



THE LAW OF OIL AND GAS IN UGANDA

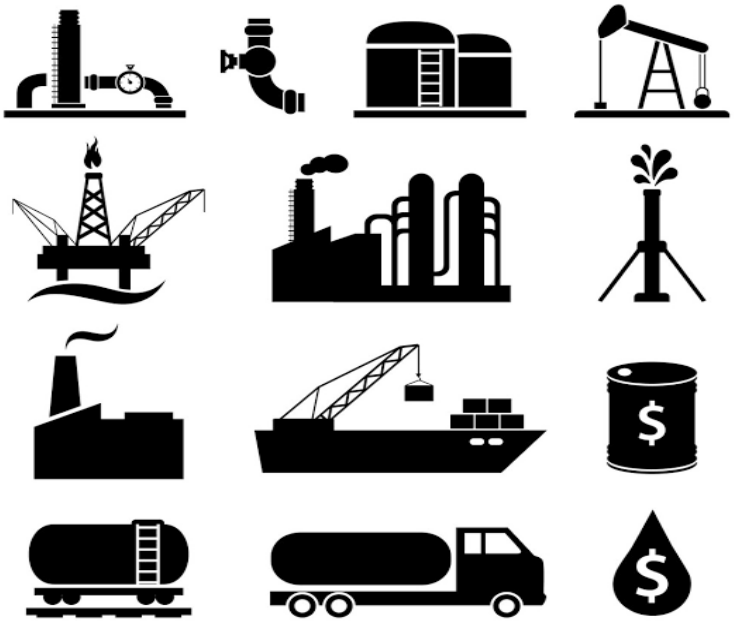
First Edition

ISAAC CHRISTOPHER LUBOGO





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Isaac Christopher Lubogo

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CHAPTER ONE

HISTORICAL BACKGROUND OF OIL AND GAS

The large oil companies up until the First World War, early competition

Introduction

STANDARD OIL

The history of petroleum from 1859 up to about 1960 is inseparable from that of the big oil companies which formed and grew rapidly in order to seek, produce, transform, transport and sell this precious liquid. The first company to become very large in the oil sector belonged to John D. Rockefeller. He initially headed up a wholesale business, one of whose products was petroleum, and built the first refinery in Pennsylvania, then a second, progressively extending his activities to cover the entire range of activities of the burgeoning petroleum industry. He acted according to a number of simple but effective principles: control the various links in the petroleum chain (storage, refining, transport, distribution infrastructure) and ensure that they operate at minimum cost. Rockefeller eschewed production, which he considered anarchical, preferring to buy in his crude, which was then available on the market at a very competitive price.

On 10 January 1870, he created Standard Oil together with his brother and some friends. The name “Standard” reflected the desire to sell a product of constant and high quality. After a decade of fierce struggle with his competitors Standard Oil achieved a dominant position in the market, controlling 80% of the distribution of the principal oil products, and in particular kerosene.

But the successand sizeof Standard Oil provoked defiance and hostility not only amongst its competitors but also amongst some sections of the public and the authorities. In order to defuse these attacks, the company formed itself into a trust in 1882. The shares in the various operating companies in the group were presented as being no longer the property of a single company but rather as being held in trust on behalf of their owners, the shareholders of the main company. The Standard Oil Trust issued 700000 shares, distributed amongst its members; it received, in trust, the shares of all the companies in the group (14 were totally controlled and 26 partially controlled). The group continued to be run by a small team led by Rockefeller.

Against a background of rapid growth in the demand for lighting, heating, lubricants and greases, Standard Oil continued to grow, maintaining its firm grip on the refining, transport, distribution and retail of petroleum. After 1880 it felt the need to increase its presence in oil production in order to guarantee its supplies of crude. This strategy of developing its production capacity proved particularly judicious when in 1888 a chemist employed by Standard Oil perfected a refining process which permitted Sulphur to be removed from oil products, particularly kerosene. Hitherto kerosene with a high Sulphur content had been impossible to sell because of the odor produced when it burned. This invention meant that new highSulphur crudes could be used.

Having become a trust in 1882, Standard Oil was forced to transform itself after antitrust legislation was enacted (Sherman Act, 1890). In 1899 a new holding company, the Standard Oil Company of New Jersey, was created, bringing under its umbrella all the companies then constituting the group.

The new company continued to represent a great concentration of power, attracting hostility not only from the authorities, who sought to promote competition, but also from some journalists and writers who probed the mechanisms used by the group in its operations, criticizing its harmful aspects. A series of articles published at the turn of the century by the journalist Ida Tarbell, subsequently compiled into a book, “The history of Standard Oil”, had a tremendous impact. Eventually action was taken in the courts, and in 1909 the Federal Court ordered

the breakup of Standard Oil. Despite delaying tactics employed by the company, the ruling was confirmed in 1911. The group divided up into 34 separate companies

- *Some of the companies which emerged from the breakup of Standard Oil include Standard Oil of New Jersey (now Exxon);*
- *Standard Oil of New York (Mobil, after merger with Vacuum and until its merger with Exxon);*
- *Standard Oil of California (now Chevron);*
- *Standard Oil of Indiana (Amoco until its merger with BP in 1998;*
- *Atlantic Petroleum Company (Arco until its merger with BP);*
- *Continental Oil Company (now Continental);*
- *Ohio Oil Company (now Marathon Oil Company);*
- *Standard Oil Company (Ohio) (bought by BP, and now BP USA);*
- *Ashland Oil Company (now Ashland); – Pennzoil Company (now Pennzoil).*

It should be noted that the mergers between Exxon and Mobil, and between BP, Amoco and Arco further reduced by several companies the number of “offspring companies” of Standard Oil

The strategy adopted by Standard Oil illustrates the constant concern of industry to control the entire chain of its activity. Furthermore, this desire for control rapidly translated itself into a financial obligation, the demands of technological and industrial development imposing investments on companies which only the largest could bear. This was conducive to the emergence of a vertically integrated and oligopolistic industry. Although in the first twenty years of its existence the petroleum industry was American, and dominated by Standard Oil, it rapidly became an international industry, even though the U.S. continued to account for more than half of world production until 1950. The growth in the consumption of kerosene, followed by gasoline, dieseloil, and fuel oil was a worldwide phenomenon. Not only Europe but also Russia and Asia became important markets. New oil companies were created (e.g. Shell, Royal Dutch, Texaco, Gulf, AngloPersian, later to become BP).

The oil industry in Russia

It had long been known that the Baku region was rich in oil. Travelers had been struck by the permanent fires fueled by natural sources of petroleum. There was a thriving trade in “naphtha” (*nefte* is the Russian word for petroleum) between the shores of the Caspian and the Far East. It was transported by camel in goatskins. The early discoveries of oil in the U.S. rekindled interest in the Baku resources, and drilling commenced there in 1872. Oil production grew rapidly, attaining 1 Mt in 1889, 4 Mt in 1890 and 10 Mt in 1900. At that time this was half of world production, and exceeded U.S. production. Among the first to buy up land on the banks of the Caspian were Robert and Ludwig Nobel, brothers of Alfred, the inventor of nitroglycerine and dynamite, and creator of the prize which bears his name. They rapidly developed oilfields, refineries and transport facilities. They arranged for the bulk transport of oil across the Caspian Sea, launching the first oil tanker, the Zoroastra, in 1878, and became the largest producers in the region. Of course a problem which rapidly presented itself was how the oil was to be transported out of Azerbaijan, across Georgia to the Black Sea. The isolation of the oil resources in the Caspian, already a critical problem at the end of the nineteenth century, continues to be relevant to this day. In 1893 a railway was proposed to connect Baku to Batum on the Black Sea, and a French financier Alphonse de Rothschild was approached. The latter already had interests in the oil industry: the import of kerosene from the U.S. and a refinery on the Adriatic. He agreed to participate in financing the pipeline, and went on to establish a company, BNITO, which was to become one of the largest in the region.

The Nobels and the Rothschilds rapidly sought to sell their product to external markets: Europe and the East. While the Nobel brothers controlled much of the Russian market, the Rothschilds were much more dependent on foreign markets. The latter therefore turned to Marcus Samuel, a London businessman specialising in imports and exports, particularly the import of antiques and sea shells from the Far East, in regard to the transportation of their products.

For many years there was fierce competition between Standard Oil and the Caspian producers. But there was a rapid deterioration in economic and social conditions in Russia, the Tsarist administration proving weak and inept. A revolution in 1905 failed, but in 1917 the Bolsheviks took power and overthrew the Tsar. During this whole period the Baku region was being shaken by a whole series of strikes and industrial unrest caused by the deplorable working conditions. One of the leaders of these actions was a certain Jossef Djugashvili, later to become the notorious Stalin. In the face of this situation, the Rothschilds decided in 1912 to sell most of their interests to Royal Dutch Shell, which had been set up in 1907. In 1918 the new Soviet regime nationalised the entire oil industry. Royal Dutch Shell lost 50% of its oil supplies at a stroke. The last remaining Nobel was stripped of all his assets, which Standard Oil of New Jersey nevertheless bought from him, doubtless convinced that it would one day be able to resume operations on Russian territory. This hope was dashed, because despite the adoption of a new and more liberal New Economic Policy in the 1920s, none of the companies which had been nationalised ever managed to resume any significant activity. Standard Oil of New York, on the other hand, was later to contract to purchase Russian products.

By 1920, Russian oil production had fallen to 3 Mt/y, compared with 10 Mt/y at the turn of the century. By 1930, however, it had regained the level it had enjoyed before the outbreak of the 1914 – 1918 war, the government being in dire need of foreign currency earnings from oil exports. These exports benefited from a small discount relative to the international price.

Shell and Royal Dutch

As already mentioned, competition on the oil products market was stiff at the end of the nineteenth century, and there was particularly fierce competition between Standard Oil, the Nobel brothers and the Rothschild family.

In order to find new markets in the East the Rothschilds, seeking new transport possibilities, turned, as we saw, to Marcus Samuel. In 1892 Samuel turned his hand to the oil sector, providing bulk transport of kerosene bought from Rothschild

in Batum on the Black Sea to Asia (Singapore and Bangkok via the Suez Canal. Marcus Samuel gradually built up his oil interests, and in 1897 he created the Shell Transport and Trading Company Limited to manage these activities. The company prospered, trading not only kerosene but also, after 1885 when Karl Benz invented the internal combustion engine, gasoline.

In order to diversify his sources of supply, Marcus Samuel acquired concessions in the Dutch East Indies (East of Borneo), where he produced crude which was refined in a factory in the Balikpapan region. He also acquired interests in oil produced in Texas from the Spindletop oilfield, discovered in 1901. Shell therefore became the first company with oil sources throughout the world. Aware of the threat posed by its competitor, Standard Oil attempted to buy Shell out, but was turned down by Marcus Samuel.

The company Royal Dutch was developing at the same time. It was created in 1890 by Aeilko Gans Zijlker, a former head of the East Sumatra Tobacco Company who, on discovering traces of a paraffinrich petroleum on the island, decided to throw himself into oil exploration.

After first drilling a dry well (without oil), he was successful on his second drilling attempt. In June 1885 there was a gusher from the Telaga Tunggal 1 well in Sumatra, which had been drilled to a depth of 121 metres; the oil well continued to produce oil for another 50 years. Supported by powerful allies (including the Dutch King Willem III, who granted him a royal seal), Zijlker founded the Royal Dutch Company. When he died, several years later, his mantle was taken on by JeanBaptiste Auguste Kessler. A refinery with a capacity of 8000 bbl/d (400000 t/y), about 50% of the production of which was kerosene, was commissioned in the vicinity of the well. Part of the production was exported, putting Royal Dutch into direct competition with Standard Oil. From 1894, the latter made attempts to capture Asian markets. It introduced millions of oil lamps onto Asian markets (particularly China) at derisory prices, or even gave them away. Competition was also intense with Marcus Samuel who owned a refinery virtually next door to that of the Royal Dutch in Balikpapan.

Many attempts were made to combine *Royal Dutch* and *Shell;* and in 1902 a working relationship was established whereby. Marcus Samuel became the Chairman and Henry Deterding, who had taken over from Kessler on the latter's death in 1899, became Managing Director. Deterding also took on the daytoday management, which was his wish. The Rothschilds became associated with this new organisation when the Asiatic Petroleum Company was created also in 1902, bringing together these three interests who nevertheless retained their autonomy. It was not until 1907 that a more comprehensive agreement was signed between Royal Dutch and Shell. In fact, this made Royal Dutch, based in the Netherlands, the senior partner, with 60% of the shares in the new company, Shell Transport and Trading, based in the UK owning 40%. The formation of this new AngloDutch group ushered in a new chapter in the competition with Standard Oil. In order to avoid falling victim to the power of the American company, Henry Deterding decided to gain a foothold in the American market by buying the American Gasoline Company and the Roxane Petroleum Company.

The other American oil companies: Gulf, Texaco

Many companies were formed in the United States at the end of the 19th century. Two of them played a particularly important role: Gulf (which disappeared in 1984 when it was bought out by Chevron) and Texaco.

Gulf was created by the Mellon family around 1890. From 1889 they began to buy up oilwells in the West of Pennsylvania, using these as the basis for an integrated operation. But in 1893 the family decided to sell all its installations to Standard Oil, which showed every sign of wishing to achieve an unchallenged position in the American oil industry. The Mellon family resumed its interest in oil when the first explorations were being conducted in Texas, financing a drilling operation. This was at Spindletop in 1900, and on 10 January 1901, when a depth of 300 metres had been reached, an oil gusher destroyed all the drilling equipment, hurling rocks, sand and earth into the air! The well produced several tens of thousands of barrels per day, and it took weeks to staunch the flow of hydrocarbons.

This discovery had a number of consequences. First of all, the resulting glut of oil led to a fall in prices. The large oil companies, including Standard Oil and Shell, bought oil from Texas in order to take advantage of the low prices. But after 18 months the flow from Spindletop collapsed. In 1902 the Mellons raised further capital and founded another integrated company, also called the Gulf Oil Corporation. Their efforts were rewarded, because Gulf went on to become one of the world's largest oil companies.

Another company, the Texas Company or Texaco, was formed in 1901, based on a production facility in Texas. Like its competitors, Texaco developed an integrated structure, with a refinery in Port Arthur, a number of sources of crude and a distribution network. The lone red star logo (the symbol of Texas) was increasingly seen throughout the U.S. before embarking on the conquest of the world.

The creation of AngloPersian: the role of the British government

At the turn of the century oil production was dominated by three regions: the U.S., Russia and the Dutch East Indies. But there were many indications that the Middle East was potentially rich in hydrocarbons. Exploration started in Persia (now Iran), followed by Turkey.

The Shah of Persia was very keen to develop his country's hydrocarbon resources. At the beginning of the century, William d'Arcy negotiated the rights of exploration in Persia. The project got off to a bad start. The first four exploration wells all proved dry, also drying up the funds which had been made available by the promoters of the operation. A new capital injection by Burmah Oil, a company which developed in India, allowed work to continue. The fifth attempt, which lasted many months, was successful. In 1908, oil gushed forth from the exploration well but in order to turn a discovery of oil into a commercial venture, major investments are needed for the production, transport and refining facilities. More capital was needed. In 1909 the AngloPersian Company was established to realise this objective. Burmah Oil remained a partner. The new company went on to

become the AngloIranian Company, and later, in 1951, the British Petroleum Company.

The new company required considerable capital to finance its development in consumer markets. Ultimately the British government, finally responding to the campaign of the first Sea Lord, Admiral Sir John Fisher, (1904 – 1910) and subsequently, Churchill, to use fuel oil for the fleet, provided the necessary finance. The British government acquired a 51% participation in the company, and two government directors with the right of veto sat on the board of directors.

The development of production in Mexico and Venezuela

Oil production in Latin America followed rapidly in the footsteps of the U.S., Russia, the Dutch East Indies and Persia. Oil was first discovered in Mexico in 1901, and in 1908 there was a spectacular gusher in the Dos Bocas oilfield. Royal Dutch Shell, Standard Oil of New Jersey and Gulf successively developed oilfields in Mexico, leading to a production which exceeded that of Russia: Mexico became the world's second largest producer.

But in the 1930s a number of conflicts between the Mexican government and the oil companies set back production. In 1938 the oil industry was nationalised. Pemex (Petroleos Mexicanos) was created and took control of all oilrelated activities in Mexico. However, production fell to a very low level (6 Mt/y) and never really recovered until the 1970s. It was at that time that large new discoveries allowed Mexico to become one of the world's leading exporters.

Venezuela followed close behind Mexico, and in the 1920s became the second oil producer in Latin America. The first discovery was made in 1914, in Mene Grande. Venezuela rapidly became the world's second largest oil producer, in front of the USSR, retaining this ranking until 1961. At the beginning, Royal Dutch, Shell, Gulf and a small company, Pan American, were the main producers. After various incidents, Pan American was bought out by Standard Oil of Indiana, and later by Standard Oil of New Jersey.

BETWEEN THE WARS (1): THE ROLE OF THE STATE

Oil, a strategic product

The links between AngloPersian and the UK government were established in order to safeguard the regular supply of heavy fuel oil to the British fleet. It also served as a clear reminder of the strategic importance of oil (another example is the support given to Royal Dutch by the Netherlands government when it was created). For consumer countries the problem is to secure reliable supplies of a vital product. France is another good illustration of the concern and the energy which a major industrial country largely devoid of hydrocarbons will mobilize in developing and protecting an industry capable of ensuring its national independence.

During the First World War there was a rapid motorization of the troops, mainly unmortised at the outset of the war. Motordriven vehicles replaced the horse for transport, assault tanks appeared in 1916 and aviation began to show its military potential. The battle of the Marne was a decisive episode which revealed how important motorised vehicles could be. It was only by mobilising the famous Marne taxis that the troops could be conducted to the front, thereby avoiding a German breakthrough which could have endangered Paris. The importance which oil assumed in the first world war is encapsulated in two quotations. Lord Curzon, President of the InterAllied Petroleum Conference, declared: “The allied cause floated to victory on a sea of oil”. Senator Henry Béranger, who controlled the import and distribution of oil in France during the war, concluded a speech with a phrase which continues to resonate: “The blood of the earth was the blood of victory”.

Until the Great War, French oil supplies depended on private, independent companies linked to the major American, British, Russian and Romanian producers. Before the war, France was one of the largest oil consumers in Europe. But the onset of war caught the government by surprise. On the one hand the oil companies sought to maintain the regime of competition characteristic of the

sector. On the other hand, the international situation meant that French supplies of Russian and Romanian oil were interrupted. The only source was therefore American. Furthermore, the attacks by the German navy on oil tankers in the Atlantic were interfering with fuel supplies, to the point that in 1917 the private companies were not able to meet French needs. Clemenceau had to make an appeal directly to Wilson for the necessary shipments to be increased.

The war therefore demonstrated to France that the outcome of the war depended on the large oil companies, mainly American and British: Standard Oil, AngloPersian, Royal Dutch Shell. The French government realised that it was crucial to increase French independence in relation to energy supplies, in particular by ensuring that it participated in international oil concessions such as those in Mesopotamia, where the British were very active and the Germans also had active interests.

Following new negotiations between Clemenceau and Lloyd George in December 1918, agreement was reached about the transfer to France of the shares of the Deutsche Bank in the Turkish Petroleum Company – TPC (see Section 1.2.3.1).

The British were fairly favourably disposed to France participating in the TPC, as this would act as a counterbalance to the influence of the American companies. This agreement proved particularly useful to Paris since the American companies decided after the war to stop supplying France, based on the decision of the authorities to maintain control over oil activities after the end of hostilities. During the war the efforts of these same companies, as members of the Petroleum War Service Committee, had allowed France to satisfy its needs. But once the war ended, the French government concentrated on trying to eliminate this dependence. Apart from its efforts to gain direct access to crude oil, the French government took other measures relating to the transport, refining and sale of products. Important decisions were also taken with regard to scientific research and training.

Creation of the CFP (Compagnie Française des Pétroles)

France secured its supplies of crude by creating the CFP (Compagnie Française des Pétroles, later to become Total) which later acquired the Germans shares in the Turkish Petroleum Company. In 1923, at the request of the French government, Ernest Mercier set up a private, independent company, funded mainly by French capital. This company, with a capital of 25 million francs, was founded on 28 March 1924, the main shareholders being a number of large banks and the main French petroleum distributors, of which Desmarais was the most important. The state had a 25% stake. The CFP also received the shares in the TPC.

Despite the skepticism of the industrial community about the financial viability of enterprises of this kind, the direct involvement of the government considerably modified the nature of the market. The French state became a participant in a market expanding rapidly in response to the rise of the automobile, but which was largely being driven by developments beyond France's national frontiers. After the Second World War there was a tendency for the state to continue its support, direct or indirect, for the national oil industry in importing countries, both in Europe (with the creation of ENI in Italy (1953) and Elf Aquitaine in France (1976)) and in the U.S.

The protection of the French petroleum industry

As well as setting up the CFP, France protected its domestic petroleum industry with the help of various laws designed to foster petroleum refining and distribution. The National Office for Liquid Fuels, set up by an Act of Parliament of 10 January 1925, sought to regulate the industry without actually nationalising it. Its aim was not only to promote oil exploration in other countries by French companies, but also to encourage exploration in France. At the same time the Act encouraged the development of the French refining industry and allowed the expansion of a fleet of tankers which would guarantee national supplies in the event of war.

Laws enacted in 1928 provided for monopolies on refining and distribution to be granted by the state. The state authorized companies, either private or public, French or foreign, to import and refine crude for a term of ten years, and to import and distribute oil products for a period of three years.

"Protected" in this way, the CFP created, in 1929, the Compagnie Française de Raffinage, which built its first two refineries in Gonfreville, near Le Havre, in 1933 and in La Mède, close to Marseilles, in 1935. These two refineries, with a combined capacity of 2 Mt/y, represented onequarter of the total refining capacity in France at that time. Other refineries were also built, in PortJérôme by Esso, in PetitCouronne by Shell, in Lavéra by BP and in Donges by Antar.

BETWEEN THE WARS (2): COOPERATION AND COMPETITION BETWEEN OIL COMPANIES.

The example of;

The Turkish Petroleum Company

The Turkish Petroleum Company (TPC) was established around 1910, with three shareholders: a subsidiary of the AngloPersian Company, a subsidiary of Royal Dutch Shell and Deutsche Bank. Amongst its concessions, those for the regions of Mosul and Baghdad were the most promising.

During the 1914 – 1918 war the Deutsche Bank shares were frozen by the British government and at the same time discussions started between the British and French governments. These negotiations resulted in the French acquiring the Deutsche Bank shares in 1920.

Moreover, the United States, desirous of gaining access to oil resources outside its own territory acquired, by invoking the "open doors" policy (oil concessions throughout the world must be open to all the allies), shares for Standard Oil of New Jersey and Standard Oil of New York in the TPC. The shareholdings were then distributed as follows:

- *Compagnie Française des Pétroles: 23.75%;*
- *D'Arcy Exploration Company (AngloPersian): 23.75%;*

- *AngloSaxon (Royal Dutch Shell): 23.75%;*
- *Near East Development Corporation (50% Standard Oil of New York, 50% Standard Oil of New Jersey): 23.75%;*
- *Participation and Investment (C. Gulbenkian): 5%.*

Exploration got underway rapidly, and led to the discovery at Bala Gurgur, on 14 October 1927, of the very large Kirkuk oilfield. In 1928 the Turkish Petroleum Company became the Iraq Petroleum Company (IPC), underlining its association with the newly created independent kingdom of Iraq, which included the former Mesopotamia.

The Company ran rapidly into serious difficulties. There proved to be a divergence of interests between the CFP (for which the IPC was the only source of crude) and its American partners in particular. The socalled "Red Line" agreement, which stipulated that the partners in the IPC should act in concert in all the former Ottoman Empire territories, resolved these difficulties in 1928[1]. However, the problem resurfaced in 1948.

The Achnacarry Agreement

The Achnacarry Agreement was signed in 1928, the same year as the Red Line agreement. It reflected the desire of the oil companies to avoid competing so fiercely that their interests would be harmed, and established a form of cooperation between them. We will consider this agreement in greater detail in Section 1.3.

Around 1920 the geologist Frank Holmes published evidence pointing to the presence of oil in the Bahrain region, and obtained concessions in that Emirate, as well as in Kuwait and Saudi Arabia. However, short of money, he sold all these concessions to Gulf in 1927. In Bahrain, Gulf sold these interests on to Standard Oil of California (Socal). The first discovery was made in 1932. This was fairly modest in size, and the production of the Emirate did not exceed several million tonnes per year, but it confirmed the promise of this zone.

1 . The agreement is so named because, after long discussions, C.S. Gulbenkian grabbed a map and drew a red line around the territories within which the partners in the TPC (later the IPC) would be obliged to act in concert.

Kuwait was the only country situated outside the Red Line. Gulf and AngloPersian jointly obtained a concession for 75 years. In 1938 the Burgan oilfield was discovered. Its initial reserves were estimated at 10 billion tonnes, making it at the time by far the largest oilfield yet discovered.

In Saudi Arabia IPC was competing with Socal. The new king, Sultan Ibn Saud preferred to negotiate with the Americans and granted Socal a 60year concession in 1933. In 1948 the Ghawar oilfield was discovered, still the largest ever discovered.

At an early stage Socal formed a joint venture with Texaco in order to develop its resources in Bahrain. The latter controlled major outlets in Europe and Asia, whereas Socal had an excess of crude. Socal and Texaco established two new companies: Casoc (California Arabian Standard Oil Company), which looked after Socal's production interests in Bahrain and Saudi Arabia, and Caltex (California Texas Oil Company), which looked after the Texaco distribution networks in Europe and the East.

The 19391945 war interrupted oil extraction activities in Saudi Arabia. The full potential of the Arabian Peninsula only became fully apparent after the war. But the investments needed to develop the resources of the Wahhabite kingdom were considerable. Socal and Texaco sought partners. After lengthy discussions, Esso and Mobil joined Socal and Texaco to form Aramco (Arabian American Oil Company). The other IPC partners, who could have demanded to participate in Aramco, obtained increased interests in Iraqi production.

After WWII: increasing oil consumption, new oil companies, creation and development of OPEC

After the Second World War, and particularly in the 1950s, oil consumption grew at a rate of about 7% per year. Automobile transport was developing rapidly, and demand for domestic and heavy fuel oil was increasing steeply. These two fuels were making major inroads into the traditional markets of coal.

Supply remained abundant, however, thanks to large discoveries not only in the Middle East but also in Africa (Algeria, Libya and Nigeria) and in Venezuela.

Russian exports were also increasing. However, the entry of new producersthe American independentsonto a market hitherto controlled by the “majors” (current term used to designate the large oil companies) increased and modified the nature of the competition. These new companies sought to counter the declining profitability of American operations by internationalizing their operations and gaining a foothold in Libya, in particular.

European governments were also taking an increasing stake in oil and creating national companies such as ENI (Ente Nazionale Idrocarburi), Elf and Fina, intended to increase national energyindependence. These companies grew rapidly.

After 1945: a new relationship

The Second World War changed the nature of the relationship between the producers and the international oil companies: the producing countries were no longer content to grant concessions in the traditional way. They wanted a greater share of the rewards arising from the extraction of their oil wealth.

Negotiations in Iran in 1949 to revise the terms of the AngloIranian concession got off to a difficult start. The young Shah had to contend simultaneously with the very influential religious community and a powerful communist party. The first proposals for modifying the concession were rejected by the Iranian parliament, which demanded nationalisation. The then Prime Minister announced to parliament that he rejected nationalisation, and urged instead modification of the concession. He was assassinated several days later. The new Prime Minister, Muhammad Mossadegh, had Parliament confirm nationalisation. After many troubled months the Iranian authorities negotiated an agreement with the oil companies (led by the American companies): the oil companies recognised the ownership by the Iranian state of the Iranian land and mineral resources. The National Iranian Oil Company (NIOC) was formed. It became the owner of the resources, with production being entrusted to a consortium in which AngloIranian would hold 40% of the shares, the five American majors (Standard Oil of New Jersey, Mobil, Standard Oil of California, Gulf and Texaco) 7% each, Shell 14%, a

group of American independents 5% and CFP 6%. Production, rose rapidly to achieve 300 Mt in 1973.

New entrants into the oil sector

A. The creation of ENI by Enrico Mattei

In the 1920s, Italy formed a national refining company, the AGIP (Azienda Generali Italiana Petroli) based on the model adopted in other countries. By the outbreak of war, this company was of comparable size to the local subsidiaries of foreign companies operating in Italy. At the end of the war Enrico Mattei, an industrialist who had fought with the Resistance, was appointed to head up AGIP, whose installations had suffered severe war damage. Dynamic and ambitious, Mattei sought to develop AGIP and allow it to play a major role in guaranteeing Italy's oil supply. However, capital was needed. The discovery of major reserves of natural gas in the Po valley met this need. SNAM *(Societa Nazionale Metanodotti)*, the company formed to produce this gas, would generate the necessary capital. The ENI was formed in 1953, bringing together various companies in the hydrocarbons sector, most of which were run by Mattei.

In order to guarantee access to petroleum resources, Mattei pursued a policy of maintaining active contacts with producing countries. Failing to secure an interest in the major oilfields of the Middle East from the "seven sisters" (Mattei is reputed to have coined this sobriquet himself) he negotiated an agreement with Iran. Although Mossadegh had partially failed, several years earlier, in his assault against the oil companies, the oilfields had still been nationalised, and the state had more flexibility in its negotiations with foreign companies. Mattei signed an agreement with the Shah which envisaged a 75% share of the profits for the state and 25% for ENI. This was a first in the oil sector. Until his death in 1962 in an aircraft accident, Mattei sought to diversify his company's supply sources.

B. The creation of ELF, a second national French oil company

In addition to supporting the CFP the French government was anxious, particularly after 1945, to promote exploration and production in France and other territories under its sovereignty. Several companies were created and oil and gas discoveries were made in the south of France, in Gabon and in Algeria. These companies progressively merged into the Elf group (today part of Total).

C. The Institut Français du Pétrole (now IFP Energies nouvelles)

Although not an oil company, the formation of the Institut Français du Pétrole (IFP) in 1944 should be mentioned here. The IFP arose out of the desire of the French government to support its national petroleum industry and to limit its dependence on imported processes, equipment and technology, particularly from the U.S. The brief of the IFP is to foster scientific and technical research into all aspects of exploration, production, transformation (refining and petrochemicals), applications (e.g. engines), including training and documentation.

The IFP developed rapidly, reaching something like its present size in the early 1980s. Its success in realising its objectives can be measured in terms of the number of its proprietary refining and petrochemical processes it has sold. In 2003 more than 1500 process units in many countries including Japan and the U.S. were using IFP processes, making it the second largest licenser in the world in this field. The influence enjoyed by the IFP School, half of whose students are nonFrench, testifies further to the success of the IFP. The IFP has also played a major part in the creation of a worldclass petroleum services industry in France. Technip and Coflexip, for example, originally set up by the IFP, and which recently merged, are amongst the world's leaders in their respective fields.

Developments in the U.S.: quotas, isolation of U.S. market

The U.S. has always played a key role in the oil industry. Until 1950 it accounted for half the world's crude production. But consumption grew much faster than production. The U.S. began to import oil in 1948, and by 1962 annual imports had reached 100 Mt. By 1971 this figure had doubled. These imports were attractive because the price of Middle Eastern oil in New York was lower than that of American oil. The American authorities, worried about this competition, started by calling for voluntary restrictions, and in 1959 imposed compulsory restrictions: import quotas. The American market was therefore partially protected from the world market, leading to price rises. Prices outside the U.S., on the other hand, were falling because of the abundance of crude oil.

Falling prices and the creation of OPEC

The isolation of the American market led to increased competition on other markets, notably the European and Japanese markets. In order to increase their crude sales, oil companies widely adopted the practice of discounting the posted prices, which continued to be the reference price for the calculation of royalties and taxes. But competition also led to companies seeking to reduce the posted prices. Two reductions were made, by 18 ct/bbl in February 1959 and 10 ct/bbl in August 1960. These reductions produced an automatic reduction in the incomes of producing countries per barrel sold. Unhappy with this development, the main producing countries (Venezuela, Saudi Arabia, Iran, Iraq, Kuwait) met in Baghdad in September 1960 and agreed to form the Organisation of Petroleum Exporting Countries (OPEC). The main objective of this new organisation was successfully achieved: posted prices remained stable for 10 years, until the increases of the 1970s.

Early signs of the oil shocks

From the late 1950s there were a number of political and economic events which were to transform the oil industry hitherto dominated by the international oil companies and, more discretely, a certain number of consuming countries, above all the U.S.

A. Political events

In 1956 the nationalisation of the Suez Canal resulted in its closure. As a gesture of support for Egypt, Syria interrupted the shipment of IPC oil. While everything was restored to normal within several months, and good cooperation between the consuming countries limited the effects of the crisis, these events marked the emergence of third world countries as a political force.

Two years later, in 1958, a military coup d'état in Iraq swept General Kassem to power. In 1961 the new government decided to withdraw IPC's concessions except where there were already productive wells. The following year the Iraqi government created the INOC (Iraq National Oil Company) which replaced the IPC.

In 1967, during the Six Day War, the Arab countries imposed an embargo on oil deliveries to the U.S., the UK and Western Germany. While this embargo only lasted a few weeks, it marked a new stage in the use by producing countries of oil as a weapon. Furthermore, the reclosure of the Suez Canal led to an explosive growth in the demand for transport, i.e. tankers, because Middle Eastern oil destined for Europe and the U.S. henceforth had to be routed via the Cape of Good Hope. North African oil was therefore at a premium because of its transport advantage, a factor which would become significant in the following years.

During the 1960s Algeria and Libya became important oil producers. In Libya, where not only the majors (Exxon, Mobil, Gulf, BP, Shell) but also several independents (Occidental, Oasis, etc.) were active, production reached almost 60 Mt in 1965 and almost 160 Mt in 1970. But in 1969 King Idris of Libya was replaced by Colonel Gaddafi, who became the first leader of a producing country to seek to cut production in order to conserve resources.

B. Economic climate

Oil consumption had increased to the point where liquid hydrocarbons accounted for half the energy needs of Europe and threequarters of those of Japan, two regions virtually devoid of their own oil. There was another cause for disquiet: the world's oil reserves were equivalent to only 30 years production at current levels in 1970, compared with 140 years production 20 years earlier[2]. It was feared that oil resources might be largely exhausted by 2000. This was the backdrop against which the famous report of the Club of Rome entitled "Limits to Growth" was published in 1972. This report warned of the dangers of the depletion of natural, nonrenewable resources, as a result of economic development. The report called for economic growth to be slowed so as to save raw materials and protect the environment. Of course there was no simpler way to limit consumption than to increase prices.

At the same time, new air quality legislation in the U.S. made it more difficult to burn coal, and encouraged the use of oil. But initiatives to open up new resources situated in ecologically fragile areas (Alaska, California coast, Gulf of Mexico) were delayed following actions taken by environmental protection groups. This led to a somewhat paradoxical situation, since it made the U.S. dependent on foreign oil. In order to protect the interests of domestic producers, who were at a cost disadvantage compared with their foreign competitors, quotas were introduced. But these proved difficult to administer. In 1969 President Johnson, who had been very close to Texan oil interests, was replaced by the Nixon

Administration, which decided to change course. American producers would be protected by raising prices; this would not only allow quotas to be abolished because it would make American producers profitable, but it would also guarantee adequate revenues to the producing countries (Venezuela, Gulf states), thereby stabilising the existing regimes, which were necessary partners of the U.S.

2 **.** By 2000 the R/P ratio (reserves to annual production) was back to over 40, for "conventional" oil alone.

By 1970, the politicoeconomic climate was at last turning favourable to an increase in oil prices. The main actors (with the important exception of the major consuming countries without oil resources) saw nothing but benefit from such a development. The event which actually triggered the price rise was the decision by Libya, which demanded that the oil companies reduce production by more than one million barrels per day. At the same time, Algeria nationalised the six oil companies and unilaterally set the price of its oil. Libya obtained higher tax rates and an increase in the posted prices from the oil companies. And Venezuela decided to increase its tax rate to 60% and enacted a law allowing the posted price of oil to be set unilaterally. But most was still to come.

The first oil shock

The oil companies, concerned at the course of events, invited OPEC to enter into negotiations. In practice, two separate negotiations led to significant price increases, which in turn produced an increase in the incomeper barrelfor producing countries. The Teheran Agreement (February 1971) related to the Gulf countries. The Tripoli Agreement (April 1971) related to Algeria and Libya, but also to that part of the production of Saudi Arabia and Iraq output into the Mediterranean. Finally, following the devaluation of the dollar in August 1971, two successive conferences in Geneva in 1972 and 1973, led to increases in posted prices to compensate for the loss in value of the American currency.

Even more importantly, a fourth conflict broke out between Israel and the Arab countries. This time the war was started by Egypt and Syria, who attacked Israel during the festival of Yom Kippur, on 6 October. Initially events moved against Israel before reaching a balance of force. The war ended on 25 October 1973 without a victor.

This war nonetheless had a considerable impact on the oil industry:

- On 16 October 1973 the six Gulf states decided on an enormous increase in the posted prices. The price of Arab light, the reference crude, rose from $2.989 to $5.119/bbl.
- On 17 October all the member states of the OAPEC (Organisation of Arab

Petroleum Exporting Countries: Abu Dhabi, Algeria, Saudi Arabia, Bahrain, Dubai, Egypt, Iraq, Libya, Kuwait, Qatar) except Iraq decided to reduce their exports by 5% per month until Israel withdrew completely from occupied territories and the rights of the Palestinian people had been restored. On 4 November this reduction was increased to 25%.

- On 25 October the same OAPEC members imposed an embargo on the deliveries of oil to the U.S., Portugal, the Netherlands, South Africa and Rhodesia, which were accused of favouring Israel. The spectacle of Dutch motorways closed to traffic at weekends to save fuel was a powerful image which remained engraved on European imaginations for long thereafter.

Finally, at a meeting in Teheran in December, OPEC took advantage of the turbulence to again raise posted prices. The posted price of Arab Light rose to $11.651/bbl; the real price was of the order of $7.

Nationalisations

Another consequence of the increasing power of OPEC, perhaps even more important than the price rises, rock the oil world to its core: the main producing countries decided, one after the other, to nationalise their oilfields (see Box 1.3).

During the 1970s a wave of nationalisations by OPEC member countries gathered momentum. Over a few years most of these countries nationalised the assets of foreign companies, and in most cases declared a state monopoly on all activities related to petroleum. OPEC, by providing its members with the opportunity to take concerted action to strengthen their negotiating position, acted as a catalyst to a movement which arose from ageold demands.

The oil shock of 1973 marked the start of an economic crisis in Western countries as well as a major turningpoint in the development of the petroleum market. Firstly, a new type of actor in the oil market began to emerge beside the Western oil companies and the major importing countries: the producing, exporting countries themselves. These countries acted either individually or in some cases through OPEC. In 1973 these countries controlled over 50% of the world's production of crude and more than 80% of its reserves. Secondly, a split developed

in the oil industry at the global level, with oil production, now under the control of state companies, remaining separate from refining and distribution, most of which was still in the hands of the Western oil companies.

The creation of the IEA (International Energy Agency)

After the first oil shock, which led to real shortages in the countries subject to the embargo, the industrialised countries founded the International Energy Agency (IEA) in 1974. This Agency was set up within the OECD (Organisation for Economic Cooperation and Development), with just over 20 members, including the U.S. and Canada, Western Europe (with the exception of France, which did not join until 1992) and Japan, to mention the largest oilconsuming countries. The objectives of the IEA were:

- To promote cooperation between participating countries in reducing their excessive dependence on oil through energy conservation, the development of substitute energy sources and relevant R&D.

To set up an information system on the international oil market, as well as consultations with the oil companies.

- To cooperate with producing countries and other oilconsuming countries in stabilising international energy markets to ensure that the world's energy resources are managed and used rationally, in the interests of all countries.
- To create a plan which would prepare countries for a possible major disruption of supplies and for sharing the available oil in the event of a crisis.

The IEA is also an important centre for publications on the energy sector.

Price stability 1974 to 1978

During the period 19741978 the price of petroleum rose only slightly (from $11.65/bbl in December 1973 to $12.70 in December 1978 for Arab Light, then the reference for pricing all crudes). Prices were fixed by OPEC at periodical meetings. The prices of other crudes were derived from that for Arab light as a function of their quality (°API, sulphur content) and location.

Second oil shock 19791981

The second large price rise, or second oil shock, was associated with the Iranian crisis. At the end of 1978 political and social discontent in Iran led to strikes in most sectors of the economy and particularly in the oil sector. Iranian production fell from 6 Mbbl/d in September 1978 to 2.4 Mbbl/d in December and to 0.4 Mbbl/d in January 1979 when the Shah departed, to be replaced by the Ayatollah Khomeini.

At first other counties increased their production to make good the Iranian shortfall. But Saudi Arabia subsequently decided to place a ceiling on its production significantly lower than its level of December 1978. The free market, still relatively undeveloped, spiralled out of control. Demand far exceeded supply, exacerbated by the scramble by operators to maximise their stocks. By the end of 1979 spot prices (see Section 1.3.2.5) had risen above $38/bbl. At the same time the OPEC countries began to pursue a policy of setting the official price close to the spot price.

In October 1980 the commencement of hostilities between Iraq and Iran led to a large reduction in the output of these two countries, provoking a new, although brief, upsurge in prices. In fact, energy conservation measures taken by consumer countries were beginning to show their effectiveness: world consumption fell from 3.1 Gt in 1979 to about 2.8 Gt a few years later.

WEAKENING OF OPEC AND FALL IN PRICES

The oil supply situation in the early 1980s

While consumption was falling off, production was increasing rapidly in Northern Europe following the discovery of oil in the North Sea, Alaska and West Africa in the region of the Gulf of Guinea. Other zones were also the object of extensive development, for example in the republics of Central Asia around the Caspian Sea.

Before the oil shock of 1973 and the wave of nationalisations, the large western oil companies had chosen their supply sources essentially on commercial considerations. The expectations of governments played little part. The world was

one in which crude oil was cheap and abundant, rarely costing more than $1.50/bbl to produce. Outside of the communist block the growth in production, which extended from 1950 to 1970, therefore took place in zones with low production costs, that is basically the countries which founded OPEC in 1960 or which joined subsequently. Even countries such as India and Brazil, which were actively committed to an independent, statecontrolled approach to development, preferred to import growing quantities of petroleum products produced cheaply by the multinationals rather than develop their own production. It was regarded there as elsewhere as the antithesis of sound economics to use scarce financial resources to encourage an uncompetitive national production.

The attractiveness of OPEC oil (and particularly that from the Gulf states) was considerably reduced as a result of its policy of high prices. There were also doubts as to the reliability of OPEC supplies. Political instability in the region made Western countries increasingly wary of Middle Eastern oil. Most oilimporting countries were pursuing a policy of diversifying supplies. The sharp oil price rises greatly facilitated the emergence of new producing regions. An oil price of $30/bbl enhanced petroleumproducing potential throughout the world, benefiting new producing countries, Western oil companies and governments of importing countries. For new producers, any domestic production which substituted (costly) foreign imports or could be exported (lucratively) handsomely justified the attraction of foreign capital. Nationalisations in OPEC countries led to a split between the upstream and downstream activities of the international oil companies, which had lost most of the reserves which they managed. Their primary commercial motive was therefore to replace these reserves elsewhere so as not to be unduly dependent for the crude purchases so vital to their refining activities on any single producer. They also sought to avoid losing the benefit of their production knowhow, even though this meant redirecting investment towards regions where production costs were higher than in the ArabianPersian Gulf.

Western states found in these developments a very effective means of revitalising competition between producers, thus exercising a downward pressure on prices and restoring a balance of advantage in their dealings with exporting countries.

High prices and the fear of scarcity led to increased R&D efforts which allowed production from fields with high exploitation costs, especially offshore. New production facilities were established not only in Europe but also in North America and developing countries: Argentina, Brazil, Colombia, Ecuador, Angola, Egypt, Gabon, Syria, India, Malaysia. All of these countries became middleranking producers, between 20th and 30th in the world rankings. Only Mexico, Norway and the United Kingdom joined the ranks of the major producers. During this time there was a significant falloff in the production of the OPEC countries.

Oil quotas

With effect from 1981 petroleum markets began to undergo major changes. As already mentioned, between 1979 and 1985 total world demand for oil fell by about 300 Mt each year. The price increases led to fuel substitution (a return to coal in some industries, the use of nuclear energy for power generation, etc.) and energy conservation measures (insulation of buildings, more efficient engines, etc.). Since there was also a rapid increase in nonOPEC production, that part of total demand met by OPEC fell by almost 50%, from 1500 Mt at the end of the 1970s to less than 850 Mt in 1985.

The fall in production was no greater than 30 – 40% in most OPEC countries. It was Saudi Arabia which experienced the greatest difficulty: having accepted the role of swing producer, it saw its production fall from 510 Mt in 1980 to 185 Mt in 1985.

To cope with this weakness in demand, the OPEC countries decided to place limits, or quotas, on their production. These quotas totalled 17.5 Mbbl/d (compared with a production of 30 Mbbl/d two years earlier). They were only able to retard the fall in oil prices, which fell from $34/bbl in 1981 to $29 in 1983 and $28 in 1985.

The oil countershock 1986

At the end of 1985 OPEC as a whole and Saudi Arabia in particular found themselves in a desperate plight. The revenues of the latter had fallen by 75% in

five years. For the first time in history Saudi Arabia abandoned its defence of oil prices and sought to recapture “its fair market share”. In order to do this, it established a new type of contract for the sale of crude, the “netback” contract. For several years the profit margin on refining activities had been very low. Riyadh therefore made the following proposal to the purchasers of crude: the refiner would take delivery of the crude, would transport it and transform it into finished products which he would sell at the current price on the international market. The proceeds would then be returned to the producer of the crude after deducting refining and transport costs. The price of the crude would therefore be equal to the value of the products obtained from its processing after deduction of the costs of processing and transport. This was referred to as the netback contract.

This arrangement certainly allowed Saudi Arabia to regain market share, but it led to a collapse in the oil price. Refiners were encouraged to maximise their throughput, since their margin per barrel was guaranteed. This resulted in a glut of products on the market, and prices fell. In consequence the price of crude fell also. In January 1986 the price of Arab Light was $25/bbl. By July the price had fallen to $8/bbl.

The OPEC countries therefore decided to put an end to the netback contract and to return to a system of official prices. They set a target (desired) price for Arab Light of $18/bbl. But in practice the price of crude fluctuated widely, depending on variations in supply and demand. Producing countries paid a heavy price in terms of their oil revenues. These fell from their 1981 peak of $261 billion to $77 billion in 1986, recovering to $180 billion in 2002.

The situation in the late 1980s

The reason behind the desire of importing countries to increase the production of non OPEC oil was less the supposed instability of the OPEC members than the political weight which this cartel was able to wield. Experience in countries such as Angola, Algeria and Nigeria shows that internal political instability and even civil war rarely interferes with oil production. Both sides are usually careful to ensure that the petroleum infrastructure, the source of great wealth and sometimes

even the object of the conflict, is not damaged. The same does not apply to confrontations between different states, when the oil infrastructure becomes a military target and may suffer, as was the case in the IranIraq war and the Gulf war.

The diversification of supply was achieved not only because of the voluntary policy put in place but also because, as we saw, higher prices drove the international companies to develop their activities in nonOPEC countries.

By the end of the 1980s, the industrialised countries were less dependent on oil than they had been at the time of the first oil shock in 1973. Only the transport sector remained a captive market for oil products.

The 1990s: market forces

Since 1986 oil prices have been subject to rapid and large fluctuations. Over the next 15 years it fell on several occasions to around $10/bbl, and rallied at other times to a maximum of about $40. Remarkably small variations in the supply/demand balance can produce very large price swings.

Between mid1986 and mid1991 prices remained within the range $1020/bbl, depending on the production quotas agreed by OPEC. The Iraqi invasion of Kuwait in 1990 resulted in a sharp rise in prices. Supply was reduced by 4 Mbbl/d, and prices doubled in a few weeks. Real shortages did not occur, however, as Saudi Arabia, Venezuela and the United Arab Emirates were rapidly able to increase production to make good the shortfall in production by Iraq and Kuwait.

Even more interesting is that throughout the occupation of Kuwait by the Iraqi forces, the futures markets indicated a return to normal prices (i.e. around $20/bbl) within several months. In fact, most observers were betting on the rapid intervention of the U.S. and her allies and a normalisation of the situation within a reasonable period. Another lesson learned in the Gulf was that when hostilities commenced on 17 January 1991, although the experts expected a brief upsurge in the price of crude, it actually fell: the markets were discounting a short, sharp military action, and the actual price aligned itself with price on the futures market.

The oil price subsequently stabilized within the range $15 – 20/bbl. This was the result either of modifications in OPEC production levels or by actions such as that of American pension funds in the spring of 1994: taking the view that the oil price was abnormally low they purchased oil on the forward market.

The end of the century was marked by a further demonstration of the sensitivity of prices to fluctuations in the equilibrium between supply and demand and the importance of the role of OPEC. Over the period 1995 to 1997 there was a significant hardening of the oil price, caused particularly by a series of cold winters in both the U.S. and Europe. On occasion, stocks of oil products reached rock bottom levels, leading to spectacular price rises. It became increasingly clear that the volumes of stocks of crude and of oil products were key parameters determining shortterm price movements. Most observers therefore attached considerable importance to the regular publication of data on stocks.

The other key factor is the volume of OPEC production. At the end of 1997 OPEC, assuming continued economic growth in Asia, announced a 10% rise in its production quotas (from 25 to 27.5 million barrels per day). This was equivalent to less than 4% of total world production. Yet the Asian crisis of 1997, followed by a Russian crisis in 1998 and subsequent problems in Latin America, dampened the increase in demand, so that the price of crude fell to about $10/bbl, notwithstanding a progressive reduction in the OPEC quotas which effectively wiped out the increase at the end of 1997.

THE TWENTY FIRST CENTURY: SUSTAINED HIGH PRICES

Over the period 1999 to 2003 OPEC's unity was reestablished

A price of $10/bbl was a catastrophe for the oilproducing countries and it meant that they could no longer meet their financial needs. OPEC countries' debt was growing. A return to discipline among the OPEC countries was needed to increase prices. How could it be achieved?

The election of Hugo Chavez as President of Venezuela at the end of 1998 was the first sign of change. While the previous governmental had favored maximizing production, the new President favored a policy of solidarity with thirdworld countries in general and with other oilproducing countries in particular. Aware of the importance of increasing oil prices, he argued for an agreement between Venezuela, Saudi Arabia and Mexico (a nonOPEC country) to limit production. This agreement would be strengthened by an improvement in relations between Saudi Arabia and Iran, the main Arabian Gulf producingcountries. The commitments to reduce OPEC production, supported by clear signs of solidarity from the main nonOPEC producers, finally appeared credible to operators. In March 1999, the price of oil started an upward trend that would lead it to a peak level in 2000. The OPEC countries then decided to set an objective for the average price of a basket of crude oil of $25 per barrel, and a range of $22 – $28 within which the price should remain: if the price went above $28, production would be increased by 0.5 Mb/d, and if the price fell below $22, production would be decreased by 0.5 Mb/d. This objective was largely achieved: during the first six months of 2001, the price of a barrel (OPEC basket) was $21.

The terrorist attacks of September 11, 2001 caused a collapse in prices, with Americans greatly reducing their personal travel. But prices gradually recovered. Until 2003, $25/bbl was generally agreed to be the “normal” price of crude oil, and this was OPEC’s objective. But the threat of American intervention in Iraq caused uncertainty in the market and the addition of a “risk premium”, which different experts estimated at $5, $10 or $15/bbl. This theory was confirmed by the fall in the price of oil on March 20, 2003, the day on which President George W. Bush announced that the US rejected Saddam Hussein’s response to the US ultimatum, and that the USled coalition would attack Iraq. In London, the price of Brent crude fell from $35 to $25. Operators were not worried about the immediate consequences of the US action. Surplus capacity from countries neighboring Iraq (Saudi Arabia, UAE, etc.) meant that lost Iraqi production could be made up and it was considered that, with surplus production capacity at 5 to 10% of total capacity, there would be a return to “normal” market supply within a few months. It was

also expected that investment in Iraq would once again become possible (plans were made to raise production capacity from 3 to 6 Mb/d), so a return to “normal” oil prices therefore seemed probable.

From March 20, 2003 to July 11, 2008, pressure on the market grew

The price of oil continued to increase, reaching $60 per barrel in 2005, and $75 in May 2006. After a fall in the last months of 2006, it shot from $50 per barrel in January 2007 to $147 per barrel (Brent price) on July 11, 2008. There were many reasons for this. The situation in Iraq – and the Middle East – was not as had been expected. Iraqi production remained far below its level under Saddam Hussein.

Attacks in Saudi Arabia were worrying. Some countries could not stop their production declining. Oil consumption rose strongly while the surplus production capacity that had resulted from the fall in demand and increased nonOPEC production after the second oil shock, had disappeared. There was no shortage of oil on the markets, but the balance of supply and demand was precarious. Costs – particularly capital costs – were rising steeply. Arguments regarding levels of oil reserves added to the concern. These arguments were misdirected since the immediate problem was not the reserves underground, these were still sufficient for several years. It was rather above the ground, particularly the lack of sufficient capital investment for geopolitical reasons: producingcountries were reluctant to invest massively to produce more oil for a market that did not seem guaranteed. Why invest to supply Western consuming countries who wanted to reduce their oil consumption because of their supply security concerns and to reduce greenhouse gas emissions? There was great concern about forecasts of an oil production ceiling of 95100 Mb/d, while the needs of China and other emerging countries seemed unlimited. The market was preoccupied by its desperate attempts to balance future supply and demand.

Many specialists did not understand why the price increases did not reduce the increase in demand. The explanation is simple. The income effect – when revenues double, gasoline consumption increases by 70% – is more important than the price

effect – when prices increase by 100%, gasoline consumption only decreases by 7%.

Economic growth was extremely strong (4% per year from 2003 to 2007), while the fuel price increases seen by consumers were "tempered" by the significance of taxes in consuming countries and by price controls in emerging countries.

A comment should be made on the impact of speculation. When it seems probable that economic growth will continue and the needs of emerging countries will rapidly increase – e.g. automobiles in China – an increase in oil prices appears inevitable. Commercial "funds" will therefore invest in oil – and other raw materials – thinking that prices will continue to increase. They of course make the trend in price increases more pronounced, but they do not create the increase, they follow it.

The fall in demand and collapse in prices, from $147/barrel on July 11, 2008 to $40 at the end of 2008

Economic growth tumbled while oil production remained strong. Even the conflict in Georgia in August 2008 failed to slow the fall (however, the Russians bombed both sides of the BakuTbilisiCeyhan pipeline, the only outlet route outside the control of Moscow, to show that if they wished, they could stop exports from the Caspian).

The fact that oil was abundant and consumption was stagnant or even declining, was finally recognized. OPEC reduced its production quotas by 0.5 Mb/d in September, 1.5 in October, and 2 in December. This stabilized prices in the $40$50 range. Investment funds withdrew from the oil markets (and those for other raw materials) *en masse*. This seemed logical considering the price forecasts, but only strengthened the trend to lower prices.

The fall in prices from $147 to less than $40 between July and December 2008 is in every respect similar to what occurred in 1986 at the time of the oil counter shock, when Saudi Arabia launched a price war to recover market share and prices fell from $28 to $8 between January and July. The reasons in both cases were the same: an oversupply of crude oil. The market forgets longterm considerations

(anticipation of increasing and strong demand confronting limited future production) and focuses on shortterm fundamentals.

The situation in 2011

After the price collapse at the end of 2008, and partly because of the reduction of OPEC quotas, the price of oil started to increase again and rose to $70 per barrel in mid2009. This was close to $75 considered at this moment by King Abdullah of Saudi Arabia to be the right price for oil and the price needed to ensure the production of marginal supplies, i.e. synthetic oil from Canadian Oil Sands, the costliest liquid (obtained from non conventional oil) over the next few years. Economists were satisfied: the price of oil was close to the "long term marginal cost of production" or the cost of the most expensive barrel to produce in a few years to meet demand.

This situation did not last and quickly the price increased again, flirting with $100/b at the beginning of 2011. Of course the revolutions in some MENA countries played a role. However, it should be noticed that:

- Prices over passed the "long term marginal cost of production" before the beginning of the movements in Tunisia and Egypt.
- These revolutions had a limited direct effect on the oil production. Only in Libya oil production fell from 1,8 Mb/d to a very small quantity. Other OPEC countries had large excess capacities and could meet the lack of Libyan production, even if the quality of the crude was a problem (most of the excess capacity was for medium, sour crude, while the Libyan one is light, low sulfur).

By mid 2011 the oil price remains "high" and the short term direction is difficult to predict. A price close to $100/b is the most likely forecast even if geopolitical events can provoke strong variations.

High oil prices; how do they affect demand?

Although the two oil shocks of 1973 and 1979 resulted in demand falling by 15%, the increase in the price of a barrel from $10 to more than $100 between 1999 and

2008 had effects on demand that were slower and more limited. Several explanations for this have been advanced:

- The weight of oil in the economy is less than it was 20 years ago and so the importance of the energy bill is also less. France spent nearly 6% of its GDP on its oil at the beginning of the 1980s but only slightly above 3% in 2007. More efficient use of oil, and an increase in the service sector's share in the economy (services consume little energy) explain this. However, although oil has less weight in developed economies, it remains very significant for the poorest developing countries: in 2007 Senegal spent more than 8% of its GDP to purchase the oil it needed.
- The proportion of taxes in the price of gasoline and diesel fuel lessens the impact of crude oil price variations in a number of countries. Generally, in Europe, if the price of crude oil quadruples from $25 to $100 per barrel, the price of fuel at a service station only increases by around F0.50 per liter, which is 30% of the consumer price.
- The price of a liter of gasoline represented half an hour's earnings at the French minimum wage in 1981, but only less than 15 minutes in 2011 (when the price of oil is $100/b).

"What is the "Right Price" for Oil?"

While it is difficult to answer this question, there are several possible benchmarks that can be considered:

– Production costs (excluding costs of capital) are less than about $5/barrel in the Middle East, and $10 to $15 in other producing countries. However, they are $60 or more for the highest cost oil from difficult zones of the North Sea and synthetic oil obtained from the very heavy crude oil of Orinoco or oil sands (also called tar sands or crude bitumen) from Athabasca.

– Most oilproducing countries who are members of OPEC depend on oil for 80% to 90%of their national revenue. Until roughly 2005, they prepared their budgets assuming an oil price of $20$25/bbl. For example, Algeria used $19/bbl for many years. Any revenue from higher prices was then used for exceptional expenditure (debt repayment, new equipment projects, etc.). This situation has

changed and many producing countries now “need” a much higher price to balance their budgets. The price “needed” varies considerably from one producing country to another, but often exceeds $50/bbl.

A new factor that must now be taken into account is the considerable increase that will apply to future total production costs arising from the substantial increase in capital costs. In recent years, these costs have increased by a factor of 2 or 3. Taking this increase into account, experts agree on a total production cost (including capital costs) of $60 to $80 for the most expensive oil.

The price of oil is mainly determined by the balance of supply and demand. “Speculation” increases the volatility of price but does not affect the price level. Other factors: stock levels of crude oil and products, geopolitical events can at some time play an important role.

High oil prices; how do they affect supply?

NonOPEC production seems to be reaching its ceiling in many countries except for the CIS (in both Russia and countries of the Caspian region Kazakhstan and Azerbaijan in particular) and West Africa. Only OPEC countries and in particular the countries of the Middle East seem to be able to increase their production significantly. Saudi Arabia has an actual production capacity of more than 12 Mb/d.

Who will make the necessary investments in exploration and production? The five largest international oil companies (Exxon Mobil, Shell, BP, Chevron and Total) have jointly earned more than $110 billion in profits every year from 2005 until 2008. In 2009 that total fell to under $70 billion. Results in 2010 were distorted by BP taking a pretax charge of $32 billion in relation to their Deep Water Horizon disaster, had it not been for that the total profit would have shown a substantial increase over 2009. Over the total period some of these profits were used to reduce their debt, which is now very low, and to reward shareholders. These companies have announced significantly increased capital expenditure. But prudence is still necessary:

• The most promising basins are often not accessible to major international companies. OPEC member countries control 80% of reserves, and they are the lowest cost reserves to exploit. However, since the nationalizations of the 1970s, and notwithstanding the few exceptions which are discussed later, these countries overall remain reluctant to reopen their oil and gas industries to major international companies. Saudi Arabia and Kuwait are completely closed. Iran has opened itself to only a limited extent. Outside the Middle East, Venezuela has only opened marginal fields and reserves of extraheavy crude oil to foreign companies. Outside OPEC, Mexico remains totally closed to nonMexican companies and Russia has shown that it wishes to keep tight control over its reserves. This leads to the repeated refrain of international companies: "We lack profitable projects".

• Producing states adapt oil taxation levels to increase their share of the revenue when prices increase, leaving the foreign companies' portion broadly constant (in dollars per barrel). This policy is consistent with a dominating political approach which sees mineral resources as an asset belonging to the nation and its people whose benefits (and sometimes the exploitation see the case of Mexico in particular) must be reserved for nationals.

Stateowned companies (Saudi Aramco - Saudi Arabia, NIOC – Iran, PDVSA – Venezuela, Pemex – Mexico, Sonatrach – Algeria, NNPC – Nigeria, etc.) have not had the full benefit of the increase in crude oil prices. Their government only returns a portion of the oil revenues to them and retains the rest to finance their budgets. Of course, the high revenues of recent years have allowed major producing states to balance their budgets or even achieve surpluses in contrast to the difficult years of the 1990s. Nonetheless, in many cases the amounts left for the national oil companies have been insufficient for them to maintain and develop their oil production capacities. Since mid2008, this position has been even more pronounced.

New oil nationalism

The high oil prices of the period up to 2008 had important consequences for the principal oil producing countries' policies. Their revenues have given them

(temporarily?) far more independence from the major International Oil Companies (IOCs). Of course, for more than 30 years now, some countries Saudi Arabia, Kuwait and Mexico have operated a system in which their National Oil Company (NOC) holds a monopoly. Other countries (e.g. Venezuela), in which the presence of oil companies was limited, have recently reduced this presence even further through nationalization by legislation (Bolivia) or de facto nationalization (Venezuela decided to increase the national oil company PDVSA's share in the project for exploitation of the extraheavy oils of Orinoco, to 60%, leading to the withdrawal of Exxon Mobil and ConocoPhillips from these projects in which they were the leaders).

As well as their higher petrodollar revenues, continuing concern that major consuming countries will drastically decrease their oil consumption has made producing countries very prudent when considering any increase in production. Producing countries have blamed speculation for much of the increase in prices, have always insisted that the markets are well supplied and that they need security of demand in response to the security of supply called for by consuming countries. Why should they invest tens of billions of dollars in new capacity, which will probably result in a decrease or even collapse in prices, if demand falls in several years' time?

What is the price in the future years?

The process of experts forecasting crude oil prices has proved to be selfdefeating. The forecast in the early 1980s that the price would exceed $100/bbl before 2000, promoted a fall in demand and an increase in supply. Similarly, the low prices of the 1990s discouraged investment and so were indirectly responsible for the increases of 20032008.

Nobody expects the oil price to fall back to levels of below $60/bbl. The potential for increased demand remains very significant. If we want to "put China on four wheels", i.e. allow Chinese citizens access to the same number of vehicles per inhabitant as the US, China will need the equivalent of the current worldwide consumption of oil, for "only" onefifth of the world's population. In addition,

reserves of oil although very large currently show constraints that were not apparent in 1970 or 1980.

The oil market remains subject to basic economic laws: all periods of high prices carry the potential for future prices to fall, since they tend to stimulate supply and moderate demand. Nonetheless, it seems probable that future price movements will continue to be both significant and unpredictable, while prices themselves will stay at a considerably higher level.

UNDERSTANDING OIL AND GAS IN UGANDA

Oil and Gas Exploration in Uganda is currently taking place in the Albertine Graben. The Graben is part of the East African Rift System and runs along Uganda's western border with the Democratic Republic of Congo (DRC). The Graben is approximately 500 km long, averaging 45 km in width and 23,000 square kilometres in Uganda.

In dealing with Oil and Gas, one of the commonest terminologies to know is the Petroleum Value Chain.The Petroleum Value Chain is the series of activities starting from exploring for oil to consumption of petroleum products. The Petroleum Value Chain has three major phases, namely; upstream, midstream, and downstream.

Upstream covers exploration, development and production of petroleum together with decommissioning. Exploration refers to the search for petroleum accumulations and includes appraisal of the same to establish the extent (distribution) of the petroleum accumulation below the earth's surface and the ease of flow of the petroleum from this accumulation. Development involves preparing for production by putting in place facilities and infrastructure for collection, transportation and processing of crude oil and gas. Production is the removal of petroleum from the accumulations below the earth's surface to the surface, and preparing the petroleum for transportation and refining. Midstream includes bulk transportation of petroleum commodities (crude oil and natural gas) and products (gasoline, diesel, jet fuel, etc), refining of oil and conversion of gas. It also includes converting oil and gas into marketable products and chemicals. Downstream deals with distribution, marketing and sale of petroleum products. In

some countries, downstream and midstream operations are considered together as downstream operations.

Uganda confirmed commercial petroleum resources in 2006. Efforts to find oil in Uganda started as far back as the 1920s. These efforts led to the identification of surface seepages of oil and drilling of shallow wells around these seepages before 1945. One deep exploration well (Waki1) was also drilled near Butiaba, in Buliisa district during 1938. These initial efforts were not successful in establishing commercial deposits of petroleum in the country. Renewed and consistent exploration efforts commenced in the 1980s which culminated into confirmation of commercial petroleum resources in Uganda during 2006.

The estimate resources in the country have increased from 300 million barrels in 2006 to 2 billion and 3.5 billion barrels in 2010 and 2012 respectively. As at June 2016, the discovered resources in the country were estimated at 6.5 billion barrels of oil equivalent in place with about 1.4 to 1.7 billion barrels of these resources recoverable (1 barrel is equivalent to 159 litres). The area explored presently represents less than 40% of the total area with the potential for petroleum production in the Albertine Graben. There is therefore potential for additional petroleum resources to be discovered in the country when additional exploration is undertaken.

Geological factors including the fact that oil in the subsurface is stored in rocks with pores (similar to water in a sponge) and within structures, makes it impossible to recover 100% of the resources. The amount of oil to be recovered depends on the properties of the rock such as how the pores within the rock are connected to one another, reservoir pressures and type of oil, among others. Globally, an average of 20 to 30 per cent of the oil in place is recovered economically using the available technologies. Enhanced Oil Recovery (EOR) methods are also often used to increase the amount of oil recovered from an oil field using different technologies to supplement the natural production. EOR is used to improve movement of oil in the oil field and the different methods of EOR include polymer flooding, gas injection, and steam flooding. Twentyone (21) oil and/or gas discoveries have been made in Uganda to date. The oil companies currently

licensed to explore, develop and produce petroleum in the country are; Total E&P Uganda BV., Tullow Uganda Operations Pty Ltd, Tullow Uganda Limited and China National Offshore Oil Corporation (CNOOC) Uganda Limited.

Article 244 of the Constitution of Uganda vests the ownership and control of minerals and petroleum in the Government on behalf of the people. The Government therefore holds all resources in trust for the people of Uganda. The Constitution also empowers Parliament to make laws regulating the exploration and exploitation of minerals and petroleum. In this regard, Section 4 of the Petroleum (Exploration, Development and Production) Act 2013 vests petroleum resources in the Government on behalf of the people.

In Uganda, at a projected peak production rate of about 200,000 barrels of oil per day, it is estimated that the current discovered resources can last 2030 years. The length of time that oil and gas resources last in any given country largely depends on the amount of discovered resources and the rate at which these resources are produced. This rate is determined by many factors, including technical, strategic and economic reasons. However, additional exploration and appraisal is expected to be undertaken in the country, and this could lead to additional resources being discovered in the country, hence prolonging this production period. It is important that these resources are produced gradually in an efficient manner and at an economic rate that will also provide a sustained benefit to the country.

The depth at which hydrocarbon deposits are found varies greatly around the world. Very shallow deposits of less than 30metres were found in the early days of exploration. Today, it is common to produce oil from more than 3,000 metres. In Uganda, petroleum has been encountered between 290 metres and 3,000metres in the discoveries that have been made in the Albertine Graben to date.

Different types of crude oil are produced around the world. Two of the most important quality characteristics of oil are its density and sulphur content. Density ranges from light to heavy, while sulphur content is characterized as sweet or sour. Crude oils that are light (with degrees of API gravity above 360) and sweet (low sulphur content) are usually priced higher than heavy, sour crude oils. Uganda's crude oil has; API range of 170 ~ 330, with a low sulphur content but is waxy with

an average pour point of 400C and hence solidifies at room temperature. Uganda's crude oil is therefore described as sweet and medium to heavy.

In accordance with section 66 of the PEDP Act 2013, when a discovery is made, the licensee is required to notify the Government and submit a technical evaluation.

The licensed Oil Company appraises the discovery to determine the extent of the discovery and the characteristics of the crude oil therein by drilling additional wells and/or undertaking well testing. Following completion of appraisal and interpretation of the data acquired during appraisal, the company applies for a production licence and this application is supported by a Field Development Plan (FDP) which details how the company intends to produce and transport the petroleum in the discovery; and a Petroleum Reservoir Report (PRR) that describes the technical understanding of the reservoir below the surface. These reports are reviewed by Government and discussed with the company until agreement is reached and a production license is issued. The company then prepares the field for production by drilling injection and production wells and also putting in place other surface facilities for production and processing of crude oil.

THE DIFFERENCE BETWEEN OIL AND GAS

Crude Oil and Natural Gas are both fossil fuels formed from the remains of dead animal and plants over the course of thousands of years. They both are used as a heat source, produce energy, and are both made up of different hydrocarbons which are compounds of both hydrogen and carbon.

The Difference between oil and gas is that the term oil refers to hydrocarbon mixtures that are liquid at room temperature, whereas gas is a mixture of gas formed from the fossil remains buried deep in the Earth. Gas can be associated with oil, or found alone.[3]

The biggest difference between Crude Oil and Natural Gas is their molecular makeup. Crude Oil is comprised of a wide and diverse selection of complex hydrocarbons. Because of its unique and complex makeup, Crude Oil comes in many different forms and its viscosity and volatility can vary widely. Due to each

[3] For further refrence see: Difference Between Oil and Gas.
http://www.differencebetween.net/science/nature/difference-between-oil-and-gas/#ixzz6zwC3crhF

deposit of Crude Oil having its own unique mix of chemicals, it requires extensive refining for it to be commercially used. Natural Gas is also made up of a mixture of different hydrocarbons, such as gasses like ethane, propane, butane, and pentane. However, the greatest benefit of natural gas is that its main component (roughly 80%) is the relatively simple hydrocarbon methane. This simple structure makes natural gas much easier to refine for commercial use.

Oil has a high density with a low rate of diffusion, whereas gas has an incredibly low density and viscosity. Oil is an unctuous flammable substance which is not water soluble, whereas gas is an aeriform fluid. Oil has various forms of compositions and types, such as rock oil, mineral oil and crude oil. Gas is a mixture of many other gases, and is used for heating, cooking, producing electricity and drying clothes. Gas is used with the help of pressure and temperature, that cast affects on the particles and is referred to as compressibility. Many types of oil are found naturally, and some are processed. We call motor oil, olive oil or crude oil etc. according to the applications and compositions.[4]

Oil and gas are used as fuels, and they are nonrenewable energy forms. Oil and gas are both used for heating homes and buildings, but natural gas, when compared to oil, is much cheaper. Oil is also more polluting when compared to gas. Oil is used as a backup fuel for gas. Gas is more widely spread as a heating fuel, and has reduced the usage of oil as a heating oil.[5]

Residual fuel contains relatively high amounts of sulphur, and has undesirable properties which make it less useful, and also the cheapest. It also cannot be used for cars or vehicles because it requires heating before use. Gas has replaced oil in the industrial sector, and gas wins over oil because it is comparatively cheaper and less hazardous to the environment, whereas oil use falls under regulations of environmental restrictions on emissions.[6]

When compared to oil, gas gives off a lot of heat and light, but does not produce smoke. Because it burns brighter, cleaner and hotter than other fossil fuels, like coal and oil, it has become the first choice as a fuel. A gas supply is also reliable, and gas pipes are buried safely underground.

[4] Ibid
[5] Ibid
[6] Ibid

Finally, they differ in their uses and consumption. After refinement Crude Oil is generally used for; Gasoline; Heating Oil & Diesel Fuels; Other Products (such as plastics); Jet Fuel; Propane; Residential Fuel Oil; Asphalt, to mention but a few whereas Natural Gas is used for; Electrical Power Generation; Residential Heating; Commercial Heating; and Industrial Production.

This difference is not one that many people working on the legislation have considered and the failure to consider this difference has been the single most likely factor to affect the environment. This difference must be understood so as to allow for the legislation for gas separately from the oil production laws.

It must be understood that gas, like Oil is a resource capable of profiting the nation. This means that the challenges being faced in adhering to the standards of gas, are not that different from the challenges faced in its sister mineral; oil.

Uganda has been described by the oil industry press as Africa's 'hottest inland exploration frontier'. Exploration is taking place across the entire Albertine Rift in Uganda, with five out of nine oil and gasprospecting blocks established by the government currently allocated to companies for exploration purposes. Given the volatility of oil and gas prices, it is difficult to estimate Uganda's likely revenues from the industry. Yet, if production goes ahead without hitches, the country's budget looks likely to receive a major windfall potentially doubling Uganda's revenue base within six to ten years.

This boost to national income offers Uganda a unique and exciting chance to alleviate poverty and create broadbased development and improved standards of living across the country. But international experience points to challenges which are often faced by resourcerich developing countries in translating mineral wealth into peace and prosperity. Much has been written about the "resource curse". Developing countries that become reliant on oil and gas minerals can see a deepening of a range of political, economic and social challenges.

CHAPTER

TWO

STATE OF OIL AND GAS INDUSTRY IN UGANDA

Introduction

The nature of oil and gas is one that is wide. As an industry, it covers very many areas of the economy and the social structure. It is concerned with the community; the people who are affected by the work it does. This is because the industry must acquire land or work side by side with the communities in order to extract oil. In this process, the industry must be careful to establish a working relationship between themselves and the communities concerned.

The oil and gas industry also concerns the environment and its sustainability. This paper found that the work carried out by the oil and gas sector has a direct impact on the wellbeing of the environment. Poor working mechanisms could potentially harm the environment. The industry can pollute air, land and water bodies thereby choking the surrounding environments of their existence and wellbeing. The industry is also concerned with the welfare of its own workers. It must be able to respect and uphold their health and safety while at work or risk facing court cases that will usually require compensation.

The Oil and Gas sector is comprised of numerous contracts that must exist to set the project into action. These contracts are principally between the IOC and the state that owns the resource. They can also be contracts between the IOCs and different subsidiary companies whose role is to carry out certain activities that the IOC could not carry out on its own.

The oil and gas mining is a venture that takes up a long amount of time. The bringing of oil to fruition can take years of hard work and as such, there is a lot of upfront investment that must be made at early stages. This investment can only be regained at the end of the exhaustion of the project. This is why the sector is very sensitive to changes in laws and taxation regimes as we know them. If these changes occur to the sector without rightful insurance, it becomes difficult to see the possibility of reaping from the sector.

The exploitation of Oil and Gas has extensive bearings upon the Communities where the oil is situated. The settlers in the Albertine region have so far been affected by the exploration stages of production. Some have been asked to relocate, with or without compensation. Some have been resettled to other parts in the country for purposes of exploration. This is because of the effects the processes of the mining could potentially have on their health and the environment at large.

The environment and climate are usually not spared in this too and as such, many measures must be put in place to preserve the environment as much as is possible during these processes of exploitation of the resource. These measures include the passing or updating of laws concerned with environmental management, and ratifying of international instruments that protect the same.

Also, the production of Oil undergoes different stages of production. The Upstream which entails the exploration and drilling of the oil; midstream which is concerned with transportation of this oil to refineries for purifying; and then downstream which is concerned with the marketing and sale of the product. All these processes will in essence require a lot of contracts with many different organisations and many subcontracts as well. Some are straight up necessary; others are required by the law.

All these factors; numerous contracts, upfront investment, long life span, sensitivity to change in laws and tax regimes, climate and community impact and different stages of production; increase the chances of disputes arising. Indeed, any of the mentioned factors has led to disputes that have required settlement.

Oil exploration started way back in the early 347 AD in China. In East Africa, oil exploration started in the early 1930s by the British colonialists. The discovery of

oil in South Sudan, in 1987 brought many prospects of oil discoveries in East Africa. 2006 massive oil reserves were discovered on the Ugandan shores of Lake Albert. However, the discovery of oil in Uganda is traceable far back before independence. Oil exploration activities were started in the 1920s by W.J. Wayland, a Colonial Government Geologist of the British Protectorate. The first well was drilled at a place called *ButiabaWaki* in 1938

However, the activities did not solemnize due to the outbreak of the Second World War in the 1940s and the political instabilities of in the 1960s 1970s. These activities were resumed in 1983, leading to confirmation of the presence of oil in reasonable commercial reserves. The first recoverable oil discovery was made in 2006 by Hardman Petroleum and Energy Africa (now Tullow Oil) in Mputa1 well KaisoTonya. This brings the total discoveries of oil in Uganda to 21 to date.

Oil and Gas Exploration in Uganda is currently taking place in the Albertine Graben region. This is part of the East African Rift System and runs along Uganda's western border with the Democratic Republic of Congo (DRC). It is 500 km long and estimated to be 45 km in width.

Amount of oil estimated to have been discovered is 6.5billion barrels. (I barrel is equivalent to 159 liters). Out of which 1.4 billion barrels is estimated as recoverable. The area explored presently represents less than 40% of the total area with the potential for petroleum production in the Albertine Graben and only 12% is licensed. There is therefore potential for additional petroleum resources to be discovered in the country when additional exploration is undertaken.

It is important to note that not all that oil will be discovered. Globally, an average of 20%30% of oil in place recovered economically using the available technologies. How with advanced in technology.

The oil companies currently licensed to explore, develop and produce petroleumthis can be increased. The advanced technology helps to supplement the natural production.

- *Total E&P Uganda BV*
- *Tullow Uganda Operations Pty Ltd,*

- *Tullow Uganda Limited and China National Offshore Oil Corporation (CNOOC) Uganda Limited who are Joint Venture Partners,*
- *Armour Energy Limited*
- *Oranto Petroleum Limited*

Uganda aims at commercializing (manage or exploit in a way designed to make a profit) the oil and gas resources. Basing on The National Oil and Gas Policy, 2008 this will be done by adding value to the oil and gas through refining it. This was affected with the signing of an MoU in Feb 2014 between government and the abovementioned companies. The MoU provides for a commercialization plan for the development of the discovered oil and gas resources in the country. The MoU provides for the use of petroleum for power generation, supply of Crude Oil to the refinery to be developed in Uganda and export of Crude Oil through an export pipeline or any other viable options.

The Government of Uganda and Total on 11th September 2020, initialed the Uganda Host Government Agreement (HGA) for the East Africa Crude Oil Pipeline (EACOP) project.

Host Government Agreement **(HGA)** (An agreement between a foreign investor and a local or host government governing the rights and obligations of the foreign investor and the host government with respect to the development, construction, and operation of a project by the foreign investor. An HGA is often required by foreign investors in countries where foreign investors' rights are not otherwise protected by a bilateral investment treaty.

Subsequently, the Heads of State, their Excellences President Yoweri Kaguta Museveni of Uganda and President Dr. John Pombe Magufuli of Tanzania on September 13, 2020 met in Chato, northwestern Tanzania and signed an MOU to fast track the EACOP project. Later, on October 26th, the President of Total Exploration and Production Africa Nicolas Terraz and the Attorney General of the United Republic of Tanzania Prof. Adelardus Kilangi initialled the Tanzania HGA, paving the way for the construction of the 1,445km long pipeline that will transport crude oil from Uganda’s oil fields in the Albertine Graben, starting from Hoima, to the Port of Tanga.

Following from the previous discussant, I will start by answering the question; what will be the effects of the developments of the refinery on the community settlement and whether some people were displaced

The Ministry of Energy and Mineral Development acquired 29 sq.km of land for the refinery. This land will host a refinery complex, an airport, waste management facilities and petrochemical industries among others. As part of this process, Government undertook a Resettlement Action Plan (RAP) through a consultative process with the Project Affected Persons (PAPs) for the required land during 2012. The objective of the RAP was to develop a framework for managing the loss of economic activities and livelihoods through compensation and/ or relocation of the affected people. Following approval of the RAP, its implementation commenced in July 2013 with disclosure of compensation values to verified land, crop and property owners and training in financial management and livelihood improvement to enable the PAPs put to good use the compensation packages. Payment of compensation packages commenced in December 2013 and by December 2016, 98% of PAPs who opted for cash compensation had received their payments. The remaining 2% consist of PAPs who have not shown up or have rejected the rates. In addition, 533 acres of land was acquired in Kyakabooga Parish, Buseruka Subcounty for resettlement of the PAPs who opted for relocation and physical planning for this land has been completed. Construction of resettlement houses for those who opted for relocation was completed and handed over to the PAPs during 2017.

Here outlined is the policy and regulatory frameworks governing the country's petroleum sector

A *National Oil and Gas Policy for Uganda* was approved by Cabinet in 2008. As part of efforts to operationalize the Policy, new legislation for the oil and gas sector in Uganda has been developed. The Petroleum Exploration, Development and Production (PEDP) Act 2013; and the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act 2013 became effective in April 2013 and July 2013 respectively. The former repealed the Petroleum Exploration and

Production Act of 1985. In addition, the Ministry has developed regulations in line with the two Acts and these are;

- The Petroleum (Exploration, Development and Production) Regulations 2016
- The Petroleum (Exploration, Development and Production) (Health, Safety and Environment) Regulations 2016
- The Petroleum (Exploration, Development and Production) (National Content) Regulations 2016
- The Petroleum (Exploration, Development and Production) (Metering) Regulations 2016
- The Petroleum (Refining, Conversion, Transmission and Midstream Storage) Regulations 2016.
- The Petroleum (Refining, Conversion, Transmission and Midstream Storage) (National Content) Regulations, 2016.
- The Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016.

This is in addition to other sectoral laws, statutes and guidelines on Environment, Wildlife, Water, Income Tax, Land, among others

And the Institutional frameworks for the sector are highlighted by The National Oil and Gas Policy and the roles of the different Government institutions led by the Ministry of Energy and Mineral Development. In line with the policy three key separate institutions were created with the following roles:

- *The Directorate of Petroleum in the Ministry which is responsible for policy making; coordinating the development of the sector; and undertake licensing and national and capacity building among other roles.*
- *The Petroleum Authority of Uganda (PAU) regulates the different players in the sector, including enforcing compliance and monitoring the operations of oil companies.*
- *The Uganda National Oil Company (UNOC) as a separate commercial entity responsible for state participation in the licenses and other related business aspects*.

The detailed roles of the Petroleum Authority and National Oil Company are provided in the PEDP Act 2013. The Boards of Directors for PAU and UNOC were inaugurated in October 2015, and recruitment of the Executive Director and the Chief Executive Officer respectively by the respective boards of directors together with staff was undertaken during 2016 and 2017. The UNOC and PAU are now operational. For purposes of our class, oil and Gas law students can be encountered anywhere by any person and a question can be asked that how can the national oil and gas policy and the laws be accessed.

Hard copies of the National Oil and Gas Policy for Uganda and the laws and regulations can be accessed from the Ministry of Energy and Mineral Development, and soft copies from both MEMD and PAU's websites www.energyandminerals.go.ug and www.pau.go.ug respectively. As part of the implementation of the National Communication Strategy for the Oil and Gas Sector in Uganda, government has developed a popular/ simplified version of the policy which has been translated into eleven local languages, which can also be accessed as highlighted above.

Furthermore, the efforts which have been put in place to keep local communities informed and enable their participation in the sector are discussed as follows;

The *National Communication Strategy for the oil and gas sector* in Uganda identifies communities in the Albertine Graben as one of the key audiences for oil and gas information since they host oil and gas operations and infrastructure for the developments. Information dissemination to communities is undertaken through Community consultations and sensitization meetings before and during operations.

Radio talk shows are carried out periodically to relay information to communities in areas of operation and across the country on topics of common interest. In addition, the Community Development Officers based at the district and community levels are being capacity built to also support the dissemination of information on the oil and gas sector to the communities. Local communities supply most of the unskilled labor required during implementation of oil and gas activities in their areas. The Oil Companies undertake Corporate Social

Responsibility (CSR) initiatives to support service delivery in health, education and enterprise development, among others in the communities where oil and gas activities are undertaken. The Ministry has also set up regional offices to ensure easy accessibility for the communities.

Furthermore, The NOGP provides for efficiency in licensing through competitive bidding. The Petroleum (Exploration, Development and Production) Act, 2013 provides for licensing of areas with the potential for petroleum production in the country to be undertaken through open, transparent and competitive bidding. Less than 10% of the Albertine Graben is licensed. The first competitive licensing round for some of the areas which are currently not licensed was announced by the Minister for Energy and Mineral Development on 24th February 2015 and three new licenses were issued. The second competitive licensing round was announced in May 2019 and is still ongoing, covering 5 blocks in the Albertine Graben.

Since the Albertine graben is shared with DRC there are some strategies which were put in place to ensure harmonized development.

The Governments of Uganda and DRC (then Zaire) signed an agreement of cooperation in 1990, to allow for joint exploration and exploitation of resources across the border by either country. An addendum to the agreement was signed in 2007 to provide for how any fields falling across the border would be shared in line with the principle of unitization. This agreement allows establishment of the percentage of the field in each country and thereby determine each country's share at the time of production. The two Governments have held discussions on the ongoing work in the Albertine Graben, exchange of technical data and visits to the Albertine Graben to understand the exploration work, among others. It is however important to note that the discoveries made in Uganda to date are not on the common border with DRC. The Governments of the two countries continue to have regular dialogue to ensure harmonious development of the resources on either side of the border.

And then for the issue of revenues which the government should expect from the sector; Government revenues from oil and gas include royalties, profit oil share, state participation and taxes. These revenues are expected to increase over the

years as the company's recoverable costs reduce. The Production Sharing Agreements (PSAs) signed between Governments and the Oil companies provide for the sharing of petroleum during production. The International Oil Company (IOC) invests capital (along with the National Oil Company) in some cases. Investment costs are deducted from production revenues in the form of cost oil. The share of the revenues from the produced oil less cost oil is profit oil, which is shared between Government and the licensee. Government also receives other payments such as bonuses, royalties, duties, or taxes which are calculated on the basis of the amount of oil produced; Government and the IOC will share profit oil throughout the entire duration of production. Government also receives corporate tax on the IOC's share of profit oil.

The government determines the recoverable costs as discussed below;

The Production Sharing Agreement (PSAs) provides that the financing risk for petroleum operations is borne by oil companies. When commercial production starts, the company receives a proportion of oil/gas production for the recovery of their costs and a share of the profits. The PSAs set out the criterion under which these costs are determined basing on the annual work programs and budgets undertaken by the oil companies. These work programs and budgets are presented to the Advisory Committee comprised of representatives of Government and the Oil Companies for consideration and approval. The Auditor General audits the annual books of account of the oil companies and indicates approval of the recoverable costs for petroleum activities for the period under review.

Lastly it is the Petroleum Authority of Uganda which is required to monitor and regulate all operations of the oil companies. Prior to its creation, the Ministry of Energy and Mineral Development deployed onsite field monitors during all company operations to among other things ensure that the executed work programmes and budgets are inline with those approved and followup to ensure that work is undertaken in line with the provisions of the Laws, PSAs and Regulations. The Companies submit daily reports regarding operations, including the costs for these operations. Other institutions such as NEMA and UWA also have fieldbased monitors who work with the District Environment Officers and

District Community Development Officers to monitor the Environmental, biodiversity and social aspects.

The goal of the National Oil and Gas Policy is to use the country's oil and gas resources to contribute to early achievement of poverty eradication and create lasting value to society. The Oil and Gas Revenue Management Policy emphasizes the need for Petroleum revenues to be used to develop infrastructure and enhance the other productive sectors of the economy such as agriculture, tourism, manufacturing, education, among others. This will enable the benefits of oil revenues to be shared with the entire population and its impact is felt even after the resources are depleted. The Public Finance Management Act 2015, Part VIII Section 5575 provides for among others, the management of revenues received from petroleum resources, specifically how these revenues will be monitored, invested, audited and dispersed to support development. The Act also provides for sharing of revenues between Central Government, Local Governments and Cultural Institutions. Local Governments will receive 6% of royalties and Cultural institutions will receive 1% of royalties.

State of national or local content.

Local content refers to an increase in the utilisation of domestic labour and businesses by oil, gas and mineral companies, nontax benefits stay incountry or in the backyards of resource regions and local ownership and capital (equity) in the longterm. Local content is composed of employment skills transfer, technology transfer, business development and competitiveness, greater participation in the extractive sector, development of downstream industries and a quantifiable retained national net product leaving host nations and communities better off than the preresource extraction periods.

Local or national content[7] (state or public participation in resource exploitation) goes to the root foundation of the right to development and economic rights

[7] 37 The National Oil and Gas Policy, Objective 7 "To ensure optimum participation in oil and gas activities. Objective" and Objective 8 "To support the development and maintenance of national expertise".

enshrined in the Ugandan Constitution.[8] The National Oil and Gas Policy include two key objectives addressing the country's local content aspirations: Objective 7: to ensure optimum participation in oil and gas activities. Objective 8: to support the development and maintenance of national expertise.

TRAINING AND EMPLOYMENT OF UGANDANS UNDER THE UPSTREAM AND MIDSTREAM LAWS

Section 56 (3) (f)[9] provides that "an applicant for a petroleum exploration licence is expected to support his application with a statement on how it intends to train and employ Ugandans." There is however no specific provision in the same law ensuring that, once trained, the same transnational oil companies should absorb the trained Ugandans. Training and employment of Ugandans is further provided for under Sections 126 and 127, which reinforces Section 56 (3) (f) by demanding that the licensee submits to the Petroleum Authority a detailed program for recruitment and training of Ugandans and transfer of knowledge to Ugandans. However, there are no training and employment targets set within these provisions and nor does the law provide any form of sanctions for noncompliance. These provisions are repeated in the midstream legislation verbatim.[10]

These provisions are to a lesser extent consistent with the provisions of the Model Production Sharing Agreement for Uganda (2006), which has a number of provisions on the employment and training of nationals for the sustainable management of the industry.

Article 21 Training and Employment

» Train and employ suitably qualified Ugandan citizens following commencement of Production.

[8] The Republic of Uganda Constitution, 1995. Article 40 and 45.
[9] The Petroleum (Exploration, Development and Production) Act for the (Upstream), 2013.
[10] Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013. Sections 54 and 55.

» *Undertake the schooling and training of Ugandan citizens for staff positions, including administrative and executive management positions.*
» Provide grants to support the training of government officials on matters related to the management and oversight of the petroleum sector.

Both the upstream and midstream laws lack provisions that ensure that Ugandans employed by the transnational oil companies receive the same treatment, pay and opportunities at their work place with their foreign counterparts.[11] A recent report by the Office of the Auditor general[12] revealed that Ugandans working in three transnational oil companies (Tullow Oil, CNOOC and Total) were being underpaid compared to their foreign counterparts. The report discovered that expatriates on average earned five to ten times more than nationals, while other expatriates were found to have overstayed past the due dates for the nationalization of their positions.

Provision of goods and services by Uganda entrepreneurs under the Upstream and Midstream Laws

Both the upstream and midstream laws require licensee holders in the exploration and refinery phases to give priority to local goods and services provided by Ugandan entrepreneurs. While these laws "give preference" to local goods and services, the term is too broad and subject to abuse by the more sophisticated transnational oil companies. The law allows transnational oil companies to use locally present foreign service providers who have built a longstanding relationship with them in the process clouding out local firms.

Article 20 (Purchases in Uganda) of the Model Production Sharing Agreement

[11] 1995 Constitution of Uganda, Article 21.
[12] Keith Muhumuza, "Auditor General Faults and Government and Oil Companies on skilling Locals." http://www.
monitor.co.ug/Business/Auditor--General--faults--government-oil/-/688322/2687092/-/af385ez/-/index.html
(accessed June 30th, 2021).

provides as follows;

- *Maximize use of local goods and services, where available on a competitive basis.*
- *Implement tender procedures that give adequate opportunity for local suppliers to compete.*
- *Report achievements in utilizing Ugandan goods and services.*

Much as the law demands that transnational oil companies, their contractors and sub contractors notify local goods and service providers of upcoming contracts as early as possible, there is no specific timeframe within which such information should be made available. This leaves the local firms at the mercy of transnational oil companies, which could elect to provide such information in a time frame that is too late for the suppliers to participate. There are no national content targets, nor standardized procurement procedures for local business entities and no efforts by government at both the central and local government levels to develop the capacity of local suppliers for the oil and gas sector. A recent study commissioned by the Ministry of Energy and Mineral Development [43] defines local content in terms of value addition, implying that ownership of the company performing the value added activities should not matter. The study further argues, that in a globalized industry, a local subsidiary of a multinational company can be just as effective in using domestic inputs and developing capacity and competence in Uganda as a company in which Ugandans hold a majority of the shares and that national content should be measured as value added covering value generation in both indigenous and foreign owned firms.

Environment, land Compensation, Human rights and security related issues.

The Supreme Court of India in ***Susethat Vs State of Tamil Nadu***[13] has held that there must be a balance between human rights and economic development. As

[13] Civil Appeal 3418 of 2006.

such, the oil and gas laws should be revised to include this precautionary principle in a bid to protect the right to a clean and health environment, and related rights alongside mineral development.

Liability for damage due to pollution (upstream and midstream laws)

Principle 4 of the Rio Declaration[14] and Article 39 of the Constitution of Uganda recognize the right of every person to a clean and healthy environment. To protect this right, the Petroleum Exploration and Production Department Act sets in motion provisions against pollution in Part X thereof. However, Section 131 of the upstream law is ambiguous on liability for pollution damage caused without a licence: "… pollution damage occurs during a petroleum activity and the activity has been conducted without a licence, the party that conducted the petroleum activity is liable for the damage, regardless of fault".

Aside from finding companies liable for pollution, regardless of fault, both the upstream and midstream laws (Section 130 and Section 58 (1)) fail to provide for a compensation regime for victims of such pollution or any losses resulting from poor management of petroleum operations, in particular, the unforeseeable long term damages such may have on the environment and human health. It would appear that according to Section 131 there is no liability for pollution damages if caused with a licence, which legalizes pollution. Liability for pollution damage should accrue with and without a licence. However, there are more clear and detailed provisions in the draft National Environment Management Bill currently under review (clauses 95100). Clause 100 states that a person (including a legal company) who pollutes the environment, is strictly liable for the damage caused to human health or the environment regardless of fault. In time there will be need to harmonize the upstream legal provisions on pollution control with the principle legislation on environmental management once the proposed bill becomes law.

[14] Rio Declaration, 1992.

Compensation and displacements

Article 26 of the Constitution provides for the right to protection from deprivation of property and guarantees the right to everyone to own property individually or in association with others. It sets aside conditions for compulsory deprivation of property in public use or in the interest of defence, public safety, public order, public morality or public health. Article 26(2)
(b) further provides that there must be prompt payment of fair and adequate compensation, prior to the taking of possession or acquisition of private property. A right to seek a court remedy for any aggrieved party is equally accorded.
Noticeably, there are no specific provisions addressing surface access rights disputes between international oil companies and local communities, nor are there provisions for compensation and resettlement of displaced communities. This has exacerbated conflicts between government, transnational oil companies, and local communities in the oil rich region culminating into court disputes among others.

Land conflicts and human displacements in the Albertine Graben

The government, transnational oil companies, and international service providers in the oil and gas industry have been faulted for the ever increasing land conflicts in the oil rich region. The existing institutional and legal systems fail to recognize the legal interests and rights of communal land owners in the face of multinational business interests. This has led to an increase in land grabbing, violent evictions and displacement of thousands of communal land owners and consequently a spate of court cases against government.[15] Oil in Uganda, a local online newsletter reveals an increase in land grabbing, evictions and violent displacements of customary landowners by international business entities in collusion with local businessmen and elites from Kampala.[16]

[15] The Constitutional (Amendment) Act No.11 of 2005. Replacement of Article 244 (1).
[16] Ibid Section 35.

In operationalizing Article 244 (1) of the Constitution on minerals and petroleum resources, the Uganda National Land Policy lays down strategies to be implemented by government in ensuring appropriate management and governance of strategic natural resources. The following strategies are set out in Clause 30 of the policy; government is required to:

i. *Protect the land rights and land resources of customary owners, individuals and communities owning land in areas where mineral and petroleum deposits exist or are discovered;*
ii. *Allow to the extent possible, coexistence of customary owners, individuals and communities owning land in areas where petroleum and minerals are discovered;*
iii. *Provide for restitution of land rights in event of minerals or oil being exhausted or expired depending on the mode of acquisition;*
iv. *Guarantee the right to the sharing of benefits by land owning communities and recognize the stake of cultural institutions over ancestral lands with minerals and petroleum deposits; and*
v. *Adopt an open policy on information to the public and seek consent of communities and local governments concerning prospecting and mining of these resources.*

These provisions appear sufficient to remedy the current injustices faced by customary landowners in the oil rich region and reinforce the right to protection from deprivation of property and to culture and similar rights. However, the decision of government to retain 93% shares from royalties, only relinquishing a paltry 6% to be shared between local governments in the oil producing region may be too little to guarantee the desired financial benefits optimization.[17] Government rewards cultural institutions with a relatively insignificant 1%, while it completely ignores communal land owners and victims

[17] The Public Finance Management Act No.3 of 2015. Section 75.

of violent evictions and displacements·

There is no legal recognition of traditional mechanisms for dispute resolution or customary law as a framework for the processing of disputes under customary tenure. The government must demonstrate the political will to protect and remedy the violations faced by customary land owners. The government should reinstate district land tribunals suspended by the judiciary in 2006 for lack of adequate budgetary support.

The upstream law is explicit on surface rights. Section 135 provides that "a licensee holder cannot exercise any rights under their licence without the written consent of the landowner." Extensively, the provision attempts to provide for the coexistence of petroleum development with landowner's rights; notably Section 136 enables landowners in an exploration area to retain the right to graze stock or to cultivate the surface of the land insofar as the grazing or cultivation does not interfere with petroleum activities or safety zones in the area.

However, Section 138 of the upstream law enables a petroleum production licence holder to acquire exclusive rights over a block in a development area. The law disarms the landowner's opportunity to negotiate for an enhanced value of their property by subjecting it to the government valuer's determination. This is because the government valuer is by law instructed to disregard the increase in the value of land as a result of the presence of petroleum. There is also a risk that some landowners may not be compensated for disturbance of their rights and for any damage done to the surface of the land as a result of oil and gas related activities, if complaints or claims are made four years after the fact (Section 139(2) of the upstream law.

Security and militarization of the Albertine Graben

Security for the oil and gas development projects in the Albertine Graben is provided by an elite special government military unit and private security firms.[18]

[18] Haggai Matsiko, "Guns in the oil region" The Independent

The Uganda Human Rights Commission has reported the denial of district labour officers access to oil well pads in Buliisa District, while civil society organisations have complained of illegal detentions and harassment from the security and military in the region.[19]

Currently the upstream and midstream laws are silent on human rights and there are no set parameters or codes of practice guiding military, police or private security firms in the oil region with respect to human rights. Oil companies are however dutybound to provide for their own security detail under Sections 143 and 66 of the Upstream and Midstream laws respectively.

Revenue management and sharing

The goal of the National Oil and Gas Policy is to use the oil and gas industry to contribute to early achievement of poverty eradication and lasting value to the society. To zoom closer into this for instance, the petroleum will be used to improve and develop infrastructure and enhance productive sectors that ride on these; such as agriculture, tourism, trade, inter alia such that the benefit of the oil and has production are well distributed to the population. The revenue from petroleum production therefore must be well managed and invested to realize the fruition of the same.

The Public Finance Management Act 2015 from Sections 55 – 75 stipulate on the management of petroleum revenues; that involves its collection, monitoring, auditing and investing. Section 56 establishes the petroleum fund where all the revenues accruing to the government shall be paid to the fund.

Existing environmental concerns.

This is obviously a foreseeable adverse impact on the environment and so the expectation is that the government undertaking this oil exploitation already has mechanisms to curb the risk posed against the government.

In place are the ESIAs Environmental and Social Impact Assessments whose purpose is to assess and predict potential adverse social environment impacts and develop suitable mitigation measures which are documented in the Environmental

http://www.independent.co.ug/cover- story/5968-guns-in-oil-region (accessed on July 5th, 2021).

[19] Uganda Human Rights Commission, *"A Special Report on Oil in Uganda: Emerging Human Rights Issues. Special focus on selected districts in the Albertine Graben*" (2013).

and Social Management Plan (ESMP). The government can only deal with these from a place of mitigating the adverse effect of the petroleum production to the environment; how it can be contained and smoothen the sharp ends of the issue on environmental concerns.

Various other frameworks have been established in regard to addressing the environmental concerns. These include; Environmental Sensitivity Atlas for the AG, an enforcement strategy plus guidelines for waste management and operations in protected areas.

Waste management

The waste in question includes the mud cuttings; a mix of the rock cuttings and drilling fluids whose composition includes bentonite and barite chemicals which without doubt pose a grievous harm to the local marine ecosystem.

During the exploration phase, waste generated is put in consolidation site where waste is containerized and monitored; that is its transportation, treatment and disposal. In Uganda, Water Based Mud has been used most often because it is environmentally friendly than Oil Based Mud for this purpose there are companies that have been licensed by government through NEMA specifically to handle waste. Among these are Enviroserv, White Nile Consultants ltd and Luweero industries have constructed facilities in Hoima and Nakasongola.

In addition, the oil spills are a concern too that must be managed. The danger is wide spread when consideration is made of Lake Albert which is shared with Democratic Republic of Congo which feeds the Nile that flows to South Sudan and beyond.

To mitigate this, in place is the Oil Spill Contingency Plan drafted from the Environment Risk Assessment and Sensitivity Analysis for oil and gas operations. This plan considers a level of preparedness, emergency response mechanism, command structure and resources available for handling spill.

What are the findings of the SEA Strategic Environment Assessment? Are the recommendations being implemented?

The SEA is an international Concept that aims to evaluate impacts f oil and gas operations to ensure these are captured in all government plans. The petroleum

production without doubt bears a number of risks and so multiple plans and frameworks put in place. The SEA plays the part to evaluate whether these risks are reasonably foreseen and thus practical mechanisms to contain the risks. The assessment observed that the volume of waste generated would pose a great hazard potential to human beings, water bodies and animals. The assessment also revealed the demographic changes in the region that would require planned social amenities like road networks, health facilities etc.

Some of the assessments being implemented include; the state of the art waste management facilities have been constructed in the Albertine graben, the Ministry of Works and Transport are upgrading the road networks in the Albertine as well as plan s for the construction of an international airport in the region is underway. Also, clean water and infrastructure have been extended to the region. In addition, the Ministry oof Education, sports and information technology has sanctioned a curriculum that extends to oil and gas setting by upgrading existing technical institutions to provide certifiable oil and gas training. This greatly contributes to demand for ready labour force. In addition, Enterprise Enhancement Centre is being established to raise the standard of business and entrepreneurs, there is ongoing implementation of an Agriculture Support Development Programme. *inter alia.*

Therefore, the manifestation of the projects mentioned above and various others is a clear indication that the indications of the Strategic Environment Settlement are well being implemented. This is also manifest in the numerous frameworks set in place by government to calculate and manage the risks against the environment, social content and the whole region.

It must be noted that the government has undertaken a number of endeavors, some in the aspects discussed above like environmental concerns, legal framework on the

management of the revenue to guard against the resource curse.

The question on how Uganda will guard against the oil curse is very important to consider. The government of Uganda is conscious of the fact that many African countries despite being wealthy in resources still remain poor under the brackets of developing countries. The National Oil and Gas Policy is well informed that the sector can

have a negative effect on the oil and gas resource utilization leading to economic stagnation and increased poverty.

Therefore, the government developed a robust policy, legal regulatory and institutional framework that addresses the potential negative social, environmental, and economic impacts of petroleum exploration and production in Uganda. In addition to this, government has endeavored to establish a capacity in and outside government to ensure effective and efficient development and management of petroleum resource.

CONCLUSION

This analysis demonstrates that Uganda's oil and gas laws fall short of protecting and promoting fundamental and other human rights and freedoms enshrined in the country's constitutional framework. The analysis also shows that Uganda's current policy and legal regime fails the compliance test, with regard to the UN Guiding Principles on Business and Human Rights. A number of human rights issues are raised, ranging from lack of transparency and accountability in the sector, nondisclosure of information, land conflict and compensation rights violations, labour discrimination between international expatriates and local human resources employed in the international oil companies, security and militarisation of the Albertine Graben, and local business opportunities through the provision of goods and services by local small business enterprises as key to the realisation of the desired sustainable economic development in the country. However, it should be noted that economic development does not directly correlate to human development. Therefore, deliberate measures need to be taken to ensure that sustainable economic development realises human development.

CHAPTER THREE

LEGAL REGULATORY FRAMEWORK ON OIL AND GAS

Introduction.

According to the **International Labor Organization Report 2020**[20] 2.3 million women and men around the world succumb to work related accidents or diseases every year; it corresponds to over 6000 deaths every day. Such senseless deaths are undesirable and as such regulation of commercial activities especially extractives is necessary to ensure health and safety standards of workers and the communities surrounding the commercial activities are upheld.

It is noteworthy that accidents have a long history as far back as 1870's[21]. A case in point is the **Galician Oil industry in 1870's** where oil would be extracted by digging holes[22]. This was an incredibly inefficient style of extraction as well as a safety hazard[23]. As a result workers were often victims of collapsing shafts and noxious gases leading to loss of lives[24].

This begs the question whether firms should be allowed to do selfregulation or they should be regulated by the state. Allowing firms to selfregulate or persuasion would have implications of poor or no compliance to health and safety standards and strong state regulations on the other hand could discourage certain investors.

[20] International Labour Organization Report (2020)
[21] Alison Fleig Frank, Oil Empire: Visions of Prosperity in Austrian Galicia (Harvard University Press 2005)
[22] ibid
[23] ibid
[24] Ibid

Ian Ayres and John Braithwaite weigh in on the above debate and observe in one of their works that there is a debate between those who favour strong state regulation of business and those who advocate deregulation[25]. **Ian Ayres** further notes that the trick of a successful regulation is to establish a synergy between punishment and persuasion. The import of the above assertion seems to suggest that there should be a blend of both models[26]. It is equally noted that you cannot develop a sound regulatory enforcement policy unless you understand the fact that some times business actors were powerfully motivated by making money and sometimes they were powerfully motivated by a sense of social responsibility[27].

In the case of **Susethat v State of Tamil Nadu**[28] the Supreme Court of India held that there must be a balance between human rights and economic development. The import of the above case is that development at the expense of people's lives is not desirable in a democratic dispensation.

Uganda's Regulatory frame work.

In Uganda, the discovery of oil and gas has been identified as having the potential to transform Uganda's economy, moving away from a predominantly lowincome to a competitive upper middle income country by 2040[29]. However, this progress should not be at the expense of the population.

Following the discovery of the commercially viable oil deposits in the Albertine Graben region in 2006[30], Uganda has since then embarked on establishing effective regulatory frame work management to promote growth, development and respect of human rights such as the right to health in Uganda.

Human Health has been defined to include physical, psychological and socio

[25] Ian Ayres , John Braithwaite, Responsive Regulation : Transcending the Deregulation Debate (Oxford University Press 1992)
[26] ibid
[27] Ian Ayres , John Braithwaite, Responsive Regulation : Transcending the Deregulation Debate (Oxford University Press 1992)
[28] Civil Appeal 3418 of 2006
[29] Christopher Mbazira, Teddy Namatovu (2018) African Human Rights Law Journal
[30] Pamela Mbabazi and Martin Muhangi, Uganda's Oil Governance Institutions: Fit for Purpose CPRD Working Paper No 60(2018) Mbarara University

economic dimensions[31]. Health and Safety laws and regulations trace their routes from the **Factories Act 1961 and the Offices, Shops and Railway Premises Act 1963(OSPR)**[32] which were aimed at correcting identified wrongs, the laws tended to be very prescriptive in their content that is to say they laid down how the wrong was to be corrected and were restrictive in their field by applying only to the particular operation, process or premises defined in the Act.

The regulatory framework regarding oil sector in Uganda includes policies, the Constitution, Acts of Parliament as well as Regulations. As such a number of laws have been enacted to ensure that people are protected from health hazards and life threatening situations that may arise from oil and gas industry activities.

The Constitution under **Article 79(1) of the Constitution of the Republic of Uganda 1995 as amended**[33] dresses Parliament with power to make laws on any matter for the peace, order, development and good governance of Uganda. Parliament therefore is possessed with power to make laws to regulate the Oil and Gas sector.

Article 244(1) of the Constitution of the Republic of Uganda 1995 as amended[34] vests Government with control of all minerals and petroleum in, on or under, any land or waters in Uganda. The Government therefore is charged with responsibility to initiate policies and regulations for better management and governance of the oil and gas sector.

Article 244(2) of the Constitution of the Republic of Uganda 1995 as amended [35] confers powers upon parliament to make laws regulating the exploitation of minerals and petroleum. The purpose of the laws made by parliament is to ensure that companies/ firms uphold health and safety standards.

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[31] Margaret A. Mcoy and Judith A. Salerno, Assessing the effects of the Gulf of Mexico oil Spill on Human Health: A Summary of the June 2010 Workshop (The National Academies Press 2010)
[32] John Ridley, Health and Safety in Brief (Elsevier, 3rd edition 2004)
[33] The Constitution of the Republic of Uganda 1995 as amended
[34] The Constitution of the Republic of Uganda 1995 as amended
[35] ibid

Article 39 of the Constitution of the Republic of Uganda 1995 as amended[36] provides for a right to a clean and Healthy Environment. Oil companies therefore must ensure that pollution and oil spills are avoided and in the long run uphold proper health and safety standards. **Objective 14 of the National Objectives justiciable under Article 8A of the Constitution**[37] is to the effect that the state must ensure that all Ugandans enjoy rights and opportunities and access to health services, clean and safe water among other rights. The licensee therefore has a responsibility to ensure there is no release of waste into wetlands. The wastes from the oil exploration activities must be managed well to avoid contamination of water resources and aquatic life generally.

The leading policy on **Oil and Gas sector in Uganda is the Oil and Gas Policy 2008**[38]. The main aim of this policy is to use the Country's oil and gas resources to contribute to early achievement of poverty eradication and create lasting value to society[39]. **Principle 5.1.5 of the Oil and Gas Policy 2008**[40] provides; "The environment, human development and biodiversity should be neatly balanced for mutual benefit and survival. Many actors engage in development initiatives and interventions focusing on expected benefits and often end up by doing harm. This policy shall contribute to promote this balance to ensure sustainable development. It is the responsibility of licensed oil companies to protect the environment where they work or any areas in the country impacted by their operations while Government shall legislate, regulate and monitor compliance." The above principle underscores the importance of regulations by government to ensure oil companies do not make profits at the expense of the environment health and safety of the people.

Principle 6.2.5 of the policy recognizes the need to protect the health of the community, it anticipates the negative effects of oil and gas for example oil spills that contaminate the water sources and also blow outs that would cause

[36] ibid
[37] The Constitution of the Republic of Uganda 1995 as amended
[38] Oil and Gas Policy (2008)
[39] Ojijo Pascal, The Legal Regime for Protection of Environment During Oil and Gas Exploration: Case Study of Uganda
[40] Oil and Gas Policy (2008)

death[41].Gas flares and dust would result in air contamination that would lead to sickness[42].

The other policy is the **National Environment Management Policy** [43]whose overall goal under **Principle 2.1** is to ensure a sustainable social and economic development which maintains environmental quality and resource productivity on a long term basis that meets the needs of the present generations without compromising the ability of future generations to meet their own needs. The above policies are critical since it's important to protect the forests, aquatic life and wild life in the Albertine region and to ensure survival of the people in the areas[44].

Other regulatory framework is discussed here under;

The **Petroleum (Exploration, Development and production) Act, 2013** [45] provides under its long title that it is to give effect to Article 244 of the Constitution, promote efficient and safe production activities among other purposes.

Section 140(1) of the Petroleum (Exploration, Development and production) Act[46], 2013 provides that petroleum activities shall be conducted in such a manner as to enable a high level of safety to be maintained but also conform to best petroleum industry practices and the occupational Safety and health Act of 2006.

Section 140 Sub section 2[47] provides that a licensee shall identify hazards and evaluate risks associated with any work performed in the course of petroleum activities carried out under the licence which constitute a hazard to the health of persons employed by him or her.

One of the regulations aimed at promoting health and safety is the **Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety**

[41] ibid
[42] ibid
[43] ibid
[44] ibid
[45] The Petroleum (Exploration, Development and Production) Act, 2013
[46] Petroleum (Exploration, Development and Production) Act
[47] Petroleum (Exploration, Development and production) Act

and Environment) Regulations, 2016[48]. It confers a responsibility upon a licensee and any person working for him or her to ensure compliance to the Act as well as regulations and any other applicable law. This presupposes that a licensee must ensure that the operations undertaken do not endanger life.

Section 4 of the Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016[49] provides general duties to a licensee which include preventing incidents, accidents and hazards and limit their consequences to human health and environment, prevent and reduce the number of accidents among employees that are likely to result into loss of time for work, disability or fatality to the employees, to ensure that occupational safety and health in all midstream operations is satisfactory for the health and safety of employees and the environment, to ensure that the level of safety and health is at all times concurrent with the technological development and to comply with the requirements under the **Occupational Safety and Health Act, 2006**[50]**.**

Regulation 5(2) of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 [51] provides that the licensee shall ensure that process and auxiliary facilities are free from failure during operation that is likely to lead to hazardous situations , incidents or accidents.

Regulation 6(a) of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 [52] requires the licensee to comply with requirements of the Occupational Safety and Health Act, 2006 and in addition ensure that the management of health, safety and the environment comprises the operations, resources, processes and organization necessary to ensure prudent operations and continuous improvement.

[48] Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016
[49] Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016
[50] Occupational Safety and Health Act, 2006
[51] ibid
[52] ibid

Regulation 7(a) Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 [53] provides that the licensee shall ensure that all offices, warehouses and process buildings within a facility are constructed in accordance with standards approved by the Authority and best petroleum industry practices. Premises safe

Regulation 7(b) Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 [54] requires a licensee to ensure that the laboratory building construction takes into account the safety of employees and provision of adequate ventilation and measures for proper disposal of waste.

Regulation 7(d) of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 [55] requires the licensee to ensure that the emergency alarm system and evacuation programs within the facility conform to standards approved by the Authority and best petroleum industry practices.

Regulation 8(1) of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 [56] confers a responsibility on a licensee to ensure that risk assessment on health, process, safety and working environment is planned, carried out and used.

Regulation 8(2) of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 [57] provides that the risk assessment carried out under Sub regulation (1) shall identify the likely incidents, hazards or accidents that may occur during midstream operations or in the operations of a facility and their consequences to human life , environment and the facility.

Regulation 16 of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations,

[53] ibid
[54] ibid
[55] Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016
[56] ibid
[57] ibid

2016[58] requires a licensee to reduce risk by selecting technical, operation and organizational solutions that reduce the probability of harm, errors, hazard,, incidents or accident situations that may occur, establish barriers among other measures.

Regulation 19 of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 [59] requires the licensee to take measures to protect the community where the facility is located or where the midstream operation is taking place from impacts of a facility or midstream operations during the construction, operation and decommissioning of facilities.

Regulation 20 of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 [60] requires the licensee to put in place safety signs at the entrance to rooms, zone or equipment where employees are likely to be exposed to incidents, hazards or accidents at the restricted areas, ensure that there is adequate response and rescue against incidents, hazards or accidents among other measures.

Regulation 21(1) of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 [61] provides that the licensee shall ensure that every employee has the competence necessary to carry out his or her duties in accordance with the occupational Safety and Health Act 2006 and the regulations.

Regulation 21(2) of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 [62] provides that an employee shall have training in occupational health and safety and in handling incidents, hazards and accidents. John Ridley has noted that the training may take the following form[63];

[58] ibid
[59] ibid
[60] ibid
[61] ibid
[62] Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016
[63] John Ridley, Health and Safety in Brief (Elsevier, 3rd edn 2004)

At induction training for all employees would cover all aspects of employment including: fire precautions and evacuation drill, details of company products, tour of the premises to identify location of facilities, occupational health facilities such as first aid arrangements, accident prevention activities, safety rules to be obeyed, fire and security arrangements, who to contact if in doubt.

In respect to a contractor and his employees: the training would include local safety rules to be obeyed, any special hazards in their area of work, safe systems of work and permittowork systems procedures, emergency and evacuation procedures, allowed access routes, permitted use of welfare facilities, canteen, toilets, first aid to mention but a few.

Ongoing health and safety training for all employees: would include reaffirmation of safety rules, hazards likely to be met in the work and techniques for avoiding them, safety devices and how to use them, reaffirmation of emergency and evacuation procedures, action in the event of an accident as well as procedure on identifying a hazard.

Regulation 25 of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 [64] places a responsibility on employees to cooperate on implementation of measures put in place by the licensee to create a satisfactory and safe working environment.

Regulation 83 of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 [65] requires the licensee to provide respiratory protective device where an employee or person having access to a facility is exposed to the risk of an airborne hazardous substance or an oxygen deficient atmosphere in the workplace.

Another regulatory framework is to be found under the **Petroleum (Refining, Conversion, Transmission and Midstream Storage) Regulations, 2016.**

Regulation 34(1) of Petroleum (Refining, Conversion, Transmission and Midstream Storage) Regulations, 2016[66] confers a duty on the licensee to report any accidental spillage of petroleum commodities, petroleum products or

[64] ibid
[65] ibid
[66] Petroleum (Refining, Conversion, Transmission and Midstream Storage) Regulations, 2016

chemicals inside a refinery conversion plant to the Authority immediately but in any case not later than 24 hours from the time of the spillage. This would be to mitigate the possible disastrous consequences that may arise and endanger human life where if not prevented**.**

Regulation 34(2) Petroleum (Refining, Conversion, Transmission and Midstream Storage) Regulations, 2016 [67] requires the licensee within 14 days after the accidental spillage occurs under sub regulation (1) to submit to the authority a written report describing the cause and nature of the spillage, the amount of spillage, precautionary measures taken since the spillage to prevent any hazard that may arise from the spillage and precautionary measures taken to prevent such spillage in the future**.** All the above is to ensure safety of not only employees but the

surrounding communities.

Oil spills have in the past caused devastating consequences. A case in point is the Gulf of Mexico oil spill. On or about 20th April 2010, eleven (11) oil workers lost their lives when the deep water horizon, a semisubmersible offshore drilling in the Gulf of Mexico exploded and created one of the largest environmental disaster in the U.S history. In the weeks and months that followed hundreds of millions of crude oil spewed into the Gulf of Mexico threatening the waters and surrounding lands, marshes and beaches, damaging fish and wild life and disrupting the lives of many residents and communities in the Gulf region. The Albertine region is not an exception to such spillage hence the justification for regulation to protect the communities from a disaster that would befall them in the event of a spillage.

Similarly in **2001, the African Commission on Human and Peoples' Rights** concluded consideration of a communication under **Article 55 of the African Charter on Human Rights and Peoples' Rights** which dealt with alleged violations of human rights of the Ogoni people in Nigeria[68] a complaint was lodged in March 1996 by two nongovernmental organizations. These were the Social and Economic Rights Action Centre (SERAC), based in Nigeria and the

[67] Petroleum (Refining, Conversion, Transmission and Midstream Storage) Regulations, 2016
[68] Communication 155/96, The Social and Economic Rights Action Center and the Center for Economic, and Social Rights

Centre for Economic and Social Rights (CESR) in New York [69]. The communication dealt with a number of alleged serious human rights violations of the Ogoni people. The complaint alleged that the military government of Nigeria had been directly involved in irresponsible oil development practices in the Ogoni region. The **Nigerian National Petroleum Company (NNPC)**, the State oil company, formed a joint venture with **Shell Petroleum Development Corporation (SPDC**) whose activities in the Ogoni region allegedly caused environmental degradation and health problems among the Ogoni people, resulting from the contamination of the environment. The African Commission found that there were violations of the rights to health, a health environment, housing and food among others contrary to Articles 2, 4, 14, 16, and 21 among others. The African Commission further appealed to the government of the Federal Republic of Nigeria to ensure protection of the environment, health and livelihood of the people of Ogoni land by adopting various
measures.

Regulation 36(1) of Petroleum (Refining, Conversion, Transmission and Midstream Storage) Regulations, 2016[70] confers a responsibility on a licensee to prevent leaks that would cause serious consequences. **Regulation 36(2) of Petroleum (Refining, Conversion, Transmission and Midstream Storage) Regulations, 2016[71]** requires a licensee to document any leaks identified under **Sub regulation(1)** and submit a report to the Authority within seven days after detection of the leak indicating measures taken to rectify the leak.

Regulation 52 of Petroleum (Refining, Conversion, Transmission and Midstream Storage) Regulations, 2016 [72]confers a responsibility on a licensee to put in place measures for pollution prevention and control from gas flaring.

The other law is the general law of **Occupational Safety and Health Act, 2006** that provides under **Section 13(1)[73]** for general duties of employers to protect workers by taking all measures to protect his or her workers and the general public from the dangerous aspects of the employer's undertaking at his or her own cost,

[69] Fons Coomans, The Ogoni Case before the African Commission on Human and Peoples' Rights (2003) Cambridge University Press
[70] ibid
[71] ibid
[72] ibid
[73] Occupational and Safety Health Act, 2006

to ensure as far as reasonably practicable that the working environment is kept free from any hazard due to pollution. The employer must ensure that the place of work is safe.

Under **Section 13(2)** [74] the duty of the employer extends to provision and maintenance of plant and systems of work that give as far as is reasonably practicable a safe working environment including its vicinity, ensure safety and absence of risks to health in connection with use, handling, storage and transport of articles and substances among others.

The employer must ensure that the place of work is safe. Such was the case in **General Cleaning Contractor's v Christmas**[75]. Christmas was a window cleaner working for a window cleaning contractor. The firm provided safety belts for its employees but on one building there were no hooks to attach to the belts. The firm was aware of this situation. Christmas was injured while cleaning windows on that building. A defective window sash fell onto his fingers and caused him to lose his grip. As a result, he fell to the ground and suffered serious injuries. He sued his employer for failing to provide a safe place of work. It was held that the employer was liable. He was aware of the danger surrounding the lack of hooks on the building and should not have continued to send employees to work there.

The employer must ensure a Safe Plant and Equipment for instance all machinery, tools and equipment used by the employee must be reasonably safe for use. In the case of **Bradford v Robinson Rentals**[76] , A van driver was required to make a long journey during some extremely cold weather. His employer knew that the heater in the van was broken but insisted that the driver make the journey. The driver suffered frostbite. It was held that the employer was liable for the driver's injuries. He had breached his duty to provide safe plant and equipment.

The employer must equally ensure a Safe System of Work. This duty relates to safe working methods. It is a very wide duty and includes a number of issues including the layout of the workplace, warnings about potential hazards, the provision of safety equipment and training & supervision in its use. Employers must warn employees about potential hazards that they would not otherwise be

[74] Occupational Safety and Health Act, 2006
[75] [1953] AC 180

[76] [1967] 1 ALL ER 267

able to avoid. However, they are entitled to assume that employees have some common sense and so do not have to warn them of all dangers.

In the case of **O'Reilly v National Rail**[77],a group of scrapyard employees found an unexploded bomb in their workplace. Several men challenged O'Reilly to hit the bomb with a hammer to see what would happen. He hit the bomb and they were injured when it exploded. They sued their employer, saying that they had been provided with no guidance as to how to deal with this type of situation. It was held that the employer was not liable. He was entitled to assume that they would have had sufficient common sense not to hit the bomb with a hammer.

Employers have a duty to provide appropriate safety equipment and advise employees of its whereabouts. In the case of **Finch v Telegraph Construction & Maintenance Co Ltd**[78] ,Finch was employed as a grinder and was injured when a piece of flying metal struck him in the eye. The employer had acquired the necessary protective goggles but had never told the employees where they were kept. It was held that the employer was liable for the employee's injury.

It is worth noting that in many situations the employer will be under no duty to insist that employees actually use the safety equipment. Such was the case in **Qualcast (Wolverhampton) Ltd v Haynes**[79] where an employee was injured when he was splashed on the legs with molten metal. The employer had provided him with protective spats but he had chosen not to wear them. It was held that the employer was not liable. Court observed that by making the spats available to the employee he had done all that was reasonable in the circumstances.

Section 27 of the Occupational Safety and Health Act[80] confers a duty upon a person in control of premises in this case a licensee to use the best practicable means to prevent the emissions into the atmosphere from the premises of toxic or offensive substances and to render harmless and inoffensive any substances that may be emitted. In the case of **Jane Lugolobi &ors v Gerald Segirinya** [81]that involved noise and bad odour released into the atmosphere court held that the noise and bad odour was a violation of the plaintiff's right to a clean and healthy

[77] [1966] 1 ALL ER 499
[78] [1949] 1 ALL ER 452
[79] [1959] AC 743, HL
[80] Occupational Safety and Health Act,2006
[81] 2007 KALR 396

environment. It was further observed by court that the defendant had an obligation to control the release of fumes into the atmosphere. As such the employer's duty extends to the community around the area with these activities.

The above cases assist in understanding the responsibility a licensee shoulders to ensure that the safety of his or her workers and the communities.

Another law is the **Water Act Cap 152**[82].The above law governs management of water extraction activities in Lake Albert for use in the petroleum activities[83]. It is pertinent in the sense that without proper environmental and water management guidelines, water resources would be polluted and mismanaged to the detriment of the society[84]. Pollution of water would mean deprivation of many people from a livelihood since it would kill the fish and contaminate the water sources. The case of **Salvatori Abuki v Attorney General**[85] has extended the meaning of a right to life to include a right to a livelihood. Irresponsible oil exploration activities would be disastrous and significantly negatively affect the communities around the Albertine region which would in the long run affect the right to life.

Another law is the **National Environment Act that provides under Section 2(2)** [86]for principles of environmental management that include but are not limited to assuring all people of Uganda the fundamental right to an adequate standard of health and wellbeing.

Section 19(3) of [87] provides that every developer is to undertake an Environment Impact Assessment (EIA) if the project is likely to have an impact on the environment. It is not in doubt that the oil industry has numerous impacts that may include spills that could endanger people's health and even to death.

Section 3(2) of National Environment Act[88] confers on every person the right to a healthy environment. This gives effect to **Article 39 of the Constitution of the Republic of Uganda 1995 as amended**[89] that provides for a right to a clean and

[82] Water Act Cap 152
[83] Pamela Mbabazi and Martin Muhangi, Uganda's Oil Governance Institutions: Fit for Purpose CPRD Working Paper No 60(2018) Mbarara University
[84] ibid
[85] Attorney General v Salvatori Abuki Constitutional Appeal No.1 of 1998
[86] National Environment Act
[87] National Environment Act
[88] ibid
[89] The Constitution of the Republic of Uganda 1995 as amended

healthy environment. A healthy environment would be one free from pollution and other hazards.

The other law is the **National Environment (Waste Management) Regulations, SI No 52 /1999** which applies to all categories of hazardous and nonhazardous waste, storage and disposal of hazardous waste and their movement into and out of Uganda. This would ensure that people's health is not affected by poor disposal of waste for instance coming from oil pipes.

Another law is the **National Environment (Standards for Discharge of Effluent into Water or on Land) Regulations, SI No 5/1999** [90] which provides for standards for waste water before it is discharged into water or onto land. The regulations provide for the general obligation to mitigate pollution.

Another critical law is the **National Environment (Wetlands, River Banks and Shores Management) Regulations SI No 3/2000** [91] which regulates the management of wetlands, river banks and lake shores. The objectives of the regulations include conservation and wise use of wetlands and their resources in Uganda for purposes of minimizing and controlling pollution of rivers and lakes and controlling pollution or degrading activities.

In conclusion whereas the oil and gas sector has the potential of leading to development of Ugandan economic sector there is need to have robust regulation mechanisms to ensure that the health and safety standards of people are upheld since hazards such as oil spills would turn the otherwise blessing to a curse.

[90] National Environment (Standards for Discharge of Effluent into Water or on Land) Regulations, SI No 5/1999

[91] National Environment (Wetlands, River Banks and Shores Management) Regulations SI No 3/2000

CHAPTER FOUR

ENVIRONMENTAL ASPECTS (Health, safety, the environment, ethics).

Introduction.

An environmental aspect is an element of an organizations' activities, products, and services that can interact or that interact with the environment.92

In ordinary parlance an environmental aspect is the way an activity, service or product either of a juridical person or natural person impacts the environment.

Environmental aspects include inter alia, air emissions, effluent discharges, waste arisings, land contamination, use of resources like water, fuel.

Therefore, the difference between environmental aspects and environmental impact is that, the former is an activity, product or service that can or interacts with the environment while the latter is a change to the environment whether adverse or beneficial, wholly or partially resulting from an environmental aspect. Thus an environmental aspect causes an environmental impact.

Oil is often regarded by the public as a dangerous and polluting industry. This somewhat dramatic view relates particularly to the operations traditionally perceived as the most critical, such as drilling and transport by tanker and pipeline, which the public associates with spectacular accidents such as oil well blowouts and "black tides" which result from major oil spills. In addition, there have been several occasions when routine operations involving longterm installations have proven to be a source of danger. Events in the North Sea such as the capsize of the

[92] www.ornl.gov accessed on 28th October 2021

Alexander Kielland and the fire on Piper Alpha were major contributors to this perception.

Exploration and production activities involve the manipulation of flammable substances at high temperature and pressure which sometimes contain very toxic gases. The main risks are essentially associated with uncontrolled escapes of hydrocarbons and other hazardous substances, which can cause fire, explosions and contamination. There are other dangers inherent in the very nature of the means and processes deployed, such as flares which can cause high levels of thermal radiation, or heavy, bulky objects which are difficult to maneuver. These effects can be amplified by the working environment, which often involves working in a constrained space in remote locations, particularly offshore.

Apart from problems occurring during operations, often due to human error, shortcomings in the design of the structures is another major cause of loss of control in installations. In order to prevent this, an assessment of risk must be fully integrated into the design of a development project and all stages of the engineering. Exploration and production induce also various effects on the environment, soil, water or air. As all human activities, it contributes to greenhouse gas emissions, which means that specific efforts must be taken to limit these effects.

The Piper Alpha accident is one unforgettable event. The accident which befell the oil and gas production platform Piper Alpha in the North Sea in 1988 called into question established offshore safety practices. This platform, situated 110 miles NorthEast of Aberdeen in Scotland, was destroyed in several hours following a series of explosions, killing 167 persons. It led to production being stopped immediately, for several months, at five other fields, with a total loss of production of 300000 bbl/d, representing 12% of the production of the North Sea. It was estimated at the time that the loss of exports amounted to £550 million in 1988 and £800 million in 1989, with a loss of tax revenue to the British government of £250 million in 1988–1989 and £520 million in 1989–1990.The findings of the enquiry conducted by *Lord Cullen* which led to a significant change in the law, with greater emphasis on objectives to be met. The report also made it made clear the

need for the development and application of a safety management system (SMS) by all companies, a practise now regarded as standard in the offshore industry.
Legislation varies between countries, but many of the companies operating in the North Sea have applied the new approach to safety at other fields all over the world, and these practices have been disseminated throughout the entire oil industry.

Reducing Risk.

The central production facility must be designed in a manner such as to limit risk by reducing the frequency of malfunctions and minimising their consequences. More specifically this means:
a, Minimising the likelihood of a loss of control of production and particularly of escapes;
b, Reducing the probability of ignition/explosion where there is an escape.
c, Containing the consequences of any fire, explosion or escape of toxic substance;
d, As a last resort, ensuring that there are means of evacuation for all contingencies.
In order to bring this about, safety imperatives are integrated right from the preliminary design stage into the overall layout, ensuring safe separations are respected, and systematically separating the oil and gas treatment plant from ignition sources. The organisation of each project therefore draws on traditional risk management methods such as quality control, risk assessment, safety reviews and audits.
The treatment plant is equipped with specific safety facilities, most commonly firefighting systems. It is always equipped with an integrated process control system and an emergency shutdown (ESD) system. Detectors continuously monitor pressure, temperature, liquid levels, etc. As an antifire precaution, gas detectors automatically shut down production and dispatch the contents of processing units to the flare. If a fire breaks out, fire detectors automatically trigger sprinklers in the zone where fire was detected. Reliability calculations are carried

out for all safety systems which depend on sensors and automatic mechanisms (safety integrity levels or SIL).

Safety precautions are put into effect on equipment whose main function is not safety. The accommodation quarters in dangerous areas are designed to withstand explosion and fire, and an overpressure is maintained in order to prevent gas, smoke or toxic substances from penetrating. The gangways and means of escape must be able to maintain their integrity for a minimum period following fire or an explosion.

At each stage of a project safety reviews are conducted which are intended to ensure that processes in the treatment plant are robust. They identify the main hazardous events which threaten the installation: blowout, fires and explosions, escapes of hydrocarbons, ship collision, helicopter crash, etc.

Health Safety Aspects. Having looked at matters related to the design of installations, we shall now turn to safety issues associated with operations.

Legal aspects. When an accident or disaster occurs, initial attention, and subsequently the investigations, focus first on technical defects and human error, and then turn to organisational deficiencies.

The European Union Seveso II Directive, which took effect on **3 February 1999** and relates to the prevention of major accidents, states clearly that it is the responsibility of all operating enterprises to practise a policy of prevention.

Management therefore has a clear responsibility to formulate a safety policy and make organisational arrangements for safety. This legal requirement alone is sufficient argument for the company to ensure that it has in place an effective safety management system.

Human Factors is of the major causes of accidents, and obviously has to be addressed by ways other than merely punishing the guilty party. This is made very clear by looking at the causes of errors. It can be seen that in most cases these are the result of underestimating the risk, suggesting inadequate management and an inadequate appreciation of this danger in the organisation of the work, equipment ergonomics, etc.

What is more, as systems become more complex, human error rises because it becomes more difficult for the workers concerned fully to apprehend the danger associated with their decisions. Management studies have shown that, since the 1960's, less than 15% of operational problems which arise, including the prevention of accidents, can be dealt with effectively by the individual. The organisation of work and training, and the dissemination of information is therefore critical to accident prevention and to minimising the consequences of error.

This is why safety management is far more than a matter of merely solving technical problems and enacting regulations.

Taking account of the Environment.

Keen to maintain a positive image, oil companies endeavour to prevent or control environmental problems resulting from their activities, and set clear environmental targets. These relate mainly to reducing the flaring of gas, emissions of hydrocarbons and the oilcontent of effluent, minimising the environmental impact of their operations, preserving biological diversity and cleaning up the legacy of historical contamination. The companies are highly aware of the very severe financial consequences of accidents and pollution in terms of fines, compensation payments and the negative impact on their image. They fully appreciate the need for their operations to be clean and safe. The companies have a duty to minimise the risk of oilspills and the economic, ecological problems that arise due to the oil and gas sector.

Over the last 20 years, and particularly since the **Exxon Valdez catastrophe in 1989** and the highprofile hearing which followed leading to the award of massive compensation payments, a battery of regulations and a whole range of technical measures have been put in place internationally to contain possible disasters. Since the **Kyoto Protocol in 1996** greenhouse gases, and combustion gases in particular, are under scrutiny. In response to concerns about global warming, and driven also by states desirous of making the most of their natural resources, the practice of

flaring associated gases is declining, these gases instead being reinjected into the reservoir, used for secondary recovery or, when possible, marketed.

A global initiative led by the ***World Bank*** "the Global Gas Flaring reduction" has the aim to reduce significantly the emissions of Carbondioxide due to flaring. According to this organisation, natural gas flaring represents around 150 billion cubic meters every year, which is more than the annual gas consumption of France and Germany and around 15% of committed emission reduction by developed countries under the Kyoto protocol for 20082012. Flaring takes place all over the world, firstly in Africa (30%), Middle East (25%) and the Former Soviet Union (20%) but also in the Americas (10%), Asia (10%) and Europe (3%). Reducing flaring is not a simple task as it means limiting the emissions of associated gas in the process where the use or reinjection is not easy

Liquid effluent poses a particular problem. Water is a byproduct of oil production, and the water naturally contains hydrocarbon emulsions. It is vital that the effluent is cleaned up before being discharged. Effluent containing up to 40 ppm oil is presently tolerated, but oil companies are seeking to impose a more stringent standard of 15 ppm. Production from depleted reservoirs present difficulties, because large quantities of water are used in the production process.

The Stages of Environmental Management: Before During and after.

This integrated approach looks at all stages of the life of a project.

"Before": the preparatory phase

Before embarking on exploration or production activities a thorough assessment must be made of the environmental impacts in accordance both with local statutory requirements, if existing, and the environmental policies and procedures of the company.

In the first place a statement must be drawn up of the regional and local constraints, whether regulatory (protected zones, authorisation procedures),

environmental (wetlands, forests, groundwater, coral reefs) or socioeconomic (fisheries, fish farming, tourism, exploitation of water resources, etc.).

The baseline study and the impact assessment are then carried out and, if the area is a sensitive one, an intermediate stage is carried out comprising a preliminary reconnaissance and a preimpact study. The baseline study, which may be of a terrestrial or marine system, documents the features of the site including the physical, climatological, geological, hydrological, hydrogeological parameters as well as the chemical quality of the environment (recording any preexisting contamination), the biological resources, i.e. the flora and fauna, as well as the socioeconomic and local cultural context.

The impact statement will be accompanied by recommendations on technical aspects of the project which will minimise the adverse effects, such as the abatement of noise and emissions proposed disposal of waste water and Waste management;

"During": the operating phase

The approach depends on the type of operation involved, but it will any case be broadly structured as follows.

The management plan

The management plan, which is implemented by each subsidiary, must include, in addition to an organisation with clearly defined responsibilities which pays close attention to regulatory compliance such as the impact and risk assessments for modifications or extensions of activities and installations and management of waste and chemical products and environmental audits.

"After": the aftercare phase

Abandonment and decommissioning are dealt with by regulations. The rules governing impact statements also often provide for account to be taken of site rehabilitation after production has finished.

The Integration of Health, Safety and the Environment.

Safety and environmental matters are assuming an increasing importance for companies. The international companies have begun to deal with these issues within a single “health, safety, environment” (HSE) module. Although safety and environmental requirements can sometimes appear to conflict with one another, an approach which tackles these two issues together proves more effective than a piecemeal approach. It ensures that there will be an interaction between these two elements, and provides a vehicle by which management can set strategic objectives, establish rules and procedures specific to the company, supported by performance measures and remedial actions.
Practical systems for managing health, safety and the environment are based on quantified risk assessment. A guide describing best practice in industry and drawing on the principles of ISO 9000 certification was published and circulated in 1994. Many companies adopted these recommendations and developed a sophisticated system for the management of risk which they have often validated through ISO 14001 certification.

The Norwegian system is an example: built on the TQM model (Total Quality Management, developed by the European Foundation for Quality Management), the purpose of which is to build awareness amongst managers and analyse the company’s activity, not only in economic terms but also in terms of safety, personnel satisfaction, environmental results and relations with government.

The system adopted by American companies, on the other hand, emphasises the importance of motivating the personnel, cultural diversity, cost control and the putting into practice, by management, of all the key elements.
In many cases, oil companies try to take into account a price for Carbondioxide in their evaluation to measure the effects in terms of emissions. This leads to a limitation of these emissions with regard to technical and economic conditions.

Oil and Ethics

The oil industry, like other large industries, cannot develop without regard to the sociopolitical context in the countries in which it operates. This observation may seem a commonplace because all large industries have an impact on the environment, on the economy, on social development, and even on a political level. The oil industry therefore interfaces directly with our most precious values: our natural surroundings, our health, our safety. This is why public opinion is so sensitive to matters related to the activities of the oil companies.

The term “ethical” is one which everyone seeks to appropriate.

Larousse defines ethical as “the science of morality”; it derives from the Knowing what is moral and what is not, is one of the earliest questions to preoccupy man.

In oil and gas, the question of morality is best handled by looking in practical terms problems encountered by oil companies. Ethics pose for the oil industry.

Ethical issues are caused by different factors that is to say;

a, Ethical issues which arise relating to the oil industry and direct stakeholders: the oil companies, their employees, customers, suppliers, shareholders and partners.

b, Ethical issues relating to the relationships between the oil companies and the countries where they pursue their exploration and production activities.

C, Fundamental ethical issues: global environmental problems, biodiversity, the preservation of natural resources, sustainable development and human rights.

Ethical issues within the oil community

These are the questions which weigh least heavily on public opinion, because they are regarded as too specialised and of secondary importance compared with the fundamental ethical issues, or the relations between the oil companies and host countries. Furthermore, they are not generally issues which are specific to the oil industry. This category contains quite a few important issues, which are indeed crucial to the effective functioning of liberal and market economies. These questions include;

What should be the rights and duties of the companies in relation to the privacy of their employees? Is it permissible, and to what extent, for a company to control

how its employees use their working time, their access to the Internet? Has it the right to limit their political activity if this is judged potentially detrimental to or in conflict with the activities of the company?

These are well and truly ethical issues, as is the issue of equity in dealings with partners and suppliers. Clear conflicts of interest can arise between practical expediency and ethics. Is it legitimate to favour one particular supplier of goods or services at the expense of others if relations with that supplier accord with the logic of industrial strategy, partnership or regional development? The oil industry has a symbiotic relationship with the service industries which supply it and a number of special factors apply in consequence.

Consider, for example, the issue of ethical conduct towards shareholders. On one hand there is a duty to ensure that information is transparent. On the other hand, there is a duty to conduct commercial and industrial activities as efficiently as possible. The latter imperative, by its nature, tends to limit the transparency of information. Striking the right balance between two ethical but conflicting considerations is not a matter for detailed and prescriptive rules. It has to be acshieved by a combination of detailed knowledge and a good understanding of the problem, a good dose of common sense and, ultimately, the moral qualities of those who will make the necessary choices.

Ethical issues involved in relations with host countries.

This subject is one which finds a much more ready response amongst the general public, and which involves a number of risks for oil companies, sometimes difficult to deal with.

Central to this issue is the nature of the contracts which define the terms under which a foreign company often powerful and usually from a developed country will invest in a country which is often relatively undeveloped, and will be rewarded, if successful, for the risks it has taken.

The terms of these contracts reflect the characteristics of oil and gas exploration and production, activities in which chance plays a large part, which are highly capitalistic in nature, and which, when successful, have a major impact on the host

country. These contracts define how the proceeds from the production will be split between the investors and the host country. The appropriation and use of these proceeds, often large in amount, are a major political issue. They rapidly become central to the economic and political life of the host country, and are the root cause of a host of ethical problems which arise. These problems usually lead to resentment on the part of the public in that country, or of external observers. This resentment is not without foundation. Petroleum exploration activities generate large financial flows, and can lead to or exacerbate factionalism, or even fuel armed banditry.

There have been many oilproducing countries in recent years where attempts have been or are being made to seize power: examples include Angola, Burma, the Congo, Colombia, Sudan, Algeria, while armed banditry in various forms is rife in Nigeria and now in Algeria.

In countries where the authority of the State is being violently challenged, the oil companies are considered by the insurgents as natural enemies in so far as they pay taxes to the State.

In the face of these problems the foreign investor has to manage its own interests, not having any real influence over the political choices of the host country. Such an influence would in any case be unethical, since interference in the political problems of the country would lack legitimacy.

In looking at questions of ethics which arise in relations between oil companies and host countries, we conclude that oil does not necessarily, in itself, lead to economic and social development, nor is it necessarily a democratising factor. However, it will be appreciated that the adverse effects will be less severe where the political system is perceived by its citizens to be legitimate, and that these systems will permit the oil revenues to be distributed in an equitable and balanced way.

Regimes of this kind would not necessarily have to conform to the model of parliamentary democracy, although that is probably the model best able to reconcile oil and socioeconomic development or oil and ethics.

Some recent initiatives have to be mentioned:

- Chad. In order to export the crude oil produced in the Doba Basin fields, the construction of a more than 1,000 kilometres long oil pipeline between Doba and Kribi (Cameroon) had to be built. However, the construction of such a pipe line was costly and faced a large number of environmental problems. To make it possible, it was necessary to bring the World Bank into the project.

  In 1999 the World Bank Chad agreement introduced an innovative scheme designed to maximize the social use of oil revenues. With this system, all direct oil revenues (royalties and dividends) are paid into a sequestered account in the name of the Chad Government in London. After deduction of payments relating to the debts owed to the World Bank, the remainder of the revenues is divided up as follows:

  - 10% is paid into a fund for Future Generations, for the period after Chad's oil reserves are exhausted,
  - 72% goes toward capital investment in five "priority sectors" in the fight against poverty: education, health and social services, rural development, infrastructure and the environment and water supplies.
  - 4.5% is paid over to the oilproducing region of the Southern Chad, as additional reserve financing;
  - 13.5% is paid into the Chad Treasury to finance current public expenditure.

  But, the rise in the crude price put a new face on the situation. In January 2006, it led the government to denounce the agreement with the World Bank. Clearly making such a system sustainable over time is not easy. Nevertheless, this kind of agreements present promising solutions to provide a better use of the energy revenues.
- The Extractive industries transparency initiative (EITI) has the objective to provide for a detailed information on energy and commodity revenues, trying therefore to induce a better use of these revenues. This initiative is supported by more than 30 countries and 25 big oil, gas and mining companies. It is very interesting in that among these countries there are some of the most important oil producers in Africa or Central Asia, such as Nigeria, Gabon, Chad, Azerbaijan and Kazakhstan, Trinidad and Tobago. All the major international oil companies either American or

European are involved in this initiative. A dynamic process has been initiated and it should provide for a better knowledge of commodity revenues.

Major ethical issues: the environment and human rights

Quite apart from ethical questions, the activities of the oil companies mean that they are involved in a whole range of issues of a general nature.

It should be remembered that oil products and gas are produced in order to meet society's needs for energy. Approximately 50% of this energy is generated by the oxidation of the carbon contained in hydrocarbons (40% or more for natural gas and more than 60% for oil products). This results in the formation of carbon dioxide. This is in the nature of the process, and technological progress cannot change it. On the other hand, technology can help us to reduce the amount of energy we consume to achieve a certain result, or perhaps even to "sequester" some of the carbon dioxide

produced. However, this is not in itself what the ethical debate is about.

A number of ethical questions arise here where political leaders have to make tradeoffs, of their nature difficult to justify, between short and longterm effects, between public health and the economy.

These questions also involve tradeoffs between costs arising from the demands for ever greater safety and the implicit and explicit costs of pollution, either local or global. This again gives rise to questions of an ethical nature: what value should we attach, what priority should we give, to the survival of a particular plant or animal species threatened with extinction, what value to the conservation of biodiversity? What value should we attach to a human life? There are so many questions to which there are no natural and simple answers, whatever moral or philosophical frame of reference we adopt.

To ensure that their activities are pursued within a framework of sustainable development, the oil companies must involve themselves in developing techniques and policies for reducing consumption so as to extend the era of oil and gas.

Environmental Aspects; Business and Human Rights Impacts in The Oil and Gas Industry in Uganda.

Introduction.

Human rights are the basis for securing dignity and equality for all people. In recent years, a number of transnational oil companies have joined the government and civil society to establish multistakeholder initiatives aimed at maximizing positive human rights impacts and preventing negative ones in the sector. Such initiatives include the Extractive Industries Transparency Initiative (EITI), the Voluntary Principles for Security and Human Rights, and the Global Oil and Gas Industry Organization for Environmental and Social Issues. Domestication of these principles and initiatives into national laws and policies is critical to the full realization of the "Protect, Respect and Remedy" framework of the UN Guiding Principles on Business and Human Rights.

The three Pillars of the United Nations Guiding Principles on Business and Human Rights

i. *The State duty to protect against human rights abuses by third parties, including business enterprises, through appropriate policies, regulation, and adjudication.*
ii. *The corporate responsibility to respect human rights, which means that business enterprises should act with due diligence to avoid infringing on the rights of others and to address adverse impacts with which they are involved.*
iii. *The need for greater access by victims to effective remedy, both judicial and non judicial.*

The UN Guiding Principles are organized under three pillars of the *"Protect, Respect and Remedy"* framework which emphasizes the multistakeholder nature of the issue and avoids the failed attempt of the *Norms* to impose an expansive array of state responsibilities into business. The UN Guiding Principles are in line with other international obligations and further elaborate the implications of

existing standards and practises for States and businesses. They are related to the principles of the human rightsbased approach including participation, accountability, equality and nondiscrimination, transparency, rule of law and respect for human rights, among others, which are embedded in Uganda's 1995 constitution as amended.[6]

Uganda's Compliance with the United Nations Guiding Principles on Business and Human Rights

Transnational oil companies can profoundly impact the human rights of employees, consumers and host communities in both a positive and negative way. Positively, they could increase local and national employment opportunities; improve access to public services and shared infrastructure such as roads, health facilities, markets for their agricultural products, education, small business enterprise development, tourism, water among others. Negatively, a weak and unresponsive human rights policy and legal regime could lead to polluting of the environment; underpaying workers, forcibly evicting communities without adequate compensation leading the proverbial resource curse.

Transparency and Accountability.

Openness and access to information that enables stakeholders to participate in the sector is the foundation of good governance for the oil and gas industry. According to a report by **Global Witness,**[8] in addition to promoting good governance and accountability in the oil and gas sector, joining the emerging global transparency standard for the extractive industries revenues accords Uganda an opportunity to protect its citizenry against the predatory practices of transnational oil companies, promotes respect for the rights of host communities within the exploration and production areas, and provides recourse to justice where human rights are violated by the actions of transnational oil companies and their agents.

Breached commitment to join EITI

Under the **2008 National Oil and Gas Policy**, the government of Uganda committed

to joining the global **Extractive Industries Transparency Initiative (EITI).**[9] The EITI promotes open and accountable management of the oil, gas and mining industries through strengthening of government's governance systems and encourages public participation in holding governments as trustees of their natural resources accountable. This commitment was renewed under the **2012 Oil and Gas Revenue Management Policy.**[10] Unfortunately, this commitment is not reflected in the upstream,[11] midstream and most importantly, in the revenue management law, yet prior to the promulgation of these laws, government had repeatedly emphasized the need to harmonize its legislation with the EITI standards and process before joining the initiative.

Companies' failure to disclose payments to Government

The three transnational oil companies operating in Uganda (Tullow, CNOOC[12] and Total) are currently not required to disclose information regarding the payments they make to the government. The EITI standards require that data on payments should be disaggregated by payment type, government agency and by project. Where this information is not disclosed, it becomes difficult for stakeholders to hold the government accountable. Tullow Oil is the only company that has, since 2012, voluntarily disclosed payments made to the government.[13]

NonDisclosure of payments received by Government

The Public Finance Management Act requires the Minister of Energy and Mineral Development to present to Parliament both semiannual and annual reports of the Petroleum fund,[14] inclusive of both actual, cashinflows and outflows of the petroleum fund. There is however no requirement for the Minister to ensure that such payments be disaggregated in accordance with the EITI standards stipulating the payment type, origin and source project. This makes it impossible to follow

company payments with government receipts since the national budget recognizes only one single figure from the oil and gas industry.

Unclear payments of subnational royalties

Under the Public Finance Management Act, local governments are entitled to 6% of petroleum royalties while cultural or traditional institutions located within the exploration and production areas receive a meagre 1%.[15] There is no individual reporting line for these payments to enable local communities and subjects to hold their local governments accountable for such monies. Government's commitment to allocate such revenue in accordance with the local government budget lines makes it complicated for ordinary stakeholders within these districts to know if the local governments are getting a fair share thereof.

Opaque licensing allocation process

There is a commitment to an open, transparent and competitive licensing process reflected in the upstream law.[16] However the Minister of Energy and Mineral Development is accorded unfettered powers to circumvent the bidding process in certain instances. The law[17] does not provide criteria for prequalifying bids, rendering the process susceptible to abuse and corruption. The technical and financial criterion applicable in the selection process has not been disclosed.[18]

Disclosure of information about beneficial ownership

There is a requirement under the upstream law for the disclosure of information by applicants in a bidding process about beneficial ownership. Aside from a failure to demonstrate that once such disclosure in made, the same shall be made public; the law is silent on the actual definition of "beneficial ownership."

NonDisclosure of production sharing agreements and other contracts

Contrary to the provisions of the Access to Information Act,[19] the government has unwaveringly declined to disclose Production Sharing Agreements (PSAs), on the basis of confidentiality clauses in the contracts. Sections 152 and 153 of the upstream law[20] stipulate that information submitted by the transnational oil companies to government should be kept confidential unless the parties thereto agree to the disclosure, though consent should not be unreasonably withheld. Government employees are subjected to an oath of secrecy and strict penal sanctions for breach of that oath.

While the government should honour its commitment to fully join the EITI and make it an open policy to publish all the contracts on the line ministry's website, there is also need for the transnational oil companies to publicly demonstrate their willingness to disclose information. This will be a big step in managing public expectations but also demonstration of the governments political will to be held accountable by its citizens.

State/Public Participation Under the Upstream and Midstream Law

The government should pursue opportunities for local and national benefits and account for, mitigate and offset the environmental and social costs of resource extraction projects.[21] It is through such efforts that, natural resource exploitation can transform into the desired economic multiplier effects for Ugandans. This principle presupposes deepening the principle of Free, Prior and Informed Consent (FPIC) through the involvement of local communities in decisionmaking and assessment through the planning, execution and closure of projects. Government works with citizens at both local and national levels to determine ownership and access rights over surface and subsurface interests and rights to the subsequent revenues. Measuring and mitigating the negative effects of extraction, creating

opportunities to develop local benefits from extraction, while communicating with members of the local government, cultural institutions and strengthening their capacity in the overall management of oil and gas resources as stakeholders.

Oil and Gas Policy 2008.

One of the guiding principles of the 2008 Oil and Gas Policy[22] is to create lasting benefits for Ugandans. The policy states that government shall ensure that it collects the right revenues; uses them to create lasting value for the entire nation; ensure optimum national participation in oil and gas activities; support the development and maintenance of national expertise; ensure that oil and gas activities are undertaken in a manner that conserves the environment and biodiversity and ensures mutually beneficial relationships between all stakeholders in the development of a desired oil and gas sector for the country. The UN Guiding Principles on Business and Human Rights are reflected in the objectives of the 2008 Oil and Gas Policy.

The Petroleum (Exploration, Development and Production) Act, 2013

The long title of the Petroleum Act[23] states that its purpose is operationalize Article 244 of the Constitution by creating the governance structures of the industry, which include the Petroleum Authority and the National Oil Company all charged with oversight over the exploration, development and production of the oil and gas resources. The long title also seeks to create an environment for open, transparent and competitive licensing and restoration of derelict lands among others. According to Section 4(2), petroleum rights are held by government on behalf and for the benefit of its people.

This provision needs reassertion in the form of a constitutional amendment to eliminate any suspicions between the people and their government about benefits of petroleum. Vesting petroleum and minerals in the "State"[25] which embraces all state institutions such as the Human Rights Commission, beyond the limited

interpretation of "government", which in Uganda's denotes the Office of the Presidency, could create a more accountable environment for other stakeholders' participation in the formulation of the requisite policy and regulatory framework.

Compliance with Environmental Principles

The Upstream Act[26] charges the National Environment and Management Authority (NEMA) with the responsibility of making regulations for the management of the production, transportation, storage, treatment and disposal of waste arising out of petroleum activities. However, the prescribed fine of five thousand currency points in Section 3 (9) is not dissuasive enough. Raising the fine to one hundred thousand currency points as prescribed in Section 3 (7) could guard against noncompliance by licensees. It is also important to note that there is no legal requirement for the Minister of Energy and Mineral Development to publicly disclose the outcomes of an assessment of the impact of the petroleum activities on trade, industry and the environment and other risks such as pollution, or economic and social costs. Although an assessment is required under Section 47 (3)[27] for new licensing areas, there is no provision for similar assessments provided for in the other stages of resource development for interested stakeholders to comment. Even though the affected communities are accorded an opportunity to express their views on new areas of exploration, their fate is left in the hands of the Minister who may disregard their interests (Section 47 (6).

The Upstream Act fails to make provisions for public disclosure of Environmental Impact Assessments (EIAs). This perpetuates lack of information and infringes on citizens' right of access to information regarding enjoyment of a clean and healthy environment (Article 39).[28]

Agreements with government under the Upstream Law·

The Minister for Energy and Mineral Development is required to present Parliament with the Model Production Sharing Agreements and any other agreements signed by the government and international oil companies.[30] The Upstream law does not provide penalties for failure to disclose Model Production Sharing Agreements to Parliament and as such, the government has consistently refused to make these agreements available to Cabinet in violation of the constitutional right of access to information, yet the transnational oil companies claim to have no objection to the government's disclosure of these agreements.

Community development and benefits agreements

The interests of government are best reflected in the Model Production Sharing Agreements. However, the social, cultural, environmental and economic interests and rights[33] of resource host communities in oil rich areas are better served under community development and benefit agreements. Petroleum exploration, development and production activities could in theory provide immense benefits to local communities and the country as a whole, but also pose great immediate human rights, social, cultural, and environmental risks. Potential benefits include increased employment across the value chain, stimulation and diversification of the rural economies through the establishment and development of local businesses, potentially leading to sustainable economic development.[34] The development of oil and gas resources can also lead to economic inequality, inflation, social disruptions, displacement, housing shortages, social tensions, loss of traditional lifestyles, and significant environmental damage.[35]

The relative weight of potential benefits and risks of oil and gas exploitation is balanced through government policy and legislation that both facilitate and may inadvertently constrain economic and social development for the communities affected.[36] The provisions of **Section 6** of the upstream law could

be enriched with the inclusion of a subsection on community development agreements between transnational oil companies and local host communities.

Uganda's legal and policy frame work regarding Environmental aspects, human rights, business, healthy, and safety.

Significantly, distinct laws have been enacted to regulate and manage environmental aspects to their best of application to reach beneficial environmental impacts or even mitigate adverse environmental impacts. And these are copiously enunciated below.

To begin with, **article 244(1)**[93] Subject to clause (2) of this article, Parliament shall make laws regulating, (a) the exploitation of minerals; (b) the sharing of royalties arising from mineral exploitation; (c) the conditions for payment of indemnities arising out of exploitation of minerals; and (d) the conditions regarding the restoration of derelict lands. The above article guarantees powers to parliament to regulate all the environmental aspects relating to mining. Pertinent to note is that article 245[94]avails that Parliament shall, by law, provide for measures intended(a) to protect and preserve the environment from abuse, pollution Protection and degradation; (b) to manage the environment for sustainable development; and (c) to promote environmental awareness. This is to the effect that whatever environmental aspect is carried out, the environment ought to also be protected.

Section 1(a), (b) of the Petroleum (exploration, Development and Production) Act 2013 avail respectively that; the purpose of this Act is to operationalize **the National Oil and Gas policy by**; a establishing an effective legal framework and institutional structures to ensure that the exploration, development and production of petroleum resources of Uganda is carried out in a sustainable manner that guarantees optimum benefits for all Ugandans, both the present and future generations.

b) Creating a conducive environment for the efficient management of petroleum

[93] Of the 1995 Uganda constitution as amended.
[94] Of the 1995 Uganda constitution as amended.

resources of Uganda. The above are targeted at regulating the distinct environmental aspects in the exploration, development and production processes so as to have beneficial environmental impacts.

Section 3[95] triggers the application of the environmental principles and safeguards prescribed in the National Environment Act 2019. It avails that; A licensee and any other person who exercises or performs, functions duties or powers under this Act in relation to petroleum activities, shall comply with environmental principles and safeguards, prescribed by the National Environment Management Act which is now the (National Environment Act 2019) and other applicable laws. These principles include inter alia;

a). **Polluter pays principle**; to ensure that true and total costs of environmental pollution are borne by the polluter. Thus if an environmental aspect leads to a nonmitigated adverse environmental impact the polluter ought to pay for that adverse effect caused.

b). **Public participation principle**; to encourage the maximum participation by the people of Uganda in developing policies, plans and processes for managing the environment. Thus the populace ought to know about the environmental activities in the oil and gas sector to have knowledge on how to combat the effects that may come along in the process.

C). **Precautionary principle**; to conserve the cultural heritage and use the environment and natural resources of Uganda for the benefit of both present and future generations.

d). **Clean environment**; to assure al people living in Uganda the fundamental right to an environment adequate for their health and wellbeing.

Therefore, the stringent application of the above principles to the oil and gas sector helps to have positive environmental aspects that may lead to beneficial environmental impacts and mitigated adverse environmental impacts.

Section 71(2)[96] avails that, The report of the petroleum reservoir referred to in subsection (1) shall contain particulars of; a) the chemical composition, physical

[95] Petroleum (Exploration, development and production) Act 2013
[96] Of Petroleum (Exploration, development and production) Act 2013.

properties and quality of the petroleum, b) the thickness and content of the production strata, c) the petrophysical properties of the petroleum reservoir formation, inter alia. These specifications may be used to prevent adverse environmental impact by applying significant environment aspects.

Section 88(2)[97] avails that, Notwithstanding the general effect of subsection (1), a licensee shall take all reasonable steps necessary to secure the safety, health, environment and welfare of personnel engaged in petroleum activities in the license area including; a) controlling the flow and preventing the waste or discharge into the surrounding environment, of petroleum, gas which is not petroleum or water, b) preventing the escape of any mixture of water or drilling fluid and petroleum or any area not covered by the license, g) where pollution occurs treating or dispersing it in an environmentally acceptable manner. This is a significant section because it touches the heart of environmental aspects in protecting the environment during oil and gas processes.

Section 115(1), (2)[98] promulgates that; (1) the authority may issue directions relating to the disposal of decommissioned facilities and shall stipulate a time limit for implementation of the directions; 2) avails that directions issued under subsection (1)shall be based, among other factors, on technical, safety, environmental and economic aspects as well as on consideration for other users.

Section 141(a) (ii) of the Petroleum (Exploration, development and production) Act 2013 avails that, an operator shall take such precautions as are necessary to, protect the environment and natural resources, including taking precautions to prevent pollution. This portrays an aspect of preventing the pollution of any kind whether land, water or air and this helps the license to use environmental aspects that do not cause grave negative effects to land, air and water.

Additionally, the **Petroleum (Refining, Conversion, transmission, and Midstream storage) Act 2013,** has provisions with similar wording and legal effect as those of the Petroleum (exploration, development and production) Act

[97] Of Petroleum (Exploration, development and production) Act 2013.
[98] Of Petroleum (Exploration, development and production) Act 2013.

2013, the difference is in the stage of applicability. The former operates in the upstream stage, the latter operates in the midstream stage of oil and gas. For**example section 3 of the former Act is the same as that of section 3 of the latter Act, the applicability is in the stage oil and gas. Section 46 of the Petroleum (Refining, Conversion, transmission, and Midstream storage) Act 2013 is the same as section 115 of the Petroleum (Exploration, development and production) Act 2013.**

In pursuant to the common examples of environmental aspects which include inter alia air emissions, effluent discharges, waste arisings, land contamination, use of resources like water, fuel; environmental standards have been set up to manage these environmental aspects. In the case of **Nyakaana vs National Environment Management Authority [2015] UGSC 14**, where Nyakaana acquired land in a swamp to improve for the benefit of the people. However, Nyakaana built a residential house in the swamp and acquired title on the same land. The respondent tempted to remove Nyakaana from the land but he contended that he had a private title on the land. The court held in favour of NEMA and granted a restoration order against Nyakaana. Court further held that in every issue concerning the environment its standards should at all times be maintained because any deviation from the standards causes superfluous adverse environmental effect.

Pertinent to note is that, **part IX of the National Environment Act 2019** establishes environmental standards, and to this extent; **section 103 (1)** The Authority shall, in consultation with the relevant lead agencies (a) establish the criteria and procedure for the measurement of air quality; (b) prescribe ambient air quality standards and other air quality standards; (c) prescribe emission standards for various sources; and (d) establish criteria and issue guidelines for air pollution control for mobile, stationary and other sources.

Section 104[99] The Authority shall, in consultation with the relevant lead agency, establish (a) procedures for the measurement and determination of noxious smells; (b) minimum standards for the control of pollution of the environment by smell;

[99] Of the National Environment Act 2019

and (c) guidelines for measures leading to the abatement of obnoxious smells, whether from human activities or from naturally occurring phenomena.

Section 105[100] The Authority may, in consultation with the relevant lead agency (a) establish standards for effluent discharge; (b) prescribe measures for the treatment of any effluent before discharge into the environment; or (c) require that a developer or operator undertakes such works as it considers necessary for the treatment of effluent before its discharge.

Section 106[101] (1) The Authority shall, in consultation with the relevant lead agency (a) establish the criteria and procedure for the measurement of the effects of vibration and noise pollution; (b) prescribe minimum standards for noise and vibration; (c) issue guidelines for the abatement of unreasonable noise and vibration from any source; and (d) take measurement of the levels of noise emanating from all sources, details of which measurements shall be given to the owner or occupier of the premises from which the measurement was taken for their action.

Section 107[102] (1) The Authority shall, in consultation with the relevant lead agency (a) establish the criteria and procedure for the measurement and determination of soil quality, including sampling methods and soil analysis; and (b) prescribe minimum standards for the management of the quality of the soil.

Section 109[103] **(1)** The Authority may, in consultation with the relevant lead agency, establish standards for other matters and activities that may be deleterious to human health or to the environment. (2) The Authority may, in consultation with the relevant lead agency, establish such criteria and procedures as it may consider necessary for the determination of the standards established under **subsection (1).**

[100] Of the National Environment Act 2019
[101] Of the National Environment Act 2019.
[102] Of the National Environment Act 2019.
[103] Of the National Environment Act 2019.

It is imperative to note that, the above provisions are intended to regulate the environmental aspects so as to have beneficial environmental impacts mitigated adverse environmental impacts.

Safety and Health in Oil and Gas

Occupation Safety and Health in Oil and Gas.

Article 39 of the 1995 Constitution of the republic of Uganda as amended in the first place provides for a right to a clean and health environment.

Article 40 of the Constitution further mandates parliament in obligatory terms to enact laws to provide for the right of persons to work under satisfactory, safe and health condition.

Section 88 (2) of the Petroleum Exploration Development and Production Act 2013 provides that notwithstanding the general effect of subsection 1is that a licensee shall take all reasonable steps necessary to ensure the safety health environment and welfare of personnel engaged in petroleum activities yeah in the license which includes a couple of things.

Section 140 subsection 2 provides that a licensee shall identify the hazards and evaluate the risks associated with any work performed in the course of petroleum activities carried out under the licence which constitute a hazard to the health of persons employed for purposes of that work and the steps that need to be taken to comply with the law.

This provision is an equivalent of **Section 63 Subsection 2 a of the Petroleum Refining Conversion Transmission and Midstream Storage Act Of 2013**

Section 140(B) further provides that the licensee shall as far as reasonably practicable prevent the exposure for the persons preferred in paragraph a. This is similar provision is encapsulated in section 63 subsection 2 B of the of the petroleum refining conversion transmission and midstream storage Act 2013.

Section 141 (A) Of the Petroleum Exploration Development and Production Act of 2013 further provides that an operator shall take such precautions as a

necessary to ensure the safety of any person employed or otherwise present at or in the vicinity of any installation in accordance to the law. A similar provision is provided for under **section 64 subsection a of the Petroleum Refining Conversion Transmission And Midstream Storage Act 2013.**

Section 141(A)Ii of The Petroleum Exploration Development and Production Act 2013 provides for the protection of the environment and natural resources including taking precautions to prevent pollution. A is similar provision is provided for under **section 64 (a)ii of the Petroleum Refining Transmission and Midstream Storage Act of 2013**

Section 142 Of The Petroleum Exploration Development and Production Act of 2013 provides that a licensee and any other participant in petroleum activities shall at all reasonable times maintain efficient emergency preparedness with a view of dealing with accidents and emergencies which may lead to loss of life or personal injury.
A provision similar to the above mentioned is reproduced under **Section 65 of the Petroleum Refining Conversion Transmission and Midstream Storage Act 2013**

Subsection 2 of section 142 of the petroleum production exploration development act of 2013 further provides that the licensee shall ensure that necessary measures are taken to prevent or reduce harmful effects including the measures required in order to the extent possible return the environment to the condition it was before the accident transpired. A similar provision is reproduced under **section 65 (2) of the Petroleum Refining Transmission Conversion and the Midstream Storage Act 2013.**

Section 143 Of The Petroleum Exploration Development and Production Act of 2013 provides that a licensee shall initiate and maintain security measures to contribute to avoiding attacks against facilities and shall at all times have

contingency plans to deal with such attacks. A similar provision is reproduced under **Section 66 Of The Petroleum Refining Conversion Transmission and Midstream Storages Act of 2013.**

Section 144 Of The Petroleum Exploration Development and Production Act of 2013 provides that there shall be a safety zone surrounding every facility carrying out petroleum activities unless otherwise determined by the authority. It is pertinent to note that a similar provision is as well provided for under **Section 67 Of The Petroleum Refining Conversion Transmission and Midstream Storages Act Of 2013.**

Section 145 Of The Petroleum Exploration Development And Production Act Of 2013 provides that where an accident or an emergency referred to in section 143 occurs, the licensee or other person responsible for the operation and use of the facility shall to the extent necessary suspend the petroleum activities for as long as the requirement of prudent operation Warrant .This section is father provided for under section 68 of the petroleum refining conversion transmission and midstream storage action 2013.

Policy Frame WorK.

This policy is the first major document promulgated with an intention of providing for the first legal framework intended to guide the petroleum activities in Uganda and it was passed in **the year 2008.**

Principle 6. 2. 5 Of The Oil and Gas Policy recognizes the need to protect the health of the environment and it anticipates the negative effects of oil and gas to wit oil spills which contaminates water and in particular the water in danger are the waters of lake Albert and surrounding water bodies and further oil spills or dangers emanating from the activities carried out by the oil and gas sector could be as well harmful to the human beings which can in the worst case scenario cause death.

Occupation health and Safety Act 2006

Section 13 of this act provides for general duties of employers to protect workers

by taking all measures to protect them. Workers and the general public from the dangerous aspects of the employers undertaking at his own cost the employer must ensure that the place is safe for work. Further under **Section 13 subsection 2** the duty of the employer extends to provision and maintenance of plant and systems of work that give as far as is reasonably practicable a safe working environment including its vicinity. The employer must ensure that the place of work is safe and this was clearly illustrated in the case of **General cleaning contractors versus Christmas[104].** In this case Christmas worked for the general cleaning contractors as a cleaner who cleaned windows on numerous buildings builds. As a way of ensuring his safety, belts were provided by the company but unfortunately there were no hooves on the building where the belts could be appended to ensure maximum safety. The company knew that indeed the hooves were not available and they were needed to ensure the safety of its employees. Now on the fateful day Christmas while working and in particular cleaning the windows, Christmas fell from where he was working from and hence, he suffered a lot of damage and hence suing. The court held that the employers were liable for having failed to ensure that the working environment was good for Mr Christmas.

The employers must ensure a safe system of work through providing safe working methods that is to say layout of the workplace, putting warning signs for potential hazards, provision of safety equipments and warning employees about potential hazards however this warning does not mean that in the event where an employee does not use common sense the employer will be liable as well and this was illustrated in the case of **O'Reilly versus National Rail[105]** in this case the employees came across an unexploded bomb in the place where they were working from, the plaintiff in this case was tasked by his fellow employees to hit the hammer on top of that unexploded bomb in a bid to ascertain what would happen. The claimant in this case hit a hammer on top of the unexploded bomb and of course the bomb exploded hence leading to severe damages occasioned on the

[104] [1953] AC 180
[105] [1966] 1 ALL ER 499

employees who sued the employer in this case. The court held for the employer that much as an employer had an obligation to warm his employees of any potential hazard, instances where the employees simply needed to use their common sense and so the employer was not liable.

Employers have a duty to provide appropriate safety equipment and advise employees of its whereabouts as it was illustrated in the case of **Finch verses telegraph construction and Maintenance Company limited**[106]**.** Finch was employed as a grinder and was injured when a piece of flying metal struck him in the eye. The employer had procured the necessary protective goggles but had never told the employees where they were kept. It was held that the employer was liable.

Where the employers provide the gears but the employees choose not to use them the employer is not liable as it was illustrated in the case of **Qal cast Wolverhampton limited versus Haynes**[107]. Where an employee was injured when he was splashed on the legs with molten metal. The employer had provided him with protective spats but he had chosen not to wear them. It was held that the employer was not liable.

Section 27 of the Occupational Safety and Health Act confers a duty upon a person in control of premises in this case a licensee to use the best practicable means to prevent the emissions into the atmosphere from the premises of toxic or offensive substances and to render harmless and inoffensive any substances that may be emitted. In the case of **Jane Lugolobi &ors v Gerald Segirinya**[108]that involved noise and bad odour released into the atmosphere court held that the noise and bad odour was a violation of the plaintiff's right to a clean and healthy environment. It was further observed by court that the defendant had an obligation to control the release of fumes into the atmosphere. As such the employer's duty extends to the community around the area with these activities

[106] [1949] 1 ALL ER 452
[107] (1959)AC 743, HL
[108] 2007 KALR 396

One of the regulations aimed at promoting health and safety is the **Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016**. It confers a responsibility upon a licensee and any person working for him or her to ensure compliance to the Act as well as regulations and any other applicable law. This presupposes that a licensee must ensure that the operations undertaken do not endanger life.

Section 4Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016provides general duties to a licensee which include preventing incidents, accidents and hazards and limit their consequences to human health and environment, prevent and reduce the number of accidents among employees that are likely to result into loss of time for work, disability or fatality to the employees, to ensure that occupational safety and health in all midstream operations is satisfactory for the health and safety of employees and the environment, to ensure that the level of safety and health is at all times concurrent with the technological development and to comply with the requirements under the Occupational Safety and Health Act, 2006

Regulation 5(2) of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 provides that the licensee shall ensure that process and auxiliary facilities are free from failure during operation that is likely to lead to hazardous situations, incidents or accidents.

Regulation 6(a) ofPetroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 requires the licensee to comply with requirements of the Occupational Safety and Health Act, 2006 and in addition ensure that the management of health, safety and the environment comprises the operations, resources, processes and organization necessary to ensure prudent operations and continuous improvement.

Regulation 7(a)Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 provides that the licensee shall ensure that all offices, warehouses and process buildings within a facility are constructed in accordance with standards approved

by the Authority and best petroleum industry practices. Premises safe

Regulation 7(b)Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 requires a licensee to ensure that the laboratory building construction takes into account the safety of employees and provision of adequate ventilation and measures for proper disposal of waste.

Regulation 7(d) of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016requires the licensee to ensure that the emergency alarm system and evacuation programs within the facility conform to standards approved by the Authority and best petroleum industry practices.

Regulation 8(1) of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 confers a responsibility on a licensee to ensure that risk assessment on health, process, safety and working environment is planned, carried out and used.

Regulation 8(2) of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 provides that the risk assessment carried out under Sub regulation (1) shall identify the likely incidents, hazards or accidents that may occur during midstream operations or in the operations of a facility and their consequences to human life, environment and the facility

Regulation 16 of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016requires a licensee to reduce risk by selecting technical, operation and organizational solutions that reduce the probability of harm, errors, hazard, incidents or accident situations that may occur, establish barriers among other measures.

Regulation 19 of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 requires the licensee to take measures to protect the community where the facility is located or where the midstream operation is taking place from impacts of a

facility or midstream operations during the construction, operation and decommissioning of facilities.

Regulation 20 of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 requires the licensee to put in place safety signs at the entrance to rooms, zone or equipment where employees are likely to be exposed to incidents, hazards or accidents at the restricted areas, ensure that there is adequate response and rescue against incidents, hazards or accidents among other measures.

Regulation 21(1) of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 provides that the licensee shall ensure that every employee has the competence necessary to carry out his or her duties in accordance with the occupational Safety and Health Act 2006 and the regulations.

Regulation 21(2) of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 provides that an employee shall have training in occupational health and safety and in handling incidents, hazards and accidents. John Ridley has noted that the training may take the following form;

At induction training for all employees would cover all aspects of employment including: fire precautions and evacuation drill, details of company products, tour of the premises to identify location of facilities, occupational health facilities such as first aid arrangements, accident prevention activities, safety rules to be obeyed, fire and security arrangements, who to contact if in doubt.

In respect to a contractor and his employees: the training would include local safety rules to be obeyed, any special hazards in their area of work, safe systems of work and permittowork systems procedures, emergency and evacuation procedures, allowed access routes, permitted use of welfare facilities, canteen, toilets, first aid to mention but a few.

Ongoing health and safety training for all employees: would include reaffirmation of safety rules, hazards likely to be met in the work and techniques for avoiding them, safety devices and how to use them, reaffirmation of emergency and

evacuation procedures, action in the event of an accident as well as procedure on identifying a hazard.

Regulation 25 of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 places a responsibility on employees to cooperate on implementation of measures put in place by the licensee to create a satisfactory and safe working environment.

Regulation 83 of Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016 requires the licensee to provide respiratory protective device where an employee or person having access to a facility is exposed to the risk of an airborne hazardous substance or an oxygen deficient atmosphere in the workplace.

Another regulatory framework is to be found under the **Petroleum (Refining, Conversion, Transmission and Midstream Storage) Regulations, 2016.**

Regulation 34(1) of Petroleum (Refining, Conversion, Transmission and Midstream Storage) Regulations, 2016confers a duty on the licensee to report any accidental spillage of petroleum commodities, petroleum products or chemicals inside a refinery conversion plant to the Authority immediately but in any case, not later than 24 hours from the time of the spillage. This would be to mitigate the possible disastrous consequences that may arise and endanger human life where if not prevented**.**

Regulation 34(2) Petroleum (Refining, Conversion, Transmission and Midstream Storage) Regulations, 2016 requires the licensee within 14 days after the accidental spillage occurs under sub regulation (1) to submit to the authority a written report describing the cause and nature of the spillage, the amount of spillage, precautionary measures taken since the spillage to prevent any hazard that may arise from the spillage and precautionary measures taken to prevent such spillage in the future**.** All the above is to ensure safety of not only employees but the surrounding communities.

Oil spills have in the past caused devastating consequences. A case in point is the Gulf of Mexico oil spill. On or about 20th April 2010, eleven (11) oil workers lost their lives when the deepwater horizon, a semisubmersible offshore drilling in the

Gulf of Mexico exploded and created one of the largest environmental disasters in the U.S history. In the weeks and months that followed hundreds of millions of crude oil spewed into the Gulf of Mexico threatening the waters and surrounding lands, marshes and beaches, damaging fish and wild life and disrupting the lives of many residents and communities in the Gulf region. The Albertine region is not an exception to such spillage hence the justification for regulation to protect the communities from a disaster that would befall them in the event of a spillage.

In my well considered opinion, Uganda has a robust legislative and policy framework to handle environmental aspects in the oil and gas sector. However, this depends on a number of factors such as government willingness, the role of courts, oil companies and civil society.

CHAPTER

FIVE

LAND ACQUISATION

Introduction

Uganda recently discovered bankable oil in the Albertine region in the western part of Uganda. As a natural resource, the discovered oil and gas belongs to the citizens of Uganda but it is held in their trust by the government of Uganda. The government is tasked to extract this oil and process it for the benefit of the country at large and the growth of its economy. However, this extraction cannot be discussed without tackling the underlying land issues that come with it. The land ownership system in Uganda is in such a way that land is owned by people and if government wishes to utilise this land, there must be prior and adequate compensation rendered to the owner before the government can compulsorily acquire the land.

In the Oil and Gas sector, land rights are further subdivided to include surface rights and sub surface rights. They are severed for purposes of establishing what is owned by the citizen and what is owned by government on behalf of the citizen. The former will have surface rights and must be compensated in order to utilise his/her rights. Subsurface rights on the other hand, belong to the government; held in trust for the people.

It is important to discuss the rights at length in the quest to establish whether the ownership of these rights and their transfer to extractive industries has been a legal and smooth process or marred with illegalities and human rights violations.

In Hoima District, Buseruka Sub County, oil exploration has led to land conflicts which have threatened the existence of the indigenous people. Despite the existence of legal instruments like the Constitution and the National Oil and Gas Policy, land conflicts still persist in Buseruka Sub County (International Alert, 2013). The media has reported the threats emanating from the land uncertainty as a result of oil exploration like hatred between the oil exploration company and the indigenous people, and displacement (Kisembo, 2009, p.2). A baseline survey carried out by HOCADEO (2012, p.29), reports that the majority of the individuals believed in the idea that there were incidences of land grabbing as seen from the 143(46.7%) who strongly agreed, 84(27.5%) who agreed to the statement. Moreover, the majority of the respondents had a perception that more people were likely to be displaced on their land due to oil discovery.

Article 26(1) of the 1995 constitution of Uganda provides for every person's right to own property either individually or in association with others, while **Article 237** states the land in Uganda belongs to the citizens of Uganda and shall vest in them in accordance with land tenure systems: customary, freehold, mailo and lease hold. Such legislation include: land (amendment) Act, 2010, which enhances the security of occupancy of lawful and bona fide occupants on registered land in accordance with **Article 237 of the constitution**.

In spite of the findings, no empirical studies have been done on oil exploration activities and land conflicts and more so in developing countries, like Uganda in confirmation to the abovementioned facts. This lack of studies has resulted into uncertainty, increased hostility, and loss of land among others. Therefore, there is a need to conduct a study on relationship between oil exploration activities and land conflicts in Hoima district particularly Buseruka Sub County.

Uganda's oil and gas sector has transitioned from the exploration phase to the development phase in preparation for oil production (the operations phase). The extraction, processing, and distribution of oil require a great deal of infrastructure, which demands considerable acquisition of land from communities surrounding project sites.

This book makes an endeavor to examine the social impacts of land acquisition for five projects associated with oil and gas development in Uganda. Should they all proceed as planned, collectively, these five projects will consume around 115,000 hectares of land and will displace nearly 15,000 people. The potential and actual social impacts of these projects on the local communities are many and varied, including: increased levels of poverty, conversion of agricultural land to industrial purposes increasing food insecurity, inflation in the cost of goods and services, community disarticulation, and disruption of people's lives and livelihoods.

The influx of immigrants is viewed by local people as a threat to their survival due to increased competition for limited job opportunities. Since most land is communally owned, faced with the prospect of having land bought or expropriated, there are social tensions within communities about how land might be kept sufficiently intact for viable agricultural production, and over how the community might be able to cashin on such opportunities. Another challenge is how the proceeds from the sale of land should be used. Women are still socially excluded from owning land, which is a major concern when it comes to fair compensation and their future livelihoods. In most cases, they have been made worse off by the land acquisition for oil development in Uganda.

Throughout Uganda's history, the question of land ownership, rights and interests in land has always been a socioeconomically sensitive issue[109]. The strong citizenry attachment to their land stems from the fact that for many Ugandans, land is always and, in some cases, the only source of livelihood. Without land, there is no hope for sustainability as it is used to supply the daytoday basic needs of families. These needs include; shelter, food, healthcare, and in more traditional societies, clothing. One major indicator of the extent to which Ugandans depend on land is through the national dependency on agriculture. According to the Uganda Bureau of Statistics (UBOS), the agricultural sector employs over 70 percent of the workforce and about 81 per cent of households depend on

[109] John T. Mugambwa, 2002, Source Book of Uganda's Land Law – Kampala, Fountain Publishers, p.3

agriculture, accounting for 90 percent of export earnings[110], and as of 2014/15; agriculture provided for 24 percent of Gross Domestic Product. It is land that is sold for children's fees, or for the access to other needs that cannot be gotten directly from land, not to mention the spiritual and cultural values attached to the land.

In view of the fact that not only the livelihood, but also sustainability and survival of Ugandans depends on land, regulation and governance of land ought to be handled with diligence. In the past, Ugandans from all walks of life young and old, male and female have expressed willingness to do anything in defense of their land and property rights.

On three different occasions in 2015[111], Ugandan media and the general public witnessed the boldness and resilience with which some women stood nudely to be counted in pursuit of their land rights. This move was out of the ordinary for two reasons;

(i) Traditionally women's bodies are believed to be sacred.

(ii) It has been argued that women largely have neither land rights nor ownership due to patriarchal cultures that place land ownership as a preserve for men[112].

The actions of women in Acholi and Teso who chose their last resort option to protect land from being arbitrarily taken, by government, signified the verbosity of the discussion around compulsory land acquisition by government. In this light, government's decision to legitimize acquisition of private land prior to compensation, by amending the supreme law of the land needs to be treated as sensitive issue and a matter of national importance. The Uganda Human Rights Commission in 2016 advised government to call for a referendum to address the

[110] Uganda National Bureau of Statistics, 2015, The National Population and Housing Census 2014. At P. 42

[111] Muhindo, J., 2017. Compulsory Land Acquisition in Uganda: An Analysis Of The Proposed Amendment Of Article 26 Of The Constitution, Kampala. ACODE Policy Briefing Paper Series No.47.

[112] Chidinma Unigwe, 2016, Women Strip Totally Naked to Protest Land Grabbing in Uganda. Available at https://www.thetrentonline.com/women-strip-totally-naked-protest-land-grabbing-uganda-photos-nudity-2/

controversial proposal to acquire land without giving prior compensation.[113] This advice from the Uganda Human Rights Commission buttresses the threat the proposed amendment of the Constitution poses to the economic, social and cultural rights of Ugandans across the board as well as its political implications.

Uganda's oil and gas sector has transitioned from the exploration phase to the development phase in preparation for oil production (the operations phase). The extraction, processing, and distribution of oil require a great deal of infrastructure, which demands considerable acquisition of land from communities surrounding project sites. Here, we examine the social impacts of project land acquisition associated with oil production in the Albertine Graben region of Uganda. We specifically consider five major oil related projects that have or will displace people, and we discuss the consequences of this actual or future displacement on the lives and livelihoods of local people. The projects are: Tilenga; Kingfisher; the East African Crude Oil Pipeline; the Kabaale Industrial Park; and the Hoima–Kampala Petroleum Products Pipeline. Our findings reveal both positive and negative outcomes for local communities. People with qualifications have benefited or will benefit from the job opportunities arising from the projects and from the muchneeded infrastructure (i.e., roads, health centres, airport) that has been or will be built. However, many people have been displaced, causing food insecurity, the disintegration of social and cultural cohesion, and reduced access to social services. The influx of immigrants has increased tensions because of increasing competition for jobs. Crime and social issues such as prostitution have also increased and are expected to increase.

Demystifying the oil impression

Tom Ogwang & Frank Vanclay, 2019[114], endeavors to examine five of the major projects associated with the development of oil and gas in Uganda, each of which

[113] Francis Emorut, 2016, Hold Referendum on Compulsory Land Acquisition, The New Vision. Available at https://www.newvision.co.ug/new_vision/news/1435535/hold-referendum-compulsory-land-acquisition

[114] 1. Tom Ogwang & Frank Vanclay, 2019. Social Impacts of Land Acquisition for Oil and Gas Development in Uganda, Urban and Regional Studies Institute, Faculty of Spatial Sciences,

requires substantial land take. they discuss the social impacts these projects have had and will continue to have on the livelihoods of local people. They argue that oil and gas development should not lead to a resource curse, Dutch disease, and/or the Nigerian disease. Instead, Uganda and other resourcerich countries in Africa should ensure that the negative consequences from resource exploitation, and especially from land acquisition, are fully addressed by adhering to international best practice. Opportunities for benefit sharing should be properly considered and implemented by the oil companies and the government in a negotiated and coordinated way. Should this occur, local communities and the nation at large will prosper, and the oil companies will gain a social license to operate and grow. In addition, they will be more likely to experience the efficient and effective implementation of their projects.

Amy K.L. & Gare A.S., 2010[115] explores the benefits that Talisman Energy Inc. ("Talisman") might derive and the challenges it might encounter if it were to adopt a policy to secure the free, prior, and informed consent ("FPIC") of indigenous peoples potentially impacted by its global operations. Talisman commissioned this report at the request of two responsible investors, Bâtirente and Regroupement pour la responsabilité sociale des entreprises ("RRSE"). The World Resources Institute ("WRI"), a think tank and thought leader on FPIC, was asked to provide a thirdparty commentary on it. The scope of the report, as agreed by Talisman, the responsible investors, and WRI, includes the legal history of FPIC, the opportunities and challenges attendant to a FPIC policy, FPIC best practices, and guidance on FPIC policy language and implementation guidelines. The report does not encompass a review of the effectiveness of Talisman's existing indigenous people's policies and practices, although the responsible investors requesting the report noted that Talisman "is ahead of the curve in terms of corporate social responsibility and transparency." The perspectives expressed in

University of Groningen, 9700AV Groningen, The Netherlands, [online] available at; https://www.mdpi.com/2073-445X/8/7/109/pdf (accessed 24th June, 2021)

[115] Implementing a Corporate Free, Prior, and Informed Consent Policy: Benefits and Challenges, Foley Hoag LLP, Driving Business Advantage.

the report are intended to be inclusive, and draw upon the expertise of a range of community engagement and FPIC experts.

FPIC is one of a number of indigenous rights that are specifically enumerated in international documents. Talisman and a number of its peer companies already have policies and practices in place to respect the longerstanding international norm of engagement with indigenous peoples who will be affected by development activities. Indeed, meaningful engagement is a critical process for companies that seek a social license to operate. FPIC can be understood, in fact, as a heightened and more formalized form of community engagement to be utilized when a project has substantial impacts on indigenous groups. Although this report is focused on FPIC, it builds upon the assumption that community engagement is an essential baseline for company behaviour that helps ensure respect for human rights when company projects will affect communities. FPIC derives from a number of legal and normative sources. International Labour Organization ("ILO") Convention No. 169, a binding legal document, requires party States Parties to obtain the FPIC of indigenous peoples before resettling them, although this application of FPIC is conditional if States do not receive indigenous peoples' consent, they may relocate them in accordance with national law. The United Nations ("U.N.") Declaration on the Rights of Indigenous Peoples ("the Declaration") calls on parties to obtain the FPIC of indigenous peoples in the context of development projects that affect them. The Declaration is soft law rather than a binding legal document, but it is likely to influence national laws and jurisprudence over time, and soft law can evolve into hard, binding law. The U.N. General Assembly's approval of the Declaration in 2007 signalled a victory for indigenous people and provided momentum to the principle of FPIC.

These international legal documents look primarily to governments, not companies, to obtain FPIC from indigenous peoples. Yet this could change. FPIC is rapidly gaining momentum, and this paper captures only a snapshot of the concept, which will continue to develop. Although international law does not appear to impose a requirement directly on companies to gain FPIC, the evolution of FPIC in international law will affect companies. National and regional legal

systems are beginning to incorporate the right of indigenous peoples to be involved in decisions regarding development projects that will impact them, which in some instances has led to the denial or alteration of concessions that had been offered to multinational companies by the State. In addition, nonlegal entities, such as the Inter American Development Bank ("IADB") and the Roundtable on Sustainable Palm Oil ("RSPO"), recently have started to apply the principles of FPIC directly to companies.

The policies and practices of a small but growing number of mining companies also incorporate the principles of FPIC that consent is free, prior, and informed to varying degrees. The oil and gas industry, however, has less frequently used FPIC in policy or practice. Evolving legal, social, and reputational risks provide reasons for Extractive companies to examine indigenous people's issues and consider whether seeking FPIC would better enable them to play an appropriate role in the realization of indigenous rights while more effectively protecting their social license to operate. Companies considering a policy that incorporates FPIC principles face a number of potential benefits and challenges to their operations, relationships, and reputation. FPIC might enhance a company's ability to obtain and maintain a social license to operate in some countries. Yet in countries where indigenous communities feel that their rights are wellprotected and are not demanding FPIC, it might add little more benefit than a robust engagement process. Furthermore, obtaining FPIC is challenging because it can be difficult to identify the relevant indigenous peoples and define an appropriate negotiation process.

In addition, FPIC could heighten existing tensions between indigenous and nonindigenous communities if companies accord differential treatment to indigenous people. On the other hand, seeking consent could improve the reputation of companies in the eyes of civil society, responsible investors, and indigenous groups if the companies can demonstrate that they follow a suitable process. Adhering to the principles of FPIC could also affect companies' market access and regulatory and legal risk. Companies that seek FPIC might obtain better market access if the government is concerned about indigenous rights and social

unrest. On the other hand, some governments might wish only to develop natural resources as rapidly as possible and give concessions to companies that are certain to exploit them with or without FPIC. Efforts by companies to secure consent could adversely affect relations with the host government if the companies are construed to be undermining national sovereignty although if companies present FPIC as a means of mitigating social risk, such an outcome is less likely. In some instances, regulators might view companies that seek FPIC more positively and be more helpful during the regulatory process. At the same time, other regulators might feel that companies have layered an unnecessary and timeconsuming requirement on top of the existing process. Adopting a policy that incorporates FPIC principles would likely lower legal risks in the longterm, particularly in countries that voted for the Declaration. This report is premised on a number of assumptions. First, understanding the distinct, although complementary, roles and capabilities of States and companies is critical. As the U.N. Special Representative for Business and Human Rights has noted, States and companies have different, although complementary, roles regarding human rights. Because the roles of States and companies are distinct, even if a government fails to meet its human rights duties, this does not release the company from its independent human rights responsibilities.

Given that the roles of States and companies are different; it is not surprising that the precise meaning of FPIC as it applies to governments is not likely to be the same for companies. Companies do not hold the power to seek FPIC in a manner that is truly “prior” as ILO Convention No. 169 and the Declaration appear to utilize the term, whereby a state gains consent before a concession is granted. Companies can, however, adhere to the principle of gaining consent “prior,” and seek consent before commencing specified stages of operations. Therefore, this report refers to “community agreement based on FPIC principles” to highlight the ways in which these principles can be defined and operationalized in a corporate context, which sometimes varies in subtle but important ways from the State context. In some instances, the paper also refers to consent. This should be understood to be synonymous with “community agreement based on FPIC

principles." The report also assumes that consent and engagement are closely related concepts that can form part of the same process. Companies always should engage with project affected communities. Consent is added on top of normal engagement processes in certain circumstances, and includes a more formalized process and outcome.

The terms engagement and consent should not be used interchangeably, as consent is a heightened or extra layer added to the engagement processes that companies normally undertake. The report concludes that, in the longterm, the benefits for oil and gas companies of obtaining community agreement based on FPIC principles, and thereby both supporting their social license to operate and reducing legal and reputational risks, may outweigh the substantial challenges of securing consent.

This is particularly likely in States that voted for the Declaration and in places where the rights of indigenous peoples are poorly protected in law or practice.

In light of global trends, it would be both timely and wise for Talisman to consider incorporating FPIC principles into its indigenous peoples or community policy. Because jurisprudence and consensus around FPIC is changing so rapidly, and companies have so little experience implementing the principles of FPIC, Talisman should review its policy within three years.

Human rights are the basis for securing dignity and equality for all people.[116] Broadly, the human rights "bill of rights" is made of the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights. These international instruments set out a range of rights and freedoms such as protection from deprivation of property, right to education, the right to favourable conditions of work, to a clean and healthy environment, and to an effective remedy, among others. There is evidence that transnational oil companies that respect human rights tend to have strong health and safety performance, reduced environmental effects from their operations, and become more acceptable by local communities within their operational jurisdictions, while, those that show no interest in protecting

[116] European Commission, 'Oil and Gas Sector Guide on Implementing the UN Guidelines on Business and Human Rights.'

human rights face hostilities in their areas of operation leading to the denial of a social license to operate, face operational delays, reduced employee satisfaction, lawsuits and a reputational harm and limited investment expansion and opportunities[117].

In recent years, a number of transnational oil companies have joined the government and civil society to establish multistakeholder initiatives aimed at maximizing positive human rights impacts and preventing negative ones in the sector. Such initiatives include the Extractive Industries Transparency Initiative (EITI), the Voluntary Principles for Security and Human Rights, and the Global Oil and Gas Industry Organization for Environmental and Social Issues. Domestication of these principles and initiatives into national laws and policies is critical to the full realization of the "Protect, Respect and Remedy" framework of the UN Guiding Principles on Business and Human Rights.

This analysis demonstrates that Uganda's oil and gas laws fall short of protecting and promoting fundamental and other human rights and freedoms enshrined in the country's constitutional framework. The analysis also shows that Uganda's current policy and legal regime fails the compliance test, with regard to the UN Guiding Principles on Business and Human Rights. A number of human rights issues are raised, ranging from lack of transparency and accountability in the sector, nondisclosure of information, land conflict and compensation rights violations, labour discrimination between international expatriates and local human resources employed in the international oil companies, security and militarisation of the Albertine Graben, and local business opportunities through the provision of goods and services by local small business enterprises as key to the realisation of the desired sustainable economic development in the country. However, it should be noted that economic development does not directly correlate to human development. Therefore, deliberate measures need to be taken to ensure that sustainable economic development realises human development.

[117] See 1.Avocats Sans Frontières (ASF), 2015. Business and Human rights aspects in Ugandas oil and gas sector., Kampala, Uganda.

The oil was first discovered in 2006 in the Albertine Graben area. This area is now divided into ten Exploration Areas. Five of these ten areas have been licensed to different oil companies. The discovery so far is amounting to about 2, 5 billion barrels. An oil refinery is planned in Buseruka Kabale, and plans for pipelines to link the individual wells are under construction (NEMA 2012).

A full development plan for the oil region in Albertine Graben has not yet been prepared by the government, but the area needs a large amount of infrastructural development to make oil exploration possible (Oil in Uganda 2012).

Roads, pipelines, airstrips, a railway and a refinery are the main infrastructural improvements the government needs to exploit the resources. With increase in petroleum developments, an airstrip is being planned in the immediate surroundings of the refinery (NEMA 2012).

The infrastructural developments connected to the oil discovery are mainly taking place in the areas where a lot of people have their homes and their livelihoods through customary tenure. The developments such as roads and the refinery require huge areas of land, which in several areas is in use by local communities. This results in land acquisitions by the government to achieve the planned development (Uganda Roads Authority 2012, Ministry of Energy and Mineral Development 2013, Downstream Today 2012). How the areas included in this research are affected will be presented under the area description.[118]

Customary tenure represents a great part of the tenure systems in many developing countries. Some countries recognize their customary land holders; others do not (*Bruce et al 2010).* This is complicating the process of land acquisitions and losers are often the rural poor (ILC 2011). This is also the case in most of the Albertine Graben area (NEMA 2010), which makes the local population vulnerable towards land grabbing.

This thesis will look at the system of land tenure in three areas within Hoima district in Western Uganda. It will look at the ongoing process of land acquisitions connected to a road project between Hoima town and the village Kaiso Tonya, and

[118] See 1. Ingrid Gildseth, 2013. Land tenure practices and land acquisitions in oil region: The case of Hoima, Western Uganda, Master Thesis of Geography, Norwegian University of Science and Technology, Trondheim

a planned refinery in Buseruka Kabale as specific infrastructural developments in the area, and land acquisitions connected to safety measures taken by the government in Kyangwali.

The land tenure practices in Kaiso Tonya, Buseruka Kabale and Kyangwali are locally managed customary systems. These practices are making the local farmers vulnerable towards land grabbing as the government does not fully recognize these inhabitants' land tenure rights. This is most noticeable in Kyangwali where local people are being evicted without compensation, but also in Kaiso Tonya and Buseruka Kabale where compensations are described as highly insufficient.

The customary tenure systems of these areas have developed through history. The developmental plans of the area and the following land acquisitions might have an extra negative effect on the local inhabitants. Their way of assigning land rights and managing tenure is completely overlooked, and they are now losing control of something that always has been in managed within the local community. This will affect the locally based tenure security.

By using Zoomers' (2010) list of issues that should be taken into account in case of land acquisitions, it is by the presentation in chapter 5 clear that the land acquisitions in this case have not been handled properly by the government, which has affected the farmers in a very negative way. These land acquisitions can therefore be evaluated as a type of land grabbing by the government in their attempt to develop the oil sector in Uganda.

The discovery of oil in any country is met with joy and jubilation for its prospective contribution to development. This is no different for Uganda. The need for land to pave way for oil exploitation and exploration as well as speculative investment has generated a challenge of land acquisition which in this paper the author has considered to be land grabbing. ***Roberts K. Muriisa*** opines that [119]The phenomenon of land grabbing has been widely researched in the agricultural sector because of the scale and size of land taken over in the process of land acquisition and much less in the oil and extractive industry. This paper explores the drivers of

[119] Roberts K. Muriisa, 2018. Land Grabbing and Oil Industry, Implications for Women's Land Rights and Oil Industry in Uganda, Centre for Research on Peace and Development (CRPD) KU Leuven Parkstraat 45, box 3602, 3000 Leuven, Belgium.

oil related land grabbing, the impact of land grabbing on women's land rights and the implications of land grabbing related conflicts on the oil industry in Uganda. Concludes that land grabbing is real, the drivers are both institutional state led, has impacted women's land rights and livelihoods negatively, and that the impact on the oil industry are largely destructive for the success of the oil industry.

The discovery of commercially viable oil deposits in Uganda in 2006 brought a lot of optimism about the contribution of this new discovery to the development of the country. The discovery of oil will transform the country from being a low to middle income country by 2017, and a first world country by 2040. Indeed, with the discovery of oil, Uganda and the expected oil gains, "Uganda is on the verge of becoming an OPEC powerhouse" (Bategeka et al 2013). According to Bategyeka, these considerations are promoted by politicians, a populist's approach to politics where leaders want to maintain themselves into power by overselling the expected benefits of oil discovery. The popular argument is that oil proceeds will finance the national budget and liberate Uganda from donor dependence and boost investment in the development of infrastructure such as roads, health, education and recreation, etc. At the local level the argument is that oil revenues will boost the districts and free them from dependence on central government.

The optimism with which this discovery comes with however fell short of reality when people in the oil rich region of the Albertine Graben began facing evictions from their land and some of them began living in internally displaced people's camps (IDP)like conditions[120]. With more than 200 people evicted from their land to pave way for oil refinery in Kabaale, the hope and glamour of getting employment and a decent life from the oil industry by these people got lost. In addition to land being lost to oil exploration drive, there are reports that speculative land acquisition and application for freehold registration of land has increased. This affects people's livelihoods and transforms into conflicts which may in the long run affect the oil industry.

[120] http://www.observer.ug/business/38-business/38987-oil-rich-hoima-struggles-to-solve-the-land-question

There is little academic work that has examined land grabbing as a phenomenon, the process and drivers of land acquisitions and the outcomes of this process and in particular the conflicts. Much of the land grabbing literature is on the green grab (see for example (Fairhead, Leach, Scoones 2012), with justifications of the green, food and biofuels as necessitating land grabbing because of the expanse of land involved in agriculture and less focus on 'black grabbing'. I argue that the manner in which government acquired the land for oil exploration and mining, the speculative investments and land acquisitions by individuals in the Albertine Graben after the discovery of oil can be positioned in the wider discourses on land grabbing, due to the manipulative nature of the process of acquisition.

Since 2006, the government embarked on the construction of the oil refinery which is expected to sit on approximately 29 square kilometres. Because of the oil refinery and the preparation for this refinery which involves infrastructural development including roads, there is a lot of oil related activity and land related matters have taken a heated turn and many people have been affected. So far it is reported by a number of scholars that a total of 7000 people from about 1200 households in Hoima district have so far been affected by the intended project (AFIEGOAfrica Institute for Energy Governance, 2013). More than 200 people have been evicted from occupying land.

In this book, the author examines the processes of land grabbing as a result of oil exploration and exploitation in Uganda in the districts of Buliisa and Hoima. The paper systematically explores the nature of land grabbing related to oil discovery, the drivers of land grabbing (legal and social frameworks guiding acquisition), and the resultant outcomes of land grabbing. The discussion and analysis in this paper is based on data collected in Buliisa and Hoima, existing literature and government reports. In order to collect primary data, field research was carried out in the villages of Bukona (b), Nyamasyoga, Kyapolani all in Kabaale Parish, Buliisa Districts. In Hoima the author carried out field work because of the close proximity with Kabaale Parish, this is where most people especially those still awaiting compensation/relocation are residing. It is also an area where speculative land grabbing has taken place, and the area where the oil refinery is being planned

for construction. In addition, land has been acquired for road construction (KaisoTonya Road), dumping site for oil refuse during testing during oil exploration. Indepth interviews were undertaken with people; a majority of whom were women to understand the contestations over land and how their lives were impacted by oil discovery. Interviews were also held with civil society organizations as well as community leaders such as local council chiefs. Indepth interviewing was preferred because of the flexibility it allows in getting more data through detailed probing of respondents.

In most countries, oil is produced in areas inhabited by ethnic groups. However, the

proceeds of the production go to government officials as well national coffers.[121] In this case, the members of the ethnic communities will feel that given the fact that the oil is on their land, and they are not getting anything from the government, then it would be best if they break away from the parent nation to form their own *(Ako & Okonmah, 2009, p. 57).* This has been the case in Nigeria, Indonesia, and the southern part of Sudan. South Sudan is a recently independent state because of such a conflict *(Alao, 2007, p. 124).*

According to ***Onduku, (2001, p.5)*** that in Nigeria, some experiences abound in the Niger Delta is that parties in the conflict do not involve only the federal government and the Niger Deltans but also the oil multinationals. Put summarily, the grievances of the Niger Deltans have involved three closely interrelated, but analytically distinct issues: firstly, that all laws relating to oil exploration and land ownership be abrogated; secondly, the issue of natural resource control and selfdetermination and thirdly, that appropriate institutional and financial arrangements should be put in place by the Nigerian nation state and the oil multinationals to compensate the oil producing communities for the developmental and environmental problems associated with oil exploration and exploitation.

Furthermore, the whole conflict has been compounded by the cultural patterns of the people. The people consider their land to be sacred, for it is the source of their

[121]Festus Winyi, 2016. Relationship Between Oil Exploration Activities and Land Conflicts in Hoima District, Uganda: A Case Study of Buseruka Subcounty.

subsistence and income, and it also links the living to the dead. This too is reinforced by refusal to accept change, pride, confidence in supernatural deities and the low context behavior. These goalblocking behaviors leave much to be desired and have jeopardized conflict prevention mechanisms (Onduku, 2001, p.6). On the side of Sudan, it is important to distinguish between the ecological sources of conflict, political and economic sources of conflict. Oil is essentially an economic resource. It has little value to the traditional peoples of the region in terms of their survival, representing economic wealth only to the extent that it can be found, extracted from the ground, processed and shipped to industrial centers for use. Most central therefore, to this study of ecological sources of conflict are: access to and control over the oil fields and land areas they represent, right to participate in decision making over oil rights allocations and share in benefits of oil production and environmental impacts of oil exploration and production and their consequences (Switzer,2001, p.4).

According to Switzer, (2001, p.7) the chain of causation is believed to hold the following sequence: first, discovery of oil leads to an attempt by the government to appropriate oilbearing lands. Second, efforts to appropriate land from groups without what they perceive to be equitable compensation leads to rising social tension and out breaks of rebellion. This rise in social tension is compounded by the environmental consequences of oil production that diminish the traditional sources of livelihoods.

Lado (2001, p.8) asserts that the last two decades of oil exploration and the battle of political control in Sudan are closely correlated. It demonstrates that the discovery of oil in the south led the central government to claim ownership of the newly precious/valuable lands and the resources they represented. This sparked the formation of the Sudan people's Revolutionary army and violent protest by the local inhabitants, culminating with the cessation of oil exploration and production in Sudan.

According to *Emeseh, (2011, p.12)* oil resourcesinduced conflicts in many cases create two or three parties to the conflict the government of the host state, the oil producing companies (which in most cases are MNCs) and the host local

communities, which in this research are also referred to as oil village communities. The revenues from oil resources are maximized by the state and the MNCs, leaving the host oil communities in a state of alienation and deprivation. In many cases, such as in Nigeria's Delta oil region, such negative impact easily manifests in form of environmental degradation and poverty and has been a cause for grievance by oil communities. However, beside the physical effects of oil resources on the host communities, there are other intense fundamental factors, such as struggles for power and leadership, and access to oil resource benefits (Ukiwo, 2011, p.8). Incidentally, the situations of struggle for power, leadership and access to the control of oil resources benefits arise out of the nature of the new relationship that exists between the parties that are directly or indirectly involved in oil production and utilisation.

Land conflict has been very pertinent in subSahara Africa. In Nigeria, Congo, Angola, Gabon, Sudan, Ghana, Senegal *(Ukiwo, 2011, p.10),* can highlight to Uganda that the experience differs radically from the promise of petroleum. A more worrisome situation is created when the gap between the expectation created by oil riches and the actual produced is a condition for disorder and war which distort country's petroleum potential.

The author examines five of the major projects associated with the development of oil and gas in Uganda, each of which requires substantial land take. He discusses the social impacts these projects have had and will continue to have on the livelihoods of local people. He argues that oil and gas development should not lead to a resource curse[122], Dutch disease, and/or the Nigerian disease[123]. Instead, Uganda and other resourcerich countries in Africa should ensure that the negative consequences from resource exploitation, and especially from land acquisition, are

[122] Collier, P. The institutional and psychological foundations of natural resource policies. *J. Dev. Stud.* **2017**

[123] Bategeka, L.; Matovu, J. *Oil Wealth and Potential Dutch Disease Effects in Uganda*; Economic Policy Research Centre: Kampala, Uganda, 2011; Available online: https://www.africaportal.org/documents/10469/Research_ Series_81.pdf (accessed on 23 June 2021).

fully addressed by adhering to international best practice[124]. Opportunities for benefit sharing should be properly considered and implemented by the oil companies and the government in a negotiated and coordinated way[125]. Should this occur, local communities and the nation at large will prosper, and the oil companies will gain a social license to operate and grow? In addition, they will be more likely to experience the e*ffi*cient and e*ff*ective implementation of their projects[126].

These various authors have expressed interest in the oil sector and the bulk keeps growing given the quick transformation of the oil production from upstream all through to downstream production. However, I have tried to capture the aspects that cut across all the stages of production and this literature should be able to guide the reader in establishing the legality of the processes of land acquisition mainly in midstream oil production.

THE LEGAL FRAMEWORK THAT GOVERNS LAND ACQUISITION IN UGANDA.

The Constitution of the Republic of Uganda, 1995, as Amended.

The Constitution is the supreme law of the land as such, there is no other law in Uganda that precedes it. All other laws derive their validity from the Constitution and any law which proves not to agree with the provisions of the Constitution, that

[124] IFC. *Guidance Note 5: Land Acquisition and Involuntary Resettlement*; International Finance Corporation: Washington, DC, USA, 2012. Vanclay, F.; Hanna, P. Conceptualising company response to community protest: Principles to achieve a social licence to operate. *Land* **2019**, *8*, 101

[125] Vanclay, F. Project-induced displacement and resettlement: From impoverishment risks to an opportunity for development? *Impact Assess. Proj. Apprais.* **2017**

[126] Jijelava, D.; Vanclay, F. Legitimacy, credibility and trust as the key components of a Social Licence to Operate: An analysis of BP's projects in Georgia. *J. Clean. Prod.* **2017**.

law is rendered null and void to the extent of its inconsistence with the Constitution.[127]

It follows that **Article 26** of the Constitution provides that;

1. *Every person has a right to own property either individually or in association with others.*
2. *No person shall be compulsorily deprived of property or any interest in or right*

   over property of any description except where the following conditions are satisfied

   a. *the taking of possession or acquisition is necessary for public use or in the interest of defence, public safety, public order, public morality or public health; and*
   b. *the compulsory taking of possession or acquisition of property is made under a law which makes provision for*
      i. *prompt payment of fair and adequate compensation, prior to the taking of possession or acquisition of the property; and*
      ii. *a right of access to a court of law by any person who has an interest or right over the property.*

To begin with, every citizen has the right to own land as the law provides and this ownership can only be taken away after the requirements mentioned above have been fulfilled. However, it is important to note that in as much as land is privately owned, natural resources are not.

This is derived from the provision of the Constitution under ***Article 237*** which provides that land in Uganda belongs to the citizens of Uganda and shall vest in them in accordance with the land tenure systems provided for in the Constitution. it further enunciates that notwithstanding clause (1) of the article the Government or a local government may, subject to article 26 of the Constitution, acquire land in the public interest; and the conditions governing such acquisition shall be as prescribed by Parliament. The Government or a local government as determined by Parliament by law, shall hold in trust for the people and protect, natural lakes,

[127] Article 2 of the Constitution of the Republic of Uganda, 1995, as amended.

rivers, wetlands, forest reserves, game reserves, national parks and any land to be reserved for ecological and touristic purposes for the common good of all citizens.

Article 244 of the constitution provides that;

1. Subject to article 26 of this Constitution, the entire property in, and the control of, all minerals and petroleum in, on or under, any land or waters in Uganda are vested in the Government on behalf of the Republic of Uganda.

2. Subject to this article, Parliament shall make laws regulating

a. the exploitation of minerals and petroleum;

b. the sharing of royalties arising from mineral and petroleum exploitation;

c. the conditions for payment of indemnities arising out of exploitation of minerals and petroleum; and

d. the conditions regarding the restoration of derelict lands.

3. Minerals, mineral ores and petroleum shall be exploited taking into account the interest of the individual landowners, local governments and the Government.

This provision seeks to vest ownership of land discovered to be rich with natural resources in the government. However, for this ownership to be complete, the government must fulfil the requirements provided for under Article 26. Failure to fulfil these requirements grants a citizen to approach the courts of law for redress.

These two provisions are fundamental to this discussion as they help to draw the line between citizen and government ownership of land. In this way, it should be quite smooth to change ownership for purposes of exploiting the Mineral resources. It has however proven to be the opposite for many reasons as I shall discus later on in this paper.

The Land Act as amended Cap 227

This is an Act of Parliament passed to provide for the tenure, ownership and management of land; to amend and consolidate the law relating to tenure, ownership and management of land.[128] It gives detail to the provisions of the Constitution that are concerned with land ownership.

[128] Long title of the Land Act (as amended) Cap 227

It follows that ***Section 2 of the Land Act*** provides that subject to article 237 of the Constitution, all land in Uganda shall vest in the citizens of Uganda and shall be owned in accordance with the following land tenure systems; (a) customary; (b) freehold; (c) mailo; and (d) leasehold.

Section 42 of the Act further provides that the Government or a local government may acquire land in accordance with articles 26 and 237(2) of the Constitution.

As the parliament laid out the law to govern the ownership of land, it recognised the power of the government to take over ownership of land from private individuals for the common good of the country.

The land acquisition Act cap 226.

Like the Land Act, the Land Acquisition Act was enacted by parliament. It was promulgated to make provision for the compulsory acquisition of land for public purposes[129]. It lays out the procedure for acquiring land in detail following the provisions of Article 26 and Article 237 of the Constitution.

It is important to note the provision made under section 6 of the Act which states thus;

Where a notice is published under section 5 in respect of any land, the assessment officer shall, on the day specified in the notice, proceed to hold an inquiry into claims and objections made in respect of the land and shall make an award under his or her hand specifying; (a) the true area of the land; (b) ***the compensation which in his or her opinion should be allowed for the land****; and (c) the apportionment of that compensation among all the persons known or believed by him or her to have an interest in the land, whether or not they have appeared before him or her.* [Emphasis mine]

The Act recognises the aspect of compensation prior to the take over the land. However, on who should determine the amount of compensation is also an issue that has had a longstanding debate. The provision provides that the appointed person by the minister states the compensation which in his or her opinion should be allowed which seems to strip the owner of the chance to suggest how much

[129] Long title of the Land Acquisition Act, Cap 226

compensation he wants according to the attachment he or she might have with the land.

Section 13 of the Act seems to remedy this fear by providing that;

Where an award is made under section 6, any person awarded or claiming that he or she should have been awarded compensation may within sixty days of the date of the award appeal to the High Court by way of objection to any or all of the following;

(a) the total amount of the compensation awarded;

(b) the apportionment of the compensation;

(c) any failure or refusal of the assessment officer to include him or her in the apportionment.

The aggrieved party has the opportunity to take their disagreement to court in order to have a more reliable compensation or the desired remedy, if it is in the best interests with justice.

The Petroleum (Exploration, Development and Production) Act, 2013

This was an Act promulgated to govern activities of oil production in the upstream section of the process. It nonetheless sheds light on the land rights and how they are to be exercised.

Section 135 of the Act provides that a licensee shall not exercise any right under a license;

(a) Without the written consent of the relevant authority, upon any land dedicated or set apart for a public purpose or for a place of burial or upon land over which a mining lease, an exploration licence or a right to cultural site has been granted;

(b) Without the written consent of the land owner;

(i) Upon any land which is the site of or which is within two hundred meters of any inhabited, occupied or temporarily unoccupied house or building;

(ii) Within fifty meters of any land which has been cleared or ploughed or otherwise bona fide prepared for the growing of agricultural crops or on which agricultural crops are growing

(iii)Upon any land from which, during the year immediately preceding, agricultural crops have been reaped or;

(iv) Upon any land which is the site of or which is within one hundred meters of a cattle diptank, dam or water used by human beings or cattle.

Section 136 further provides that;

A land owner in an exploration or development area shall retain the right to graze stock upon or to cultivate the surface of the land insofar as the grazing or cultivation does not interfere with petroleum activities or safety zones in the area.

This Act severs the land rights to include the surface rights as envisaged under section 136 and subsurface rights as envisaged under section 137. The Act also portrays that the licensee acquires the right to access the sub surface but must pay rent for utilising the surface in the process of accessing the subsurface.

THE IMPACT OF GOVERNMENT ACQUISITION OF LAND.

The land ownership system

As it has been said before, the system of land ownership in Uganda is that the citizenry have the ownership and they have the right to develop the land in ways that suit their sustainability. Uganda, like many other developing countries relies heavily on the land and most population thrives on ownership of land. Agriculture, tourism, infrastructure and the rest all require this precious factor; land.

There are various types of land tenure systems in Uganda under which citizens and foreigners can buy land, own and utilize it. Land can either be owned in perpetuity or for a given period of time. The Land Act identifies the four forms of land tenure systems in Uganda which include Customary, Leasehold, Freehold and Mailo. The Act grants all legitimate and bona fide occupants property rights; establishes land tribunals and decentralizes land administration.[130]

[130] https://www.ecolandproperty.com/types-of-land-tenure-systems-in-uganda/

It is under such tenure systems under which land can be acquired, owned, utilized and disposed off. If you do not belong to any of the systems of tenure, you do not own land in Uganda. However, you can only be defined as a tenant on a property, a squatter or bonafide occupant as may the law determine based on circumstances of occupancy.[131]

Commercial oil deposits were first discovered in the Albertine Graben region in western Uganda in 2006, and since then the Government of Uganda has had plans for their exploitation, although the target date for first oil has been postponed several times[132]. The extraction of oil means that there will be several large projects in the region, potentially including an oil refinery, the generation of electricity from gas, the export of crude oil to international markets by pipeline via Tanzania, and a new international airport. The Government expects that the development of the oil and gas industry will accelerate economic growth, job creation, contribute to poverty eradication, and improve the general prosperity of Uganda[133]. However, each project requires large amounts of capital, technical expertise, and land. The demand for land has led and will continue to lead to the displacement of large numbers of people[134].

Irrespective of their purpose, large projects require land, and sometimes very large tracts of land. Many projects cause displacement. If not managed well, resettlement can have severe consequences for local communities[135] and can create human rights impacts[136]. All projects should adhere to international best practices,

[131] Ibid
[132] Vokes, R., 2012. The politics of oil in Uganda. Afr. Aff., 111, 303–314
[133] Hong, P.Y.; Singh, S.; Ramic, J. Development induced impoverishment among involuntarily displaced
populations. J. Comp. Soc. Welf. 2009, 25, 221–238
[134] Kinyera, P.B. Land, oil and expressions of citizenship in Uganda's Albertine Graben. Extr. Ind. Soc. 2019, 6,
110–119.
[135] Smyth, E.; Vanclay, F. The social framework for projects: A conceptual but practical model to assist in assessing, planning and managing the social impacts of projects. Impact Assess. Proj. Apprais. 2017, 35, 65–80.
[136] van der Ploeg, L.; Vanclay, F. Challenges in implementing the corporate responsibility to respect human rights in the context of project-induced displacement and resettlement. Resour. Policy 2018, 55, 210–222.

which, among other things, require that involuntary resettlement be avoided or at least minimized, and that, where resettlement is unavoidable, all affected people should be fully and fairly compensated, and have an opportunity to be involved in the resettlement process[137]. Each project should be considered as an opportunity to improve the wellbeing of affected people. If international standards are not complied with, land acquisition for projects and the associated displacement and resettlement leads to impoverishment and conflict[138].

Scholars have argued that the extractive industries tend to be associated with the resource curse and issues like corruption, political and social instability, and economic underperformance, rather than positive and inclusive development[139]. Uganda is at a critical point if it wants to avoid joining the growing list of resource curse countries[140]. It needs to ensure that the land needed for oil and gas infrastructure is acquired in a fair and transparent way, and with the consent of the original land owners. People in local communities need to be fairly and promptly compensated for their land[141]. Arguably, if land acquisition and future revenues are well managed, this could lead to economic prosperity and the improved welfare of Ugandans, however, if badly managed, there will be many negative outcomes, including protests, project delays, escalating costs, reputational damage, food insecurity, and conflict[142].

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[137] Vanclay, F.; Hanna, P. Conceptualising company response to community protest: Principles to achieve a social licence to operate. Land 2019, 8, 101.

[138] Alao, A. Natural Resources and Conflict in Africa: The Tragedy of Endowment; University of Rochester Press:
New York, NY, USA, 2007.

[139] Collier, P. The Bottom Billion; Why the Poorest Countries are Failing and What Can be Done About It;
Oxford University Press: Oxford, UK, 2007.

[140] Sturesson, A.; Zobel, T. The Extractive Industries Transparency Initiative (EITI) in Uganda: Who will take
the lead when the government falters? Extr. Ind. Soc. 2015, 2, 33–45

[141] Shepherd, B. Oil in Uganda: International Lessons for Success; The Royal Institute of International Affairs:
London, UK, 2013; Available online: https://www.chathamhouse.org/sites/files/chathamhouse/public/Research/Africa/0113pr_ugandaoil.pdf (accessed on 24th June 2021).

[142] Hanna, P.; Vanclay, F.; Langdon, E.J.; Arts, J. Conceptualizing social protest and the significance of protest

Free Prior and Informed Consent (Social Licence)

The term "social license," or "social license to operate," generally refers to a local community's acceptance or approval of a project or a company's ongoing presence. It is usually informal and intangible, and is granted by a community based on the opinions and views of stakeholders, including local populations, aboriginal groups, and other interested parties. Due to this intangibility, it can be difficult to determine when social license has been achieved for a project. Social license may manifest in a variety of ways, ranging from absence of opposition to vocal support or even advocacy, and these various levels of social license (as well as, of course, the absence of social license) may occur at the same time among different interested parties.[143]

The FPIC of indigenous peoples remains a contentious issue, and only recently gained acceptance into nonbinding international law through the adoption of the Declaration. The dispute over whether FPIC should be required at all, even of States, much less of companies, appears to have limited the discussions and consensusbuilding needed to define exactly what a workable consent process would look like in practice. The Declaration was adopted so recently that national and human rights courts have not provided interpretations of what State implemented process is sufficient for FPIC, because the few cases that these courts have heard involved instances in which the State entirely failed to seek FPIC, rather than instances in which the process was inadequate.

Furthermore, the parties that drafted the Declaration remain deeply divided on the meaning of its language, making it difficult to rely on preparatory papers to divine the meaning of various phrases in the Declaration.47 Examples from industry are few and far between, and most derive from the mining sector, which has a distinct physical footprint and follows different stages with different risks than an oil and gas project.

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action to large projects. Extr. Ind. Soc. 2016, 3, 217–239.

[143] Brian F. Yates and Celesa L. Horvath, 2013. Social License to Operate: How to Get It, and How to Keep It, Pacific Energy Summit, 2013 Summit Working Papers

It is clear that consent is only meaningful when combined with other processes such as engagement that are both company good practice and called for in ILO Convention No. 169 and the Declaration. Company statements regarding consent are therefore best embedded within a more general policy on indigenous peoples or community engagement practices. This section incorporates elements of community engagement good practice because FPIC is so intimately tied to community engagement.

The republic of Uganda has not ratified the ILO Convention No. 169 and as such they can not follow its provisions to the dot which affects the indigenous people whose land has been acquired by government.

A social licence or free, prior and informed consent is a prerequisite for the International Oil Company (IOC) to start extracting the Oil and gas. This is because the aspect of land rights dictates that ideally, the IOC is not allowed to tamper with the land's natural setting at the expense of the communities that settle on it.

Therefore, the consent must be free in a way that the communities choose, on their own volition and without any inducement, to give up their land for the extraction of oil. This free will is hard to obtain from communities especially if they are indigenous communities which share a sentimental attachment with the land. This sentimental attachment like culture is more valuable to these communities than the oil or the compensation they can receive. The IOC must regardless allow the community to freely choose whether they would like to cooperate or not. Should the communities fail to cooperate, the IOCs must not force the citizens to vacate or compel them to agree. This is because the consent ceases to be free and therefore the required threshold is not met.

The consent must be obtained prior to the start of the extraction of oil. No activity should be done on the land without the consent of the settlers thereon. The IOC should be able to meet these communities and discuss with them what they intend to do and how the community is going to be affected by their operation.

The consent must most importantly be informed. Informed consent does not mean that the communities are bombarded with seismic reports and product sharing

agreements concluded with the government. It means that the licensee must explain to the community and the community must comprehend the intentions of the licensee. There must be effective communication of the plan of the IOCs to the community.

A combination of all these three requirements is a key to operate without resistance and to also have support from the community. These negotiations can always yield long lasting relationships that are an incentive to sustainability of the community and developmental to the county's economy.

A good example is the Ogboni leaders in the Niger Delta. They use the framing to mideekor in the Ogoni struggle to hold the oil companies to account. Mideekor refers to a local labour practice where the owners of palm trees hire fields to palm wine tappers. The tappers keep the produce for the first four days for themselves, but the fifth is the landlord's mideekor. To renege on the mideekor is culturally unacceptable. Using this concept to explain the responsibilities of the oil companies to pay their mideekor to the local communities helped to build the movement.

Surface and subsurface rights.

Surface rights refer to the entitlement to utilize the area on and above the earth's crust. This area can be used for farming, tourism, settlements or infrastructure development. Usually, this is the commonest use of the land and many citizens will pass on this land without ever having to use the land below the surface. This is because most citizenry lack the machinery to utilise the land beneath or better still, they have no reason to dig beyond the crops' roots!

Sub surface rights on the other hand is the entitlement to enjoy and utilise land beneath the surface. Here, one is interested in what lies under the usual loam soil that a farmer loves very much. It is usually for mining purposes, or the drilling of water by bore halls and wells. The licensee is usually interested more in this part of the land because on the bed rock, lies the pores that harbour Oil, a rich natural resource that he intends to extract.

Whenever government acquires land in trust of the citizenry because of the discovery of oil beneath the surface, it is the sub surface they intend to hold in trust. The surface would only be the gateway and as such, there is no way for the licensee to access the sub surface without using the surface. This is why therefore the surface rights of the ordinary citizens must be traded for compensation in order to access the sub surface.

The worry is that the government actually rents the surface to the Oil company and receives rents from their continued occupation on the surface while they extract oil. This is because of the onetime compensation they pay off to the original settler so that the land, with both surface and sub surface rights, can belong to them. These rents are just one of the many ways the government usually profits form the oil and therefore one would argue that it would look greedy for the government to want to own even the surface rights when these rights can be retained by the community and the rent is paid to them instead. This would cultivate trust in the citizens and yield cooperation. It would be a direct benefit for the citizens that would make their consent more readily available.

One might argue that the government keeps these rents for the greater good of the entire community and can share these dividends in form of service delivery and infrastructure. This is only true to the extent that the government collecting the money lacks corruption tendencies. When the government has a practice of not accounting for money gotten from the different ventures that it oversees, there is no hope that this rent will ever be shared among the countrymen and women in form of services.

The aspect of compensation.

Compensation is what the communities will receive after their land has been taken over by the government to enable them be able to sustain themselves elsewhere. This compensation can either be monetary; where the government assesses the value of the land and pays the owner that amount of money; or substitute land; where the government identifies a piece of land elsewhere and awards the same to the communities for them to relocate and settle.

It must be pointed out that either method of compensation is questionable for a number of reasons. When the land is valued, the government does not take into account the value added by the discovery of oil underneath. The government simply assesses the land on the normal market price and awards the owner that amount of money. This is particularly wrong because the owner will never experience the value of his land with oil. It seems like the government simply purchased land from him/her without her/his consent. Even if he/she did not want to sell, this option is removed from their options because ultimately, the government must acquire the land.

Relocation has also proved to be inadequate for a number of reasons. Most of the land owners do not own idle land. They are farmers and their settlement, heritage and identity is interwoven with that piece of land. The new allocated land will always lack all the above and as such, can never fully satisfy the land owner. They will always have to start from scratch, lose their identity and probably their ethnicity and language.

Therefore, the system of compensation does not seem to fulfil its real intended purpose. The land owner will always be at a loss whether they allow them to sell the land to government or resettle in any other part of the country.

Internal Displacement.

As a result of the discovery of oil and the subsequent compensation in order to use the land, the citizens have in many occasions become internally displaced persons. This is because, their original ancestral home is usually under valued and the amount of money granted is insufficient to get them ample land to settle elsewhere. The transition process eats up most of the given money because in compensation, it is not a factor that is considered.

For example, if a family has given up its home and land for oil's sake at 5 billion shillings, they need to use part of that money to sustain the family while they look for another are to settle. By the time they do, this money will no longer be 5 billion to get them at bear minimum, what they had before the discovery of oil. This

means that this family will struggle to rebuild and, in the process, might be internally displaced by its own government.

The other more pressing threat is the commencement of these development projects before the actual compensation is paid. Families are told to evict before they receive their compensation and, in the meantime, they are expected to fend for themselves and survive on their own without a land to call their own. When this happens, these families become internally displaced and many who have been living a subsistence life will struggle to survive the transition.

The Aspect of Human Rights.

Human rights are entitlements that we have by virtue of being human. They are universal, and interdependent and as such, a denial of one could be a potential spiral denial of many other rights. Human rights in Uganda are highly respected and even the Constitution has an entire chapter on this bill of rights.

The right to own land is one of the listed rights in chapter four of the constitution. a person has a right to own land in person or in group with others.[144] This means that this right can only be limited upon fulfilment of the requirements under Article 43 of the Constitution. these requirements can only be met by fulfilment of the procedure laid down in Article 237, 244 of the Constitution and the Land Act, cap 227 and the Land Acquisition Act, cap 226. This procedure is predominantly insistent on compensation that is fair and adequate, prior to the acquiring of land.

The failure to observe these requirements would therefore amount to a human rights violation. This is because the right of an individual to own land would have been limited illegally and improperly. This could in extension violate the person's right to life since their sustenance is derived from the land. And with this, a multiple of other human rights like identity, culture and tradition, religion, and so forth.

The other aspect is the underlying discrimination concerning land ownership. Some primitive communities still deny women the right to own land and this causes them to miss out on compensation that could have been rightfully theirs.

[144] Article 26 of the Constitution of the Republic of Uganda, 1995, as amended

Environmental impact

The nature of Oil and gas extraction can be catastrophic to the environment if it is not well managed and properly insured against. This effect can be on the soil; incapacitating it from ever being productive again, or the climate which sustains the agriculture sector of the country. As such, it poses an everpresent threat to the environment which, if allowed to occur to a developing country, can be extremely catastrophic.

Even during the drilling process, the areas that surround the plant are inhabitable due to the use of explosives and heavy ground shaking machinery which could be dangerous to human life. Therefore, the communities on the land with oil and even around must vacate for their health's sake and not all receive the same deserved compensation. The impact on the environment is therefore large and majorly not positive.

Court procedure as a remedy.

There is an ultimate aspect of seeking redress before the courts of law should one feel dissatisfied with the operations of the licensee or government in compensating them. This appeal must be made within 60 days after the dissatisfaction.

The court system of Uganda on the other hand is one that has battled case backlog and many cases taken to court have taken years to be resolved and by the time a judgment is delivered, it is nugatory or noneffective. This is because, while one person takes their plea to court, the Licensee does not halt their processes for all those years waiting for the case to be handled, since their licenses usually have expiry dates. Therefore, by the time the court delivers judgment, even if it is favour of the complainant, they have already lost their lands and can only receive damages.

There are many aspects one can consider when it comes to assessing the legal impacts of the acquisition of land by government in areas discovered to have oil. Most of the ones reflected above have been prevalent throughout the development of the sector in the Albertine region.

OVERARACHING ISSUES WITH LAND ACQUISITION FOR OIL MINING.

In my wellconsidered opinion, I find that the land system of ownership in Uganda is poor. The fact that the citizens are allowed to own land and can only give it up upon compensation means that the government will spend a lot of fund on compensating people. This has been experienced before in the construction of road around the country. Many times, 2/3 of the budgets passed for road construction in Uganda is for awarding compensation and many government officials have benefitted from this. They, having the knowledge of the intentions of government, have bought land intended for construction and later reaped tonnes of money in compensation for the land. This has made the development process very slow if not stagnant.

This type of ownership has allowed land grabbing for compensation purposes, the denial of women the right to own land and incidences of the sort. These stifle developments and affect the efforts to make the country a habitable place for all regardless of their gender.

Corruption is another threat that is imminent on the prosperity of the Oil and gas sector. Uganda is well known for having laws to combat corruption and there is no question about this. However, the query is raised on the implementation of this law. Uganda has suffered in the past with instances of corruption and embezzling of funds meant for different communities. It follows that with the amount of money that the Oil and Gas sector is capable of bringing to the economy, if the bad spirit of corruption continues to haunt the leaders of the country, there is no guarantee that this money will ever benefit the citizens of Uganda.

It is important to note that the existence of weak political institutions in Uganda and the lack of political will highly contribute to illicit financial outflows. Most of the behaviours that support IFFs such as tax evasion, transfer pricing, drugs, among others flourish in the absence of a strong political will.

There is a present threat of poor implementation of the law. Uganda, has impressive laws that are elaborate and well structured. However, the implementation of this law has in the past proven to be futile. The rule of law is not a virtue that the Ugandan politics cherish and as such, there is fear that the

implementation of laws concerning oil and gas might follow the same trend. The difference is that this mistake will have adverse effects on the population and the environment now, and many more generations to come.

The other threat is poor budget allocation. In the recent past, there has been a lot of criticism on how Uganda has allocated its resources in the face of pressing issues. Poor budgeting can be a fertile ground for the oil curse or the Dutch disease if it is not curbed. Budgeting for this sector should be well planned out given the fact that in the coming years, this sector could as well fund the entire budget of the country.

The other threat is the relaying of information to the citizens. In a social contract, the leaders to whom the mandate has been given owe the citizens transparency and information delivery. The citizens should be able to understand what is going on in the oil and gas sector. It is important to note that this should not just be the releasing of technical reports which can be comprehended by a few educated citizens. The information must be communicated effectively to ensure that the communities comprehend and react to the information. Involvement in the making of certain decisions will bolster confidence in the leaders.

The aspect of longterm strategic planning is important and if it not considered, there is a threat of failure to optimally benefit from the resource. The country must be able to project its expected fruits from these ventures and what is best for the country. This will in essence save the country from catastrophic decisions and will secure the future of the development of the sector.

There is also a serious threat of the use of the decommissioning fund for other purposes other than that for which it is designated. The decommissioning fund is an amount of money set aside for the purpose of cleaning up and closing the business of oil drilling when the oil is done. It is a requirement that this money be set aside after before the commencement of the oil drilling to guarantee that the licensee will clean up after their work. This money is submitted to the government. If Uganda decides to utilise this money for other reasons and when it is decommissioning time it is not present, it will have diverse effects on the environment and the population that is supposed to use that land after the oil drilling is done.

There is also a fear that most of the work that is already done was done without obtaining consent from the locals. This consent should never be empty promises. It must be free, prior and informed consent that is to say that the licensee must first inform the local communities of everything going to be done so that the community can give their free consent. The aspect of compensation must also be strictly adhered to. It must be done prior to the taking over of the land.

There is another fear that the country has spent highly on its initial costs of securing land for the expansion of the oil and gas mining process. This means that the government will require a lot of cost oil and leave little or no profit for the Ugandans since most of the money was wasted in initial costs.

There is a threat of environmental degradation if enough is not done to insure against it. As earlier mentioned, the decommissioning fund should not be used for anything else apart from cessation of the oil and gas projects.

The issue of court case backlog will continue to encumber the citizen's ability to obtain timely redress from the courts of law in order to avoid unfair compensation.

Conclusion.

Land and Oil and gas are two intertwined blessings that Uganda has. To use one, the other must be available and ready for use. Uganda must find a way of utilizing both without one hurting the other or causing conflict. This is the reason Ugandans vote; that all things usable to the citizens might be protected and used concurrently for sustainable development and preservation for future generations to come.

CHAPTER

SIX

ENVIRONMENTAL AND WASTE MANAGEMENT.

Introduction.

Oil development can bring great benefits, but it also comes with great risks to the environment as has been seen in oil development zones from the **Gulf of Mexico to the Niger Delta**. The significance of these risks cannot be overstated, and it is critical that Uganda's legislative framework puts laws in place that will ensure that these risks are minimised. Most of the current foreign exchange earnings and livelihoods come from industries that rely directly on the environment namely, agriculture and tourism. If oil development is undertaken in a way that compromises the natural endowment of Uganda, the shortterm gains will be more than offset by longterm losses.

The Albertine Rift is the most biodiverse region of Uganda and, in fact, one of the most speciesrich areas in the world. It is frequently identified as a globally important area for conservation, and is Uganda's largest draw for tourism, hosting more species than any other area on the continent, including the rare mountain gorilla. Some scientists have estimated that the region is home to 30 percent of Africa's mammal species, 51 percent of its bird species, 19 percent of its amphibian species and 14 percent of its plant and reptile species. Most of the oil exploration is taking place in protected areas. Fishing and agriculture throughout the Rift are also critical economically and

socially and are completely reliant on healthy, nonpolluted ecosystems.

Contamination of the Albert Nile must also be protected against, as it would have farreaching political ramifications due to the impacts on downstream nations where interstate relationships are already strained.

The Constitution obliges the state to ensure that natural resources are managed in such a way as to meet the development and environmental needs of present and future generations of Ugandans. The state is charged with promoting and implementing energy policies that will ensure that people's basic needs and those of environmental conservation are met. By **article 237(2)(b) of the Constitution,** the government or a local government holds in trust for the people and protects natural lakes, rivers, wetlands, forest reserves, game reserves, national parks and any land to be reserved for ecological and touristic purposes for the common good of all citizens.

Article 39 of the Constitution 1995 as amended instructively provides that every Ugandan has a right to a clean and healthy environment. This provision is reiterated under **section 3 of the 1995 National Environment Act Cap 153; and section 5(2) of the National Forestry and Tree Planting Act 2003.** The right to health encompasses so many rights and has been defined to include;

a, the right to freedom from pollution, environmental degradation and activities which threaten life, health or livelihood;

1. protection and preservation of air, soil, water, flora and fauna;
2. right to healthy food and water; and
3. a right to safe and healthy working environment.

NEMA is the principal agency established by the National Environment Act for the management of the environment, charged with initiating legislative proposals, standards and guidelines on the environment. Among other duties NEMA is obliged to:

(a) Ensure the integration of environmental concerns in overall national planning through coordination with the relevant ministries, departments and government agencies;

(b) Liaise with the private sector, intergovernmental organisations, NGOs and

governmental agencies of other states on issues relating to the environment;

(c) Receive, review and approve Environmental Impact Assessments (EIA) and environmental impact statements;

(d) Promote public awareness through formal, nonformal and informal education about environmental issues; and

(e) Prepare and disseminate a "state of the environment" report once every two years.

The National Environment Act provides for maximum participation by the people of Uganda in the development of policies, plans and processes for the management of the environment. Additionally, before EIAs are carried out, they should be officially announced and published by the government at least once in the mass media, no less than 30 days before they occur.

NEMA has to ensure that the principles of environmental management are observed, as follows:

a, To assure all people living in the country of the fundamental rights to an environment adequate for their health and wellbeing;

b, To establish adequate environmental protection standards and to monitor changes in environmental qualities.

c, To require prior environmental assessment of proposed projects that may significantly affect the environment or the use of natural resources; and

d, To ensure that the true and total costs of environmental pollution are borne by the polluter.

Section 19 and paragraph 6(j) of the third schedule provides that projects for the exploration of petroleum require a project brief and Environment Impact Assessment. **Sections 24 to 32 of the National Environment Act 2019,** provide for the establishment of standards to establish the criteria and procedures for the measurement of air quality and water quality, and standards for control of noxious smells, noise and vibration, etc. **Section 52** makes it an offence for any person to fail to minimise the waste generated by his or her activities.

NEMA's ambitious mandate, and critical role in ensuring oversight of environmental aspects of the oil and gas sector, including through ensuring public consultation about potential impacts, positions it as an essential actor in securing minimal damage to Uganda's environment by the industry. However, it is underfunded, overstretched and lacks the trained human resources to monitor and enforce environment and social impact regulations contained in its mandate. If these gaps are left unaddressed, there is a real danger that environmental risks associated with oil will not be effectively managed.

The National Oil and Gas Policy asserts the need to protect the environment as part of management of the petroleum sector. **Objective 5.3.9** seeks to ensure that oil and gas activities are undertaken in a manner that conserves the environment and biodiversity. To achieve this objective, the state is required to carry out due diligence on oil companies applying for licences in the country with regard to their technical and financial capabilities together with their environmental standards.

The National Oil and Gas Policy further tasks the government with doing the following:

Ensure availability of the necessary institutional and regulatory framework to address environment and biodiversity issues;

Ensure presence of the necessary capacity and facilities to monitor the impact of oil and gas activities on the environment and biodiversity;

Require oil companies and their contractors/subcontractors to use best practices in ensuring environmental protection and biodiversity conservation; and

Require oil companies and any other operators to return all sites on which oil and gas activities are undertaken to their original condition as an environmental obligation.

The policy also realises the need to upgrade the relevant environment and biodiversity legislation to address oil and gas activities.

RELEVANT ASPECTS OF THE BILL

Compliance

Section 3 of the Bill introduces the need to comply with environmental principles, and every licensee must take into account and give effect to the national environmental laws and other applicable laws, including international environmental conventions such as the Kyoto Protocol and the Rio Declaration. Arguably, however, the phrasing 'take into account' is weak, and the Bill should demand compliance. As currently drafted, it does not go further than the Act.

Activities in gazette areas

The Bill's provisions on surface and subsurface rights remain similar to those in the Act, but with a few modifications. For example, oil activities can no longer take place in a national park or wildlife reserve without the written authority of the Uganda Wildlife Authority (UWA); or, for activities in a forest reserve, the written consent of the National Forestry Authority (NFA) must be sought. Under the Act, this consent is vested with the line ministers.

Pollution

Under **section 104 of the National Environment Act**, a licensee is not to flare or vent petroleum in excess of the quantities needed for normal operational safety, unless authorised by the Minister on the advice of the Petroleum Authority. The allowed disposal of gas by flaring or venting for normal operational safety still requires the consent in writing of the Petroleum Authority, although, in case of an emergency, the licensee may vent or flare without such consent.

According to **sections 132 to 138 of the National Environment Act 2019**, a licensee or licensees are held liable for pollution damage hazardous to public health, safety or welfare; to animals, birds, wildlife, fish or aquatic life; or to plants; or that causes a contravention of any condition. Legal action for compensation for

pollution damage shall be brought before the court in the court area where the effluence or discharge of petroleum has taken place or where damage has been caused. But the mention of generic pollution liability needs to be specified to, for example, the placement of tailings, use of chemicals and drilling fluids, as well as wellhead/pad activities, spillage and discharge due to overreliance on diesel to generate field power. The operator should be held liable not simply for activities directly related to drilling, but also for all ancillary activity in the fields.

ENVIRONMENT MANAGEMENT.

Handling environmental concerns related to oil exploration activities.

The following are being put in place and practice to handle environmental concerns.

Legal regulations and Frameworks that contain environmental principles that ensure harmonious existence between the environment and oil and gas operations are in place and are being implemented. These include:

Environment and Social Impact Assessments (ESIAs) which are undertaken in consultation with Government through National Environment Management Authority (NEMA) and the local communities. This ensures that any potential impacts positive or negative are considered and mitigation measures are put in place.

A multiinstitutional monitoring team from NEMA, PEPD, Uganda Wildlife Authority (UWA), National Forestry Authority (NFA), Directorate of Water Resources Management (DWRM), and Directorate of Fisheries Resources (DFR) together with the respective District Environment Officers continually monitor the activities.

Other frameworks developed to date include an Environmental Sensitivity Atlas for the AG, an Environment Monitoring Plan, and an Enforcement Strategy together with Guidelines for Waste management and Operations in protected areas.

A Strategic Environment Assessment for oil and gas activities has also been developed to ensure that environmental concerns are included in all Government Plans, Programmes & Policies.

Environment and Social Impact Assessment are public documents, and a final copy of the final Environment and Social Impact Assesment report is forwarded to the district through the District Environment Officer (DEO). It includes all comments and concerns raised and the responses given during consultations with stakeholders.

Management of waste generated from the drilling operations.

Waste produced from drilling operations is mainly composed of mud cuttings which are a mixture of rock cuttings and drilling fluid that contains additives like bentonite, barite which are used in the drilling process. In Uganda, Water Based Mud (WBM) has been used most often because it is more environmentally friendly than Oil Based Mud (OBM).

During the exploration phase, waste generated from the well sites was stored at designated consolidation sites where the waste was containerized and monitored. So far, no accidents have been reported with regard to waste generated from various exploration and production activities, as well as base camps.

NEMA has licensed twelve companies to handle waste at different levels namely; transportation, treatment and disposal. Enviroserve White Nile Consultants Limited and Luwero Industries have constructed facilities in Hoima and Nakasongola respectively and are now licensed to operate these facilities. The previously containerized waste has been transferred to these facilities for treatment and disposal.

In addition, the requisite legislation for waste management is being updated.

How Uganda is prepared to address the potential for oil spills given the presence of international water bodies in the Albertine Graben.

Oil spills undeniably present a risk in petroleum production processes across both developing and developed countries. In Uganda, oil spills present an additional risk given that Lake Albert is shared with Democratic Republic of Congo and also feeds the White Nile that flows to South Sudan and beyond. The rich biodiversity

in the Albertine Graben presents another challenge.

To this end, an Environment Risk Assessment (ERA) and Sensitivity Analysis for oil and gas operations in the Albertine Graben was undertaken. This informed the development of an Oil Spill Contingency Plan that was drafted with input from Office of the Prime Minister, NEMA, Ministry of Water and Environment, the Directorate of Petroleum and the Petroleum Authority of Uganda (PAU) among other agencies. The plan considers level of Preparedness, Emergency response mechanism, Command structure, Resources available and Mechanisms for handling oil spill.

Guarding against the Resource Curse.

The National Oil and Gas Policy recognises that the oil and gas sector can have a negative effect of oil and gas resource utilization leading to economic stagnation, environment degradation and increased poverty. Government of Uganda is conscious of the fact that very many resource rich countries in Africa have remained poor despite the existence of natural resources. Government has therefore developed a robust policy, legal, regulatory and institutional framework that addresses the potential negative environmental, social and economic impacts of petroleum exploration and production in Uganda. In addition, capacity has been build both within and outside Government to ensure strict monitoring and accountability. All stakeholders must play their respective roles to ensure effective and efficient development and management of the oil and gas sector in Uganda.

Strategic Environment Assessment.

Strategic Environmental Assessment is a new concept recognized internationally that aims to evaluate the cumulative impacts of the oil and gas operations to ensure that these are captured in all Government Plans, Policies and Programs (PPP) across different sectors of the economy. The strategic Environment Assessment report for the Albertine region was carried out and it indicated that there would be economic gains, albeit not without environmental and social challenges. For example, a large volume of waste would be generated with hazard potential to human beings, water bodies and animals. The assessment also indicated demographic changes in the region that would require planned social amenities

like road networks, health facilities, and urban plans to avoid slums, among others.
Some of the Strategic Environment Assessment recommendations are being implemented and they include;
Development of a waste management plan and strategy to complement the laws that are already in place.
State of the art waste management facilities have been constructed in the graben; the Ministry of Works and Transport together with Uganda National Roads Authority are upgrading the road networks in the Albertine Graben; plans to build an international airport are underway; Clean water infrastructure has been extended to region; and a police department to attend to oil and gas issues has been formed.
In addition, the Ministry of Education, Science and Technology has sanctioned a curriculum that attends to oil and gas by setting upgrading existing technical institutions to provide certifiable oil and gas training.
The Ministry of Lands has developed has prepared a regional physical development plan for the entire Albertine Graben and planning for several growth centers in the region is ongoing.

CHAPTER

SEVEN

THE RISK MANAGEMENT STRATEGIES IN ENSURING FIRE SAFETY IN UGANDA'S PETROLEUM INDUSTRY.

Introduction.

Risk has quite a number of different meanings. For example, in technology and economics, risk is defined as an expected value that an event will be accompanied by undesirable consequences and this is measured by both the probability of the event and the seriousness of the consequences.[145]

Risk management refers to an interactive process consisting of steps, which when undertaken in sequence, enable continual improvement in decision making which helps the different parties to understand and agree on what the risks really are and how they will be managed to improve safety, performance, and reduce financial distress.[146]

Fire and Explosion Hazard Management means actions, procedures, laws and policies used by organizations and individuals to prevent the occurrence of or limit

[145]Osabutey, D, Obro- Adibo,G, Agbodohu, and Kumi, P. Analysis of Risk Management Practices in the Oil and Gas Industry in Ghana. European Journal of Business and Management www.iiste.org ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online)Vol.5, No.29, 2013

[146]Osabutey, D, Obro- Adibo,G, Agbodohu, and Kumi, P. Analysis of Risk Management Practices in the Oil and Gas Industry in Ghana. European Journal of Business and Management www.iiste.org ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online)Vol.5, No.29, 2013

the explosion to unplanned fires and explosions in wellbores or associated equipment.[147]

History of risk management.

The first two academic books on risk management were published in **1963 and 1964** by ***Mehr, Hedges, Williams and Hems*** respectively and the main scope of these books were however limited to pure risk management.[148] Later, engineers developed the technological risk management models and subsequently broadened their scope to operational risk.[149] Other writers argue that risk management has for a long time been structured around the use of market insurance for the protection of individuals and companies from various losses associated with accidents.[150]

The **mid 1950s** saw the emergence of new forms of pure risk management which served as alternatives to the different costly and incomplete insurance packages that were common during that period as several businesses found it expensive or impossible to insure risks related to their operations.[151]

In the **1980s, c**ompanies began to give consideration to financial management or risk portfolios and this period also saw financial institutions such as banks and insurance companies intensify their market and credit risk management activities.[152] Operational liquidity risk management was introduced in the 1990s.[153]

Another development that occurred in the 1990s was the international regulation of risk. Several financial institutions created risk management models for use within the institution where they were created and capital calculation formulas to shield

[147] CEN-EHS039, Fire and Explosion Hazard Management Practice • Ver. 2.1 • July 2010
[148]Ibid
[149] Dionne, G. (2013). Risk Management: History, Definition and Critique. Interuniversity Research Center on Enterprise Networks, Logistics and Transportation. Available at: https://www.cirrelt.ca/DocumentsTravail/CIRRELT-2013-17
[150] Harrington, S. and Niehaus, G. (2004). Risk management and insurance. Boston, Mass.: McGraw-Hill.
[151]Dionne, G. (2013). Risk Management: History, Definition and Critique. Interuniversity Research Center on Enterprise Networks, Logistics and Transportation.
[152] Dionne, G. (2013). Risk Management: History, Definition and Critique. Interuniversity Research Center on Enterprise Networks, Logistics and Transportation. Available at: https://www.cirrelt.ca/DocumentsTravail/CIRRELT-2013-17
[153]Ibid

themselves from risks that were not anticipated and reduce regulatory capital.[154] This further resulted in the introduction of integrated risk management, giving room for the creation of the first risk manager position[155].The risk management practices include but are not limited to conscious effort to live healthy. (exercising, dieting), profit oriented business decisions by business owners, financial practices for the rainy day (saving, investing) and physical security measures.[156]

Risk management cuts across in all aspects of life, every form of business and from very simple business set ups to the complex ones. However, the level of risk varies across business set ups with the capital intensive ones. However, the level of risk while the less capital intensive ones tend to experience lower risk levels. [157]

During its introduction to the oil and gas sector, the objective of risk management was as it is today, to provide a strategy to minimize the exposure of petroleum projects to risk and uncertainty in Petroleum exploration activities and since then the concept has become an important aspect of business strategy within the oil and gas industry.

Oil and Gas industry is one of the riskiest industries when it comes to health and safety of employees and inherent flash fire hazards are associated with oil and gas well drilling, servicing, refining and productionrelated operations.[158] A flash fire requires oxygen, an ignition source, and a fuel source such as hydrocarbon or an atmosphere containing combustible air thus during the production of oil and gas, risk of fire is very high.[159]The potential for fire is present in most of the operations due to vapour or product leaks which in most cases result into fire explosions which severely affect the health of the workers and the surrounding environment

[154] Dionne, G, Risk Management ; History, Definition and Critique, Inter University Research Centre on Enterprise Networks, Logistics, and Transportation.
[155] Ibid.
[156] Crockford, N , The Bibliography and History of risk Management . The Geneva Papers on Risk and Insurance 7(23) pp 169- 179, 1982
[157] Ezume Okoronkwo, Risk management Techniques in Oil and Gas . A focus on the risk of Oil Price Volatability, Available at https.// www. Academia. edu
[158] NoopurSonee, et al. Oil and Gas industry: Review on fire hazards and protective textiles. *International journal of Advance Research in Science and Engineering Vol. No.6, Issue No.01*, January 2017.
[159]Ibid

hence the need to carefully manage, operate petroleum activities by ensuring safety from fire and heat related hazards.[160]

The importance of risk management in Oil and Gas businesses cannot be overlooked as petroleum operations/activities take place in fire prone environments and its complex nature makes it the most plagued industry prone to fire explosions that are extremely dangerous to the surrounding environment which necessitates the need to determine the causes of the fire accidents in Uganda's oil and Gas industry, and provide effective solutions to ensure fire safety in the industry by employing fire prevention and control measures. The workplace environment can be a hazardous place to work because workers are exposed to numerous potential hazards including physical such as fire, flying sparks, electrical, and radiant heat, which are responsible for wide range of injuries and illness starting from a simple headache to severe burns and respiratory diseases.[161]

The oil and gas industries all over the world have had measures to manage the operational risks.

However, these do not effectively ensure fire safety during oil and gas operations as witnessed in the many fire explosions most notably the Macondo incident where quite a number of workers died and others sustained grave injuries from the fire explosion which calls for the need to identify the causes of fire accidents, determine what effective management practices which must be adhered to by both the workers and the top management to ensure that fire accidents are prevented and controlled in Uganda.

The risk management practices include but are not limited to conscious effort to live healthy (i.e. exercising, dieting), profitoriented business decisions by business owners, healthy financial practices for the rainy day (i.e. saving, investing) and physical security measures.[162]

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[160] NoopurSonee, et al. Oil and Gas industry: Review on fire hazards and protective textiles. *International journal of Advance Research in Science and Engineering Vol. No.6, Issue No.01*, January 2017.

[161] CEN-EHS039, Fire and Explosion Hazard Management Practice • Ver. 2.1 • July 2010

[162] Crockford, N. (1982). The Bibliography and History of Risk Management. The Geneva Papers on Risk and Insurance 7(23), pp.169-179.

Risk management cuts across in all aspects of life, every form of business and from the very simple business setups to the complex ones. However, the level of risk varies across business setups with the capitalintensive businesses facing a higher level of risk while the less capitalintensive ones tend to experience lower risk levels.[163]

During its introduction to the oil and gas sector, the objective of risk management was, as it is today, to provide a strategy to minimize the exposure of petroleum projects to risk and uncertainty in petroleum exploration activities and since then, the concept has become an important aspect of business strategy within the oil and gas industry.[164]

The stake holder theory of risk management.

The theory behind risk management is the **Stakeholder theory**, developed by Freeman (1984) as a managerial instrument, and has since evolved into a theory of the firm with high explanatory potential focusing explicitly on an equilibrium of stakeholder interests as the main determinant of corporate policy.[165]

Stakeholder management theory conceives an organization as a complex, dynamic and interdependent network of multidimensional relationships with a wide variety of stakeholders.[166] Performance and competiveness depend on how well firms manage and nurture these relationships strategically in order to achieve corporate objectives and how they are perceived to manage them by the stakeholders, in their interests.[167] From a risk management perspective the benefits of consulting with

[163]EzumaOkoronkwo. Risk Management Techniques in Oil and Gas.A focus on the risk of Oil Price Volatility. Available at https://www.academia.edu

[164]Suslick, S. and Schiozer, D. (2004). Risk analysis applied to petroleum exploration and production: an overview. Journal of Petroleum Science and Engineering, 44(1-2), pp.1-9

[165]Freeman, R. E. (1984), Strategic management: A stakeholder approach, Prentice-Hall, Englewood Cliffs, NJ.

Geczy, C., Minton, B.A., Schrand, C. (1997), "Why Firms Use Derivatives", The Journal of Finance, Vol. 52,

No. 4, pp. 1323-1354.

[166]Loosemore, M, Raftery, J, Reilly, C and Higgon, D (2005) Risk Management in Projects, Taylor and

Francis, London, UK.

[167]Ibid

these stakeholders are said to be numerous and include higher levels of trust with stakeholder groups whereby stakeholders are able to contribute to decisions affecting their future, avail higher quality information for making business decisions, provide a wider understanding in the community of constraints upon firms and provide greater collective responsibility in managing risks.[168]

In essence, the stakeholder paradigm is based on the premise that people are not rational when thinking about risk but are influenced by cultural and social networks in which they are imbedded meaning that people form their own subjective perceptions of risk which often differ from the objective assessments made by managers, experts and scientists and their behaviour reflects these perceptions.[169] Ultimately, it is argued that there is no other way for managers to interpret risks other than in terms of human values, emotions and networks and this position is supported by Barnes who points out that while risk managers have become more scientifically and technologically sophisticated in their approach to managing and measuring risk, the majority of the public continue to rely on cultural and social explanations of risk events, leading to significant perceptual differences between the community and the private business sector.[170] Therefore, it is likely that in many companies there may remain significant institutional "blind spots" which ignore the contextual experience of risk and the perceptual issues that are relevant to public concern [171]like the environmental issues (fire safety) in Oil and gas industry.

It is estimated in the existing literature that unsafe work conditions is one of the leading causes of death and disability and these deaths are preventable; however

[168]Loosemore, M, Raftery, J, Reilly, C and Higgon, D (2005) Risk Management in Projects, Taylor and
Francis, London, UK.
[169]Berry, D (2004) Risk, communication and health psychology, Open University Press, Maidenhead.
UK
[170]Barnes, P (2002) Approaches to community safety; risk perception and social meaning, Australian
Journal of Emergency Management, 15 (3), 15-23.
[171]Loosemore, M, Raftery, J, Reilly, C and Higgon, D (2005) Risk Management in Projects, Taylor and
Francis, London, UK.

the workplace environment can be a hazardous place to work because workers are exposed to numerous potential hazards including physical such as fire, flying sparks, electrical, and radiant heat, which are responsible for wide range of injuries and illness starting from a simple headache to severe burns and respiratory diseases.[172]

Considering that fact that Uganda has good safety laws and policies which have not been tested, questions arise as to what would be the probable causes of fire accidents, what risk management practices have been adopted to ensure fire safety, how effective have they been in preventing, controlling fire accidents and the challenges faced in implementing the strategies in Uganda's oil and Gas industry.

Uganda has very good safety laws and policies adopted as strategies to manage fire risks associated with the Oil and Gas operations. However, cases of fire explosions are still occurring world wide especially during Oil and Gas sector causing grievous bodily harm, destruction of property and massive deaths which necessitates the need to determine how effective they have been in ensuring fire safety before and during petroleum operations in Uganda and what challenges are faced in the implementation of these strategies from which recommendations were made to ensure that fire accidents are prevented and controlled in all ways possible to avoid fire incidents from occurring in Uganda's petroleum industry.

Considering that fact that Uganda has good safety laws and policies which have not been tested, questions arise as to what would be the probable causes of fire accidents, what risk management practices have been adopted to ensure fire safety, how effective have they been in preventing, controlling fire accidents and the challenges faced in implementing the strategies in Uganda's oil and Gas industry.

In order for the Ugandan government to achieve its goal of using the country's oil and gas resources to contribute to early achievement of poverty eradication and create lasting value to society, and ensuring environmental sustainability; laws and policies must be adopted and employed effectively in order to properly achieve the desired goals in the industry.

[172]NoopurSonee, et al. Oil and Gas industry: Review on fire hazards and protective textiles. *International journal of Advance Research in Science and Engineering Vol. No.6, Issue No.01*, January 2017.

The significance of the risk management strategies in ensuring fire safety in the Oil and Gas industry of a developing country like Uganda cannot go unnoticed. While International oil companies may have more advantages in investing in a developing country like Uganda, concerns for environmental health and sustainability must be addressed and the only ways to ensure this is by adopting and employing effective risk management practices/strategies which in the end can help in achieving the national Oil and Gas policy objectives which include environmental health and sustainability.

Operations in the oil and gas sector.

The Oil and Gas industry is operated in a project based environment, whereby each task is highly structured in such a way that a single operation might involve several small projects in order to ensure the running of the operation less risky and more efficient.[173]

The industry operations occur in every corner of the globe, in a diverse range of habitats and ecosystems thus they often place large pressures on the local environment and inhabitants, and as global population growth continues to rise, so does the demand for useable energy and resources.[174]

Cooperation at all levels is fundamental to oil and gas exploration and development and this requires involvement of numerous investors, administrators, complicated techniques, and large investments and risks.[175] The nature of these operations produce many uncertainties in oil and gas drilling projects, which lead to great risks in every aspect of such projects and if effective risk management measures are not taken, these risks can easily lead to various kinds of accidents, which will threaten the safety of operating personnel and produce environmental pollution or even a huge loss of government property.[176]

[173]Osabutey, D, Obro- Adibo,G, Agbodohu, and Kumi, P. Analysis of Risk Management Practices in the Oil and Gas Industry in Ghana. European Journal of Business and Management www.iiste.org ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online)Vol.5, No.29, 2013

[174] Ibid

[175]Zhenhai, X., and Longwei, W., (2002). "Index system study of risk investment project evaluation" *Journal of Zhongyuan University of Technology*, Vol. 1, pp. 44-47.

[176] Ibid

The purpose of risk management therefore, is to ensure that adequate measures are taken to protect people, the environment, and assets from the harmful consequences of the activities being undertaken, as well as to balance different concerns, particularly health, environment, safety concerns, and costs.[177] Risk management includes measures to avoid the occurrence of hazards and reduce their potential harm. Risk assessment is followed by risk treatment, which is a process involving the development and implementation of measures to modify risk, including others designed to avoid, reduce, transfer, or retain risk.[178]

Risk management covers all coordinated activities designed to direct and control an organization with regard to risk, on the other hand, risk management process is the systematic application of management policies, procedures, and practices to the tasks of establishing the context for, assessing, treating, monitoring, reviewing, and communicating risks.[179]

Efficiency of an Oil and Gas industry is highly dependent on the success or the completion of several small projects and according to ***D. Baccarini,***[180] **t**he success of a project depends on the ability of the management to manage risk prone changing environments within the framework of the project and thus project managers usually try to minimize the uncertainty and risk; however, normally during the process project managers either underestimate or overestimate risks[181]

Risk has quite a number of different meanings. For example, in technology and economics, risk is defined as an expected value that an event will be accompanied

[177]Badiru, A. B., and Osisanya, S. O., (2013) Project Management for the Oil and Gas Industry. CRC Press.

[178] D. D. Fiberesima, and N. S. A. Rani, "An Evaluation of Critical Success Factors in Oil and Gas Project Portfolio in Nigeria," *African Journal of Business Management*, vol. 5, no. 6, pp. 2378 – 2385, 2011.

[179] ibid

[180]D. Baccarini, Understanding project cost contingency: A survey in Sidwell," A.C. (ed), *Proceedings of the Queensland University of Tech-nology Research Week 2005*, 4-5 Jul 2005. Brisbane, Qld: Queensland University of Technology, 2005.

[181] D. D. Fiberesima, and N. S. A. Rani, "An Evaluation of Critical Success Factors in Oil and Gas Project Portfolio in Nigeria," *African Journal of Business Management*, vol. 5, no. 6, pp. 2378 – 2385, 2011.

by undesirable consequences and this is measured by both the probability of the event and the seriousness of the consequences.[182]

Hewitt 2008, shows that the Oil and gas industry by its nature is a very risky and complex business with huge sums of money invested and life at stake which remarkably makes it different from other industries; and the operations there under are divided into three main activities which are upstream, midstream and downstream; and usually, the most critical and highly risky operations are centred in the upstream activities.[183]Such risks include fire accidents that may be due to a number of activities and thus the need to ascertain what could be the possible causes of these fire incidents in the oil and gas industry in Uganda.

According to ***Gordon and others,*** the higher levels of risks involved require risk reallocation and three vehicles are commonly used to achieve this risk reallocation adjustment of contract: indemnity and hold harmless clauses, exclusion or consequential loss and limitation of liability clauses.[184]These are some of the ways of managing general risks in oil and gas industry. However, considering that Uganda's petroleum industry is still growing and within a semiarid area, it is prone to fires and this necessitates the need to determine the legal and policy framework has been adopted in ensuring fire safety in the industry.

According to Badiru, A. B., and Osisanya), risk management must be a core component of a company's project management portfolio in the oil and gas industry and risks can be mitigated, but not eliminated. They add that in spite of government regulations designed to reduce accident risks in the energy industry, accidents will occasionally happen thus the need for government regulators can work with oil and gas producers to monitor data and operations as this will only

[182]Osabutey, D, Obro- Adibo, G, Agbodohu, and Kumi, P. Analysis of Risk Management Practices in the Oil and Gas Industry in Ghana. European Journal of Business and Management www.iiste.org ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online)Vol.5, No.29, 2013

[183] T. Hewitt, who is to blame? Allocating liability in upstream project contracts, Journal of Energy and natural resources law vol 26 n0.2 2008, available at https://doi.org/10.1080/02646811.2008.11435183

[184] G. Gordon, Risk Allocation in Oil and Gas Contracts in Greg Gordon et al (eds)Oil and Gas Law: Current Practice and Emerging trends (2nd Edn, Dundee Universty,2011)

preempt a fraction of potential risks of incidents.[185] For this reason, regulators must work with operators to ensure that adequate precautions are taken in all operating scenarios and this can be done in a riskmitigation partnership, rather than in an adversarial "lording" relationship[186]as this aids in ensuring the effectiveness of the laws, policies and practices employed.

Canvello and Mumpower review the history behind risk management, going back to the 3200 B.C. Asipu people, widely considered the world first risk managers,[187] emphasising and stressing the importance and need to effectively and efficiently manage risks in any oil and gas projects which are likely to have adverse negative impacts on the environment. This helps in integrating environmental risk management procedures. Integration helps to minimize the vast number of challenges companies face with oil and gas production and exploration and combating environmental issues through foreign and domestic legislation has been met with limited success, indicating that it is easy for energy corporations to ignore environmental risks unless they are explicitly embedded into daily operations.[188] Making environmental goals part of the business plan as opposed to a secondary task helps align the internal values and actions of company employees with the external views of the corporation as a whole.[189]

Shrivastava (1995,) reviews the switch from the industrial to post industrial revolution from a risk perspective and he identifies a change in understanding that production necessarily implies risk.[190]

Risk has also proven not to be merely a technical issue but to have a distinct social profile and has become a functional equivalent of power. Shrivastava in addition

[185]Badiru, A. B., and Osisanya, S. O., (2013) Project Management for the Oil and Gas Industry. CRC Press

[186] ibid

[187]Covello, V. and J. Mumpower, (1985) "Risk Analysis and Risk Management". An Historical Perspective. Risk Analysis, Mclean, VA: Vol, 5, No. 2, pp. 103-119.

[188] ibid

[189]White M, 1995 *Investor Response to the Exxon Valdez Oil Spill*, McIntire School of Commerce, University of Virginia, Virginia.

[190]Shrivastava, P., (1995) "Ecocentric *Management for a Risk Society*", The Academy of Management Review,
Vol.20, No.1, pp.118-137.

clarifies the disregard management paradigms generally have for ecology where he proposes two alternatives, industrial ecosystems and ecocentric management.[191]
The first considers harmful byproducts of operations as potential useful input products of other production processes, while the second focuses on better aligning an organization with its natural environment.[192]
According to ***Markussen,*** there are several effects on employees' health that a geological survey can produce and he concluded that oil and gas production causes chemicals and physical agent exposure, specifically on drilling mud; petroleum products; treatment chemical; radioactive sources hence recommended that all risks must be identified and managed through wisely incorporated resources in order for quality operation to be long lasting.[193]

Risk management in the oil and gas sector in different countries.

Project risk management in the oil and gas industry involves the identification, assessment, and prioritization of risks through coordination and economic application of resources in minimizing, monitoring and controlling the probability consequences of unfortunate events that hopefully, will maximize the success of a project in addition to environmental sustainability. The following countries have done the following practices to this effect.
It should be noted that the oil and gas operations and the risk management strategies considered below are countries with offshore operations unlike Uganda which has just realised the viability of the resource which is onshore (located on the shores of Lake Albert) and is yet to start production but operations are ongoing.

Canada.

There are also several safety concerns discovered by ***Verma, Johnson and Maclean (2000)*** who undertook research on the benzene and total hydrogen

[191] Ibid
[192]Shrivastava, P., (1995) "Ecocentric *Management for a Risk Society*", The Academy of Management Review,
Vol.20, No.1, pp.118-137.
[193]Taksar,M and Markussen, C.(2003).Optimal Dynamic reinsurance policies for large insurance potfolios.*FinanceStoch*.

exposures in the upstream petroleum oil and gas industry.[194] The study was based on the Canadian oil and gas industry and total of 1547 air samples taken by oil companies in various sectors were evaluated and the outcome of the research can be generalized for the whole oil and gas industry around the world.[195] For instance, it was discovered that the percentage of samples are over the occupational exposure limit (OEL) of 3.2 mg/m3 or one part per million for benzene for personal longterm samples range from 0 to 0.7% in the different sector, and area longterm samples range from 0 to 13%.[196] The findings assist to establish a precaution to the global oil and gas industry that certain operations such as glycol dehydrators should be carefully monitored and there should also bebased monitoring program along with the traditional longand shortterm personal exposure sampling.[197]

United States of America.

There have also been various ongoing projects and organisation trying to reduce the rate of emission. For instance, in the **United States of America, the Obama administration** has engaged in different steps to reduce the harmful emissions into the environment such as: the international climate negotiations, the clean energy ministerial, climate and clean air coalition, Montreal protocol, and APEC summit.[198]

California.

In California, the governments have done things like: legislative restrictions on coastal oil drilling, which have kept valuable oil reserves undeveloped; creation of

[194]Verma DK et al, *Benzene and Total Hydrocarbon Exposures in the Upstream Petroleum Oil and Gas Industry.* AIHAJ.2000 Mar-Aril;61(2):255-63
[195]Ibid
[196]Verma DK et al, *Benzene and Total Hydrocarbon Exposures in the Upstream Petroleum Oil and Gas Industry.*AIHAJ.2000 Mar-Aril;61(2):255-63
[197]Osabutey, D, Obro- Adibo, G, Agbodohu, and Kumi, P. Analysis of Risk Management Practices in the Oil and Gas Industry in Ghana. European Journal of Business and Management www.iiste.org ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online)Vol.5, No.29, 2013
[198]F. AdejohOgwu, S. Badamasuiy, and C. Joseph. Environmental Risk Assessment of Petroleum Industry in NigeriaInternational Journal of Scientific Research and Innovative Technology ISSN: 2313-3759 Vol. 2 No. 4; April 2015.

a farreaching air regulatory system prior to the Federal Clean Air Act and establishment of statewide appliance and building efficiency standards.[199]

Nigeria. In Nigeria, the Federal Ministry of environment initiated a program called the "clean energy initiative" as part of African strategy on voluntary emission reduction, and program implementing Clean Development Mechanism (CDM).[200]

Ghana.

In Ghana, considering a case study of the Tema Oil Refinery (TOR), recommendations were made that Casual workers and contract workers engaged by TOR had to go through thorough training in risk management prior to their engagement as it became necessary because the management saw no need to spend scare resources on casual workers who were always blamed for failing to observe basic safety rules in the refinery.[201] Educational campaigns on safety were also recommended for workers to understand the relevance of risk management in a bid to reduce the bad attitude of workers towards risk management[202] and these proved to be highly effective in ensuring environmental health and safety during and after the operations in the country's oil refinery project.

Causes of fire accidents in the oil and gas industry.

The fire accidents also include burns which are as a result of the extremely flammable nature of oil, gas. Accidents like fire and explosions which are the major accidents in the petroleum industry that come as a result of combustible gasses that come as a result of the reaction of air and mostly during the process of drilling. Fire accidents in the petroleum industry is the leading accident in the oil drilling industry.

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[199] Ibid

[200]F. AdejohOgwu, S. Badamasuiy, and C. Joseph. Environmental Risk Assessment of Petroleum Industry in NigeriaInternational Journal of Scientific Research and Innovative Technology ISSN: 2313-3759 Vol. 2 No. 4; April 2015.

[200] Ibid

[201]Osabutey, D, Obro- Adibo,G, Agbodohu, and Kumi, P. Analysis of Risk Management Practices in the Oil and Gas Industry in Ghana. European Journal of Business and Management www.iiste.org ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online)Vol.5, No.29, 2013

[202]Ibid

Fire accidents usually happens in the process of drilling, blowouts, tripping out and swabbing, combustible gasses can exit and react with the air, a potential cause for explosions.

It can also occur when cutting or welding in proximity to combustible materials as well as detonating perforating guns above ground. When it comes to having the needed situational awareness, safety training for these fire outbreaks can mean the difference between life and death.

The potential for fire is present in most of the operations due to vapour or product leaks which in most cases result into fire explosions which severely affect the health of the workers and the surrounding environment hence the need to carefully manage, operate petroleum activities by ensuring safety from fire and heat related hazards.[203]

Negligent or improperly trained workers are the cause of fire accidents in the petroleum industry. Human errors are the major root causes of any industrial accidents. It is also truly applicable for Oil & Gas Industry[204]. Unsafe practices such as unsafe conditions and actions are basic causes of most accidents. Untrained man power lacks basic knowledge on how best to carry out the operations. Negligent and unskilled workers mix or use equipment they are not well conversant with Chemicals that are mixed poorly, automatically they will cause flames that bring out fire in the area.

High pressure in oil drilling wells can lead to fire accidents. The explosions which are as a result of combustible gasses that come as a result of the reaction of air are the major causes of fire accidents in the petroleum industry.

Improperly stored chemicals or substances, gas leaks cable or block breaks are some of the causes of fire accidents in the petroleum industry. Explosions happen when combustible gasses come up as a result of the reaction of the air, they form and cause fire breakouts.

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[203]NoopurSonee, et al. Oil and Gas industry: Review on fire hazards and protective textiles. *International journal of Advance Research in Science and Engineering Vol. No.6, Issue No.01*, January 2017.

[204]Zongzhi Wu, Rujun Wang (2014). Concern with the safety management of oil and gas pipelines--Status. Chinese Safety News, 6, p. 1

Risk management strategies adopted to prevent and control the fire hazards.

The objective of risk management today is to provide a strategy to minimize the exposure of petroleum projects to risk and uncertainty in petroleum exploration activities and since then, the concept has become an important aspect of business strategy within the oil and gas industry.[205] Risk management must be a core component of a company's project management portfolio in the oil and gas industry and so that risks can be mitigated and eliminated. Inspite of government regulations designed to reduce accident risks in the energy industry, accidents will occasionally happen thus the need for government regulators to work with the licensees to monitor petroleum operations as this will only preempt a fraction of potential risks of incidents.[206] For this reason, regulators must work with operators to ensure that adequate precautions are taken in all operating scenarios and this can be done in a riskmitigation partnership, rather than in an adversarial "lording" relationship.[207]

There are several risk management strategies that they have put in place to prevent and control fire hazards and these among others include.

Training of workers is also an important activity that can prevent a fire hazards. Training workers helps to prevent and control fire outbreaks. Having necessary training and knowledge on fire and safety in the oil and gas industry is important in the petroleum company, it's advantageous to have these skills and to see that the such fire risks are controlled and prevented. Training is therefore a necessity. To this effect, the **Institute of Petroleum studies** has been put in place to train people

[205]Suslick, S. and Schiozer, D. (2004). Risk analysis applied to petroleum exploration and production: an overview. Journal of Petroleum Science and Engineering, 44(1-2), pp.1-9
[206]Badiru, A. B., and Osisanya, S. O., (2013) Project Management for the Oil and Gas Industry. CRC Press
[207] ibid

to obtain right expertise on such cases of fire outbreaks and how to deal with them and added that there also laws put in place to govern petroleum operations.
Furthermore, the installation of fire controlling tools like fire extinguishers in all corners of the companies that are in proper use and training workers on how to use them. Fire watches are equally necessary because they always sound an alarm when
there are fire outbreaks.
It is also necessary to improvise personal protective equipments for all their employees so that they do not get injuries in case fire accidents happen.
Effective monitoring by hiring people must be done to always keep a watch and sometimes even outsource companies that are specialized in prevention and control of fire outbreaks in the petroleum industry.

Legal framework adopted to prevent and control fire hazards

The discovery and confirmation of commercial petroleum resources in the Albertine Graben poses new opportunities and challenges for the country. Petroleum is a resource that, if managed well, has the potential to turnaround the economy of the country.[208]

The principle law of **Uganda, the 1995 Constitution** [209] under Article 245 emphasizes the need to protect the environment and use it for sustainable development[210]The Government has a duty to ensure public awareness on the protection of the environment, even though there is still a lot to be done to ensure this is effective as regards fire safety in the petroleum industry. The constitution also guarantees the right to a clean and healthy environment which places a duty on the government to ensure the clean environment including the restriction and regulation of the oil and gas industry.[211]

[208]National oil and gas policy for Uganda 2008
[209]The constitution of Uganda 1995 as amended in 2005
[210]See National objective xxvii.
[211]Article 39

Petroleum (exploration, Development and production) (health, safety and environment Regulations 2016

The above regulations specifically provide for fire and explosion protection in facilities during petroleum activities [212] in Uganda thus fire protection and prevention
practices within a facility or during a petroleum activity are governed by the regulations, standards approved by the Petroleum Authority of Uganda, best petroleum industry practices and any other applicable law.[213]

The licensee is required to ensure observance of fire and safety precautions within the restricted area, provide adequate means designed to extinguish fire, effectively control the spread of fire and explosions and provide a central fire station with suitable equipment and maintained by trained employees in putting out fire or explosion.[214]

The licensee is also required to put in place measures to control fire and explosion hazards generated by process operations including accidental release of syngas containing carbon monoxide, hydrogen, oxygen, methanol or other gases.[215] Such measures include the design, construction and operation of a facility according to standards approved by the Authority and best petroleum industry practices for the prevention and control of fire and explosion hazards, provision of early release detection including pressure monitoring of gas, liquid conveyance systems, smoke and heat detection for fires and many others[216]

Note: *See also regulations 94,95,96,97, 98, 99, 100,102, 103, 106, 108, 110,112 for the duties of a licensee in ensuring fire safety.*

[212]Part VII of the P(EDP) (HSE) Regulations 2016.This part provides for fire and explosion safety in Uganda's Oil and Gas sector
[213]Regulation 93; See also Oil and Gas Standards Catalogue approved as at 31st December, 2017
[214]Regulation 104(1)
[215]Regulation 105(1)
[216] See Regulation 105 (2 (a)-(i)) for more fire& explosion control measures

In addition, the law provides that where a passive fire protection unit is used at a facility or during a petroleum activity, the unit shall be designed to provide relevant structures and equipment with sufficient fire resistance in regard to load capacity, integrity and isolation properties during a design fire load[217] which is another risk mitigation strategy aimed at ensuring fire safety during Oil and Gas operations. The licensee is under obligation to ensure that living quarters are designed and protected to ensure that the
functions they are designed for can be maintained during a dimensioning fire.[218]
The licensee is also required to ensure that spaces with key functions and equipment and a high fire risk, are separated from the surroundings by means of fire divisions [219] and these shall be designed to resist a dimensioning fire, to prevent fire from spreading to the adjacent areas or cause equipment in those areas to become inoperative for a minimum period of one hour.[220]

Petroleum (Exploration, Development and Act 3 Production) Act 2013

This is the principal legislation governing the oil sector its preamble states that it is to give effect to **Article 244 of the constitution,** regulate the petroleum production, the licensing of companies, the revenue, promotion of oil exploration, set a safe environment for the operations and plan for the decommissioning.[221]
The purpose of the Act to establish an effective legal framework and institutional structures to ensure that the exploration, development and production of petroleum resources of Uganda is carried out in a sustainable manner that guarantees optimum benefits for all Ugandans, both the present and future generations.[222] It is important to note that the principle of sustainable development is emphasized in the act, this entails environmental protection and section 1 (e) is principally to the insurance of public safety, public health and environment in the activities.[223]

[217]Regulation 101
[218]Regulation 102(1)
[219]Regulation 103(2)
[220]Regulation 103(3)
[221]Petroleum (Exploration, Development and Production) Act 2013
[222]Section 1 (a) Petroleum (Exploration, Development and Production) Act 2013
[223]Section 1 (e)

The act also requires compliance with the environmental principles and safeguards stipulated under **National Environment Act a**nd other applicable laws.[224] NEMA has the mandate to monitor and supervise the activities so as to protect the environment as provided for under section 17.[225] This requirement covers the upstream and downstream protection of the environment in accordance with the license, also requires carrying out of environmental impact assessment before the opening of the new site section 47 and in the operation and work section 88 which should be environmentally sensitive.[226]

In addition, the petroleum operations are required to be conducted in a healthy and safe way in accordance with O**ccupational Health and Safety Act, 2006**[227]**,** section 141 provides for safety precautions and 142 for emergency preparedness, the safety zones provided under section 144; these are all aimed at ensuring fire and general safety during oil and gas operations.
The act also establishes the authority Petroleum Authority of Uganda, whose main function is to monitor and regulate upstream and downstream petroleum and gas processing in Uganda.[228] The authority is also enjoined to enforce compliance with health, safety and environmental standards set out in the act during the execution of petroleum activities.[229]

National Environment Act (NEA), Cap 153

The act was enacted provide for the sustainable management of the environment and natural resources and it is known as the principal legislation for the protection of the environment in Uganda. It creates the National Environment Management Authority which is principal agency in Uganda for the management of the

[224]Section 3
[225]Section 17 Petroleum (Exploration, Development and Production) Act 2013
[226]The Petroleum (Exploration, Development and Production) Act 2013
[227]Occupational Health and Safety Act, Act No. 9 of 2006
[228]Section 9 the Petroleum (Exploration, Development and Production) Act 2013
[229]The Legal Regime and Environmental Dimensions of Oil and Gas Exploration and Production in Uganda

environment and shall coordinate, monitor and supervise all activities in the field of the environment[230] and is required to ensure that Occupational Safety and Health issues are identified and addressed before approving any Environmental Impact Assessment.

Under section 2(2), the principles of environmental management include ensuring all people of Uganda the fundamental right to an adequate standard of health and wellbeing, encouraging maximum participation by the people of Uganda in the development of policies, plans and processes for environment management, using and conserving the environment and natural resources of Uganda equitably for the present and future use, establishing adequate environmental protection standards and to monitor changes in environmental quality, and ensuring that the entire and total costs of environmental pollution are borne by the polluter.[231]

The act covers environmental impact assessment as mentioned above in the section of environmental impact assessment which requires any operator or licensee to determine the likely impacts of the intended activity on the environment which includes fire accidents that are commonly associated with Oil and Gas operations.[232]

Occupational Safety and Health Act No. 9 of 2006

The Occupational Safety and Health Act was enacted to consolidate, harmonise and update the law relating to occupational safety and health, to repeal the Factories Act, Cap 220 and to provide for related matters. The Act legislates on safety and health measures of employers thus an employer is required to:

• prepare, and as often as may be appropriate, revise a written statement of policy with respect to the safety and health of employees while at work;

• make arrangements for carrying out the statement of policy; and

• bring the statement of policy and revision of it to the notice of all employees.[233]

This law is aimed to regulate health and safety standards for the health, safety, welfare and appropriate training of persons employed in workplaces and the act

[230]Section 4National Environment Act (NEA), Cap 153
[231]Section 2(2) of the NEA Cap 153
[232]Section 19 of the NEA Cap 153
[233]Section 14of the Occupational Safety and Health Act2006

provides for fire prevention which states that all stocks of highly inflammable substances shall be kept either in a fireresisting store or in a safe place outside any occupied building, provided that no such store shall be so situated as to endanger the means of escape from the workplace or from any part thereof in the event of a fire occurring in the store.[234]

The act also provides in **subsection 2** that where highly flammable liquids are to be conveyed
within a workplace they shall, where it is practicable so to do, be conveyed through a totally enclosed system incorporating pipelines and pumps or similar appliances and that where conveyance of highly flammable liquids within a workplace through such a totally enclosed system is not practicable, they shall be conveyed in vessels which are so designed and constructed as to avoid so far as practicable, the risk of spilling.[235]

Subsection 3 is to the effect that where in any process or operation any highly flammable liquid (which in this case is petrol/diesel) is liable to be spilled or to leak, all reasonably practicable steps shall be taken to ensure that any highly flammable liquid, which is spilt, or leaks shall be contained or immediately drained off to a suitable container or to a safe place, or otherwise treated to make it safe.[236]

Subsection 4 prohibits any means likely to ignite vapours from highly flammable liquids from being present where a dangerous concentration of vapours from flammable liquids may reasonably be expected to be present.[237]

The act also prohibits persons from smoking, lighting or carrying matches, lighters or other flame producing articles, or smoking materials, in any place in which explosive, highly flammable or highly combustible substances, are manufactured,

[234]Section 78(1) Occupational Safety and Health Act 2006
[235] Section 78(2) OSH Act 2006
[236]Section 78(3)
[237]Section 78(4)

used, handled or stored[238] and places a duty on the occupier to take all practicable steps to ensure compliance with the foregoing provisions including the display at or as near as possible to every place a clear and bold notice indicating that smoking is prohibited in that place.[239]

Section 13 of the Occupational Safety and Health Act, 2006, makes it obligatory for an employer to ensure health, safety and welfare of persons at workplace is also intended to reduce cases like those of fire outbreaks/ accidents in the petroleum industry. The **Occupational Safety and Health Act, Number 9, 2006** which requires registration of work places, inspection and monitoring of occupational, safety and Health activities at workplaces, education, training and creating awareness through dissemination of information on occupational safety and health among workers, employers and the general public all intended to reduce cases like those of fire outbreaks/ accidents in the petroleum industry….."

Section 18(1) requires the employer to monitor and control the release of dangerous substances into the environment. Thus, where there is major handling of chemicals or any dangerous substance that is liable to be airborne or to be released into rivers or lakes or soil and which are a danger to animal and plant life, the employer is required to arrange for equipment and apparatus to monitor air, soil and water pollution and to arrange for the monitoring of these mediums, with a view to rendering them safe.[240]

The Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016.

These regulations have been developed to implement the Occupational Safety Health Act of 2006. They provide for the Safety document which bears "safety functions" meaning the physical measures that reduce the probability of an incident, hazard and accident situation occurring or that limit the consequences of the incident, hazard or accident.[241]

[238]Section 78(5)
[239]Ibid
[240] Emmanuel Kaweesi, "Environmental Law Compliance and its implications for Oil and Gas Exploration and Production in Uganda" 2014 at 18.
[241]Definition of ''Safety Functions'' in regulation 3 of the P(RCTMS(HSE)Regulations 2016

According **regulation 14(1)** the licensee has a duty prepare a safety document for the purposes of;
(a) demonstrating that a major accident prevention policy and a safety management system for implementing it have been put into effect in accordance with the Act, the Regulations and any other applicable law;
(b) demonstrating that the major accident, hazards and possible major accident scenarios in relation to a midstream operation or a facility have been identified and that the necessary measures have been taken to prevent such accidents and to limit their consequences to human health and the environment;
(c) demonstrating that adequate safety and reliability have been taken into account in the design, construction, operation and maintenance of any installation, storage facility, equipment and infrastructure connected with the facility's operation which are linked to major incidents, hazards or accidents inside the facility;
(d) demonstrating that an emergency plan has been prepared in accordance with these Regulations, the Act and any applicable laws; and
(e) providing sufficient information to the Authority to enable decisions to be made regarding the setting of new operations or developments around the facility.[242]

It should be noted that this safety document is prepared by the licensee and contains a minimum the data and information specified in **Form 2 set out in Schedule 1[243], t**hey are required to send a safety document to the Authority[244] and shall not start construction or operation of a facility or make any alteration or substantial modifications to a facility before the Authority approves the safety documents submitted.[245] The licensee is required by law to review or revise the safety document every five years under normal circumstances[246]

THE NATIONAL OIL AND GAS POLICY FOR UGANDA 2008.

[242]Regulation 14 (1)of the P(RCRMS) Regulations 2016
[243] Regulation 14(2)
[244] Regulation 14(3). And the Authority in this case is the Petroleum Authority of Uganda
[245]Regulation 14(5)
[246]Regulation 15(1)

The National Oil and Gas Policy for Uganda was approved by Cabinet on 31st January, 2008 to guide the development of the country's emerging oil and gas sector following the discovery of commercial petroleum resources in 2006. The Policy addresses the entire spectrum of exploration, development, production and utilisation of the country's oil and gas resources.[247]

The Policy is intended to ensure that Uganda's oil and gas sector is developed in a cost effective and efficient manner and that the resources are used to contribute to poverty reduction and to create lasting value for the country.[248]

Concerning the effectiveness of risk management strategies (laws and policies) adopted to control the fire accidents, it is important to note that the provisions in the Occupational, Safety and Health Act 2006 that can help deal effectively with reduction of occupational hazards like fire accidents at work place. However, the reality is that these laws have not been effective to a larger extent because petroleum companies major aim in this business is profit making and not safety of the people. To make matters worse, the government has failed to effectively implement these laws because when big people like owners of these companies are caught breaching these laws, they are not apprehended by the long arm of the law which is sometimes so disappointing and this explains why there are still cases of occupational hazards like fire accidents in the industry even though they are not brought to public attention.

Effectiveness of the risk management strategies

To a lesser extent, the risk management strategies have been effective since the occurrence of these fire accidents have been minimized to a great extent. The strategies put in place by the companies have been effective since they have the capacity to terminate and treat these risks themselves since they have the human expertise in place to do the job and the finances that are enough to deal with these risks.

However, to larger that the risk management strategies put in place by the companies have not been effective since there is still an occurrence of these risks

[247] Ibid

[248] National oil and gas policy for Uganda 2014

especially the fire accidents during transportation. Some companies do not have enough capacity and have failed to involve all their stakeholders in the process of risk management which is a prerequisite to risk management. One of the managers in one of the companies had this to say;

Challenges faced in the implementation of risk management strategies.

There is lack of knowledge about the available laws on occupational health and safety has been a major challenge and this is especially on the employees who most of the times are not able to report such cases of bleach of the law. The **Occupational Safety and Health Act 2006 s**till has some flaws which does not effectively stress what the compensations are once an employee has gotten into an accident at work

There is also a lot of reluctance on the side of the government. The implementation of the set laws by the government is weak as some of the people caught bleaching the laws are not held accountable. The people supposed to implement these laws are corrupt and do not do their job.

There is also a problem of shortage of enough finances and skilled human resources to carry out risk management has been a major hindrance. It is important to note that finances are a prerequisite for any business that wants to carry out effective risk assessment. However, some petroleum companies operate on limited finances as so they find themselves unable to effectively engage themselves in the process of risk assessment and risk mitigation[249].

Most businesses have failed to use the right metrics to effectively evaluate the risks that occur in the petroleum industry.

The changing environment in the internal company management itself is a big challenge. This is because companies have to always bring up new ideas and ways of dealing with some of these risks occurring several times plus the failure to effectively communicate the whole process of risk management in the organizations.

Solutions to the challenges faced in the implementation of risk management strategies.

[249] Hopkin, P, (2014). Fundamentals of Risk Management, 3rd Edition. London: Kogan Page.123

Involvement of all the stakeholders in the process of risk management. This helps in formulation of better business and company management resolutions. It also increases access to information and transparency. More so, most of these companies need specially department for risk management where people with expertise in this field sit and formulate the best policies and strategies that enable the company to reduce the occurrence of risks like fire accidents in the operations of their businesses.

There is need for financial and human resource that have the expertise that can help in the effective implementation of risk management.

Finally, there is need for effective enforcement of the laws on the occupational safety and health hazards by making sure that the culprits are arrested and asked to pay for the damages. One of the managers in one of the companies had this to say;

A comparative analysis of the regulatory frame work of Uganda and Ghana.

Uganda just like Ghana has oil deposits that are being developed and as such, Ghana adopted the ***Petroleum (exploration, Development and production) (health, safety and environment Regulations 2017 L.I 2257*** whichlegal instrument provides for safety and regulation 10(1) requires the operator to prepare and submit a safety case to the commission before the commencement of an operation of a petroleum facility which shall ensure the management system and enhance health and safety performance in compliance with the relevant enactments.[250]

Under **regulation 51(1)**, a contractor, subcontractor, licensee, the corporation or any other person engaged in petroleum activity is required to ensure that a passive fire protection is designed to ensure that in event of a fire load, it provides efficient fire resistance to the relevant structures and equipment with regards to the load capacity, integrity and insulation properties.[251]

A fire load according to the law means the maximum degree a fire system is designed to handle or accommodate; and passive fire protection means a group of

[250]Regulation 10(4)
[251]Regulation 51(1)

systems that compartmentalises structures and equipment through the use of fire resistant related walls or floors.[252]

The regulations also provide for fire divisions where the operator/contactor is required to ensure that the main area on a petroleum facility is separated by a fire wall that has the capacity to withstand the designed fire load and explosion load, and at least satisfies the fire rating standards if exposed to hydrocarbon fires.[253]

The above regulations are similar with Uganda's ***Petroleum (exploration, Development and production) (health, safety and environment Regulations 2016*** and both emphasise fire and health safety. However, in both countries educational campaigns and sensitization on safety are recommended for workers to understand the relevance of risk management in a bid to reduce the bad attitude of workers towards risk management[254] and these have been proven to be highly effective in ensuring environmental health and safety during and after the operations in Ghana's oil refinery project.

The governments have very good fire safety laws but they have a duty to make sure that such laws are brought to the attention of the workers and fully enforced which will help to achieve maximum efficiency in ensuring fire safety.

In light of the above, it can be concluded that there are accidents like fire and explosions which are the major accidents in the petroleum industry that come as a result of combustible gasses that come as a result of the reaction of air and mostly during the process of drilling. These are usually caused by negligent or improperly trained workers are the cause of fire accidents in the petroleum industry and combustible gasses that come as a result of the reaction of air. There are also several risk management strategies that have been put in place to prevent and control fire hazards for example, removal of all combustibles from the area before conducting hotwork, training workers on how they can prevent and control fire outbreaks and employing people with the right expertise in the oil and gas industry

[252]Regulation 51(2)
[253]Regulation 52(1a)
[254]Osabutey, D, Obro- Adibo, G, Agbodohu, and Kumi, P. Analysis of Risk Management Practices in the Oil and Gas Industry in Ghana. European Journal of Business and Management www.iiste.org ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online)Vol.5, No.29, 2013

and putting in place laws like the Occupational Safety and Health Act 2006. However, the implementation of these has been a challenge due to lack of enough resources both skilled workers and financial plus the weak implementation of the law which need to be critically analyzed by the stakeholders.

Furthermore, from the study findings, it can be concluded that there are several risk management strategies that have been put in place to prevent and control fire hazards for example, removal of all combustibles from the area before conducting hotwork, training workers on how they can prevent and control fire outbreaks and employing people with the right expertise in the oil and gas industry, putting in place fire controlling tools like fire extinguishers in all corners of the companies, putting in place fire watches who can always sound an alarm when there are fire outbreaks, improvising personal protective equipments for all their employees so that they do not get injuries in case fire accidents happen and offering effective monitoring by hiring people to always keep a watch and 3sometimes even outsource companies that are specialized in prevention and control of fire outbreaks in the petroleum industry among others.

There is a legal framework that has been put in place by the government of Uganda for example the **Occupational Health Act, No 9, 2006** which requires registration of work places, inspection and monitoring of OSH activities at workplaces, education, training and creating awareness through dissemination of information on occupational safety and health among workers, employers and the general public all intended to reduce cases like those of fire outbreaks/ accidents in the petroleum industry. However, it was noted that these laws have been effective to a low extent because most of the petroleum companies do not follow these laws ignorant about the laws by the workers and low implementation of the laws by the government

CHAPTER

EIGHT

THE PUBLIC TRUST DOCTRINE

Introduction and Origin of the doctrine.

This is the doctrine that entrusts natural resources in the hands of government as caretaker on behalf of the public[255].

The doctrine dates back to the Institutes of Justinian (530 A.D.), which restated Roman Law that by law of nature these things are common to mankind the air, running water, the sea and consequently the shores of the sea. In the case of **M.C Mertha V Kamal Nath and Others (1856) ER 1305**, it was held that the doctrine rests on the principle that resources like seas, water, air, have a great importance to the general public and that would be unjust to enable people own them individually.

In the centuries there after, both civil law and common law countries have incorporated these principles, and remnants can be found in African constitutions. It governs the use of property where title is presumed to be held by a given authority in trust for citizens. Often times the breach of this fiduciary duty is what causes the various conflicts in litigations.

[255] For example, Part XIII of Uganda's constitutional National Objective Principle of State Policy provides that: "the State shall protect important natural resources, including land, water, wetlands, minerals, oil fauna and flora on behalf of the people of Uganda." And while the binding nature of these principles remains unclear, at the very least it suggests that there is a constitutional basis for the public trust doctrine in Uganda."

While there was substantial debate on the nature and scope of this doctrine in the 1970s and early 80s, especially in the United States, its continuous implications for public interest litigation in East Africa in particular is similarly often found controversial. The doctrine has found its way in national legislation and practice and if interpreted creatively, it could play a very important role in environmental public interest litigation.

The flexible statutory and judicial interpretation of the responsibilities of the trustee and the resource rights of the beneficiary could lay the basis for a vibrant and thriving legal regime on public interest litigation under the public trust doctrine.

Traditionally, courts applied the Public Trust Doctrine to waters and similar common resources, and generally limited the power of the government to significantly alter the nature of the public resource for the benefit of an individual party.

Courts have applied the public trust doctrine to invalidate conflicting legislation,[256] to limit alteration of public resources,[257] to require express legislative action, [258] and to identify public rights of resource access and use.

Background of the Public Trust Doctrine

The existing evolution of the Public Trust Doctrine can be traced from the Roman law.[68] It originated from the declaration of the Justinian Institute that there are three things common to mankind: air, running water, and the sea. The title to these essential resources was vested in the state, as the sovereign, in trust for the people. While not strictly the property of the Roman people, these resources especially the seashores were considered to be *res communes* and as such excluded from private

[256] E.g., Priewe v. Wisconsin State Land & Improvement Co., 93 Wis. 534, 67 N. W. 918 (1896) (invalidating legislation authorising the drainage of a lake for development purposes).

[257] E.g., Illinois Central Railroad Co. v. Illinois, 146 U.S. 387 (1892) (rescinding conveyance of the bed of Lake Michigan to a private party).

[258] E.g., Gould v. Greylock Reservation Commission, 350 Mass. 410, 215 N.E.2d 114 (1996) (requiring legislative action before a state park could be used for private and specific public uses).

control. The purpose of the trust then was to preserve these resources in a manner that makes them available to the public for certain public purposes. Indeed, Nanda and Ris have asserted that the protection and control of navigable waters and shorelines is the oldest and best developed of all evolutionary theories about the Public Trust Doctrine.[259]

The incorporation of the doctrine in the English common law may itself be traced in the Magna Carta. Paragraph 5 of the Magna Carta made explicit reference to the guardianship of land. It extended that guardianship "to houses, parks fishponds, tanks, mills and other things pertaining to land."[260]

The public trust doctrine is better described in the ancient words as old as 1865 thus;

"The bed of all navigable rivers where the tide flows, and all estuaries or arms of the sea, is by law vested in the crown. But this ownership of the crown is for the benefit of the subject, and cannot be used in any manner so as to derogate from, or interfere with the right of navigation, which belongs by law to the subject of the realm." [71]

This was statement by the House of Lords in case of ***Gann Vs. Free Fishers of Whitestable***.

From this statement, a fiduciary duty of care was imposed on the state and the responsibility followed thereon. This responsibility rested on the nature of the state and the beneficiary communities. While the existence of a fiduciary relationship has often been invoked in many areas of law including contract, it is one of those legal concepts that are less conceptually certain.

Professor Joseph L. Sax has asserted that fiduciary duty under a trusteebeneficiary relationship entails three major restrictions on the trustee; "

[259] Ibid

[260] Avalon Home Page;http://www.yale.edu/lawweb/avalon/magna.html

[71]11 English Reports(ER) 1305(1865)HL.

a, the property subject to the trust must not only be used for a public purpose, but it must be held available for use by the general public.
b, the property may not be sold, even for a fair cash equivalent.
c, third, the property must be maintained for particular types of uses." This duty includes the obligation not only to preserve the trust property, but also to seek an injunction against, and compensation for any diminution of the trust corpus.

The fiduciary cannot unilaterally exercise that power or exercise so as to affect the beneficiary's legal or practical interests. Thus, under natural resources governance regimes, the doctrine could be used either against the state for a breach of its duties as a trustee, or by the state to protect the resources subject to the trust.

The courts have emphasized the fact that the "notion underlying all the cases of fiduciary obligation that is inherent in the nature of the relationship itself is a position of disadvantage or vulnerability on the part of one of the parties which causes him to place reliance upon the other and requires the protection of equity acting upon the conscience of that other".[261]
In a later USA case, ***Illinois Central Rail Road Co. V Illinois***[73] the United States Supreme
Court reaffirmed the House of Lords position in ***Gann Vs. Free Fishers of Whitestable*** by holding that the government could not abandon its responsibility and authority over an area of the public trust. The court set very limited parameters within which the trustee could deal with the trust property. It considered using, managing, or disposing of the trust property in a matter that would infringe upon the *jus publicum* an abuse of the fiduciary relationship between the trustee and beneficiary. Therefore, an alienation of resources held in trust could only be proper where the conveyance either promotes the interests of the public or does not impair substantially the public interest in the remaining property.

[261] Hospital Products Ltd. V United States Surgical Corp. 91984, 55 A.L.R.417[per Dawson J. at pp.488] [73] 146 US

The above and several other court decisions suggest that the courts could employ and uphold the Public Trust Doctrine to mitigate administrative abuses in natural resources management. Indeed, according to Prof. Sax, the court in *Illinois Central* "articulated a principle that has become the central substantive thought in public interest litigation. When a state holds a resource which is available for the free use of the general public, a court will look with considerable skepticism upon and government conduct which is calculated either to relocate that resource to more restricted uses or to subject public uses to the self interest of private parties.[262] While reaffirming the Public Trust Doctrine as being part of the Indian law, the Indian Supreme Court in ***M.C. Mehta Vs. Kamal Nath and others***[263] emphasized the essence of the doctrine in the following terms;

"The Public Trust Doctrine primarily rests on the principle that certain resources like air, sea, waters, and the forests have such a great importance to the people as a whole that it would be wholly unjustified to make them a subject of private ownership. The said resources being a gift of nature, they should be made freely available to everyone irrespective of the status in life. The doctrine enjoins upon government the duty to protect the resources subject to the trust for the enjoyment of the general public rather than to permit their use for private or commercial purposes"

Despite the existing jurisprudence on the doctrine, there appears to be no consensus on the nature of the interest in the trust property. Bray contends that there are two coexisting interests to trust lands: the *jus publicum* which is the public's right to use and enjoy trust lands; and the *jus privatum* which is the private property rights that may exist in the use and possession of trust lands. The trustee may convey the *jus privatum* to private owners, but this private interest is

[262] Ibid

[263] M.C.Mehta v Kamal Nath and others, Writ Petition [c] No. 182 of 1996(Supreme Court of India)-Decided on December 13, 1996

subservient to the *jus publicum* which is the state's inalienable interest that it continues to hold in the trust land and water. [264]

In the ***National Adubon Society Vs. Superior Court of Alpine County (*****the Mono Lake case**)[265] the California Supreme Court summed up the powers of the state as trustee in the following terms;

"Thus, the Public Trust Doctrine is more than an affirmation of the duty of the state to protect the people's common heritage of streams, lakes, marshlands and tidelands, surrendering that right only in rare cases when the abandonment of that right is consistent with the purposes of the trust…."

Since the Justinian Institute Declaration, the doctrine has continued to evolve both in terms of scope and application. It has since then been extended from its traditional common law application to uses such as navigation, fishing and commerce to cover a broad range of natural resources. The United States of America Courts have in particular been very instructive in expanding the scope of the resources protected by public trust. American judicial decisions suggest growing judicial concern in protecting fragile and ecologically important lands such as fresh water, wetlands and riparian forests.

The observation by the Supreme Court of California in the *Mono Lake case* was to the effect that the argument that the ecology and environment protection is a relevant factor to determine which lands, waters, or air are protected by the Public Trust Doctrine. Indeed, the Indian Supreme Court in ***Mehta Vs. Kamal Nath*** **and Others** cited authoritatively the decision of the United States Supreme Court in ***Phillips Petroleum Co. Vs. Mississippi***[266] to uphold Mississippi's extension of public trust doctrine to areas underlying nonnavigable tidal areas. In that case, the

[264] Paul M. Bray. http://stella.als.edu/glc/ptd-home.html
[265] 33 Cal 3d 419
[266] 108 SCt 791(1988)

Court expanded the public trust doctrine to identify the tide lands not on commercial consideration but on ecological concepts.

The Public Trust Doctrine has also influenced the debates over the management of resources that are considered to be of global significance. The debate about the global commons, common heritage etc, within the United Nations system is nothing other than an affirmation that certain resources are essential for the survival of humanity and should be protected to serve the common interest. This may be validated by the growing consensus among states that such areas like the Antarctica, the High seas or even outer space should be protected against expropriation by individual states. Public Trust Doctrine is, therefore, increasingly gaining acceptability as a legal and planning tool for managing natural resources both within and beyond the jurisdiction of states. In all cases, therefore, the Public Trust Doctrine represents a viable legal tool for establishing a system of governance that provides a dynamic and interconnected framework for intergenerational responsibility for the management of natural resources.

Public Trust Doctrine in Uganda.

The government by virtue of **article 237 and objective 8 of the National Objective and National Policy** is responsible for mineral ownership. *The* state is mandated to protect important natural resources, including land, water, wetlands, minerals, oil, fauna and flora on behalf of the people of Uganda since they are for the benefit of all people.

Similarly, **section 4 of the Petroleum (Exploration, development and Production) Act 2013** vests petroleum resources in the government on behalf of the people. It follows therefore that the government of Uganda cannot lease out or otherwise alienate any natural resources referred to in this section.

The concept has been recognized in Uganda and has been tested in several cases under public interest litigation. The first time the doctrine was tested before the courts of law was **in 2004 in Advocates Coalition for Development and Environment V Attorney General (Misc. cause no 0100 of 2004**. In this case Kakira Sugar Company had a long standing lease to take firewood from Butambira

Forest Reserve for its sugar factory. Kakira applied to NEMA to turn the forest into a plantation which the government accepted. ACODE protested and brought the suit under public trust doctrine and public interest litigation.

The High court held that the government had breached its duty of holding property in trust for the people by not obtaining consent from the local community and not carrying out an environment impact assessment. The court observed that although the government had no right to alienate the *jus publicum* in trust lands, it could issue permits or licences only with local consent which was not evident in the case of Kakira.

Any member who wishes to bring a suit under public trust doctrine can mcommence his suit under article **50 of the constitution**. This very provision authorizes a person or organization whose rights have been infringed to file suit to vindicate another person's rights. This makes it clear that human rights are inherent and not granted by the state.

Remedies in case of violation of the Public Trust Doctrine.

Violation of the Public Trust Doctrine are subject to injuctive relief, revocation of the Jus Privatum granted in trust resources and possibly damages and restitutions.

In the ACODE case, an injuction was offered to restore the forest to itsa prepermit conditions.

Key cases in Public Trust Doctrine.

(a) **Niaz Mohamed Jan Mohammed V Commissioner of lands.**

The plaintiff hade been registered proprieter of a property measuring approximately 3.63 acres in Kisauni – Mombasa. During the construction of the new Nyali Bridge, it became necessary to construct anew road to Kisauni and Nyali estate. The road was opened for public use until November 1995 when it was alleged that the Commssioner of lands had created a new leasehold from a portion of the road uncovered by tarmac. The plaintiff saw this as a deliberate

attempt to unlawfully alienate public land to private developers and the respondents challenged his locus standi.
It was held that the plain tiff was a member of the public who had locus standi to question the propriety of the dealings by authorities dealing with public land which was held in trust for the people.

(b) **Nairobi Golf Hotels (Kenya) Ltd v. Pelican Engineering and Another. Civil case 706 of 1997.**

The applicant sought a permanent injuction which sought to restrain the defendant from constructing on Gatharani River from diverting the water. The defendant raised a preliminary objection against the applicant and stated that under article 3 of the water Act, water is vested in government and so the plaintiff had no locus standi. The defendants further averred that the plaintiff should have lodged a complaint with the Water Appointment Board and that since land had been leased to someone else, it was wrongly sued.
The preliminary objection was overruled and It was held that the water act does not affect the right of anyone to bring any action or take any proceedings against the defendant for the alleged illegal construction of the dam and alleged diversion of water and an injuction was granted.

(d) **Abdikadir Sheikh Hassan & 4 Others v. Kenya Wildlife Service**
Court granted an injuction to the applicant who asked for restraining orders against the defendant for removing g or dislocating a rare and engangered animal from its natural habitat in Tsavo National park.
In regards, to Public Trust Doctrine it is also important to understand the case of **Paul Nderitu Ndungu and 2 Others v. Pashito Holdings Limited & Another Sierra Club v. Rogers C.B. Morton & Another and the case of Re: Human Rights Case.**
It is evident from the above that the doctrine of public trust doctrine is to the effect that the government keeps some resources on behalf of the people and it cannot alienate them since it's the trustee.
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CHAPTER

NINE

INTERGENERATIONAL EQUITY.

Introduction.

The opportunity to exploit indigenous oil and gas resources means that oil and gas activities are going to become an important sector of development in the country. This sector has the potential to significantly impact the already existing sectors and can be an important engine for poverty reduction and sustainable development. Many of the areas with the potential for petroleum production in the country also coincide with areas of important biodiversity like national parks, water bodies, and game and forest reserves among others. Due consideration will therefore be necessary so as to ensure harmony between developing the country's oil and gas resources and conserving its rich biodiversity to benefit the current and future generations[267].

The theory of intergenerational equity argues that we, the human species, hold the natural environment of our planet in common with all members of our species: past generations, the present generation, and future generations. As members of the present generation, we hold the Earth in trust for future generations. At the same

[267] Joseph Mawejje &Lawrence Bategeka. '*Accelerating Growth and Maintaining Intergenerational Equity Using Oil Resources in Uganda'.* Economic Policy Research Centre (Eprc); Research Series No. 111 (2013).

time, we are beneficiaries entitled to use and benefit from it[268].

There are two relationships that must shape any theory of intergenerational equity in the context of our natural environment: our relationship to other generations of our own species and our relationship to the natural system of which we are a part. The human species is integrally linked with other parts of the natural system; we affect and are affected by what happens in the system. We alone among all living creatures have the capacity to shape significantly our relationship to the environment. We can use it in a sustainable basis or we can degrade environmental quality and deplete the naturalresource base. As the most sentient of living creatures, we have a special responsibility to care for the planet.

Partnership between generations is the corollary to equality. It is appropriate to view the human community as a partnership among all generations. In this partnership, no generation knows beforehand when it will be the living generation, how many members it will have, or even how many generations there will ultimately be. Each generation is thus both a trustee for the planet with obligations to care for it and a beneficiary with rights to use it.

Legal Framework on Implementation of principle of Intergenerational Equity in the Oil and Gas Sector in Uganda

International law.

The Rio **Declaration on Environment and Development ('the Rio Declaration'),** adopted at the United Nations Conference on Environment and Development in 1992, provides a starting point for the elucidation of international environmental law principles. While the Declaration itself is not enforceable, it does have some value: it provides evidence of what states' stated beliefs are with respect to what the law is or what it should be. **Principle 3 of the Rio Declaration**

[268] Federico Escobar, 'Commentary : Forest Cover Is Critical for Biodiversity Conservation in Tropical Livestock-Dominated Landscapes', 2018, 1–4 <https://doi.org/10.1177/1940082918783160>.

envisages the right to development, and that this right 'should be fulfilled so as to meet equitably the developmental and environmental needs of present and future generations

Article 11 of the Vienna Declaration on Human Rights states that 'the right to development should be fulfilled so as to meet equitably the developmental and environmental needs of present and future generations. **The World Conference on Human Right**s recognizes that illicit dumping of toxic and dangerous substances and waste potentially constitutes a serious threat to the human rights to life and health of everyone.'

Article 3 of the 1992 Convention on Climate Change (article 3(1)) provides that Parties shall be guided by a number of principles including art 3(1) which provides that the Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.'

Article 5 of the UNESCO Declaration on the Responsibilities of the Present Generations towards Future Generations, 1997 states that "present generations have the responsibility of ensuring that the needs and interests of present and future generations are fully safeguarded" and that to ensure this they must ensure that the Earth is not irreversibly damaged and ecosystems not harmfully modified by human activities.

***In* Taralga Landscape Guardians Inc v Minister for Planning**[269] there was disagreement between a group of rural residents and a wind energy company over the company's development proposal for a wind farm that would be visible from the residents' properties. The case required the balancing of local interests (the appearance, noise and impact upon local flora and fauna of the wind farm, considered unacceptable by local residents)[270] with wider interests (the advantages to the community at large of provision of wind energy, a low carbonemitting. Court found that the principle of intergenerational equity not only demands that the process of production and use of energy occur in a manner which accounts for the

[269] Taralga [2007] NSWLEC 59
[270] Taralga [2007] NSWLEC 59 at [97-114]

requirements of future generations, but also requires new types of clean energy production to be substituted increasingly for old, emissionsintensive methods.

Evaluation of National Laws, regulations and Policy Framework for Intergenerational Equity in the Oil and Gas Exploration and Production Sector in Uganda.

The Constitution of the Republic of Uganda (1995) (as amended).

The principle law of Uganda is the 1995 Constitution, which is the supreme law in Uganda[271]. In the National Objectives and Directive Principles of State Policy, **(National objective XXVII**), the Constitution requires the government of Uganda to take measures to protect important natural resources, including land, water, wetlands, minerals, oil, fauna and flora on behalf of the people of Uganda. ***Article 245(a), (b), (c)*** of the Constitution empowers Parliament to provide for measures intended to: Protect and preserve the environment from abuse, pollution and degradation; to manage the environment for sustainable development, and to promote environmental awareness.

The Petroleum (Exploration, Development and Production) Act 2013

This is the principal legislation governing the oil sector its preamble states that it is to give effect to **Article 244 of the constitution**, regulate the petroleum production, the licensing of companies, the revenue, and promotion of oil exploration and also set a safe environment for the operations and plan for the decommissioning. The act repeals the **Petroleum (Exploration and Production) Act, Cap 150** and the related matters. The major purpose of this Act is to operationalize the National Oil and Gas Policy and to achieve this many strategic approaches are identified: establishing an effective legal framework and institutional structures to ensure that the exploration, development and production of petroleum resources is carried out in a sustainable The act also guides the

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establishment of the Petroleum Authority [272] of Uganda and the National Oil Company, which have administrative powers to oversee the protection of environment through licensing and regulation of activities. The law requires every licensee and every person exercising or performing functions, duties or powers under it in relation to petroleum activities to take into account, and give effect to, the environmental principles prescribed by the NEA and other applicable laws[273]. Nema still has the mandate to monitor and supervise the activities so as to protect the environment as provided for under ***Section 17*** to the board of directors. This requirement covers the upstream and downstream protection of the environment in accordance with the license.

The Petroleum Supply Act (2003)

This Act makes provisions for the protection of public safety and the environment. It requires the Commissioner to develop and implement or cause the implementation of a programme of gradual adoption and adaptation of the prevailing international standards, technical specifications and codes of practice in relation to the petroleum supply industry in cooperation with the National Bureau of Standards and the Committee. It further provides that the standards, specifications and codes of practice as established by the standards developing organizations which are recognized by the International Petroleum Industry (IPI) in matters of quality, industrial safety and environmental protection should be adopted by the Uganda National Bureau of Standards (UNBS) by reference and declared as national standards in accordance with the UNBS Act after being adapted as necessary taking into account the socio economic realities of the petroleum products market in Uganda.

National Environment Act 2019. This law established an Authority called the National Environment Management Authority (NEMA) which is a coordinating, monitoring and supervisory body for that purpose; and for other matters incidental

[272] Section 9
[273] Section 5

to or connected with the foregoing[274]. According to ***Section 2 (2) of the National Environment Act 2019*** the principles of environmental management include using and conserving the environment and natural resources of Uganda equitably for the present and future use, establishing adequate environmental protection standards and to monitor changes in environmental quality, and ensuring that the entire and total costs of environmental pollution are borne by the polluter. Under **section 19(3), EIA i**s to be undertaken by the developer if the project is likely to have an impact on the environment, or is likely to have a significant impact on the environment, or will have a significant impact on the environment. **Section 157** of the Act prohibits any person from carrying out any activity that is likely to pollute the air, the water or the land in excess of any standards or guidelines prescribed or issued under the Act. Thus a person requires a pollution licence to carry out a polluting activity. A pollution license cannot be issued unless the licensee is capable of compensating the victims of the pollution and cleaning the environment in accordance with the "polluter pays" principle.

The Land Act Cap. 227.

The Land Act is the main law dealing with land management in Uganda. As such it has implications for oil and gas activities and the right to clean and healthy environment. **Section 43** requires that any person who owns or occupies land manages and utilizes it in accordance with the existing environmental laws such as the Forests Act, the Mining Act, the National Environment Act, the Water Act and the Uganda Wildlife Act. It also requires that environmentally sensitive areas are protected in trust and for the common good of the people of Uganda. **Section 44** reserves all the water rights any natural spring, river, stream, watercourse, pond, or lake on or under land, whether alienated or alienated, to the Government of Uganda therefore such water can be obstructed, dammed, diverted, polluted or otherwise interfered with, directly or indirectly, except with the permission in writing granted by the Minister responsible for water or natural resources. This provision restricts carrying out of oil activities around natural water resources.

[274] Section 4 , NEA

This specifically is geared towards preserving natural water resources from pollution by oil and gas exploration activities so that current and future generations can benefit.

POLICY FRAMEWORK IN UGANDA.

Oil and Gas Policy 2008.

This policy explicitly provides for the oil and gas. The goal of this policy is to use the country's oil and gas resources to contribute to early achievement of poverty eradication and create lasting value to society. **Principle 5.1.1** recognizes that the oil and gas are nonrenewable resources that can get exhausted at a given time, therefore the policy promotes the safeguarding of these resources and managing them in a manner that will create lasting benefits to society. Intergenerational equity, sustainable resource management this entitles use of the resources in a way that will not place a burden on the future generation, therefore it requires a balance between the present and future generation[275]. The policy, under **principle 5.1.3**, focuses on the balance of the environment, human development and biodiversity for mutual benefit and survival and adds that many of the developers focus on benefit in disregard of the likelihood of harm. The policy aims at the promotion sustainable development. The responsibility is placed of licensed oil companies to protect the environment where they work or any areas in the country impacted by their operations and the Government obliged to legislate, regulate and monitor compliance.

The Oil and Gas Revenue Management Policy (OGRMP) recognizes the immense macroeconomic, fiscal and governance challenges associated with the management of windfall resource revenues. To this effect, the policy recommends that a special fund be set up in the Bank of Uganda with the objectives of financing the budget and saving for future generations. In addition, it states that all expenditures will be focused on key growth areas such as infrastructure, but financed through the budget.

[275] OPT CIT (note 32)

The National Environment Management Policy.

This policy whose overall goal objective under **Principle 2.1** is to ensure a sustainable social and economic development which maintains or enhances environmental quality and resource productivity on a longterm basis that meets the needs of the present generations without compromising the ability of future generations to meet their own needs. This is in line with the international law and policy of sustainable development of the **Stockholm Declaration**. Albertine region being an environmentally sensitive area with biodiversity and numerous forests, wildlife and aquatic life, there is need to observe the policies for a sustainable development. **Principle 2.3 states** that, Uganda's economy should be based on a sustainable natural resource usage and sound management in line of petroleum under Principle it advocates for using reasonably the nonrenewable resources. The objectives of National environmental management policy relating to intergenerational equity in oil exploration are operationalized in National Environmental Act.

The Regulations.

The Petroleum (Exploration and Production) (Conduct of Exploration Operations) Regulations (1993).

These were made under the **Petroleum (Exploration and Production) Act, Cap. 150** (now repealed) but they were saved to remain in force in so far as they are not inconsistent with the repealing Act, until they are revoked by a statutory instrument made under the repealing Act.32 The Regulations provide for pollution prevention during exploration. The **Regulations under Regulation 56** also bar the disposal of drilling mud into any lake, river, stream, pond or other water body. Under Regulation **56(2),** produced water may be disposed into an operating area after satisfying, with the commissioner's approval, that the oil content of produced waters discharged from offshore platforms has been reduced to an average of not more than 10 mg/l during normal operation. **Regulation 61(1)** prohibits any person to import explosives without a licence into Uganda for use in petroleum operations. audible warning device. person observed approaching that place should

be warned of the danger that exists. **Regulation 115** is to the effect that, the exhaust gases from engines or motors or devices using gas in place of steam or air to operate pumps and other power driven equipment should be discharged in a direction and location where they will not create a health hazard to any person. These regulations serve to protect the environment for degradation such that it can be enjoyed by present and future generation long after the oil exploration.and for other matters incidental to or connected with the foregoing[276]. Under ***Section 2 (2)*** the principles of environmental management include . . . using and conserving the environment and natural resources of Uganda equitably for the present and future use, establishing adequate environmental protection standards and to monitor changes in environmental quality, and ensuring that the entire and total costs of environmental pollution are borne by the polluter. The NEA makes EIA a legal requirement. Under **section 19(3), EIA i**s to be undertaken by the developer if the project is likely to have an impact on the environment, or is likely to have a significant impact on the environment, or will have a significant impact on the environment. ***Section 3(2)*** of the act confers on every person the right to a healthy environment and also states that every person has a duty to maintain and enhance the environment, including the duty to inform the authority or the local environment committee of all activities and phenomena that may affect the environment significantly. ***Section 157*** of the Act prohibits any person from carrying out any activity that is likely to pollute the air, the water or the land in excess of any standards or guidelines prescribed or issued under the Act. Thus a person requires a pollution licence to carry out a polluting activity. A pollution license cannot be issued unless the licensee is capable of compensating the victims of the pollution and cleaning the environment in accordance with the "polluter pays" principle.

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[276] Section 4 , NEA

manages and utilizes it in accordance with the existing environmental laws such as the Forests Act, the Mining Act, the National Environment Act, the Water Act and the Uganda Wildlife Act. It also requires that environmentally sensitive areas are protected in trust and for the common good of the people of Uganda. **Section 44** reserves all the water rights any natural spring, river, stream, watercourse, pond, or lake on or under land, whether alienated or alienated, to the Government of Uganda therefore such water can be obstructed, dammed, diverted, polluted or otherwise interfered with, directly or indirectly, except with the permission in writing granted by the Minister responsible for water or natural resources. This provision restricts carrying out of oil activities around natural water resources. This specifically is geared towards preserving natural water resources from pollution by oil and gas exploration activities so that current and future generations can benefit

Environmental Regulations.

Uganda has various regulations regarding protection of the environment, as below analyzed. The National Environment (Waste Management) Regulations, SI No 52/1999, which apply to all categories of hazardous and nonhazardous waste, storage and disposal of hazardous waste and their movement into and out of Uganda and to all waste disposal facilities, landfills, sanitary fills and incinerators.

The National Environment (Standards for Discharge of Effluent into Water or on Land) Regulations, SI No 5/199972 provide the standards for effluent or waste water before it is discharged into water or onto land. The Regulations provide for the general obligation to mitigate pollution[277].

The National Environment (Wetlands, River Banks and Lake Shores Management) Regulations, SI No 3/2000, regulate the management of wetlands, river banks and lake shores. The objectives of the Regulations include the conservation and wise use of wetlands and their resources in Uganda, thus minimizing and controlling pollution of rivers and lakes and controlling pollution or degrading activities.

[277] The National Environment (Standards for Discharge of Effluent into Water or on Land)

The National Environment (Noise Standards and Control) Regulations 2003[278] are aimed to ensure the maintenance of a healthy environment for all people in Uganda, the tranquility of their surroundings and their psychological wellbeing by regulating noise levels and, generally, to elevate the standard of living of the people by prescribing the maximum permissible noise levels from a facility or activity to which a person may be exposed, and to regulation 7(3).

Finally, the Water Resources Regulations 1998 prohibit the discharge of effluent or waste on land or into water bodies or drainage systems. These regulations also ensure that use of water is environmentally friendly and promotes sustainable development. These controls also ensure that water is not treated as a free good but as a good with a value to be paid for. This economic valuation of water is an important incentive for its conservation to benefit current and future generations.

REVENUE MANAGEMENT LAWS.

Public Finance Management Act

The Public Finance Management Act (2015) was drafted with a full chapter (part VIII) on petroleum revenue management. This law consolidated the Budget Act 2001 and the Public Finance and Accountability Act 2000 and established a comprehensive framework for the management of oil revenues. The purpose of the Act is to provide for public financial management in Uganda by establishing the legal and regulatory framework for the collection, allocation and management of petroleum revenue.[279] The PFMA is expected to govern the collection and use of money from the oil industry. Here below we provide an analysis principles of intergenerational equity in the existing legislation with regard to oil revenues.

responsibility of managing the Petroleum Fund with the Minister responsible for Finance, month, shall be paid by the seventh day of the following month by the person obliged to make the payment.

[278] SI No 30/2003
[279] Section 2 (f)

Withdrawals from the Petroleum Fund shall only be made under authority granted by an Appropriation Act and a warrant of the Auditor General.[280] Similarly s.59 (3) provides that For avoidance of doubt, petroleum revenue shall be used for the financing of infrastructure and development projects of Government and not the recurrent expenditure of Government Section 60 provides for reporting and accountability through proper books of account and proper records of the fund. Submitting semiannual and annual statements of account to the minister. Similarly, **s. 61** requires report of petroleum fund to parliament based on the underlying assumptions including the projected production levels and the average price of petroleum and recommendations for the reconciliation and adjustments needed to account for any deviations so that the estimated inflows and outflows of the Petroleum Fund match the actual of the financial year.

The Investment Code Act, Cap. 92

The purpose of the Act is to establish a code to make provision in the law relating to local and foreign investments in Uganda by providing more favorable conditions for investment, to establish the Uganda Investment Authority and to provide for other related matters[281]. This Code empowers the Uganda Investment Authority (UIA) to, inter alia, attract and coordinate all local and foreign investments in the country to enhance economic development. The Act in section 18 (2) (d) requires the investor to take necessary steps to ensure that the operations of the business enterprise do not cause injury to the ecology or environment. Hence this Act implies that investors in the oil exploration business need to take necessary steps to ensure that their activities do not injure the environment.

International Legal Framewor for intergenerational equity in the gas exploration and production in Uganda.

International law is a system of principles, rules and practices that govern relationships between states and other internationally recognized problems. This chapter extent to which the principle of intergenerational equity is anchored in

[280] Section 58
[281] The Investment Code Act, Cap. 92 (Preamble)

international law to balance the interests of current and future generations with respect to the environment, oil resource and revenue management. This chapter presents a synthesis of International binding and nonbinding legal framework for implementation of intergenerational equity.

Binding International law on implementation of intergenerational equity

Uganda has ratified a number of binding international and regional laws conventions and treaties which have significant implications for oil and gas exploration and production in Uganda. This is more so due to the fact that they have a force of law and Uganda is obliged to abide by the principles of intergenerational equity enshrined thereunder. They include the following:

The Vienna Convention on the Protection of the Ozone Layer (1985).

Uganda acceded to this Convention on 24th June 1988. The objectives of this Convention include the of human health and the environment against adverse effects resulting or likely to result from human activities which modify or are likely to modify the ozone layer; adoption of agreed measures to control human activities found to have adverse effects on the ozone layer; to cooperate in scientific research and systematic observations; and to exchange information in the legal, scientific and technical fields.[282] The Convention establishes the secretariat as the regulating body. It lists the chemical substances of natural and anthropogenic origin that are thought to have the potential to modify the chemical and physical properties of the ozone layer. These include: carbon substances like carbon monoxide (CO), carbon dioxide (CO2), methane (CH4); nitrogen substances including nitrous oxide (N2O); and Chlorine substances. The Convention therefore, targets the reduction in the production and use of these chemicals by the parties. These emissions are eminent in the process of oil and gas production and therefore the actors should ensure that they don't exceed the

[282] Ibid

conventional limits especially when it comes to gas flaring and venting.[283] The spirit of this law is to preserve environment by regulating emission of dangerous chemical from human activities like all and gas exploration that could have devastating impact on human life today and in future.

Convention on Wetlands of International Importance especially as Waterfowl (Ramsar Convention) (1971)

This is commonly known as the Ramsar Convention. Uganda ratified this Convention on 4th March 1988. The Ramsar Convention seeks to ensure the sustainable, wise use of wetland resources including designation of wetland sites of international importance and to ensure that all wetland resources are conserved, now and in the future. Countries are required to implement the *"wise use" principles* of the Convention (including wetland policies, awareness programs, and legislative review) and cooperate with other Contracting Parties; manage a network of protected wetland sites of international importance in cooperation with provinces, territories, and nongovernmental organizations (NGOs); foster cooperation through joint work plans and Memoranda of Understanding (MoUs) with the Convention on Biological Diversity (CBD), Bonn Convention, the World Wildlife Fund for Nature (WWF), Wetland International, Birdlife International, IUCN, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and other international treaties and organizations; and contribute financially to the Convention. This convention is very instructive especially when it comes to operations on the immediate shores of Lake Albert which is a wetland of international importance (Ramsar site) within the meaning of the convention

[283] (s.2 of the Petroleum (EDP) Act,

The Montreal Protocol on Substances that Deplete the Ozone Layer (1987)53

Uganda signed the Montreal Protocol on 15th September 1988 and ratified the protocol on same date. This protocol controls the production and consumption of the most commercially and environmentally significant ozonedepleting substances and also deals with atmospheric pollution. The Protocol majorly intends to control production and use of CFCs.[284] Chlorofluorocarbon (CFC) is an organic compound that contains only carbon, chlorine and fluorine, produced as a derivative of methane, ethane and propane. Comparable limitations are set out in article 2B in respect of halons; article 2C in respect to other fully halogenated CFCs; article 2D in respect of carbon tetrachloride; article 2E in respect of 1, 1, 1Tricholoroethane (Methyl chloroform); article 2F in respect to hydro chlorofluorocarbons; article 2G in respect to hydro bromofluorocarbons; article 2H Methyl bromide; and article 21 in respect of Bromochloromethane.[285] Some of these combination gases are reported to be emitted during oil and gas activities hence the guidance of this protocol is relevant for our oil industry.

Promotional Framework for Occupational Safety and Health Convention, 2006 (No.187)

This Convention aims at promoting a preventative safety and health culture and progressively achieving a safe and healthy working environment. It requires ratifying States to develop, in consultation with the most representative organizations of employers and workers, a national policy, national system, and national programme on occupational safety and health. The national policy shall be developed in accordance with the principles of Article 4 of the Occupational Safety and Health Convention, 1981 (No. 155), and the national systems and programs shall be developed taking into account the principles set out in relevant ILO instruments. A list of relevant instruments is contained in the Annex to the Promotional Framework for Occupational Safety and Health Recommendation,

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2006 (No. 197). National systems shall provide the infrastructure for implementing national policy and programs on occupational safety and health, such as laws and regulations, authorities or bodies, compliance mechanisms including systems of inspection, and arrangements at the level of the undertaking. National programs shall include timebound measures to promote occupational safety and health, enabling a measuring of progress.

Radiation Protection Convention, 1960 (No. 115)

The objective of the Convention is to set out basic requirements with a view to protect workers against the risks associated with exposure to ionizing radiations. Protective measures to be taken include the limitation of workers' exposure to ionizing radiations to the lowest practicable level following the technical knowledge available at the time, avoiding any unnecessary exposure, as well as the monitoring of the workplace and of the workers' health. The Convention further refers to requirements with regard to emergency situations that may arise.

United Nations Convention on the Law of the Sea (UNCLS) (1982)

This imposes obligations on states parties to protect the marine environment. The UNCLS requires States that have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution of or significant and harmful changes to the marine environment to as far as practicable, assess the potential effects of such activities on the marine environment and communicate reports of the results of such assessments.[286]

Though Uganda has no sea, the analogous marine environment of Lake Albert affected by the oil activities seems to me to bring the UNCLS principles into play. It is accordingly incumbent upon Uganda to assess all likely impacts on aquatic life before onshore exploitation of wells along Albert can commence. Other water bodies likely to be affected include Lake Kyoga and the Nile River.

[286] Article 206

United Nations Framework Convention on Climate Change (UNFCCC) (1992)

Uganda signed the UNFCCC on 13th June 1992 and ratified it on 8 September 1993. The ultimate objective of United Nations Framework Convention on Climate Change (UNFCCC) is to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time framesufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner. One of the major principles in the convention that deals with climate change is the precautionary principle which imposes an obligation on states to take measures to prevent and minimize the causes of climate change and mitigate its adverse effects. The weakness with this convention is however that it is not specific as far as emission

Basel Convention on Control of Transboundary Movement of Hazardous Wastes and their Disposal (1989)

Uganda signed this Convention on 11th March 1999. The overall goal of the Basel Convention is to protect human health and the environment against the adverse effects which may result from the generation, transboundary movement and mismanagement of hazardous and other wastes. Other objectives include reducing transboundary movements of wastes to a minimum consistent with their environmentally sound and efficient management and controlling any permitted transboundary movement under the terms of the Convention. It also aims at minimizing the amount of hazardous wastes generated and ensuring their environmentally sound management and assisting developing countries in environmentally sound management of the hazardous and other wastes they generate.

In summary, the aim of the Basel Convention is to help reduce the transboundary movements and amounts of hazardous waste to a minimum, and to manage and dispose of these wastes in an environmentally sound manner. The observation of this convention is so critical because oil and gas activities in Uganda have contact with Lake Albert through which river Nile (Albert Nile) flows to other countries of Africa such as Southern Sudan, Sudan and Egypt, meaning that if waste is not controlled transboundary pollution may occur yet this may be so costly not only to the peace but also the economy of Uganda.

Bamako Convention on the ban of the Import into Africa and the Control of Transboundary Movement of Hazardous Wastes within Africa (1991)

The objectives of the Bamako Convention are to protect human health and the environment from dangers posed by hazardous wastes by reducing their generation to a minimum in terms of quantity and/or hazard potential. The Convention requires that each Party adopts and implements the preventive/precautionary approach to pollution problems which entails, inter alia, preventing the release into the environment of substances which may cause harm to humans or the environment without waiting for scientific proof regarding such harm.[287] These principles are without doubt applicable to the oil industry. Firstly, the NOGP also entrenches the precautionary principle. Therefore, operators should take preventive measures to contain wastes produced especially produced water and other aqueous streams to ensure that they don't escape into transboundary water catchments especially the AlbertNile as this can culminate into transboundary pollution.

[287] Article 3(d) of the Agreement.

Kyoto Protocol to the United Nations Framework Convention on Climate Change (1997)

Uganda ratified the Kyoto Protocol on 25th March 2002. This protocol sets binding numerical targets for the limitation and reduction of greenhouse gas emissions especially carbon dioxide, methane, nitrous oxide, hydro fluorocarbons, per fluorocarbons and sulphur hexafluoride for the industrialized and transitional countries during the period 20082012.[288] No numerical targets for the reduction of emissions were set for the developing countries, but they are required to report on their emissions. The Kyoto protocol defines three international policy instruments (Kyoto mechanisms) which provide opportunities for annex 1 parties to fulfill their commitments cost effectively. These are: the Clean Development Mechanism (CDM); International Emission Trading (IET);[289] and Joint Implementation (JI).[290] From these three mechanisms, it is CDM that applies to developing countries like Uganda because JI and IET are meant for industrialized countries.

Therefore, the operators in the Albertine rift should follow the CDM to make plans to minimize greenhouse and ozone depleting emissions in the process of production due to start by 2020. Key emissions that should be minimized include inter alia carbon dioxide; carbon monoxide; nitrogen oxide and methane.

[288] Article 3 read together with Annex A to the Protocol

[289] IET allows annex 1 parties to exchange part of their assigned national emission allowances. IET implies that countries with high Marginal Abatement Costs (MACs) must acquire emission reductions from countries with low
MACs. Under IET system, countries that have emissions units to spare can sell this excess capacity to countries that are over their targets. This mechanism of emission trade may be called carbon market because carbondioxide is the most widely produced greenhouse gas

[290] Article 6 of the Kyoto Protocol provides for JI. JI allows industrialized countries to meet part of their required cuts in greenhouse-gas emissions by paying for projects that reduce emissions in other industrialized countries.
The sponsoring governments receive credits that may be applied to their emissions targets; the recipient nationsgain foreign investment and advanced technology (but not credit toward meeting their own emission caps; they have to do so themselves).

Nonbinding (soft law) principles of Intergenerational Equity.

The Stockholm Declaration (1972)

Stockholm principles were adopted at the United Nations Conference on the Human Environment, at Stockholm (5th16thJune 1972). The conference was convened due to the need for a common outlook and for common principles to inspire and guide the peoples of the world in the preservation and enhancement of the human environment.[291] The Declaration lays a number of principles relevant to the oil and gas exploration processes in Uganda. These principles provide guidance ranging from integrated planning, access to information and citizen involvement, application of environmental health and safety sound technologies in oil exploration and production, control of pollution and the need to cater for future generations.

According to the declaration, man is a creator of his environment which gives him physical sustenance and affords him the opportunity for intellectual, moral, social and spiritual growth. In the long and tortuous evolution of the human race on this planet a stage has been reached when, through the rapid acceleration of science and technology, man has acquired the power to transform his environment in countless ways and on an unprecedented scale. Both aspects of man's environment, the natural and the manmade, are essential to his wellbeing and to the enjoyment of basic human rights the right to life itself.[292]

Accordingly, the declaration lays down the following principles: Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and wellbeing, and he bears a solemn responsibility to protect and improve the environment for present and future generations; natural resources of the earth, including the air, water, land, flora and fauna and especially representative samples of natural ecosystems, must be safeguarded for the benefit of present and future generations through careful

[291] Stockholm Declaration 1972, Preamble.
[292] Ibid, Article 1

planning or management, as appropriate; capacity of the earth to produce vital renewable resources must be maintained and, wherever practicable, restored or improved; and man has a special responsibility to safeguard and wisely manage the heritage of wildlife and its habitat, which are now gravely imperiled by a combination of adverse factors. Nature conservation, including wildlife, must therefore receive importance in planning for economic development.

The Johannesburg Declaration (2002)[293]

This declaration was adopted at the World Summit on Sustainable Development in Johannesburg, South Africa (2nd to 4th September 2002). The summit was intended to reaffirm the world's commitment to sustainable development.[294] The importance of this declaration to oil activities in Uganda is that it lays down principles of sustainable development which should inform the management of Uganda's oil and gas resources and proceeds there from. In fact, this is one of the key pillars encapsulated in the National Oil and Gas Policy, 2008. Accordingly, the declaration recognizes that the future belongs to the children of the world and thus there is a need to ensure that through our actions they will inherit a world free of the indignity and indecency occasioned by poverty, environmental degradation and patterns of unsustainable development.[295] There is an urgent need to create a new and brighter world of hope.[296] Hence there is need to assume a collective responsibility to advance and strengthen the interdependence and mutually reinforce pillars of sustainable development economic development, social development and environmental protection at the local, national, regional and global levels.[297] There is need to check all development activities which an impact on the environment because according to the delegates, the global environment continues to suffer. Loss of biodiversity continues, fish stocks continue to be depleted, desertification claims more and more fertile land, the adverse effects of

[293] United Nations A/CONF.199/20
[294] Preamble
[295] Article 3
[296] Article 4
[297] Article 5

climate change are already evident, natural disasters are more frequent and more devastating, and developing countries more vulnerable. That in fact air, water and marine pollution continue to rob millions of a decent life.[298]

Therefore, the Johannesburg Summit renewed the world efforts towards protecting the indivisibility of human dignity through decisions on targets, timetables and partnerships, to speedily increase access to such basic requirements as clean water, sanitation, adequate shelter, energy, health care, food security and the protection of biodiversity. At the same time, the members of the summit committed to work together to help one another gain access to financial resources, benefit from the opening of markets, ensure capacity building, use modern technology to bring about development and make sure that there is technology transfer, human resource development, education and training to banish underdevelopment forever. Therefore, following principles of sustainable development laid in the foregoing declaration, the oil resources should be exploited having regard not only to the interests and aspirations of today's Uganda but even the Uganda of tomorrow. This calls for environmentally sound exploration and production and a clear national reinvestment strategy in resources that can survive the oil sector and support the economy long after oil production has ceased.

3.5.3 United Nations Environment Program (UNEP)

With regards to the environmental health and safety impacts management, Exploration and Production Forum and UNEP (1997) have suggested that while host governments seek to understand the environmental impacts of the industry and put in place environmental laws to regulate the activities of the oil companies, the management of the oil companies must also do their part to institute an Environmental Health and Safety (HSE) management system.

Host Governments ought to develop their own comprehensive HSE policy manuals. Exploration and Production Forum and UNEP (1997) also suggested for effective application of environmental health and safety legislations host governments are required to appropriate international and national laws,

[298] Article 13

regulations and guidelines, coherent procedures for decisions on projects/activities, legislation with clearly defined responsibilities and appropriate liabilities, enforceable standards for operations, appropriate monitoring procedures and protocols, performance reporting, adequately funded and motivated enforcement authorities, existence of adequate consultation and appeal procedures, appropriate sanctions and political will for their enforcement.[299]

Equally importantly, Exploration and Production Forum and UNEP (1997) identified examples of infrastructure needed for environmental protection and these include the following: Policy formulation and regulations, Baseline environmental surveys, Assessment and approvals, Inspection, monitoring, enforcement, Services, water, power, waste disposal, Emergency response, Logistics and transportation, External supplies/services, construction, materials, engineering, consultants, Technical services, laboratories, laboratory supplies, and equipments, Training
institutions, standards associations.[300]

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[299] Op cit 74 at 10
[300] Ibid at 11
[301] Preamble

The effectiveness of Uganda's institutional framework in implementing intergenerational equity.

Implementation of intergenerational equity is determined by compliance and enforcement levels of existing international, regional and domestic laws. The institutional framework is responsible for implementation of laws. Level of Implementation is analysed based on compliancy with regulations and standards of intergenerational equity embedded in the laws of Uganda. Enforcement of oil and gas laws is through institutions of government such as Authorities and Agencies.

National Environmental Management Authority (NEMA).

The National Environmental Management Authority is a tool for monitoring all activities that affect the environment in Uganda provided for in the National Environment Act (NEA). This Act defines **environmental monitoring** to mean the continuous determination of actual and potential effects of any activity or phenomenon on the environment, whether short term or long term. The general objective of monitoring is to establish the status of environment and to evaluate the impacts of various activities on the environment in general and natural resources in particular.

NEMA is required, in consultation with a lead agency, to monitor all environmental phenomena with a view to making an assessment of any possible changes in the environment and their possible impacts; and the operation of any industry, project or activity with a view to determining its immediate and longterm effects on the environment. For this purpose, an environmental inspector appointed[302] may enter upon any land or premises to monitor the effects upon the environment of any activities carried out on that land or premises.[303] This is to ensure that there is proper use of the environment such that it is not depleted totally because there has to be sustainable development which enables future generations to use the same environment as well.

[302] Section 79 NEA
[303] Section 23 NEA

Further, a study conducted by the National Association of Professional Environmentalists (NAPE) established that the monitoring of the ongoing exploration activities is poor. Whereas the government instituted an oil monitoring team consisting of central governments agencies such as NEMA, UWA, MEMD and others, its activities are not visible on the ground. The study has established that there are issues that could be best handled by a field based monitoring structure capable of responding to issues. The study also established that coordination and monitoring between oil companies and government agencies responsible for environmental management are woefully weak or perhaps nonexistent as required under the National Environment Act.

The National Environment Management Authority (NEMA) has made efforts to manage oil drilling wastes in the Albertine Graben, but capacity gaps in supervision and monitoring of oil activities still exist, a recent environmental audit report released by the Auditor General has revealed. The report also faults the oil companies for failing to conduct quarterly selfmonitoring assessments to demonstrate compliance with legal requirements under the NEMA Act. For instance, Tullow Oil was expected to have submitted twelve selfmonitoring reports while Total and CNOOC should have submitted six reports each in the last three years, but this did not happen Out of the expected selfmonitoring reports, Tullow submitted 7 reports, Total 3 and CNOOC none, but even for the submitted ones, NEMA had not issued standardized formats, against which the exploration companies would report. Contrary to the general position by NEMA that drilling waste is not hazardous, the Auditor General's audit found the waste to contain abnormally high concentrations of Barium, Chromium, Lead and other heavy metals.

The Judiciary is the body responsible for administration of justice. It is indicated in the Constitution of the Republic of Uganda that judicial power is derived from the people and shall be exercised by the courts established under in the name of the people and in conformity with the law and with the values, norms and aspirations

of the people.[304] Henceforth the judiciary is responsible for bringing to justice those who are guilty of breaching intergenerational equity principles embedded in environmental and natural resource conservation laws as above discussed. This is aims at deterring people and oil and gas companies from violating these laws and regulations especially during the oil and gas exploration and production activities.

There is need for specialized courts. The Judiciary spokesperson, Mr Erias Kisawuzi[305] said that the new court seeks to lessen issuance of court injunctions against agencies like the National Environment Management Authority (NEMA) and Uganda Wild Life Authority (UWA), since their cases will be handled expeditiously. However, in two years' time there is so far no known decision made by this court in relation to violation of environmental laws relating to oil and gas preservation for the future generations.

Bank of Uganda

Bank of Uganda through Public Finance Management Act has mandate to manage oil revenue and investments. One of the ways is through creation of an oil sovereign fund. This is in line with recommendations by **Oil and Gas Revenue management policy 2012** which recommended that a special fund be set up in bank of Uganda with the objectives of financing the budget and saving for future generations. The Fund is currently maintained on two separate accounts in Bank of Uganda; one denominated in Uganda Shillings (UGX) and the other in United States Dollars (USD). Another account was opened in the Federal Reserve Bank of New York to facilitate investment of the funds under the Petroleum Revenue Investment Reserve.[306]

Issues of transparency in oil revenue management are still a major threat in Uganda. The World Bank emphasizes transparency and accountability if oil and

[304] Article 126 (1) The 1995 Constitution of the Republic of Uganda
[305] Ibid
[306] Republic of Uganda,Ministry of Finance, Planning & Economic Development, Accountant General's Office (2018)
Semi-Annual Report Of The Petroleum Fund For The Financial Year 2017 /2018 p. 4

gas revenue is to benefit current and future generations.[307] It is important that oil revenue management be strictly subjected to effective oversight to minimize embezzlement, malfeasance, and corruption. However, Uganda has failed to show commitment to transparency.

Transparency is an important issue in all oil activities. Based on our field consultations, we have determined that ever since Uganda discovered commercially viable oil resources in 2006, oil deals have been shrouded in secrecy. Government has resisted pressure from parliament, civil society, and even the donor community, to make the Production Sharing Agreements (PSA) public.

6.1.4 Uganda Petroleum Authority

Section 33 of the Petroleum (Exploration, Development and Production) law imposes on the Petroleum Authority's board members and former board members a duty not to disclose information. This section neither encourages nor protects whistle blowers. **Section 148 allows** the minister to make information available to the public, but there is no legal requirement for this to occur. Moreover, **section 149** creates a blanket requirement for confidentiality of all data submitted to the minister by a licensee. In effect, there is little scope for the public to compel the minister to release information that can help them understand how their resources are being allocated. In order for the government to adequately evaluate the performance of licensees and, for the public to determine how well the government is monitoring the operations of licensees, both the government and the public must be provided necessary information. Deliberate concealment of oil and Gas exploration information to the public implies that preserving the oil resource to benefit future generations may be a myth in Uganda.

However, PAU still has challenges of institutional capacity to monitor and supervise oil and gas licensees.

Solutions to the problems.

[307] IBID

Weaknesses stem right from the government which is being too slow in enacting new required laws and Regulations and/or updating existing ones. There is also a problem with implementation of Environmental Impact Assesment as baseline studies and reports prepared by operators are still facing a lot of criticism. The multisectoral monitoring system proposed is not operating to the required standards due lack of clarity of duties and responsibilities especially as between the central government sectors and local governments.

The multisectoral monitoring system proposed is not operating to the required standards due lack of clarity of duties and responsibilities especially as between the central government sectors and local governments. The oil companies have also not yet published their waste management plans, something which still poses a big problem of current and future pollution. Containerization of waste is not a lasting waste disposal mechanism.

Laws should furthermore be made to provide for liability for damage arising from the impacts of environmental health and safety noncompliance such that the defaulters are made liable for their actions. Aside from finding companies liable for noncompliance, regardless of fault, both the upstream and midstream laws (**Section 130 and Section 58 (1**) fail to provide for a compensation regime for victims of such pollution or any losses resulting from poor management of petroleum operations, in particular, the unforeseeable long term damages such may have on the environment and human health. It would appear that according to **Section 131** there is no liability for pollution damages if caused with a licence, which legalizes pollution. Liability for pollution damage should accrue with and without a licence. However, there are more clear and detailed provisions in the in **National Environment Management Act**. Section 100 states that a person (including a legal company) who pollutes the environment is strictly liable for the damage caused to human health or the environment regardless of fault. The legal provisions on the upstream stage and legal provisions on pollution need to be harmonized with the principle legislation on environmental management such that

the existing laws regulating oil and gas exploration are given effect to implement intergenerational equity.

Concerning poor waste management, there is need for a waste management plan identifying anticipated solid and liquid waste streams and addressing determination, inspection and waste minimization procedures, storage locations, and wastespecific management and disposal requirements. A recycling strategy must be practiced by workers during all project phases; minimize the generation of both solid and liquid wastes (including produced water) from well drilling and well development operations that are potential environmental contaminants and employ drilling and recovery systems that recycle drilling fluids, and minimize the amount of final disposal of contaminated fluids and materials. This plan should be enhanced by regular monitoring and supervision for compliance.

There is need to embrace biodiversity offsets. Biooffsets are biodiversity conservation management or improvement actions considered to counterbalance impacts to biodiversity resulting from development. Biooffsets may be effected through: purely voluntary measures taken by corporations; conditions of project approvals; conservation management or other actions negotiated between decisionmakers and developers on a casebycase basis whether under a formal or informal scheme; or the purchase by developers of credits generated by conservation management actions under a formal marketbased scheme, whether mandatory or voluntary. A particularly interesting form of biooffset scheme involves the use of a "biooffset bank" (BOB). The intention of a BOB is to enable proponents to pay a price for conservation measures to be carried out by third parties. This transfers all obligations to the third party to develop, operate, and accept legal liability in relation to the relevant conservation measures.

Use of efficient and Environmentally Sound Technology to protect the environment, are less polluting, use all resources in a more sustainable manner, recycle more of their wastes and products, and handle residual wastes in a more acceptable manner than the technologies for which they were substitutes. Environmentally sound technologies in the context of pollution are "process and

product technologies" that generate low or no waste, for the prevention of pollution. They also cover "end of the pipe" technologies for treatment of pollution after it has been generated.

The Government and civil society organizations should be play their role in creating inter generational equity. The role of government in setting and enforcing environmental regulations is key to minimizing the potential environmental impacts. The trend towards performancebased regulations, rather the traditional command and control approach, has the potential to stimulate more innovative and effective environmental management in all areas of the world including Uganda.

Civil society organizations and the Government of Uganda have a shared interest in ensuring that oil exploitation activities are undertaken in a manner that is consistent with national policy and legislation and promoting sustainable and equitable development in Uganda. Hence there is need to shift from politicization to strengthening Civil Society Organizations and supporting their works. Where there a criticism by a Civil Society Organization, the government should feel advised rather than insulted, and the recommendations should be implemented.

The production sharing agreements need to be made public in order to enhance the right of access to information and improve capacity to understand and make use of such information, in a manner that makes wider and meaningful participation in such important processes. This will improve transparency and accountability in oil revenue management, exploration and guarantee intergenerational equity of oil resource.

There is need to enact new Oil and Gas regulations that contain new regulatory requirements and standards for oil and gas exploration and production; the Public Finance Management Act (2015) should be strictly enforced for oil revenue accountability; Government should be ensuring that Uganda joins the Extractive Industries Transparency Initiative (EITI) and form the Oil and Petroleum Uganda Association to oversee activities in Uganda.

Expansion of stakeholder participation

The law should provide for oversight committees that comprise of the ruling party, the opposition party, civil society, and parliament to jointly undertake the scrutinizing the oil contracts, national oil receipts and national expenditure. In this context government should not be worried of civil society and the opposition but

treat them as partners in avoiding the resource curse. Public participation in oil and gas activities should also be enhanced especially when it comes to decisions that may affect them such as oil exploration. It is very crucial that the policy goals envisaged in the oil and gas policy are implemented before oil production starts in 2020 if Uganda is to deliver intergenerational equity with the oil resource.

The oil resource has potential to be of lasting value to generations to come in Uganda. Nevertheless, if the oil is not properly managed it may result into a generational curse rather than a blessing to Uganda. The research concludes that that intergenerational equity in oil and gas production is ‘paper and lip service’ to Ugandans. This is because of the failure to fulfill the above underscored standards by responsible enforcement Authorities and bodies. For example, the EIA conducted has been criticized for lacking full appreciation of the problem and full public participation. In addition, there was no area specific EIAs for sensitive areas such as Lake Albert. The SEA conducted is criticized for not covering the entire Albertine Graben. When it comes to audits and reviews, the government has not come up with Audit plans for oil sector.

CHAPTER

TEN

OIL CONTRACTING

Concession regime

In the early twentieth century the concession regime was the most common framework by which IOCs acquired the right to explore and produce hydrocarbons on what very often were large portions of the host government's territory. The term 'concession' describes a relationship between a state and an IOC under which the state concedes sovereign control over its hydrocarbon resources. These oldstyle concessions were usually very favourable to the IOC; the state granted to the IOC absolute authority over the territory and surrendered to the IOC the title to all the hydrocarbons *in situ*. Furthermore, the concessions were granted for relatively long periods of time, during which the terms of the concession were often preserved and the state had very little say on how the area was developed and how the recovered hydrocarbons were disposed of. For example, in the 1920s a consortium of British and French companies and the Iraq Petroleum Company signed three concession contracts with the ruler of Iraq, King Faisal. The concessions were for approximately 75 years and collectively granted the Iraq Petroleum Company rights to all of the hydrocarbons in the entire country.

Under the old concession regime, the IOC would pay an initial consideration, similar to the modernday signature bonus, and an annual rent that was independent of the results of the exploration and production activities. These oldstyle concessions allocated all risks (and rewards) to the IOC. While this may have

seemed like an effective way of allocating incentives to explore and extract hydrocarbons in a costefficient manner, the host governments did not generally provide the IOCs with incentives to achieve any other objectives, such as those relating to the environmental and wider development objectives.

The post1950s concessions are significantly different with respect to ownership of hydrocarbons. The state has permanent sovereignty over the hydrocarbons within its territory and the concessions grant an IOC a legal title to the hydrocarbons, but only once recovered at the wellhead. As with licences, the concessionaires have proprietary rights over the concession areas. In addition, the modern concessions are for shorter periods of time and the concession areas are limited to smaller geographical areas that may be required to be relinquished depending on the work programme and budget. The IOC takes most of the exploration risks and the state generally derives all its revenues from royalties, income taxes and other similar payments.

The concession will typically take the form of a concession agreement which will contain the terms and conditions on which the concession is granted. The agreement will create a minilegal system applicable only to the concessionaire and will cover a range of regulatory matters such as the right to import and export goods, work permits, foreign exchange, health and safety, taxation, planning and environmental issues. In the past, it was likely that the concession agreement would have been directly negotiated with the IOC. Nowadays it is more likely that their terms, and the conditions on which they are granted, will be regulated. For example, standard terms may be laid down by legislation (the Libyan Petroleum Law of 1955 is an early example of this). Further, these standard terms may be circulated among interested oil companies on a takeitorleaveit basis. In other words, there may be little or no room for negotiation instead, the risks posed to the IOC (including political risk) would need to be reflected in the bid price.

Whether concession agreements are contractual or regulatory instruments has been a disputed issue. The question was considered in the *Aramco*[308] and *Texaco*[309] oil

[308] (1963) 27 ILR 117.
[309] (1977) 53 ILR 389.

arbitrations, in which it was held that concession agreements are not mere administrative instruments capable of unilateral amendment by the state. In both these cases, it was held that interference with these contractual rights would amount to expropriation, for which compensation would be payable by the state.

Concessions are in practice similar to licences, except that they are more commonly used in developing countries that have an underdeveloped or unstable legal system. Unlike in the case of licences, in concessions the state is very often likely to impose obligations on the IOC regarding local employment, training and technology transfer as well as provide sovereign assurance to the IOC by way of state support arrangements. A concession is a civil agreement under which the State provides on a compensated basis and the investor purchase the exclusive right to the use of a subsoil area for agreed purposes including prospecting, exploration and extraction of oil and gas (and other minerals). The company bears all the expenses and risks including payments to the State for the use of the subsoil, taxes and other mandatory payments as required by the law. A concession is a type of lease agreement.

In the early part of the last century, concessions were granted mainly to the large US and British oil companies in various parts of the world. Seven major international oil companies (IOC's) dominated the oil and gas production in these countries through the concession arrangement.

After a one sided negotiation process, the traditional concessions were usually granted for very long periods and over large areas mainly in favour of the IOCs. The concessions involved the granting of exclusive rights to exploit the oil and gas resources of the host country with few regulatory controls and minimal state intervention. The host governments did not reserve the rights to participate in the process of exploitation and operation of fields developed.

This practical arrangement was perceived, mainly by the developed countries to be 3the best option because the IOC possessed all financial resources and technical expertise. However, over a period of time, the concessions were seen as too generous in favour of the IOCs and the host governments sought to introduce changes in the arrangement that would give them more control over their

resources. As the political complexities also changed over time, a growing resentment became obvious on the part of host governments in that the extent of the rights granted was seen as a direct challenge to their territorial sovereignty. After some countries that were previously under the control of colonial p3owers gained their independence in some cases through political revolution or liberation wars, newly independent governments started to assert their State ownership over their natural resources.

The international principle on permanent sovereignty over natural resources was adopted by many developing countries and established as the most important instrument in designing new oil and gas laws. Most governments asserted control over their oil and gas resources through programmes of 'nationalisation' however the new rights did not auger well with the existing concession agreements in place between the oil company and the host government. In other cases, the concession agreements were in many cases abruptly ended despite the fact that there were provisions for renegotiation, etc. (Awe, A.)

The concession regime in Brazil

In Brazil, concessions to exploration and production blocks have been granted competitively since 1995 when the Petrobras monopoly was dismantled. Following the enactment of the Petroleum Law in 1997, the National Petroleum Agency became responsible for issuing tenders to grant concessions to domestic and foreign companies. The tenders are open to any company meeting the technical, economic and legal requirements. The concessionaires are entitled to all oil and gas produced, subject to taxes and other government reciepts. The government take includes a signature bonus (the minimum amount is established in a public notice tender); royalties of 10% over gross production (or 5% in exploration and production blocks with extreme geological risks); a special participation fee, with variable percentages applied to the net revenue of highproductivity fields; and an annual rental fee assessed per square kilometre. Onshore producers are subject to an extra royalty of 0.5% of production (paid directly to the relevant landowner).

While this concession system is the regime currently in place in Brazil, the 2007 deepwater offshore discoveries may change the legal arrangement in due course. Important authorities, including Brazil's current finance minister, Guido Mantego, have expressed the wish to move away from the concession system and into a PSA regime under which Petrobras would represent the state in all Brazilian oil and gas fields. This is predictable: a decrease in the exploration risks has resulted in a willingness on the part of the state to take more of this exploration risk and enjoy more of the production benefits.

Service contract

The service contract is a regime under which the host state at all points retains full ownership of all the hydrocarbons being produced on its soil and the IOC performs the exploration and production work as a service to the state. They have been adopted in countries with strong elements of nationalism, including those in which the constitution actually prohibits foreign control or ownership of natural resources, such as Saudi Arabia, Kuwait and Iran. These countries usually have substantial capital at their disposal, but seek the technical expertise of IOCs to carry out the exploration and production activities.

In a ***risk service contract,*** the IOC is responsible for the capital expenditure and management of exploration and development and all exploration is undertaken at the IOC's own risk, which means that, unless hydrocarbons are found in sufficient quantities, the IOC will not be compensated. If oil can be produced in commercial quantities, the capital expenditure and operating costs incurred are treated as a loan by the IOC to the state, which may be recovered (plus interest) from the state in the following ways:

- Payments made by the state may be in cash (usually out of the proceeds of oil sales). The cash compensation will include reimbursement of capital expenditure and operating costs and a fixed sum per unit of production. The risks associated with fluctuations in oil price are therefore borne by the state, not the IOC.

- The IOC may be entitled to a share of the market value of production recovered for a fixed number of years, with an option to convert that sum into hydrocarbons if it wishes (in which case the arrangements will be very similar, in effect, to a PSA).
- The IOC may be appointed agent for the state for the purposes of marketing and sales of petroleum, in which case it will be entitled to retain a certain percentage of sales proceeds in reimbursement of the loan, together with a nominal commission.

In a ***pure services contract***, all exploration and production risks and rewards are retained by the state. The IOC is contracted to perform certain services (eg consulting, engineering, construction, operational, managerial services and so on), as defined by the agreement, in return for a fee. The IOC is a mere contractor, working under the supervision of the state, and it has no legal or beneficial interest in the enterprise itself. This category of contracts includes management contracts (eg, contracts for management services, startup and operational assistance and so on) and turnkey contracts (under which the contractor will be responsible for the construction and commissioning of a whole facility). Occasionally, the IOC may be given the right to buy back a proportion of production from the state, under separate sales arrangements.

Service contracts in Iran

In Iran, the constitution prohibits the granting of concessions to foreign companies involved in hydrocarbon extraction. As a result, all exploration and extraction of hydrocarbons is conducted by the Ministry of Petroleum and the National Iranian Oil Company (NIOC). Indirect foreign participation is, however, allowed under a buyback scheme, which is essentially a risk service contract.

Under an Iranian buyback contract, the IOC will fund all investment costs and implement exploration and/or production operations on behalf of NIOC as per an agreed scope of work. In return, the IOC will receive remuneration for advances on these investment funds, operating costs, related bank charges with interest and the negotiated rate of return through NIOC's allocation of production. The

remuneration will be from the sale of petroleum up to a maximum of 60% of production under a longterm export oil sale agreement. The sale agreement will continue until the contractor has fully offset its petroleum costs and the remuneration. The IOC is usually committed to a development period of two to three years and a remuneration period of five to eight years.

Licensing in Uganda.

A licence (referred to in some countries as a lease) is essentially a permission granted by a state to an International Oil Companies to exploit a certain geographical area in return for a fee or a royalty. All hydrocarbons are owned by the state *in situ*, but ownership of any extracted hydrocarbons transfers to the IOC at the wellhead. Therefore, the licence grants the licensee a proprietary right over the hydrocarbons at such point and any profits obtained by the IOC from sale of the hydrocarbons are taxed by the state. The licensing regime is a relatively free market regime, under which the IOC bears most of the risk and enjoys a significant share of the benefits and is allowed to pursue its interests with relative freedom, subject to environmental, timing and other constraints imposed by the terms and conditions of the licence. The United Kingdom, Canada, Norway and, more recently, Russia are the main countries using a licensing regime to grant access to their hydrocarbon resources.

The conditions of the licence are usually reflected in parliamentary legislation. Notwithstanding this fact, in most countries, licences are considered contractual instruments rather than regulatory instruments. This has important legal consequences for the licensee: contractual relationships cannot generally be amended unilaterally, whereas regulatory instruments are subject to unilateral amendment by the state. In the United Kingdom, the relationship between the licensee and the state is generally regarded as a contractual one, albeit with a strong regulatory flavour in the sense that a considerable degree of discretion remains with the state.

Entry requirements

There is no requirement under the Upstream Act for a licensee to incorporate a subsidiary or register a branch in Uganda. It is necessary, however, to incorporate a subsidiary or register a branch if a foreign entity intends to set up physical premises or engage employees. There is a requirement to obtain an investment licence under the Investment Code Act (Cap 92). There are no minimum local shareholding requirements on holders of petroleum exploration and production licences.

Licensing

the main fiscal/legal model granting rights to explore and produce oil and gas.
In the legal rights; Under the Upstream Act, the property in and the control of petroleum in its natural condition in or upon any land or waters in Uganda is vested in the Government on behalf of the Republic of Uganda. Rights to explore and produce oil are granted through a PSA after which the relevant Licence is granted to the contractor which is issued in accordance with the terms provided in the PSA.
Fiscal
A contractor is subject to income tax in accordance with the Income Tax Act, (Cap 340) (the 'ITA') and the PSA. Uganda has special provisions for taxation of petroleum operations. These are incorporated in Part IXA of the ITA. In summary the tax rules in Part IXA of the ITA state that:
(a) The gains taxable on petroleum companies are those derived after taking account of petroleum sales (which should be determined at arm's length) and claiming certain eligible expenses such as:
(i) cost of an asset or other exploration expenditure incurred in undertaking petroleum operations;
(ii) development and production expenditure;
(iii) any expenditure incurred in transportation
facilities; (iv) operating expenses;
(v) service costs; and

(vi) general and administrative expenses (as defined in the schedule to the ITA).
Contractors are taxed on their share of the profit oil only.

(b) For the purpose of determining contractor's gross income derived from petroleum operations from a contract area, petroleum is valued and measured in accordance with the provisions of the petroleum agreement, subject to any further procedures that may be agreed in writing between the Government and the contractor.

(c) Repatriation of profits by contractors: a participation dividend paid by a resident contractor to a nonresident company is liable to withholding tax at a rate of 15%. A lower rate of withholding tax may apply if the dividend is paid to a resident of a country with whom Uganda has a favourable double taxation agreement.

(d) Contract areas are ring fenced for tax purposes. Each contract area of a contractor is taxed as if it is a separate tax payer. Therefore, this puts a limitation on consolidation of income and deductions for tax purposes across different activities or different projects undertaken by the same taxpayer. Tax deductible costs or expenditure incurred in respect of a contractor's petroleum exploration and

development expenditure in one contract area or block or oil field will only be deducted from income derived from that contract area only. Losses arising from activities in one contract area will only be carried forward and offset against future income derived from petroleum operations of that contract area.

(e) The rate of tax applicable to a contractor's share of the profit oil is the standard corporation rate tax of 30%.

Other forms of revenue under the Upstream Act and the PSAs include:

(a) Royalty, the extent of which is included in the PSA
(there being no specific level stated in the Upstream Act);

(b) Annual fees including acreage rental and training and research fees as may be prescribed in the Petroleum Regulations;

(c) Signature bonus; and (d) Discovery bonus.

Please outline the procedure to apply to the Government for an interest in a Licence in your country. Please include details of cost and timing for obtaining such interest.

The Minister is required first to announce areas open for bidding for an exploration licence by notice published in the Gazette and a newspaper of national and international circulation. The bidding process must be carried out in a fair, open and competitive manner in accordance with the Public Procurement and Disposal of Public Assets Act, 2003. In exceptional circumstances, the Minister is permitted to receive direct applications for an exploration licence including: (i) where there are no applications received in response to an invitation for bids for an area; (ii) applications in respect of areas that are adjacent to an existing licensed reservoir; and (iii) promotion of national interests.

Any party affected by the proposed exploration activity is given an opportunity to lodge, with the Minister, an objection to the grant of the exploration licence, setting out the grounds of the objection.

An application for an exploration licence must be submitted in writing and must: (i) contain the name of the body corporate, place of incorporation, the names and nationality of the directors, its share capital, and the names of holders of more than five percent of the issued share capital; (ii) identify the block or blocks in respect of which it is made (it should be in respect of not more than 10 blocks); (iii) be accompanied by a statement giving particulars of work and the minimum expenditure proposed for the blocks over which the Licence is sought; (iv) give information on the financial status and the technical and industrial competence and experience of the applicant; and (v) be accompanied by a statement giving particulars of the applicant's proposals with respect to the employment and training of citizens of Uganda.

The Minister is required, within 60 days of receipt of the application for the exploration licence, to confirm to the applicant in writing that its application is complete in all respects.

The applicant shall be required: (i) to make arrangements as may be satisfactory to the Minister for the execution of a bond or other form of security for the

performance and observance of the conditions to which the Licence may be subject; and (ii) to take the necessary insurance policies to protect against liabilities that may arise as a result of activities done under the exploration licence.

The Minister is required to consult with the Petroleum Authority on an application and to process the application within 180 days of receipt of the application.

The Minister may grant the exploration licence after consultation with the Petroleum Authority and with the approval of the Cabinet.

The application must be accompanied by a prescribed fee. The fees are to be prescribed in the Regulations made under the Upstream Act.

The holder of an exploration licence who has made a discovery of petroleum in an exploration area shall have exclusive right to apply for the grant of a production licence over any block or blocks in that area which, following appraisal, have been shown to contain a petroleum reservoir or part of a petroleum reservoir.

The application for a production licence must be made within two years of the date on which the technical evaluation of test results was submitted to the Minister or other period as may be stipulated in the PSA. The application for grant of a production licence shall be made to the Minster in a prescribed form and must be accompanied by the prescribed fee. The application must also be accompanied by:

A report on the petroleum reservoir;

A field development plan;

Any relevant information that the Minister may reasonably require, including information relating to alternative proposals for development and production not included in the development plan; and

Any other information that the applicant may deem necessary.

customary duration of the relevant Licence

An exploration licence, unless otherwise determined by surrender or cancellation, shall remain in force for the period stipulated in the Licence, which shall not exceed two years after the date of the grant. It may be renewed for a further period of two years, but the Licence shall not be renewed more than twice. A production licence shall remain in force for the period for which the application has been

made but not exceeding 20 years from the date of the grant and for any period for which the Licence is renewed under the Upstream Act.

Recovery of carry costs.

The Upstream Act contains provision on the right of the Government to participate in petroleum operations. It provides that the Government may participate in petroleum activities through a specified participating interest of a Licence or contract granted under the Upstream Act and in the joint venture established by a joint operating agreement in accordance with the Licence and the Upstream Act. The Minister shall, with the approval of the Cabinet, specify the Government share under this section.

Assignment

Under the Upstream Act, an exploration or production licence shall not be transferred without the written consent of the Minister in consultation with the Petroleum Authority.

The requirement to obtain the Minister's consent also applies to any direct or indirect transfer of interest or participation in the Licence, including the assignment of shareholdings and other ownership shares which may provide decisive control of a licensee possessing a participating interest in a Licence. Control in relation to any person is defined as the possession, directly or indirectly, of the power to direct or cause the direction of the management of the licensee by that person, whether through the ownership of shares, voting, securities, partnership or other ownership or participation interests, agreements or otherwise.

The Upstream Act does not contain timing requirements and costs of obtaining such regulatory approval. These are to be prescribed under the Petroleum Regulations. Subject to the PSA, there are no preemptive rights reserved to the Government in the event of a proposed assignment of an interest held under a Licence.

parental guarantees and other economic supports commonly are required to be provided by oil and gas companies. Under the Upstream Act, the Minister shall require an applicant to make arrangements, as may be satisfactory to the Minister, for the execution of a bond or other form of security for the performance and observance of the conditions to which the licence may be subject; and the applicant is required to take the necessary insurance policies to protect against liabilities that may arise.

Since PSAs that have been signed by the Government are not available to the public we are unable to comment with certainty on how commonly such guarantees are requested.

Licence regime in the western world. A comparative analysis.

Licensing in the United Kingdom

In the United Kingdom, the authority which grants exploration and extraction licences is the Department of Energy and Climate Change (DECC) (Petroleum Act 1998). The licence takes the form of a deed under which the licensee is bound to observe the conditions of the licence. Secondary legislation contains these conditions (known as model clauses), governing issues such as the grant of rights, implementation of development plans, working methods, measurements and work programmes and the relinquishment of a certain proportion of the licence area. The actual terms vary across licensing rounds and depend partly on the assessment of the expected environmental impact of the extraction activities. Instead of royalties, UK licences currently require the payment of an annual charge (also known as a rental).

DECC currently issues two types of offshore licence: the exploration licence and the production licence. An exploration licence allows the licensee to carry out seismic surveys in a particular area and to undertake shallow drilling. Offshore exploration licences are usually granted for a period of three years, with the possibility of extension for a further three years.

Under a UK production licence, an IOC has the exclusive right both to explore for and exploit hydrocarbons in the geographical area covered by the licence. Separate consents are required prior to drilling and development. Three different types of production licences are issued, depending on the characteristics of the particular fields. Traditional licences the most common type apply to wellknown, nottoodeep areas and applicants with proven technical and financial capabilities. 'Promote' licences are designed to enable smaller companies to obtain a production licence before proving those capabilities the IOC is required to pay only 10% of the traditional fee in the first two years and is able to bypass some of the more stringent licensing requirements, thus allowing new players to join the search for hydrocarbons more easily. Lastly, 'frontier' licences are intended to encourage exploration in areas that are remote or in deep water. The IOC is required to pay only 10% of the traditional rate, but then has to relinquish 75% of the licensed area after the initial exploration. The onshore licensing regime is similar to the offshore licensing regime.

Currently, three types of taxes apply to hydrocarbon activities in the United Kingdom:

- *The ringfence corporation tax*: With some modifications (in relation to capital allowances and losses), this is the normal UK corporation tax with the exception of a ringfence and a 100% firstyear allowance for almost all capital expenditure. The purpose of the ringfence is to prevent taxable profits from hydrocarbon extraction being reduced by losses from other activities or by excessive interest payments. However, losses from ringfenced activities can be relieved against profits from nonringfenced activities (as well as against ringfenced income) provided that, but for the existence of the ringfence, the nonringfenced and ringfenced activities would comprise a single trade.
- *Supplementary charge*: Since April 2002, there has been an additional charge on a company's ringfenced profits, without deducting costs of debt finance. The supplementary charge is currently 20%, bringing the effective tax rate on ringfenced activities to 50%.

- *Petroleum revenue tax*: This is a fieldbased tax applicable to profits arising from the exploitation of hydrocarbon fields for which development consent was given before March 15 1993. Profits for petroleum revenue purposes are based on the excess of the proceeds from the disposal of oil from the field over that field's expenditure. The current rate is 50% and it is charged prior to corporation tax and is deductible for the purposes of calculating the ringfence corporation tax and the supplementary charge.

  The tax regime which applies to any UK hydrocarbon field depends on the date on which development consent was received, because:
- fields which received development consent before March 16 1993 are subject to the petroleum revenue tax, the ringfence corporation tax and the supplementary charge; and
- fields which received development consent on or after March 16 1993 are subject only to the ringfence corporation tax and the supplementary charge.

STABILIZATION CLAUSES.

A comparative study of the ancient and the modern operation of stabilization clauses.

Oil and gas projects are, by their very nature, long term particularly those that are offshore and in locations remote from markets. They are also capital extensive with large sunk costs. The main expenses incurred in the initial stage of investment relate to exploration and development; the bulk of such expenses cannot be recovered if the economics of the project change at the time of production and commercialization because of changes in domestic laws. There is also a significant time lag, often of several years from the initial discovery of oil or gas reserves to the time of first production. Payback on the initial exploration investment can take decades.

The lengthy planning horizon for both government and companies means that dynamic aspects are more important than they are in most other industries (Osmundsen, 2008). Time creates the time/dynamic inconsistency problem, which occurs when a government starts with a specific policy but, after conditions

change, finds it welfareincreasing to go back on the commitment implied by the policy (Daniel and Sunley, 2010). Companies will then face, in addition to technical and commercial risks, the political risk, which is the chance that any entity of the host country with executive, legislative, administrative, or regulatory power may take any act or measure with a negative effect on the investors' legitimate interests (De Macedo, 2011).

The longterm and capitalintensive characteristics of investment in the international oil and gas industry underline the vulnerability of the foreign investor to unilateral alteration of the petroleum contract by the host government at some point during the life of the contract (Cameron, 2006). Furthermore, the involvement of the state as the sovereign owner of the resource and as a contracting party in a petroleum contract always raises the possibility of unilateral change or premature termination, by virtue of the state's sovereign legislative power (Faruque et al., 2006).

Although the principle of pacta sunt servanda, or strict sanctity of contract, is widely accepted, under no legal system has the principle been found to be absolute, and contractual rights can be expropriated (Daniel and Sunley, 2010). In an attempt to neutralize the political risk, investors typically push for a legally binding guarantee, in order to safeguard the terms that were originally agreed upon for the duration of a project and to protect their investment from the unilateral exercise of state power aimed at changing the terms of the contract by legislation or administrative discretion.

A stabilization clause is a contractual riskmitigating device to protect investments from variations in the legal environment. This would include risks deriving from a possible exercise of host state sovereignty such as: expropriation, the obsolescence bargain, or any other change which the government might utilize in order to impose new requirements on investors.[310]

The *stabilisation clause* is essentially a phenomenon of longterm state contracts, in contrast to private contracts, commercial contracts and shortterm state contracts,

[310] (Jardim, 2011).

which are not usually vulnerable to political or regulatory risk (Faruque et al., 2006, p. 317).

According to Johnston (2010), stability provisions are vital to the petroleum industry; without them, the scope and effectiveness of petroleum agreements are often limited.

Oil companies are so vulnerable to potential changes in fiscal terms that they behave much more conservatively if they cannot limit this risk. Conversely if they can mitigate, reduce or eliminate certain elements of risk they can be more aggressive in their investment efforts (Johnston, 2010, p.5).

Shemberg (2009) brings in the lenders' perspective, arguing that these stakeholders often view stabilization clauses as essential to the bankability of a project, particularly in emerging markets; they may insist that at least the fiscal terms of an agreement should be stabilized.

While fiscal changes can be expected in any oil and gas resourcerich country, there is asymmetry in their advocacy. Typically, the call for fiscal stability is made when companies fear an increase in tax, but it is less of a concern if there is a prospect of tax reductions. In other words, this tends to be a oneway argument and, in many respects, the desire for fiscal stability amounts to industry urging governments not to raise taxes.

Rationale for stabilization provisions.

One of the curiosities of stabilization clauses is that no developed country will offer them to investors (Erkan, 2010). Developing countries tend to negotiate individual contract terms, whereas in the OECD the content of contracts or licences is scarcely affected by any negotiations between IOCs and host governments, since the terms on offer are largely standardized (Cameron, 2006).

The nature of political risk is clearly different between developed and developing countries, as the latter include some of the world's most unpredictable and unstable countries beset with political and economic crises and potentially laden with a history of coups and countercoups (Nwaokoro, 2010). Blitzer et al. (1985) argue that while fiscal uncertainty is universally present, IOCs give it a greater

weight when considering investing in developing countries where political instability and reaction to possible windfalls have traditionally led to adverse changes in the contractual relationship.

However, according to *Cameron (2006),* the political risk alone is an insufficient condition for assessing the usefulness of fiscal stabilization provisions; it should be combined with the geological risk. Experience shows that where geologic prospectivity is high enough, the IOCs have been generally willing to risk capital on exploration according to terms that afford them a much lower degree of security of investment than is demanded by the community of international financial institutions (Alexander, 2010). Countries like Norway, with a good track record in dealing with IOCs, hence with a low political risk, do not offer stabilization provisions; others (such as Saudi Arabia and Brazil) follow suit despite the high political risk, because the perception of geological risk is low.

Bilder (2011), in a similar vein, argues that stabilization mechanisms seem to be more prevalent when there is a combination of both high geological and political/regulatory risk. In countries where the arrangement is sufficiently profitable, there is no perceived need for stability clauses. Developing countries, like Nigeria and Angola, with a wellestablished petroleum sector, do not offer stability provisions. Further, according to Johnston (2010), many of the countries that do not provide stability mechanisms have relatively low political, geographical, currency, or financing risks and are less likely to feel the need for added stability. These arguments can be linked to the bargaining power of respective players. As put by Erkan (2010), stability clauses are typically offered by governments in a weak bargaining position.

Developing countries also offer stability provisions to attract investment in the oil and gas sector, whereby contractual stability is used as a bargaining chip to increase the country's credibility in international markets and to compensate for existing risks. This issue, however, is debatable given the myriad of factors that affect the political and financial risks of investment in the oil and gas sector. These include, among others: political stability; private property and expropriation laws

and the country's track record in upholding these laws; capital control laws; and the level of corruption in the political system and in the public service.

Companies are reluctant to invest where the weakness of their bargaining position may be exploited, resulting in underinvestment. A credible assurance not to change tax terms once investment has been committed should, in principle, raise the level of investment (Daniel and Sunley, 2010). The presence of stabilization mechanisms in a petroleum contract can act as a psychological boost, giving confidence to investors at the initial stage of the investment, and can thus have an important 'market function' in developing countries.[311]

Another factor used by developing countries to justify offering stabilization is tax competition, which has increased over the past two decades in light of increased globalization and integration of the world's economies. Approximately 150 host countries compete for capital from IOCs and the list is growing as new discoveries are made and unconventional oil and gas resources are further exploited. Developing countries therefore accept stabilization clauses in order to gain an economic advantage in attracting foreign investment in the petroleum sector.[312]

Checkol (2008) contends that stability provisions are not merely designed to meet the needs of the investors alone. Host governments zealously vindicate public interest by ensuring a stable flow of returns from exploitation of scarce resource. Similarly, Johnston (2010) argues that stabilization mechanisms enhance a government's ability to attract companies, adding that such provisions are supported by economic logic and imperative, promoting the alignment of interests between the oil companies and host governments. The author adds that stability provisions facilitate oil company efficiency and performance, which is typically in the best interests of the government.

Cameron (2006), however, states that, whatever its attractions to IOCs, a stabilization clause is not a mandatory requirement for a host government that seeks to attract investment into its petroleum sector. Daniel and Sunley (2010) argue that the need for a fiscal stability clause is less compelling under certain

[311] (Faruque et al., 2006).
[312] *(Faruque et al., 2006).*

conditions: a history of sound fiscal management, statutory and effective corporate tax rates in line with international rates, low tariff rates, nonimposition of taxes that distort investment and production decisions (such as asset taxes, excises on machinery), nondiscrimination between domestic and foreign investors, a low level of corruption, a transparent tax policy process, and a reasonably efficient tax administration. This explains why most developed countries, unlike developing countries, do not grant fiscal stability clauses in their petroleum agreements.

Stabilization Mechanisms

Stabilization clauses are not a new phenomenon. Their use dates back to the 1930s (Paasivirta, 1989). Investors originally attempted to neutralize governments' power by introducing stabilization clauses in new contracts with host states in the then new oil provinces of the Middle East; such clauses then became common practice in other world regions (Erkan, 2010). The essential goal of such provisions was to ensure that the concession contract remained in force throughout the period stated in the contract (Cameron, 2006).

From the 1950s to the 1970s, the thrust of stabilization clauses in petroleum contracts was to act as a defence against expropriation. The period up until the early 1980s was characterized by highly confrontational revisions of petroleum contracts and nationalizations of oil and gas assets, which triggered several arbitral awards.

In the 1980s and 1990s, stability provisions evolved and proliferated (Johnston, 2010). Since then, two patterns of behaviour are discernible: some countries chose not to provide commitments on contract stability at all, while those who offered them provided different forms of mechanisms in terms of coverage and flexibility (Cameron, 2006). Accordingly, stabilization provisions can be grouped into two categories: classical and modern.

Classical stabilization mechanisms

The common types of stabilization tools under this category include:

- **Freezing clause**: also referred to as stabilization clause stricto sensu in the legal profession. It provides that the governing laws general and special applicable to operations under a contract between a company and a sovereign state should be those of the state at the time the contract was executed. In other words, it intends to guarantee that the future laws of the host state will not affect the contractual relationship. Freezing typically covers all tax policy changes that could affect the tax situation of an investment project (and hence its profitability), whether or not such taxes are included in the contract.
- **Intangibility clause**: provides that the signing country may not modify or terminate the contract unilaterally. • 'Good will' clause: the contract shall be performed consistently with 'good will' or 'good faith', hence the clause precludes unilateral modification or termination of the contract. According to Coale (2003), the main difference between intangibility and good will clauses is the scope they provide for interpretation in case of litigation.
- **Hybrid clause**: includes both freezing stricto sensu and intangibility; its aim is to protect against destabilization and unilateral actions.

These classic mechanisms have, however, come under criticism: since their aim is to neutralize the state's power, they are seen as incompatible with the state's permanent sovereign power, which cannot be limited to contractual mechanisms. Authors such as Cameron (2010) describe these categories as taking a narrow perspective. As put by Dias (2010), for some, the traditional forms of stabilization are seen as the limits of nonalienation of State prerogatives, or as selflimitation of its legislative competences. Others, like Adaralegbe (2008), however, argue that the state cannot rely on the doctrine of sovereignty as justification for its unilateral repudiation of a stabilization clause.

Another difficulty with these mechanisms is their sheer administrative complexity; if a government concludes oil and gas contracts containing such legal clauses at different points in time, then it has to apply to each project the law existing at the time of concluding the contract (Maniruzzaman, 2008). The administrative processing becomes considerably complicated, since for each investor a customized legal and fiscal regime applies. The tax authority ends up

administering different tax procedures and forms, which could become quite complex with the accumulation of contracts.

Modern stabilization mechanisms

Freezing clauses have largely fallen out of use, in favour of more modern 'Economic Equilibrium' clauses (Shemberg, 2009), since the exercise of sovereign authority by the host state cannot be completely restrained by virtue of a classic stabilization clause. These more modern techniques have been developed in ways that respect this reality, while at the same time protecting the economic equilibrium of the contract (Maniruzzaman, 2008). Such techniques include elements of balancing, negotiation, or a combination of these with 'freezing' of some of the contract terms.

Economic Equilibrium or Rebalancing Clauses are perhaps the most familiar modern stabilization mechanisms. They aim to keep the same financial position the economic equilibrium of the investor as provided by the contract on the date it was signed and therefore provide protection through a renegotiation mechanism. They stipulate that the investor comply with new laws but also require that the investor (or 'it') be compensated for the cost of complying with them so that it remains in the same economic situation it would have been in had the laws not changed. Compensation can take such forms as: adjusted tariffs, extension of the concession, tax reductions, or monetary compensation, but exemptions are not specifically mentioned in the contract (Alexander, 2010). Under such clauses, the state's exercise of sovereign authority is not contractually barred but is counterbalanced by the requirement to undertake renegotiation to rebalance the same economic equilibrium initially agreed between the parties.

Economic Equilibrium clauses come in different types the difference being the way in which the economic equilibrium of the contract is reestablished. They can be either stipulated economic balancing (automatic adjustment); nonspecified economic balancing (does not stipulate the nature of the amendment); or negotiated economic balancing (parties negotiate how to restore the balance).

The popularity of economic rebalancing clauses in the oil and gas industry resides in the fact that if the state's unilateral acts adversely affect the contract, the available remedies could be more favourable than under the freezing clauses. The breach of a freezing clause may result in only lump sum damages, which could be far below what the company considers would be necessary to 'keep it whole'. Under an economic balancing clause, however, the government would have to indemnify on an ongoing basis (Maniruzzaman, 2008). Bilder (2011) adds that freezing clauses may deprive an IOC of potential beneficial changes. Shemberg (2009), however, argues that if formal claims result in monetary compensation, the impact of these two types of stabilization clauses would be similar, except that economic equilibrium clauses only formally require good faith negotiations of the parties in the event of a dispute, it is unclear how these clauses would be enforced and whether they would potentially result in monetary compensation.

One of the key issues with economic rebalancing is how to define the threshold that would trigger renegotiation (if the adjustment is not automatic). In a very small number of contracts, the trigger is specifically defined. More commonly, the following terms are used: 'material change', 'adversely affected', 'significantly affect', 'materially affect', 'materially adverse effect', 'profound changes in circumstances', or 'material adverse change'. These, however, may be prone to conflicting interpretations in different contexts (Maniruzzaman, 2008) and the outcome, in case of a dispute, depends on the drafting (Bilder, 2011).

Furthermore, these clauses seem even more complex to administer than freezing, since they require the calculation of two tax results in order to determine the amount of compensation: one under the postchange system and one under the system at the time the contract was signed.

Variations

According to *De Macedo (2011),* the three main features of a typical stabilization clause are:

i) the precedence of the agreement over any following provision passed by the host country damaging the investors' interests (intangibility);

ii) the impossibility of changing the contract terms without previous consent of the other party, usually to be given in writing; and

iii) the legislation and regulations that apply to the contract are those in force at the moment the contract is signed.

While many would argue that freezing clauses are outdated and are not in use anymore, in practice, many stabilization clauses can be described as hybrids since they carry aspects of both freezing and economic balancing provisions. Like economic equilibrium clauses, hybrid clauses do not make investors automatically exempt from new laws but (more like freezing clauses) they explicitly include the granting of exemptions from laws as one way of ensuring that the investor is not financially impacted by the new laws (Shemberg, 2009). In other words, such clauses aim to restore to the investor the economic benefit originally established in the agreement, and to exempt the contract from any future law enacted.[313]

Stability clauses may also vary with the period they cover. The host country can grant stability provisions for an initial period of years of operations (say 10 years) or for the entire contractual period. The coverage can also differ. Stability provisions may cover specific fiscal laws, or certain provisions (such as tax and royalty rates), or follow an 'all inclusive' approach (broad legal and fiscal laws including environmental laws as well as labour legislation, companies and exchange control regulations). It is, however, preferable to limit the FSC to direct taxation: corporate tax, royalties, and other resource specific taxes such as rent taxes. In fact, the inclusion of all indirect taxes and fees in the FSC could send a signal to investors that the indirect tax system is detrimental to investment in general and needs to be reformed.

Given these variations, Shemberg (2009) distinguishes between full freezing clauses (which aim at freezing all laws for the entire duration of the project) and limited freezing clauses (which aim at protecting the investor in a more restricted frame of reference). The same can be said of economic equilibrium clauses which can aim at either:

[313] (Guirrugo, 2014).

- *full economic equilibrium protection against the financial implications of all changes of law, or*
- *limited economic equilibrium having some limitation on the application of the clause designed on the face of the contract. For example, requiring that the investor incur a certain amount of financial loss before compensation is due, or, for some types of new laws (like laws protecting health, the environment, individual safety, or security) compensation will not be due*

Perhaps one of the most powerful fiscal stabilization mechanisms, although one that tends to be overlooked, is 'Paid on Behalf' or 'Paid in Lieu', typically in Production Sharing Contracts (PSCs). In some jurisdictions, the state wishes to lift a greater share of the physical production, rather than receiving taxes in cash in such cases it is common to see royalty payable in kind. Some countries with PSC regimes go still further and include a requirement for the NOC, or another government body, to pay income tax on behalf of the PSC contractor. This is achieved by the state retaining an additional share of the production from a field. The tax is then discharged by (usually) the NOC which 'pays the taxes on behalf of the IOC', and still determines its tax liability, according to current policy, regulations, and administrative norms, but deducts it from the government share of revenue. According to Johnston (2010), contracts with these provisions are considered to be some of the most stable arrangements in the world, since they significantly limit fiscal manoeuvring and protect IOCs against increasing tax rates. The author adds that some experts in the industry believe that having taxes in lieu trumps even a freezing clause. It could be argued that because fiscal terms are fixed upon the signature of a contract between government and contractor, contractual systems like PSCs offer a more stable environment than the concessionary systems. However, many concessionary regimes around the world have been relatively stable, though these are generally those with high government take.

- Full Freezing Clauses freeze both fiscal and nonfiscal law with respect to investment for the duration of the project. Exemptions are required. Limited

Freezing Clauses freeze a more limited set of legislative actions. Exemptions are required.

- Full Economic Equilibrium Clauses protect against the financial implications of all changes of law, by requiring compensation or adjustments to the deal to compensate the investor when any changes occur. Limited Economic Equilibrium Clauses protect against financial implications of some limited set of changes in law or after specified costs are incurred. They require compensation or adjustments to the deal to compensate the investor only when the covered changes occur.
- Full Hybrid Clauses protect against the financial implications of all changes of law, by requiring compensation or adjustments to the deal, including exemptions from new laws, to compensate the investor when any changes occur. Limited Hybrid Clauses protect against financial implications of some limited set of changes in law or after specified costs are incurred. They require compensation or adjustments to the deal, including exemptions from new laws, to compensate investor only when the covered changes occur.

EFFECTIVENESS OF STABILIZATION CLAUSES;

A case study of the western world.

Despite the popularity of stabilization clauses, their practical value to oil and gas companies is questionable, particularly when the fairness of fiscal regimes is so often called into question. This section analyses the arguments put forth by other authors; the analysis is complemented by opinions from a small group of industry experts, who were invited to comment by drawing on their experience.

To be valid and legal, stabilization clauses must not be in conflict with any constitutional and legislative requirements. The granting of stability provisions that conflict with national law do not receive the protection of international law (Daniel and Sunley, 2010).

While authors like Mato (2012) argue that stabilization clauses are the major means of investment protection at the disposal of oil companies, other authors like

Dias (2010) believe that despite such mechanisms, host countries will still proceed with their nationalization policies, under the aegis of the permanent sovereignty over natural resources principle, and challenge their previous commitments if they find it lucrative to do so. According to De Macedo (2011), the use of stabilization clauses in state contracts should, in theory, restrain the host country from adopting unilateral measures of this sort (which have such detrimental consequences on the investors' interests); this, however, could not be further from the truth. A minority of the industry experts interviewed felt that companies would be unwise to place faith in such clauses, as governments could ignore them (and have ignored them in the past).

Cameron (2006) argues that freezing has proved to be of little value in resisting expropriation, although it may have helped investors to secure an exit on better financial terms than they would have otherwise obtained. The author further adds that the effectiveness of the more flexible modern clauses has not yet been the subject of review by arbitral tribunals. According to Alexander (2010), however, even if the IOC is successful and 'wins' an arbitral award, it may find it impossible to 'execute' (monetize) an arbitral award against the host country.

Daniel and Sunley (2010) argue that because of the lengthy planning time for oil and gas projects, which far exceeds the life expectancy of most governments, tax stability in particular is difficult to achieve. While governments may be able to make commitments of their own, they cannot bind the legislative competence of the State into the future. Taxes 'Paid on Behalf' can offer some protection, but this is limited to changes in taxes and/or royalties only. For this reason, Johnston (2010) argues that having both this kind of mechanism and other forms of contractual stabilization should provide greater stability than having just one of these elements.

Meanwhile, authors such as Bilder (2011) observe that many petroleum contracts do not have stability mechanisms, yet IOCs continue to invest. The author refutes the argument that this issue is a deal breaker, knowing that investors expect the fiscal and regulatory regime to be adjusted occasionally. After all, it is difficult for a fiscal arrangement to envisage all possible economic outcomes.

Mansour (2004), however, argues that FSCs appear to be superior to tax exemptions and tax holidays as a mechanism to deal with the peculiar nature of natural resource industries where governments lack the credibility to provide a stable general tax environment. In this situation, FSCs could achieve stability and attract the same level of foreign direct investment at a lower revenue cost to the host country. Nevertheless, their major shortcoming lies in their strength: they reduce control over tax policy and, to some extent, over fiscal policy, particularly in countries where corporate taxes (income and royalties) account for a significant share of tax revenues.

Industry experts consulted for this paper endorsed the idea that stability clauses had at least some worth, noting that while protection was not guaranteed, clauses were generally respected and might serve as a deterrent. Once such provisions are invoked, relations between the government and the company, or companies, in question deteriorate, perhaps irretrievably. Taking a government to court/international arbitration can mean that the company in question has little future in the country. This may be acceptable if the company is planning on exiting its assets in the country, but in basins with large hydrocarbon potential it is unlikely that companies can afford to do so. In most circumstances, the industry acquiesces, or uses the threat or risk of potential invocation of the stability clause to help negotiate a compromise outcome. Some would argue that the real value of a stability clause lies in the government's belief that the investor may be prepared to activate its provisions. This may be regarded as an inducement for appropriate conduct from all parties concerned.

The IMF (2007) concludes that, on the one hand, stability clauses can be administratively cumbersome, limit tax policy flexibility, and impair the legislature's normal authority to pass fiscal legislation. On the other hand, they may be necessary in highrisk environments and can increase the overall government take if they reduce investor risk premium. They may also make tougher policies elsewhere in the regime more acceptable than they would be otherwise. In fact, some countries provide stabilization provisions at a premium. Papua New Guinea's former Prime Minister, Sir Michael T. Somare,

recommended that a stabilization guarantee should be provided at a premium of 2 per cent for a period of 10 years, as quoted in Johnston (2010).

Chile provides fiscal stability as an option to foreign investors who may opt to pay an overall tax rate of 42 per cent of taxable income for 10 years, effective in the year incomegenerating activities start, instead of 35 percent (20 years for investments exceeding US$50 million). In April 2003 South Africa proposed a similar stability for royalties. Investors may elect to stabilize royalty rates for 30 years by paying, in addition to the regular rate which varies between 1 and 8 per cent depending on the resource extracted, the minimum of an additional royalty of 1 per cent, or 50 per cent of the existing royalty liability. A unique feature of both the Chilean and the South African stability mechanisms is that they do not discriminate against those investors who do not opt for fiscal stability; these investors are treated similarly to domestic investors. This is an important design element since it ensures a level playing field between domestic and foreign investors, as well as between foreign investors competing for the same resource. In this sense, contrary to prevailing wisdom, it may not always be in the industry's best interests to press for greater stability. The removal of fiscal risk in exchange for a higher level of government take may not be the optimal bargain from a shareholder perspective. In Alaska, in 2005/6, the oil industry sought to lock in the fiscal terms for 30 years, to permit a gas export project to proceed (this would cost close to US$30 billion to construct over 10 years, before the first export could be secured). Fiscal stability was deemed essential so as to remove the fiscal uncertainty for such a giant project, particularly given

Key Features of Stabilization Mechanisms

The data analysis reveals a number of key features about stabilization. First, all countries (except Trinidad and Tobago) offer it explicitly in their laws or contractual agreements, but Papua New Guinea is the only country that provides stabilization through an Act specifically dedicated to the issue, rather than including it in petroleum laws or PSAs.

Trinidad and Tobago's 2000 PSC provides only that the contract cannot be modified in any way except by agreement of the two signing parties, and a 2013 model PSA states that the model supersedes the Petroleum Act and Regulations on matters specifically addressed in the model. Since the Petroleum Act and Regulations contain no fiscal terms, we can presume that the laws of Trinidad and Tobago, including the tax laws, apply to oil and gas production without any stabilization.

The case of the 2000 PSA, however, highlights the other means by which investors and governments can obtain the same (economic) result as would be provided by explicit fiscal stabilization: when one party demands renegotiation of the contract following a major policy change or exogenous shocks that affect its share of the oil rent. Renegotiation is a main feature of PSAs, even where governments provide fiscal stability. Such a redundancy is a manifestation of the incomplete nature of contractual agreements, especially in a complex sector where multiple domestic and international laws interact. However, the 2013 PSA does not provide for similar renegotiation, except in the case of force majeure which includes only wars and natural disasters.

Second, the majority of countries cover all taxes and levies on the sector in their fiscal stabilization. This coverage is not provided explicitly, but rather implicitly by reference to various (arguably, economically equivalent) notions of 'benefit' (more on this below). Azerbaijan's PSA refers explicitly to tax laws (or any other laws containing tax provisions) being subject to stabilization. Papua New Guinea lists specifically the taxes covered by its stabilization act. Uganda is the only country that limits stabilization to income taxes, in a 2012 PSA.

Third, the majority of stabilization mechanisms are drafted broadly by reference to various notions of benefit, such as: 'economic equilibrium', 'economic balance', 'original situation of the parties' (at the time of negotiation), 'economic benefits', 'commercial and fiscal benefits', and 'balance in the interest of the parties'. It is difficult to assess whether these notions are legally equivalent, but economically they seem to refer to the share of the parties from the oil rent. In certain countries, reference is made to the relative shares of the parties, while in others only the oil

company's share is stabilized. In the first case, stability is usually symmetrical in other words it preserves the share of government if policy changes cause a reduction in this share.

Only three countries provide stability by freezing applicable laws at the time of the contract signature (Ghana, Côte d'Ivoire, and Papua New Guinea). However, the last two countries' clauses are from old/dated PSAs, and therefore may not be relevant today. Ghana changed its stabilization clause from a broad mechanism similar to those described in the previous paragraph, to a freezing type, which is a rare exception, since the trend over the period covered seems to have been moving in the opposite direction.

Fourth, one important and little known characteristic of stabilization mechanisms is that they do not always just cover tax policy parameters (an endogenous variable to government). Some, like Angola, extend coverage to exogenous shocks which presumably relate to market conditions, but can be anything that affects the return on investment. Fiscal stability in this case inherently contains an element of renegotiation.

Finally, it is interesting to note that despite the fact that all stabilization mechanisms reviewed in this section appear to have the same objectives for governments and investors, they are written in varying legal terms and lengths. It is not clear why this is so; country legal practices may be at play, with some favouring more detailed provisions, while others leave details to regulations and interpretations. Whatever the reasons for these differences, they raise the issue of enforcement of such provisions when they are invoked.

Trends and Implications for Governments and Companies

Among the 20 countries reviewed, changes over the last 15 years were documented only for 10 countries. We were not able to obtain information for the beginning and the end of the period covered for all countries. Therefore, changes

over the period may not reflect general practice in developing countries. We can draw the following observations.

The most important, and perhaps obvious, observation is that stabilization clauses are still widely provided in developing countries, and are here to stay for the foreseeable future. Moreover, there is no indication that there has been a tightening of such clauses by restricting them to certain taxes, or by limiting the time period of their application (Uganda and Trinidad and Tobago are exceptions). However, as noted earlier, and discussed in more detail below, stabilization is increasingly symmetrical.

These results are consistent with the opinions of industry experts, who were generally of the view that companies seek stabilization mechanisms mainly for the potential financial benefit they provide (protection against governments increasing taxation once exploration yields positive results), and that they usually push for stabilization of all fiscal terms.

Stability has become more focused on outcomes typically measured as the economic benefits of the parties involved in a contract rather than on tax policy parameters to be stabilized. The latter type lists specifically the taxes that must remain constant during an agreed period. The former type abstracts from any changes in taxes, and focuses only on the results that such changes may have on the economics of a project.

This significant evolution of stabilization mechanisms poses a number of questions and implications.

First, the change in the type of stabilization is probably an indication that classical models, mostly of the freezing type, have not been successful in practice, which is confirmed by the literature review in earlier sections. A number of reasons can explain this, including:

- *the difficulty in defining an exhaustive list of taxes to be stabilized;*
- *the definition of a tax as opposed to other forms of levies, or even nontax regulations that have an equivalent impact on a project;*
- *the fact that taxation in developing countries is often scattered across various government departments and government levels, which compete for a share of the*

oil rent with little coordination, due to institutional weaknesses (this latter issue is particularly acute in the natural resources sector).

Second, the more modern clauses are more likely to treat changes in fiscal terms symmetrically and may be equally beneficial to governments and oil companies, unlike freezingstyle clauses which are frequently biased in favour of the latter. Hence, a reduction in tax rates, when applied across the board, need not apply to oil and gas extraction, since the 'economic balance' which was originally agreed on in the contract needs to be maintained. This contrasts with asymmetrical FSCs that allow companies to benefit from general tax reductions that bring their tax liability below the initially agreed level. Such older mechanisms would thus provide the best of both worlds for oil companies: an insurance against tax increases, and a free call option to buy tax decreases when they occur.

The implication of keeping a balance of the financial interests of the parties means that the government can change the tax mix to improve incentives without changing the total tax take. This could be desirable for efficiency reasons; for example, higher taxes on profits or rent can substitute for customs duties on intermediate inputs, or royalties, thus reducing distortions to investment without compromising revenues. For example, during recessions or crises, when prices fall steeply, governments may choose to decrease royalties in order to reduce the disincentive to abandon projects. Or if prices go up to unexpected levels, government may introduce a surcharge on profits (assuming the tax system does not capture oil rent accurately). Over the life of a project, these changes could be neutral on government revenues while providing the right incentives for investors.

Third, the advantages of the more modern style of stabilization could extend beyond the oil and gas sector, and have linkages to the general tax system, especially where elements of such systems apply to the oil and gas sector. This is particularly the case for corporate income tax (CIT), which has declined across developed countries over the past 20 years, driven by two factors: tax competition among countries to attract foreign direct investment; and policymakers' desire to reduce distortions in capital income taxation by broadening the CIT tax base and reducing rates. The trend toward lower CIT rates and broader bases has, however,

been much slower in developing countries, in particular in resourcerich countries where CIT applies to the oil sector (for example in the oilrich central African countries). In these countries, CIT is a major contributor to the total tax take from the oil and gas sector; a reduction in its rate could have significant consequences on revenue from the sector, with few or no implications for foreign direct investment, given the immobility of natural resources. Asymmetric stabilization may explain, at least partly, why some of these countries did not reduce their CIT rates as fast or by as much as other countries. Modern stabilization clauses can allow policymakers to consider the overall tax system and its impact on revenue and growth, without worrying about the specific impact on the oil and gas sector, and without penalizing investors in the sector.

Countries that have not been able, for various reasons, to change their stabilization clauses to make them symmetrical (particularly in the case of traditional freezing) could obtain the same result by delinking the taxation of the resource sector from that of the general economy: for example, the CIT rate can be specified for the resource sector, separately from the rest of the economy. This, however, would not solve the issue of stabilization of other fiscal parameters, such as royalties.

Nevertheless, and in line with the analysis carried out in earlier sections, outcomebased stability (economic balancing/equilibrium) is more complex to administer than freezingstyle mechanisms. Complexity derives from various sources.

First, the fact that the policy tools subject to stabilization are not identified implies that the parties must know the outcome at any point in time (although the main ones such as income taxes and royalties, or calculation of production shares are usually known and easy to identify). This in turn means that governments must have, and be able to use, all the information and analytical tools necessary to calculate outcomes, otherwise, companies are likely to have an informational advantage. In contrast, with freezingstyle clauses, governments need only to know when their tax rules change and the impact of such changes on a company’s tax liability.

Second, some of the notions under modern stabilization mechanisms are difficult to define. Application rules or regulations related to PSAs can define the meaning of these notions, but it remains difficult to see how they can be linked in isolation to changes in tax rules. It is likely that outcomebased stabilization clauses provide more room for interpretation by the parties and courts than freezingstyle mechanisms; hence they are more costly to administer and comply with, and more challenging for developing countries, where administrative capacities remain important constraints. On that latter point, if countries want to offer fiscal stabilization, they could consider designing one model to offer to all firms, rather than negotiating different FSCs with different investors. The rationale for this has to do with treating all investors in an equitable manner and reducing the administrative burden.

Conclusion

For decades, oil companies have tried to minimize political and fiscal risks, by pushing for stabilization mechanisms in the contracts they sign with the host government. As this chapter has pointed out, stability clauses and fiscal stability in particular are mostly observed in developing countries. This suggests that such clauses attempt to counteract general political instability and lower credibility of policymaking although the authors know of no empirical evidence establishing this causality.

The following sections describe the main provisions to be found under each of the above headings. Most of these are to be found in any petroleum contract, but some are specific to certain types of contract only.

Term and phases of a contract

It is important to be aware of the different phases of a contract, as different provisions may apply to different phases. The first is the exploration phase, during which the contract holder carries out geological and geophysical surveys and drilling operations with a view to identifying prospects within the contract zone and then to drill the most prospective of these, i.e. those most likely to contain

hydrocarbons. The second is the exploitation phase, which occurs when hydrocarbons are found which are judged to be commercially viable. This phase comprises a period of development followed by a period of production. As long as he has fulfilled his contractual obligations, the contract holder can withdraw at any time during or at the end of the exploration phase if a discovery judged to be commercial has not been made.

There has been a recent tendency for countries once closed to foreign operators to open their industries up. Increasing numbers of contracts cover zones already explored and which already contain hydrocarbons. These might be discoveries which are not yet exploited because there is a need for technologies or funding beyond the capabilities of local operators (typically national oil companies). Or they may have been already subjected to exploitation activities, and now be considerably depleted and in need of rehabilitation or enhanced recovery which has not been carried out for the same reasons. In these cases, the contract will take account of this specific situation by omitting the exploration phase and commencing the development phase immediately. When no exploration is necessary the risks are lower, and the State may require that this fact is reflected in the financial arrangements agreed.

The situation can be even more complex where a contract is for further exploitation from an existing field but when further exploration is authorised, for example at greater depths corresponding to horizons not yet explored. These considerations demonstrate the need to define very clearly the terms used in a contract and the effective operations to which they relate, so as to avoid subsequent misinterpretations of the contract or disputes.

Exploration phase

A. Term

In setting the term of the exploration phase should two conflicting criteria need to be met:

– *It should be long enough give the contract holder the time he needs to conclude successfully the activities needed to evaluate the petroleum or gas potential of the exploration zone and to discover hydrocarbons;*

– *It should be short enough discourage the contract holder from proceeding unduly slowly, thereby occupying for too long a large area which might be of interest to other companies.*

In order to reconcile these two criteria, the normal practice is to provide for a relatively long total exploration period (generally 5–10 years), but to subdivide this period up into a number of sub periods. The contract holder therefore has an initial period, renewable for one or two succeeding periods. At the end of each sub period he may renew his entitlement for a further sub period provided he met his commitments for the period just ended.

At the end of the final sub period the contract expires for the entire area covered by the contract except the zones containing commercial discoveries which will be developed. However, it is customary to provide for an optional extension (on average 3–6 months) running from the expiry of the contract, to allow the contract holder to complete the exploration work still in progress. Up until 1986 the general trend was for a reduction in the duration and the size of the exploration area. Since then this trend has been reversed as a result of the changed petroleum environment, particularly in deep offshore locations.

The initial exploration period begins when the contract takes effect. Because this is generally the longest of the exploration subperiods, and in order not to quarantine a large area without any exploration taking place, it is normally stipulated that the contract holder must begin work within a certain period (typically 3–6 months) from the effective date of the contract.

B. Contract area and relinquishment

The initial area covered by the licence or the contract zone is specified by means of a map showing the boundaries and indicating the coordinates of reference points. It is often defined by the State before blocks are created, rather than by the applicant, particularly where there is an international call for tenders. Sometimes

the size of a licence or a zone available for granting is limited by legislation. This area varies considerably depending on the particular circumstances applying.

Although in some cases large areas are still granted to contract holders, authorities generally tend to allocate zones of medium size (of the order of 1000 to 5000 km2). If the area is too large there is a risk the holder will only explore a small part of it. The rest will therefore be “frozen”, thereby excluding other companies which might want to invest in that zone. It is important that the State adopts a policy which ensures the coherency of exploration programmes.

Usually the contract holder cannot hold on to the entire area indefinitely. It is customary for a minimum reduction to be made in the area of the contract zone when an application is made to renew the exploration term. In most contracts which provide for an initial period and two additional exploration periods, the first and second renewals are accompanied by the mandatory relinquishment of up to 25–50% of the initial area, except where special circumstances justify a smaller or no relinquishment.

The contract holder is usually free to choose the zones to be relinquished. To prevent him from relinquishing a large number of fragmented pieces, constraints can be imposed on the shape and the number of pieces relinquished.

C. Exploration work obligations or expenditure obligations

When the contract is signed, a minimum work programme is specified for each of the exploration subperiods (initial period and additional periods) which the contract holder must carry out if he wishes to renew his rights. This programme is normally subdivided by type of operation: geological studies, seismic surveys and exploratory drilling.

A minimum seismic programme is often only imposed for the initial period of exploration. The programme is defined in terms of a minimum number of kilometres of 2D profiles or 3D surfaces.

The minimum drilling programme is defined in terms of a minimum number of wells to be drilled; this number will depend on the duration of the exploration period and on the area covered by the contract. Minimum depths for the drilling (or specific objectives to be attained) will also be specified. And finally the contract needs to state whether delineation and appraisal wells will be considered as exploration wells for the purpose of this obligation.

The purpose of specifying minimum levels of activity is to satisfy the State that each contract holder will undertake sufficient exploration work obligations to ensure that the petroleum potential of the zones granted will be properly studied.

The contract usually provides that if during one of the exploration periods the contract holder exceeds the specified minimum exploration work obligations for that period, the additional work can be carried forward to the following period, thereby reducing the obligation in that period.

Sometimes the obligation imposed on the contract holder is defined in terms of the minimum expenditure on exploration work, either as a total or broken down by the various types of work.

The contract needs to specify whether the contract holder must comply with both work and expenditure obligations or only one of these, and what the priority is. Usually work obligations take priority over expenditure obligations. In that case the only expenditure stipulated in the contract relates to the penalties applying in the event of failure to complete the specified work.

In order to ensure that the contract holder can discharge his obligations to invest or carry out exploration, the State can demand that the oil company provides financial guarantees. This guarantee can take the form of a bank guarantee or a performance bond of the company.

The contract holder may relinquish all or part of the area before the expiry of the exploration period. The contract provides that where there is a partial relinquishment of the area there is no diminution of the obligations in the current period, and that of the area is totally relinquished, the contract holder will be subject to the same rules and penalties as described above.

D. Evaluation of a discovery

If the contract holder discovers hydrocarbons during his exploration activities, he is required to notify the competent authority of this fact. If he considers that the discovery is worth an appraisal, he must prepare an appraisal (or delineation) programme and a budget for the works. Certain countries then create a specific appraisal zone so that the work can be carried out.

After this programme has been executed the contract holder informs the authorities of the results obtained from the appraisal and his conclusions, and specifically, whether he regards the find as commercial and whether he plans to develop it.

Where the contract holder concludes that the discovery is economically marginal or noncommercial, some contracts may provide that he can propose to the State modifications to some of the provisions of the contract so that the contract holder is able to exploit the discovery. These proposals must be accompanied by economic studies performed by the contract holder which demonstrate the effect of the proposed changes on the project economics. The State is of course at liberty to accept or reject the modifications proposed. If it accepts them the contract holder is required to declare the discovery commercial and to propose and implement a development programme.

Some contracts provide that if a discovery is considered noncommercial the contract holder must hand the discovery over to the State if the authorities wish to exploit it before the normal expiry of the contract. Special clauses may apply to gas discoveries (see Section 5.2.5).

Exploitation phase

Declaration of commerciality and submission of a development and production plan

It must be emphasised that the judgement as to whether an oil or gas field is commercial is a matter for the contract holder: it is the investor who will bear the risk and who is in a position to evaluate the profitability of the project based on his assumptions and strategy. Some countries have however sought to formulate a

definition of a commercial discovery on the basis of which a contract holder can be obliged to undertake a development programme. This is based on certain objective criteria related to the volume of hydrocarbons discovered or a certain productivity per well achieved over a certain period. This approach has not really caught on, however.

When the contract holder declares a discovery to be commercial, he prepares a development and production plan, which if necessary is submitted to the authorities for approval. Once the plan has been accepted the contract holder must commence development within a short period. The development plan is an important document which deals with all the technical and economic aspects: reserve estimation and future production profiles; development schedule, wells and production installations, storage and transport, timetable for completion and commencement of production, estimates of capital and operating costs; economic evaluation establishing the commercial viability of production; the environment and safety; the abandonment plan when production ends.

B. Production period

After a development plan has been adopted, the holder of the exploration rights is entitled to exclusive rights to exploit the resources discovered. The duration of the production period is variable, depending on the agreement. Production is usually authorised for an initial period, typically 20–25 years, which may be renewable for 10 years or more if further production is economically viable.

The grant of a production licence involves an obligation on the part of the contract holder to develop the field in question in accordance with the development plan. He is expected to produce in accordance with best international practice, with optimal recovery of the reserves.

C. Area of production zones

When a contract holder declares that a discovery is commercial he is required to submit to the authorities details of the precise configuration of the field which emerges from the delineation. The production zone corresponds to the extent of the

field. Within a given exploration zone there will be as many production zones as commercial discoveries.

The area of the production zone is determined at the time that the discovery is declared commercial. It can occur that the improved knowledge gained after several years of production means that the production zone needs to be enlarged.

To cater for this possibility, a provision can be included allowing the production zone to be enlarged so that it corresponds with the new area of the zone which has now been found to be exploitable, providing that the additional area lies within the area of the exploration zone still held by the contract holder.

D. Unitisation

When an oilfield is discovered which straddles several different exploration zones granted to different contract holders, the contract needs to contain a clause which ensures that the recoverable reserves are exploited in a coherent manner (for example by appointing a single operator, adopting a joint development and production plan, etc.).

Such a clause, known as a unitisation clause, has to be common to all the agreements made between the State and the contract holders, since in the event that such a clause has to be invoked, the rules must be identical for all.

The special case of oil and gas fields which straddle national frontiers has to be dealt with by means of international agreements, as in the North Sea between the British and Norwegian sectors. When a dispute arises between several countries, this can be resolved by creating joint development zones governed by ad hoc statutory and fiscal arrangements, as in the celebrated Neutral Zone between Saudi Arabia and Kuwait, the Timor Gap between Australia and Indonesia, and the Joint Development Zone between Nigeria and Sao Tome and Principe.

E. Obligations when production is abandoned

When production from a field is abandoned, the obligations of the operator need to be specified. These may involve transferring all installations to the State without charge or decommissioning the wells and the disposal of the installations at its

own cost. Contracts increasingly specify an abandonment plan, submitted to the authorities in advance, containing special fiscal provisions if appropriate, and providing for cost allowances to be set aside in advance to fund the abandonment costs. This may be a costly operation in offshore zones subject to stringent regulations.

Conduct of operations

A. Good oilfield practice

All holders must undertake to observe good oilfield practice in their operations whether or not there are detailed technical regulations in force. This requirement relates particularly to resource conservation (optimum production) and safety. Nowadays environmental protection has also become a very important issue, and new standards are being formulated, including the requirement to carry out an environmental impact assessment and to monitor continuously in ecologically sensitive areas.

B. Annual work programmes and budgets

Before the start of each year the contract holder must submit to government a work programme together with a budget for the coming year, broken down by type of activity or expenditure (exploration, evaluation, development, production). The programme is provisional; and changes may be proved necessary as work proceeds. These are permissible provided the objectives of the work programme remain the same.

C. Administrative supervision

Petroleum operations are monitored by the State, acting through the department responsible for mining or hydrocarbons within the relevant ministry. The contract holder must inform this department of any major petroleum operation such as a geological or seismic survey, drilling activity, welltesting or the erection of installations so that the latter can dispatch a representative to the site. The department can also ask the contract holder to carry out any work necessary to safeguard health and safety during its operations.

D. Information, reports and confidentiality

As well as providing annual work programmes and budgets in advance, the contract holder must submit, at specified intervals, activity reports detailing the work carried out, supported by technical data where necessary.He must also submit to the State a copy of all the data obtained during operations as well as any information describing the subsoil: geological and geophysical data, logs, results of analyses, measurements made in production wells, pressure trends, studies of secondary recovery, estimates of the reserves in place and recoverable. It must also submit all the data on the production itself: quantities produced from the field, hydrocarbon sales, quantities of product shipped, including data on the purchasers, countries of destination, price of each cargo, etc.

The contract must specify the ownership of petroleum data obtained during operations: usually the data are the joint property of the State and the contract holder.

All the data obtained must be treated as confidential by the State and the contract holder for a period specified in the agreement. This period varies considerably, ranging from 3–5 years from the date they were obtained to the entire period of their validity.

Finally, the contract holder must provide periodical reports on its activities and expenditure. These reports also allow the State to monitor the development of local employment in the petroleum sector.

E. Training and employment of local personnel

The contract holder may be required to give priority to the employment of local personnel for its petroleum operations. By their very nature, petroleum operations need experienced, highly qualified personnel, not always available locally. For this reason, this clause is always accompanied by provisions for the training of local personnel, and this involves setting up a minimum annual budget for various programmes. In some countries employment objectives are also set, expressed as the percentage of the workforce at a given level of qualification which should be made up of local employees.

F. Priority for local products and services, and local development

As well as requirements regarding local employees, there will likewise be expectation that local goods and services are used. Use is often made of international calls for tender in awarding contracts, with local businesses being consulted.

Local development becomes a growing requirement in many producing countries. In October 2009, Nigeria adopted the concept of "Local Content Bill" to develop the local industry. Venezuela introduced the concept of "Desarollo endogeno". In Canada, the oil producing Provinces of Nova Scotia, Newfoundland and Labrador propose "Benefit Plans" to measure employment and profits related to any oil producing project.

Economic, fiscal, financial and commercial provisions

Financing petroleum operations

The contract holder has exclusive responsibility for the funding of the activities. Exploration costs are funded by means of equity capital. Development costs can be funded to a large extent by loan capital. The contract may specify a maximum percentage to be financed by loan capital, as well as other conditions for approval, the conditions relating to the tax deductibility or recovery of interest.

Determining the State revenues

The manner in which revenues are calculated depends on the regime applying. In Uganda, there is a law in charge of this.

State participation

During the period 1970–1980 some countries introduced provisions permitting the State to itself participate directly in petroleum operations as a partner of the contract holder, taking on the same rights and obligations in proportion to the level of its participation. The main purposes of these provisions are to give it access to petroleum resources, to increase its net revenues (i.e. after meeting its share of the capital and operating costs) and to increase its involvement in petroleum

operations, particularly in terms of increased control, closer supervision and the transfer of skills.

The State participation usually involves an incorporeal association. The State, usually through the intermediary of a national company, becomes a partner in the contract with a defined share. The relationship between the partners is governed by a participation agreement. The State may enjoy certain specific advantages, for example a “carried interest” whereby its share of the capital cost is borne by the other partners during the exploration phase, to be reimbursed later from its share of any production.

The other form of participation is implemented through a joint company. Such an arrangement is less common and can give rise to practical difficulties relating particularly to the financing the State’s share of the capital, the ownership of the reserves and of the production, the payment of dividends and the taxation basis applicable. However, Venezuela adopted in 2006 a new law aiming at converting all existing contracts into the form of “empresa mixta”, where the national oil company PDVSA holds at least 51%.

Depending on the detailed arrangements, the participation of the State can have a major economic impact because the State does not share the initial exploration risk. And State participation reduces the shares of the other investors in the production. The State share can be 50% or even higher in some countries, but has generally declined considerably over the 1990s, in some cases to nil. As already mentioned, the opposite trend can be now observed in some major producing countries (Algeria, Bolivia, Venezuela).

Determining the price of hydrocarbons

Since the revenue of each party is closely linked to the value placed on the hydrocarbons, this clause is of crucial importance.

A. Price of crude

a. Real sale price to third parties

The price is based on the real market price for sales involving a change of ownership at a point of delivery agreed by the parties. The price normally used is

the FOB price at the export port by tanker. Where sales are based on the CIF price (cost, insurance and freight) this price has to be adjusted to obtain the FOB price.
Sales between affiliated companies should be valued at the weighted mean price for sales to third parties, for the same oil and during the same period, if it is possible to calculate this price. If there were no sales to third parties during the period considered, the real market price is established by considering the mean market price during the same period of crudes of comparable quality sold in the country or in neighbouring geographical zones. This price is therefore submitted for discussion and approval by the parties according to a procedure to be agreed. Some agreements contain a detailed procedure for determining the market price, with the possibility, in the event of disagreement, of referring the matter to an independent expert agreed by the parties whose decision will be binding on all.

b. Posted price or fiscal reference price

These theoretical prices, higher than the real sale price, were introduced by certain countries, notably OPEC, in 1964. Originally posted prices were negotiated with the companies, but with effect from 16 October 1973 the OPEC countries decided to set their posted prices unilaterally. The purpose of this reference price was to avoid discussions about the determination of the real sale price, the posted price being a fiscal reference price used to calculate State revenues (royalties, taxes).
The use of posted prices not linked to the market price has now virtually been abandoned.

B. Price of natural gas

In contrast with crude oil, there is not really an international market price for natural gas because the price of gas essentially depends on the geographical location where it is sold, and on the level of integrated transportation infrastructure and market. However, a competitive market exists in the United States with a spot price. The price to be taken into account for the purpose of the contract is therefore the real sale price to third parties or, for direct sales to the government or an affiliated company, the price fixed by agreement between the parties. Sometimes the price of a substitute fuel such as fuel oil is referred to. The prices fixed in

longterm gas sale contracts may be the subject of complex formulae based on the indexed price of a basket of crudes and petroleum products.

Marketing

The contract holder is responsible for the marketing of all the products extracted or of his share of those products, depending on the type of contract applying, and is obliged to obtain the best possible price. There is often a requirement that the domestic market should have a first call on national production. In this case the sale price is either the market price or a reduced price, but the latter practice represents a hidden tax.

Auditing and accounts

During the entire period of validity of the contract, the contract holder must keep separate accounts in accordance with accounting procedures appended to the contract. These procedures are set up in accordance with the rules applying in the country concerned, but may be subjected to slight changes to allow them to cater for specific petroleum mechanisms, for example depreciation procedures, the period of carryforward of losses and the definition of petroleum costs.

The clause in the main agreement relating to the accounts of the contract holder can therefore be quite short because it will refer to the accounting procedure in which all the practical procedures are indicated. It will specify the currency in which accounts are to be kept (often U.S. dollars), rules for conversion and the right of the government to have the accounts audited.

Customs regime

Because of their particular nature, petroleum operations enjoy certain customs privileges or administrative facilities. These relate particularly to the right to import goods and services usually free of any import duties or taxes. The import of equipment which will eventually be reexported is often treated as a temporary import only. The contract holder also has the right to freely export the production, possibly after supplying the domestic market in priority, usually free of any duty or export tax.

Tax incentives

3In view of the specific nature of the tax regime applying to petroleum exploration and production, contract holders and their subcontractors generally enjoy certain tax advantages, such as exemption from taxes on sales (in particular value added tax on services provided). Holders sometimes benefit from an exemption from dividend withholding tax or tax on loans raised in other countries.

In other respects, and with the exception of any other provisions in the petroleum legislation, holders are subject to the normal tax regime. The taxation of service companies and foreign suppliers presents a difficulty in determining the profit resulting from oneoff operations in the country. A deduction at source is often made of a fixed percentage of turnover.

Exchange control

Holders are subject to exchange controls. However, in order to facilitate petroleum operations, these controls are often relaxed. This will allow:

– *Bank accounts to be freely opened and used in other countries;*

– *Payments to subcontractors and employees to be made in part in other countries;*

– *Sales revenues to be received directly in other countries free of any constraint (i.e. without repatriation) except for that part necessary to cover the expenditure in the country, i.e. the operating costs, taxes, etc.;*

– *Foreign currencies to be converted and bought in the host country.*

Some exporting countries have in the past obliged companies to reinvest part of the profits in the country, in the petroleum or in other sectors. Very often the local tax legislation in a country which is already a hydrocarbon producer provides incentives for reinvesting, for example by making new exploration expenditure immediately tax deductible through the consolidation of different activities or by allowing a depletion allowance.

Production Sharing Agreements (PSA's)

A production sharing agreement is a legal contract between one or more investors and any governmental entities to lay out the rights, duties, and obligations of each party for exploration, development, and production of mineral resources in a

specific location for a specific time.[314] Of all the legal contracts in the oil and gas industry, a PSA is one of the most significant. It is used as an instrument by all parties to realize a quick return on their investments and increase revenue as much as possible while sharing out the risks.[315]

Typically, the agreement is between the host country, where the minerals are located, and the parties who wish to drill and operate in that country. These parties are usually International Oil Companies (IOCs). The contract regulates the percentage of oil and gas production that each party receives after the recovery of a specific amount of cost and expense by all parties.

The country's government licenses the execution of exploration and production activities to an IOC. The IOC bears the mineral and financial risk of the initiative and explores, develops and ultimately produces the field as required.[316] When successful, the company is permitted to use the money from produced oil to recover capital and operational expenditures, known as "cost oil". The remaining money is known as "profit oil", and is split between the government and the company.

Production sharing agreements can be beneficial to governments of countries that lack the expertise and/or capital to develop their resources and wish to attract foreign companies to do so. They can be very profitable agreements for the oil companies involved, but often involve considerable risk.

The Production Sharing Agreement (PSA) is the most widely used host government contract in the oil and gas industry, and is becoming the leading choice for most countries in their relationship with International Oil Companies (IOCs). However, there are many jurisdictional variations, and being aware of and understanding these is crucial for oil and gas practitioners working in this space. Thus it is imperative to also have a comprehensive, indepth overview of Production Sharing Agreements in key oil and gas jurisdictions around the world;

[314] CourtHouseDirect.com Team, November 2019, What is a production sharing agreement? [online] available at; https://info.courthousedirect.com/blog/what-is-a-production-sharing-agreement (accessed on 25th June, 2021)

[315] Ibid

[316] PSAs grant certain rights, such as exploration and production, from the host government to an international oil company to prospect and develop resources.

to make a critical analysis and evaluation, and features contributions from an international group of leading experts and academics who address the legal, economic and political aspects of PSAs[317].

Although host governments and investors may share one common objective the desire for projects to generate high levels off revenue their other goals are not entirely aligned. Host governments aim to maximize rent for their country over time, while achieving other development and socioeconomic objectives. Investors aim to ensure that the return on investment is consistent with the risk associated with the project, and with their corporations' strategic objectives. To reconcile these oftenconflicting objectives, more and more countries rely on transparent institutional arrangements and flexible, neutral fiscal regimes. This paper examines the key elements of the legal and fiscal frameworks utilized in the petroleum sector and aims to outline desirable features that should be considered in the design of fiscal policy with the objective of optimizing the host government's benefits, taking into account the effect this would have on the private sector's investment.[318]

The global market for oil and gas exploration has evolved to the point that much of the world's surface open to exploitation has taken on some of the characteristics of a commodity. Governments compete for capital and technology to develop their hydrocarbon sector. In order to devise and apply the appropriate policies, strategies and tactics, each must assess its position in the global marketplace and evaluate its particular situation, boundary conditions, concerns and objectives. Companies look for investment opportunities that suit their corporate strategies and riskreward profiles. The initial decision to invest and the resulting allocation of revenue and benefits are greatly influenced by the content of existing legal arrangements and fiscal policies.

The fiscal regime can be used to convert a government's policy into economic signals to the market, and influence investment decisions, provided that the framework is clear, is not changed retroactively, and does not discriminate among

[317] 1. Flavio G. I. Inocencio, 2021. Production Sharing Agreements: A Global Legal Handbook, Globe Law and Business Limited

[318] 1. Silvana T, 2007. Fiscal Systems for Hydrocarbons: Design Issues, World Bank Working Paper No. 123.

the actors. Several countries have used favorable taxation of oil and gas to support the development of the sector in addition to relevant sector reforms. The challenge of an efficient fiscal system is to induce maximum effort from the oil companies while ensuring that the host government is adequately compensated.

In designing a fiscal system, a government has to answer the following questions: What is the effect of the fiscal regime on oil/gas output? Does it discourage the development of marginal fields? Does it influence the pace of development? Does it favour early abandonment? Is it insensitive to oil/gas price and cost variation? In other words, how flexible, neutral and stable is the fiscal regime?

Many fiscal systems around the world make use of sliding scales for the determination of at least one of the following parameters: royalty, bonuses, profit oil/gas split, cost recovery, and taxes. Sliding scales introduce flexibility into the system by allowing it to respond to changes in project variables. Unfortunately, the vast majority of these sliding scales are linked to daily or cumulative production targets. Hence, they are insensitive to changes in economic variables. No wonder that the persistently high level of oil prices in recent years has pushed many host governments to seek improvement in their contractual terms.

High oil prices have also triggered higher demand for services and equipment, which in turn has increased their cost. As many fiscal systems2were designed when oil prices were in the US$1518 barrel range and finding and development costs were US$59 barrel, these systems no longer efficiently capture the projects' economic rent.

High risks and long project cycles are key elements of the oil and gas industry. As risks can differ substantially by project and over time, an efficient fiscal system needs to be flexible enough to allocate risks equitably, thus minimizing the need for and cost of negotiations or renegotiations. Such a system would be, at least in theory, more stable and better suited to mitigating the investment risk. If correctly designed, the fiscal system has the potential to reduce the procyclicity of investment: a less variable flow of investment is more likely to support the creation of spare capacity, thus reducing price volatility.

In today's competitive market, many diverging interests must be recognized and accommodated to establish an effective and attractive legal and fiscal framework for hydrocarbon exploration and production. No ideal or model regime is available for policy makers to adopt.

Tengku [319] The model contract for oil and gas development known as the Production Sharing Contract (PSC) originated in Indonesia in 1966 and enjoyed over a decade of successful implementation, with minor adjustments, in several oilproducing countries. In more recent years, however, numerous problems have arisen as changes in economic realities have driven the level of private investment down.

Tengku N, M, uses legal analysis as well as historical data to pinpoint the reasons for the initial success of the PSC and for its subsequent and persistent frustrations for investors. The author first examines the original Indonesian contract, along with the variants adopted in Malaysia and the People's Republic of China, and then proceeds to an indepth analysis of the main clauses and their amendments and execution in all three countries.

Taking into account various commissioned surveys and emerging policies and strategies espoused by both governments and industry representatives, he concludes with a detailed proposal for an overhauled contract that allows for meaningful adjustments, or even renegotiation, when the balance of interests between parties changes substantially.

Focusing as it does on some central issues in global economic development, The Indonesian Production Sharing Contract will be of great value to lawyers, multinational corporate executives, and policymakers far beyond the AsiaPacific region.

King & Spalding, 2017 [320] opines that **The** Upstream Government Petroleum Contract in its many forms is the vehicle for some of the most significant outlays of risk capital occurring anywhere in the world at any given time. Yet there are

[319] 1. Tengku N.M, 2000. The Indonesian Production Sharing Contract: An Investor's Perspective, Kluwer Law International, The Hague, The Netherlands

[320] Upstream Government Petroleum Contracts: A Practitioner s Guide to Concessions, Production Sharing Contracts, and Risk Service Agreements, Juris Publishing, Inc.

very few comprehensive published sources of information regarding the origins, design, drafting or interpretation of these important contracts. ***Global Energy Practice of King & Spalding LLP,*** presents a practical resource for international oil and gas attorneys, commercial advisors, and other industry professionals who must understand and negotiate these contracts. This book explains the basic forms of the Government Petroleum Contract, the commercial context for those forms, and delivers meaningful analysis of key terms found in those contracts, with the understanding that the market is constantly evolving.

Kirsten B[321]**,** Concerns herself with the balance between risks and rewards and the division of benefits among the parties to the contract which have not yet been analysed with the tools of modern industrial economics. The first part identifies the rationale behind PSAs and forms the basis for the following theoretical argument. The author starts with an overview of ownership issues in general and contrast PSAs with other major contract types namely concessions, service agreements and joint ventures PSAs are then explained in more detail. Some simulations serve to highlight the sensitivity of the contract parameters to changes in endogenous (e.g. alteration of cost oil) and exogenous (e.g. price change) variables. This is followed by some theoretical considerations. The framework for the analysis is a principalagent model incorporating incentive structures and risk and rewardsharing. In this context, the role of national oil companies is evaluated with regard to both its relationship with the government and its interaction with the foreign contractor.

The empirical part of the study is based on a data set comprising 268 PSAs signed by 74 countries between 1966 and 1998. The various contract variables will be evaluated with regard to global PSA developments over time, regions (South and Central Africa, Eastern Europe, Asia and Australasia, Central America and Caribbean, Middle East, North Africa, and South America), exporting and importing countries as well as OPEC, and onshore and offshore terms and conditions (Chapter 5). This analysis is further disaggregated into selected country

[321] October 1999. Production-Sharing Agreements: An Economic Analysis, Oxford Institute for Energy Studies, WPM 25

studies. Indonesia serves as an example to illustrate how the contracts work in practice as well as how and why they have been altered. In addition, the author analyses Angola, Azerbaijan, India, Iran, and Peru (Chapter 6).

While the chapters of this study build up on each other, every attempt has been made for them to be selfcontained so that readers can pick and choose the issues that are of special interest to them. The purpose of Chapter 2 is to provide an overall framework of fiscal regimes in the oil industry, and to give a background understanding to readers who are not familiar with the history of oil contracts. Those with a firm understanding of PSAs may want to skip Chapter 3 which explains this particular contract form. If the main interest is in the empirical analysis, it is not strictly necessary to read the theoretical considerations presented in Chapter 4.

In general, the author presents that ProductionSharing Agreements (PSAs) are among the most common types of contractual arrangements for petroleum exploration and development. Under a PSA the state as the owner of mineral resources engages a foreign oil company (FOC) as a contractor to provide technical and financial services for exploration and development operations. The state is traditionally represented by the government or one of its agencies such as the national oil company (NOC). The FOC acquires an entitlement to a stipulated share of the oil produced as a reward for the risk taken and services rendered. The state, however, remains the owner of the petroleum produced subject only to the contractor's entitlement to its share of production. The government or its NOC usually has the option to participate in different aspects of the exploration and development process. In addition, PSAs frequently provide for the establishment of a joint committee where both parties are represented and which monitors the operations.

There is an argument that, although the government is fully confident that there has been enough exploration success to justify higher government take and increase other socioeconomic benefits under the new terms, there remain challenges towards encouraging foreign investment in petroleum exploration and development activities in the country. A critical aspect of an oil and gas

exploration and production agreement is balancing the interests of the state and investors[322]. The broad objective of any resource rich government is to ensure that it maximizes as much revenues as possible from its natural resource and ensuring that there is always an appropriate level of investment in exploration and development activities in the country. The investors on the other hand are interested to maximize as much profit as possible by minimizing the costs, quick recovery of these costs and working with stable governments. In order to ensure a sustainable development of exploration and development activities in the country these varying state and investor's interest has to be balanced.

The authors[323] note that all too frequently, development outcomes in the EI sector are less potent and less beneficial than expected. Indeed, the outcomes can become highly damaging to the resourcerich state. Resourcerich developing states typically underperform economically relative to nonresourcerich peers. They score badly against critical human development indicators, experience environmental degradation, and see more than their fair share of social and political instability and violent conflict. Taken together, factors such as these have led some to describe the outcomes as the resource curse or the paradox of plenty

The authors also review some of the dominant thinking about the opportunities and challenges of resourceled development and explain in detail the approach of the book. It charts the emergence of the "development model," which sees positive outcomes from EI activity if certain conditions are fulfilled. It also provides a summary of the main themes in a very extensive and rich body of literature, in ways that might benefit those unfamiliar with it or who are unable to access much of it.

Current thinking on the interaction between natural resource policy and development policy is still evolving in the light of research and lessons from

[322] 1. Nzila M.M,2017. Challenges in Balancing Government and Investor Interests Under a Production Sharing Agreement: Case Study on Tanzania Model PSA 2013, GRIN Publishing

[323] 1 Peter D.C and Micheal C.S, 2017. Oil, Gas and Mining: A Sourcebook for Understanding the Extractive Industries, World Bank Group, 1818 H Street NW, Washington, DC 20433, [online] available at; https://documents1.worldbank.org/curated/en/222451496911224999/pdf/115792-PUB-PUBLIC-PUBDATE-6-6-17.pdf (accessed on 25th June, 2021)

practice. The end of the long boom from around 2003 to 2012–13 has triggered rethinking and fresh analysis. Further insights and policy recommendations can be expected. Changing perspectives on mining over the past 15 years have significantly shifted the focus from largescale, capitalintensive mining operations to the mining sector as a whole, including artisanal and smallscale mining, in assessments of sustainable futures. Other examples of changing perspectives include diverse efforts at integration of extractive industry investments into local communities and the regional economy. These efforts include, for example, the design of local benefit policies on procurement and "resourcesforinfrastructure" deals championed by investors from various countries, including, notably, China. For the various governmental and nongovernmental bodies now seeking to influence or shape their domestic extractive industries, familiarity with the themes in this body of research can be useful. They inform, sometimes only implicitly; virtually all of the contemporary discussion on policies for resourceled development. In effect, they set the parameters within which the initial strategic decision is made whether or not to engage in development through extraction. They also inform the design and choice of specific operational techniques and instruments, such as decisions on the kind and scope of rights allocated to investors, the way in which they are awarded, and the appropriate schemes for sharing benefits among public and private parties. Their impact on our understanding of good practice has influenced the approach taken by the authors of the Book.

The authors postulate that investment in the extractive industry (EI) sectors (oil, gas, and mining) presents challenges to policy makers. They arise at the policy design and legal framework stage and are evident in subsequent stages; the management and allocation of revenues and, ultimately, the sustainable development of these resources. Some, perhaps many of these features are common to all three sectors, such as the extraction of resources from under the ground or the seabed, their exhaustibility, or their exposure to a high degree of price volatility. Others are unique to each sector. For example, oil and gas development are alike at the upstream stage (exploration and production), but

natural gas takes on distinct characteristics in its transportation and distribution phases.

From a commercial point of view, oil is riskier to find than the mineral deposits typically sought by mining companies, but once oil is found in commercial quantities, the risk is reduced relative to the commercial risk of producing minerals from mining. (Note, however, that this does not apply to environmental risk.) Gas is different again, with its risk profile requiring a complex, expensive infrastructure and a detailed contractual regime to support development. Effective management in the public interest requires recognition of both the common and the unique features of EI in the design of policies and institutions.

The authors examine the fundamental characteristics of EI sector investment, from a perspective that gives priority to public policy making and the design of appropriate institutional arrangements in the public sector. They identify the common features and the key differences among EI sectors and in their investment dynamics. They focus on the relationships that governments have or seek to have with investors in the EI sector rather than on how governments themselves can respond to the challenges and opportunities of natural resourceled development. Some features of the investorstate relationship are relatively constant over time, while others are more dynamic, such as the structure of the industry. It has experienced significant change and become more complex in recent years, due in part to companies from emerging markets making strategic investments aimed at securing future supplies of energy and minerals.

Muhammed A.M, 2010. Petroleum Fiscal Systems and Contracts, Diplomica Verlag. examines the petroleum fiscal systems that apply in different countries across the world and how these systems govern the economics of exploration and development for oil and gas. Examples are included to give the reader a wide perspective on the implementation of fiscal systems.

The petroleum fiscal system for a country is a combination of the taxation structure established by legislation, together with the contractual framework under which an international oil company operates with the host government. Fiscal systems vary widely between countries and in some countries, there is more than

one system. The taxation structure may, for example, include royalty payments. The contractual framework may be based on concessionary arrangements or on service and production sharing agreements.

The different types of fiscal system are classified and the factors in these systems that govern exploration and development economics are identified. The practical aspects of petroleum taxation and the relationships between oil companies and governments are examined in detail in a chapter that focuses on the resultant contractor and government take under different fiscal regimes. This book also provides descriptions of how exploration development project economics are calculated and how projects are planned and financed. Legal and operational aspects of contractual and fiscal terms are also considered. Topics are addressed from both industry and government viewpoints to give an understanding of the aims and concerns of both sides.

In Uganda[324]; To properly appreciate PSA's, There is need to focus on the legal framework on the PSA model pertaining to the ownership of the resources, the issuing of licenses and concessions, in as well as efforts undertaken to safeguard the effects of signing PSAs on aspects of environmental protection.

History and Background of PSA's

Production sharing contracts were first developed in Indonesia in 1966 to give the host government more control over their resources. This type of contract soon became popular with a number of governments when crude oil was in tight supply and the price was rising rapid3ly.[325]

After independence nationalistic feelings were running high and foreign companies and their concessions became the target of increasing criticism and

[324] Tumusiime K, 2021. A Review of The Legal Framework on Production Sharing Agreements in The Oil and Gas Industry: The Ugandan Case Study, [online] available at; https://www.academia.edu/45499359/A_REVIEW_OF_THE_LEGAL_FRAMEWORK_ON_PRODUCTION_SHARING_AGREEMENTS_IN_THE_OIL_AND_GAS_INDUSTRY_THE_UGANDAN_CASE_STUDY (accessed on 25th June 2021)

[325] Petroskills, April 2021. Introduction to Production Sharing Contracts, [online] available at; https://www.petroskills.com/blog/entry/00_totm/apr21-sub-introduction-to-production-sharing-contracts#.YNW2ZOgzbIU (accessed on 25th June 2021)

hostility. In response to this the government refused to grant new concessions. In order to overcome the subsequent stagnation in oil development, which was a disadvantage to both the country and the foreign firms, new petroleum legislation was brought in.[326]

PSAs were regarded as acceptable because the government upholds national ownership of resources. The major oil companies were initially opposed to this new contract form as they were reluctant to invest capital into an enterprise which they were not allowed to own or manage. More importantly, however, the Foreign Oil Companies (FOCs) did not want to establish a precedent which might then affect their concessions elsewhere.[327]

The first PSAs were therefore signed by independent FOCs who showed a greater willingness to compromise and accept terms that had been turned down by the majors. Furthermore, it has been argued that the independents saw this as an opportunity to break the dominance of the big oil companies and gain access to high quality crude oil.[328]

Thus challenged, the major FOCs bit the bullet and entered into PSAs (and found that in reality the foreign firm usually manages and operates the oilfield directly). From Indonesia PSAs spread globally to all oilproducing regions with the exception of western Europe where only Malta offers this type of contract.

PSAs are distinguished from other types of contracts in two ways. First, the FOC carries the entire exploration risk. If no oil is found the company receives no compensation. Second, the government owns both the resource and the installations. In its most basic form, a PSA has four main properties. The foreign partner pays a royalty on gross production to the government. After the royalty is deducted, the FOC is entitled to a prespecified share of production for cost recovery. The remainder of the production, so called profit oil, is then shared between government and FOC at a stipulated share (for example 65 percent for the government and 35 percent for the FOC). The contractor then has to pay income

[326] Kirsten Bindemann, October 1999. Production-Sharing Agreements: An Economic Analysis, Oxford Institute for Energy Studies, WPM 25
[327] Ibid
[328] Barnes, P. 1995. Indonesia. The Political Economy of Oil. Oxford: Oxford University Press.

tax on its share of profit oil. Over time PSAs have changed substantially and today they take many different forms.[329]

This paper seeks to analyse the nature of PSAs and criticize the same to establish whether they have served their intent and purpose in Uganda or if there is a lot that still needs to be done in order to guarantee a sound and optimal safeguard for the exploration and production of Oil.

One highly specific feature of the mineral sector is that exploration and development of mineral resources must take place where the resources are located. Ventures in this sector are of a highrisk nature in the physical, commercial, and political sense as it is difficult to determine in advance the existence, extent and quality of mineral reserves as well as production costs and the future price in the world market. Profitability is not assured, and the fact that the resource is finite requires the continual acquisition of new deposits. Since virtually all mineral ownership regimes are based on state sovereignty companies may have to concern themselves with government policies and regulations in more detail than they would in other sectors.[330]

The government decides whether resources can be privately owned or whether they are state property. If they are state owned the development can be conducted by a state company or it can be contracted to a private firm. Most countries grant development rights to private companies through a process of either negotiation or bidding.[331]

The most common combination of agents in mineral development is a host government which represents a developing country with one or more mineral resources and a multinational company from a developed country. It is not surprising that the objectives of the two frequently clash. The main aim of the multinational firm is profit maximisation whereas the government of the host country is mainly interested in maximising its revenue.

Since the objectives of firm and government do not necessarily coincide and indeed may diverge substantially, it is all the more important that they identify the

[329] Supra note 7
[330] Ibid
[331] Ibid

likely sources of future conflicts and write a contract that is as comprehensive as possible. This divergence of objectives is frequently manifested in a lack of trust between the contractual partners. The relationship worsens if the government changes existing legislation and applies the new rules to contracts agreed under the old regime. In addition, Mikesell in his study on the copper industry finds that disagreement often arises from the demand for renegotiation which increases with the profitability of a mine.[332] Other potentially contentious issues are the taxation of the (foreign) firm and the split of revenue between firm and government.

PSAs can be complicated. Parties often disagree about various parts of the contract. Because both parties are trying to maximize revenue and minimize risk, it isn't surprising that agreements that seemed pretty clear at signing receive differing interpretations from a party under stress.[333]

Some of the arguments stem from the amount of time the agreements are in place. Personnel and process changes on both sides can change the understanding of the contract language. Changes in fiscal practices or political problems incountry can create other issues. Nonaligned operating or subcontractor agreements and economic cycles cause a few.

Tensions from what may be called "cost oil" develop from the difference in desires of the IOC and NOC. The IOC wants a guarantee that upfront costs are recovered. The NOC doesn't want to allow cost recovery unless it sees these costs as having been "properly incurred." The NOC wants proof of efficiency and due diligence on the part of the OIC before awarding any money.

Socalled "profit oil," which is the allocation of production left after "cost oil," is also controlled by the PSA. The NOC wants profit oil right as soon as possible, regardless of what is going on with cost oil. Usually, a tax windfall or oil and gas royalty arrangement has something to do with it. Since tax rates can be 60% to 80%, it isn't surprising the parties would like a hedge against taxes.

[332] Mikesell, R.F. 1975. Foreign Investment in Copper Mining. Baltimore & London: Johns Hopkins University Press.
[333] Supra note 1

For example, IOCs prefer a stabilization agreement to buffer such early profittaking to make sure taxes and other financial arrangements already in the PSA are not replaced by NOCs trying to puff up government revenues.

The expiration of the PSA can cause problems as well. There may be disagreements about everything from the transfer of operations to the accuracy of asset register or termination cost accruals. Most of the problem lands on the IOC in these cases, so the contractor typically works to get the most possible out of a field before the PSA ends.

Production sharing agreements within the United States are also possible, between the lessor (acting in place of a NOC) and the lessee (operating in place of an IOC). However, these agreements don't have the same track record as they do internationally, and they are poorly understood. Typically, a PSA is introduced for an allocation well that royalty owners of tracts crossed by the wells have agreed to share production.

All the above stated are the issues that have ensued with PSAs in the past and therefore this paper will analyse whether similar problems are occurring or are yet to occur in Uganda, concerning oil and gas production.

Uganda first announced intentions to start oil production and development in 2006. Many years down the road, Uganda has started entering into contracts and agreements with different FOCs for purposes of exploration, development and production of the resource. However, few Ugandans understand or even know the terms agreed upon in those contracts. Partly, this is because the final negotiated contracts are highly confidential and therefore not readily available to read but secondly and most importantly, the model PSA is overly technical for an ordinary citizen of Uganda to comprehend.

It is important to break down the mysteries of the production sharing agreement and the whole norm of the same in the Ugandan perspective.

Uganda recently discovered the presence of oil in the Albertine region and therefore has only entered into a few contracts regarding its exploration, development or production. Therefore, there is little or no knowledge about the operation of these contracts or even experience in as far as Uganda is concerned.

The Purpose of Production Sharing Agreements

Also known as PSCs (production sharing contracts), PSAs allow the host country, sometimes called the national oil company or NOC, to maintain a certain amount of control over the development of oil and gas within the country. The agreement also helps NOCs gain the expertise they may lack for exploration and development of hydrocarbons within their borders.[334]

NOCs gain the expertise they need through the international oil companies (IOCs) with whom the agreement is signed. IOCs typically bring the technology and expertise in strategic decision making to the table. In many ways, most of the risks of oil and gas development within these agreements fall on the IOC.[335]

The PSA also outlines how costs and profits are to be shared from a particular oil or gas field from the very start that is to say; Capital expenditures for exploration; Development and operational expenditure for normal operations; and Profits once production begins.

Although the IOC shoulders most of the risks, the more the IOC contributes in the early phases, the higher the share it can expect in return. This is always reflected in what is called cost oil. Therefore, the higher the initial costs of production, the bigger the share of the produce in form of cost oil.

The IOC takes on most or all of the costs and risks of exploration. The NOC begins or increases its contribution after minerals are found, and the site is developed into a production unit with normal operations. The PSA is most beneficial to the NOC because it provides time to generate momentum for project management. Also, the NOC can develop new fields and reservoirs with no risk and little cost to itself.

The legal framework governing production sharing agreements.

It is important to note that Uganda has not for a long time had any streamlined law that manages the Oil and Gas sector. This is because the resource was not of much

[334] Supra note 1
[335] Ibid

concern until the early 1980s. Prior to 1980 the colonial government did not believe that oil and gas resources were available in sufficient quantities to justify its exploitation.[336]

The **Petroleum (Exploration and Production) Act, No. 20 of 1985** that was repealed by the Petroleum (Exploration, Development and Production) Act 2013 was the only law applicable to the management and regulation of all activities in Uganda's oil and gas sector.[337]

Since discovery of commercial oil and gas deposits, Uganda has through the parliament and the relevant institutions enacted different laws to regulate the oil and gas sector and among these include; the Constitution of the Republic of Uganda 1995 [338] , the National Oil and Gas Policy, 2008, the Petroleum (Exploration, Development and Production) Act, 2013[339]; the Oil and Gas Revenue Management Policy, 2012, the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013[340]; and the Public Finance Management Act of 2015. A further analysis of the above legal regime shall be discussed below;

The Constitution of the Republic of Uganda, 1995, as amended.

The 1995 Constitution of Uganda is the primary source of regulation of the Ugandan oil sector. This is because the Constitution is the supreme law of the country and it provides that the Government must ensure that resources are used for the benefit of all Ugandans.[341]

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[336] Okuku, J.A. (2015), „Politics, the State and Limits of Oil-led Development in Uganda". Paper presented at Makerere Institute of Social Research (MISR) Seminar, Kampala p.4; https://misr.mak.ac.ug/sites/default/files/events/UGANDA%20OIL-LED%20DEVELOPMENT.pdf (accessed 26th June, 2021)

[337] J. Oloka-Onyango; "Courting the Oil Curse or Playing by the Rules? An Analysis of the Legal and Regulatory Framework Governing Oil in Uganda" https://www.jstor.org/stable/pdf/j.ctvt9k690.9.pdf?refreqid=excelsior%3Aa7571c7c5f7529c2a0adb8525320fd8d (Accessed on 26th June, 2021).

[338] This was through the amendment of the Constitution to include the current Article 244

[339] Section 6 (2) (4); the Act was passed to handle upstream oil development

[340] See Section 8 and 9; the Act was passed to handle midstream oil development.

[341]Objective XIII of the National Objectives and Directive Principles of State Policy, and Article 244(1) of the 1995 Constitution of Uganda.

The Constitution under Article 244(2) mandates the Parliament of Uganda to make laws regulating the exploitation, exploration and development of petroleum and mineral resources, and the management of the revenues arising from petroleum exploitation and other related activities.

Article 41(1) of the Constitution of the Republic of Uganda states that every citizen has a right to access information in the possession of the state or any other organ or agency of the state except in cases where the release of such information is likely to prejudice the security, Contract Transparency in Uganda's Petroleum and Mining Sectors Contract Transparency in Uganda's Petroleum and Mining or sovereignty of the state or interfere with the right to privacy of any other person.[342]

The Petroleum (Exploration, Development and Production) Act, 2013

The Act gives life to the National Oil and Gas Policy of Uganda (2008) by putting in place an effective legal framework and institutional structures for ensuring that processes of exploring, developing and producing of petroleum resources in Uganda are carried out in a sustainable manner that guarantees optimum benefits for all Ugandans, both the present and future generations.[343]

The Act also created a conducive environment for the efficient management of petroleum resources of Uganda by providing for institutions to manage the petroleum resources and regulating the petroleum activities which includes licensing, exploration, development, production and cessation of petroleum activities or decommissioning as well as ensuring public safety and protection of public health and the environment in petroleum activities.[344]

The Act regulates the licensing and participation of commercial entities in petroleum activities. It expressly states under Section 5 that;

"Petroleum activities under Ugandan jurisdiction shall not be conducted without an authorisation, license, permit or approval in accordance with this Act."

[342] Bagabo, P., Mugyenyi, O., Magara, S., and Twebaze, P., Contract Transparency in Uganda‟s Petroleum and Mining Sectors, Kampala: ACODE Policy Research Paper Series No.94, 2019 https://media.africaportal.org/documents/Contract_transparency_in_uganda.pdf (accessed on 26th June, 2021)

[343] Petroleum (Exploration, Development and Production) Act, section 1

[344] Ibid

The Act under Section 6 gives power to the Government to enter into agreements relating to petroleum activities consistent with this Act with any person with respect to the granting or renewing a license, the conduct by a person, of petroleum activities on behalf of any person to whom a license is granted.[345]

The Act[346] further states that;

"The Minister shall develop or cause to be developed a model Production Sharing Agreement or any other model agreement as may be entered into by Government under this section which shall be submitted to Cabinet for approval."

Under section 6(3), The Minister shall lay before Parliament the model Production Sharing Agreement or any other model agreement approved by Cabinet under section 6(2) and it shall be this model agreement approved by Cabinet that shall guide negotiations of any future agreements under this section.

The Act[347] also promotes transparency in conducting petroleum activities and to this effect the specific provision in the Act tends to expressly require the Petroleum Authority to

"ensure transparency in relation to the activities of the petroleum sector and the Authority"

The NOC in line with above requirement of the law and the principle of Access to information enshrined in the Constitution of the Republic of Uganda[348] makes the model PSAs available to the public through its website.[349]

The Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013.

This Act was also enacted to give effect to Article 244 of the Constitution. it was promulgated to regulate, manage, coordinate and monitor midstream operations; to enable the construction, placement and ownership of facilities; to provide for third party access to facilities; to regulate tariffs for facilities; to provide for an open, transparent and competitive process for licensing by the minister; to provide for

[345] Section 6(1), Ibid
[346] Section 6(2), Ibid
[347] Section 11(2d), Ibid
[348] Article 41(1) of the 1995 Constitution.
[349] See https://www.unoc.co.ug/wp-content/uploads/2018/06/MPSA.pdf (accessed 26th June, 2021)

additional and particular health, safety and environment regulations not sufficiently regulated in other laws; and to provide for cessation of midstream operations under the Act and decommissioning of facilities.[350]

The Act covers areas similar to the Petroleum (Exploration, Development and Production) Act that is to say institutional arrangements [351], licensing [352], decommissioning [353], state participation and national content [354], liability for damage due to pollution [355], health and safety [356], and information and documentation[357].

Section 8 of the Act provides that;

The Government may enter into an agreement relating to midstream operations consistent with this Act, with any person in respect to the following matters;

(a) The grant of a licence;

(b) The conditions for granting or renewing a licence;

(c) The conduct by a person, of midstream operations on behalf of any person to whom a licence is granted; and

(d) Any other matter incidental or connected to the matters in paragraphs (a), (b) and (c).

The Act therefore makes an effort to allow the government to enter into agreements like the Production Sharing Agreements.

Uganda has not ratified any international conventions that would bind it to fulfil other obligations under international law. However, it has signed many contracts for purposes of oil production, with the latest being the East African Crude Oil Pipeline (EACOP).

[350] **See the long title of the Petroleum (Refining, Conversion, Transmission And Midstream Storage) Act, 2013**
[351] **Part II, ibid**
[352] **Part III, ibid**
[353] **Part VI, ibid**
[354] **Part VII, ibid**
[355] **Part IX, ibid**
[356] **Part X, ibid**
[357] **Part XI, ibid**

Model Production Sharing Agreement for Petroleum Exploration, Development and Production or Petroleum Development and Production in the Republic of Uganda.

This is a model designed to guide the Ugandan government in entering into oil exploration, development and production contracts. It is comprised of 34 Articles which lay our obligations between the different parties.

The model provides for how participating interests are to be shared between the parties; the responsibilities and grant of rights; the requirement of exploration work programmes; budgeting; the aspect of discovery, development and production; keeping of records, writing reports and keeping data; the aspect of bonuses paid to government; royalties to government; participation of the State in the OGM; recovery of cost; production sharing; the aspect of taxation; valuation and measurement of petroleum; transportation of Oil by pipeline; marketing and lifting; domestic requirements; the aspect of natural gas; training of local expertise, research and employment of locals; title to assets; foreign exchange control; assignment of participating interests; the aspect of prevention of danger to person, property or environment; dispute resolution; force majeure; annual acreage rentals; termination of contracts; accounting and audits; notice; the laws applicable to the contract; the representation of the entire agreement and its amendment; waiver clauses; and the concept of confidentiality.

All these provisions will be tailored to suit each agreement concluded by the government of Uganda with other entities for the exploration, development and production of petroleum. *(find attached a copy of the Uganda, Kenya and Tanzania models in the appendix)*

Challenges encountered in using production sharing agreements.

Firstly, under a PSA the contractor/IOC finances the largest percentage of the project operations and as a result my concentrate on one field that is lucrative and

this may affect the rate at which other exploration areas covered by the contractor and this is risky for the host country.

Secondly, one the major aims of the IOCs/ contractors is to maximize profits and as a result the contractor can chose to be uneconomical or extravagant in the petroleum operations knowing that such expenses will be fully reimbursed under the cost oil, which would obviously be to the disadvantage of the host country.

The third challenge is in instances when the oil prices shoot up than they were anticipated at the time of contracting. The contractor will earn windfall profits, thereby giving the contractor a greater share of revenue than would ordinarily have been conceded.[358]

The other challenge related to the use of PSAs is the inclusion of stabilization clauses in these contracts. Stabilization clauses like the freezing clauses limit the host countries in making adjustments to the contractual legal regimes even after there's a change in the national law. To many this has been seen as an encroachment on the sovereignty of these host states and it is therefore advisable that host countries should not allow stabilization clauses for along a period of time in order to protect their sovereignty from being interfered with.

The other challenge associated with PSAs is they take away the judicial jurisdiction from the host countries. Commercial disputes that arise out of PSAs are usually referred to international arbitration centres largely because the contractors or IOCs do not trust the technical expertise of the host states" judiciary to handle such disputes arising out of petroleum transactions.

Therefore, it is important that countries like Uganda that are engaging in the oil and gas industry for the first time look out for and pay attention to these challenges so that they are adequately provided for in the PSA at the time of contracting.

Lacuna in the Law.

As earlier discussed, the Petroleum (Exploration, Development and Production) Act, 2013 is one of the fundamental laws governing PSAs. However, one of the

[358] Omorogbe, Y. (1986) "Contractual Forms in the Oil Industry: The Nigerian Experience with Production Sharing Contracts" 20 J.W.T.L. (1986) p. 342 at 345

weaknesses of the Act in line with ensuring transparency, it has no specific provisions relating the penalties or consequences in the event of a failure to disclose the model PSA to the public and Parliament. In this context the consideration of the Parliament remains key given the advisory role it plays in developing and approving of the model PSAs.

Consequently, the Government of Uganda and particularly the ministerial bodies concerned have taken advantage of this lacuna in the law to disregard the role of upholding the availability of these extractives agreements (PSAs) to the public. The constrained availability of PSA to the public impacts the Constitutional right of enhancing the accessibility to information.

Mindful of the above predicament, there is a high likelihood that interested parties might have to seek the indulgence of Courts as exemplified in the case of *Charles Mwanguhya Mpagi and Izama Angelo v. Attorney General*[359] in which two journalists sought to be furnished with copies of PSAs made between the government of Uganda and various oil companies. Those oil companies involved were entrusted with the role of prospecting the exploitation of the oil resources in the country. However, the presiding magistrate declined the applicant's request for disclosure of the PSAs on grounds of the applicants' failure to prove that their disclosure to the public would be used for public benefit only and not harm third party interests. In this regard the reference made to third parties was aimed at protecting of IOCs and Government.

The presiding Court declined making disclosure on grounds of contractual confidentiality clauses. This extrapolates the weakness underlying possible unbalances between notions of contractual confidentiality on one hand and the public right of access to information on the other hand.

For PSAs to functions in better forms, there is a need to devise measures to minimise the unbalance effects of the above conflict between commercial confidentiality and the citizenry right of access to information.[360]

[359] Misc. Cause No.751 of 2009

[360]https://globalfreedomofexpression.columbia.edu/cases/charles-mwanguhya-mpagi-izama-angelo-v-attorneygeneral-miscellaneous-cause-no-751-200/ (accessed 26th June, 2021)

In accordance with Section 4 of the Upstream Act, which provides for vesting of petroleum rights, the Act restates article 244 of the Constitution of the Republic of Uganda, which vests the entire property in, and the control of, petroleum in its natural condition in, on or under any land or waters in Uganda in the Government on behalf of the Republic of Uganda. The Act[361] further states that

"for the avoidance of doubt, the Government of Uganda shall hold petroleum rights on behalf of and for the benefit of the people of Uganda."

It is therefore clear that these resources do not belong to government which makes public involvement paramount in ensuring that the government is held accountable by the public. Therefore, nondisclosure of these PSAs increases the risks of mismanagement of oil and gas revenues, poor negotiation of PSAs as a result of corruption or incompetence in bargaining terms which may turn out to be inconsistent with the interests of the nation.

The theory of Incentives, Risks and Rewards

Oil exploration and development projects are characterised by large capital investments, long lead times, incomplete information, and in most cases significant differences in the abilities of the parties to bear the risks involved in the venture. Thus, contracts are potentially unstable and one or both signatories may want to renegotiate at some point in time.[362] Furthermore, the inherent instability of contracts may result in some projects not being developed although they are economically attractive in general.

The uncertainties over risk and rewardsharing prevent one or both parties from going ahead with the venture. When a government or its NOC enters into negotiations with a FOC which it expects to provide capital, technology and expertise it wants to ensure that it obtains the best possible deal given the country's specific circumstances. The NOC will take a number of elements into account and evaluate them under different scenarios such as reserve discoveries, variations in

[361] Section 4(2) PEDP Act 2013
[362] Supra note 7

oil prices, operating costs, and field development. The objective is to maximise revenue under each scenario.[363]

However, given the existence of international competition for risk capital, technology and knowhow tradeoffs will occur. A further constraint is, of course, the fact that the FOC has the same aim of maximising its revenue. Although countries as well as the two parties to the contract are similar in the goals, they pursue their relative success will be determined by their; bargaining position; negotiation skills; and countryspecific circumstances.

The government therefore has to find the optimal, or efficient, contract form for its country. Efficiency can be, and indeed has been, defined in many different ways. Applying the definition of Pareto optimality from welfare economics to contract theory we can say that a contract is efficient when it is impossible to improve one party's terms without making the other party worse off. The efficient contract is then a nonzero sum game. Assume a contract is being renegotiated and is supposed to remain efficient. The renegotiation must either improve the positions of both parties or one partner improves its circumstances without the other one losing anything.

In other words, neither party will be worse off. More specifically, assuming that the government can exploit its bargaining position it will try to offer terms that provide sufficient incentives for a FOC to sign the contract while at the same time ensuring that the foreign partner will not appropriate all incremental benefits. Incentives are therefore one of the main contract features. The second characteristic, which is closely linked to incentives, is the allocation of investment, geological and price risk. Finally, the contracting risk needs to be addressed. By this we mean the possibility, and probability, of nonperformance by one or both parties.

Risk Allocation and Contract Risk

Investment decisions and strategic planning in general are carried out under uncertainty. The assessment of the risk involved in a project and the appraisal of

[363] Ibid

whether potential rewards justify taking a particular risk are made by finding probability distributions of the measures concerned. Varying degrees of uncertainty that might affect the input variables will be taken into account. The main unknown factors in oil exploration and development are:

- *discovery of new resources*
- *type of resource (oil or gas)*
- *size of deposit*
- *economic viability of development*
- *technological requirements*
- *future price developments*
- *general economic and political risks.*

The allocation of these risks is a significant factor in the formulation of an efficient contract. Recall that for the contract to be efficient, or Pareto optimal, it has to be considered efficient by both partners. Let us illustrate this. It is conceivable that one party is more exposed to, say, price risk than the other. Hence, the former is at a comparative disadvantage in carrying the price risk. Ideally, the two partners find a risk distribution that takes this into account. This process will inevitably involve a sharing of rewards that is related to the risk allocation. We can develop a similar argument with regard to the cost risk. Total expenditure on, say, an exploration operation depends on a large number of factors such as onshore, offshore or jungle location of the field, the use of two or threedimensional seismics, the depth of the deposit and so forth. Several million dollars may be spent on a venture that turns out to be unsuccessful because no commercial quantities of oil have been discovered.

Thus, the successful projects must not only be profitable on their own terms but have to generate enough profit to make up for losses incurred elsewhere. The government will also have views on how the contract should be implemented, that is how the project should be managed. However, they depend on a foreign contractor to provide technology and expertise. Again, there will be a tradeoff between the way the government wants the operation to be run and the incentives it has to offer to its counterpart. The government will thus structure the contract so

that the FOC finds it in its own interest to manage the project in the way the government itself would have chosen.

Contracting risk, on the other hand, is easier to contain since the nonperformance of one party would very likely result in reduced rewards for both partners. If, say, the FOC takes the view that the potential for a future default by the host country exists, it will insist on either incorporating a compensation clause into the contract or on a higher share of the gains from the project (or both).

At the same time the government, too, will be concerned about the FOC breaking its commitment. It will warrant a penalty clause as part of the contract. Furthermore, under a PSA the government owns the resources even once they are produced and can therefore prevent any export of oil should the FOC default on its obligations. Two crucial points have to be taken into account here. First, compensation and penalty clauses are meaningless unless they are institutionally enforceable. In acknowledgement of this almost all PSAs provide for international arbitration should conflicts arise. Second, both partners have reputations to preserve. One partner's default will become known to the rest of the industry. FOCs would be very hesitant to enter into contracts with a country perceived as an unreliable partner.

Governments, on the other hand would worry about the risk of doing business with a firm that has a history of either not finishing projects or trying to renegotiate its work and other obligations. Additionally, defaulting might make it difficult to obtain investment funds for future ventures.

Sharecropping

Like financial derivatives oil contracts can be traced back a few centuries to agricultural contracts. There are three main contract forms in agriculture; direct cultivation, fixed rent tenancy, and sharecropping. Their oil equivalents are national oil companies without foreign partners, the US bidding process, and production sharing agreements. Joint ventures and concessions constitute bastard forms with the latter being closer to fixed rent contracts. Sharecropping forms, the basis for a tool widely used in industrial economics: the principalagent model.

While PSAs may only have been introduced to the oil industry in the 1960s, the concept of production sharing has been practised for much longer. It originates in agriculture where the landlord allows the tenant to use his land in exchange for a specified share of production. The terms of the agreement can vary widely. For example, the landlord can regulate in which way and for what purpose the land is used. He may also decide to bear part, or even all, of the costs which in turn will be reflected in the production share he receives. Sharecropping has been criticised as an inefficient arrangement since tenants receive less than their marginal product. Sharecropping is thus essentially a contract form which combines risk sharing and incentives. This is of particular importance when monitoring effort is costly. Stiglitz[364] and Braverman[365] in their analysis outline two repercussions of this contract form. First, the landlord has an incentive to share the costs of the venture. In the case of agriculture contracts the landlord might for example want to encourage the tenant to use a fertiliser which will improve output. Thus, both parties to the contract can increase their returns.

PrincipalAgent Relationships

As the name suggests, principalagent theory deals with the actions of a principal (landlord), who owns an asset, and an agent (tenant), who works with that asset and/or makes decisions which will affect the value of the asset. The theory focuses on the optimal design of contracts between the two parties whereby it is possible to have more than one agent. Applied to PSAs this means that the state or the NOC is the principal and the foreign contractor is the agent. If the foreign contractor is a consortium this could be regarded as a principalagent problem with many agents. Modern contract theory[366] tells us that contracts are by definition incomplete. If we had only two states of nature, say rain and sunshine, we could foresee that tomorrow we will have either rain or sunshine or a combination of the two. What we do not know is which of the three it will be. A contract based on the possibility

[364] Stiglitz, J.E. (1989). Sharecropping. In: Eatwell, J./Milgate, M./Newman, P. (eds). Economic Development. The New Pelgrave. London: Macmillan. pp 308: 15.
[365] Braverman, A./Stiglitz, J.E. (1982). Sharecropping and the Interlinking of Agrarian Markets. American Economic Review. Vol 72. No 4. September. Pp 695:715.
[366] Hart, 0. (1995). Firms, Contracts and Financial Structure. Oxford: Oxford University Press.

of these three events occurring could simply specify that if 'rain' clause x applies, if 'sunshine' clause y applies and so forth. However, in reality there are infinite events that can occur. Some may be more likely than others, and some will be regarded as being more relevant than others. Assume we are an oil company negotiating a contract in a foreign country. Surely, we would be more concerned about say the likelihood of a nationalist terrorist group attacking our oilfield than the likelihood of a plane crashing in the car park. Therefore, the best we can hope for is the formulation of a comprehensive contract. We try to take all possible, relevant future events into consideration and make provisions for those events that we cannot foresee.

The main concern is the relationship between ownership and control when writing a contract within this framework. Recall that the two parties to the contract are a principal and an agent. The principal will want to design a contract such that his interest will be advanced by the agent despite the fact that the interest of the latter may diverge from that of the former. Thus, the principal needs to provide an incentive to the agent that will induce him to act in the principal's interest.

At the same time the principal has to develop a monitoring system that allows him to measure the agent's performance, and that avoids moral hazard. In other words, the principal wants to establish a scheme whereby the agent is induced to maximise his efforts in order to get a maximum reward which in turn will also yield maximum profit to the principal. As mentioned before the agent can be a team. This makes the control of moral hazard more difficult as it is harder to detect the source of shirking.

One way to control moral hazard is for the principal to pay the agent a salary and bonus based on the performance of the company. The better the agent performs the higher his income. However, if we have many agents, they may have different utilities of leisure. That is to say somebody may be prepared to accept a lower income if that means he can work less hard and has more leisure. In this case shirking can still persist unless group pressure and/or social cohesion make it unacceptable to each individual agent.

The issue just discussed implies another way to prevent moral hazard. The problem can be avoided if the principal develops a mechanism that enables him to monitor the performance of each individual agent. Also in conjunction with the first scenario is the possibility of incentive contracts which reward agents only on the basis of individual results. One could imagine a scheme whereby the agent has to pay the principal a specified sum in case of underachievement. The most obvious solution to the principalagent problem is of course for the principal to become his own agent.

Underlying issues.

Developing countries like Uganda commonly lack financial, technical and human resources that are required for undertaking petroleum operations. In order for developing countries to tackle problems of inadequacy associated with exploring, exploiting, producing and developing resources from their oil fields, they contract IOCs.

The economies of less developed countries are dependent on these natural resources and therefore the major objectives of the host state are to maintain and retain ownership and control over these natural resources, generate revenue, promote and enhance economic growth as well as encourage foreign investment.

The extent to which these objectives are achieved is determined by the legal frameworks regulating the PSAs. It is therefore key that the legal frameworks that regulate PSA regimes should be drafted effectively and in line with the host country's goals and objectives of the oil and gas policy and should target the economic rent of an oil and gas project.

It is also important that the legal frameworks meet the required international standards not only in protecting the sovereignty of the host state but also in encouraging the success of foreign investment in the sector.

Given the politicised nature of the oil resource, some of information is inaccessible due to the absence of transparency especially in relation to certain PSAs documents detailing the records, participants and background of negotiations on oil and gas exploration and production. Most of the PSAs have a confidentiality

clause which bars any of the parties to the contract from issuing or allowing access to information on PSAs to nonparties. This limited the researcher since current PSAs would not be accessed in public domain.

When designing a fiscal system, a government aims to maximise revenue from its natural resources while at the same time providing sufficient incentives to foreign investors. The oil industry relies on many different contract forms. One of the most widespread types is the productionsharing agreement.

Under a PSA the FOC receives a share of production as a reward for its investment and operating costs and the work performed. It usually bears the entire exploration cost risk and shares the revenue risk with the host country. The contract is signed before exploration begins and the foreign partner will therefore expect significant rewards later on in the life of the contract.

The FOC's revenue is made up of cost oil and profit oil, while the direct sources of revenue for the government can comprise royalties, profit oil, bonuses, taxes, customs duties, and indirect benefits that arise from price caps. PSAs do not divide profits out of market proceeds but instead divide the physical production after allowing a portion of output to be retained by the FOC for the recovery of preproduction and production costs. This means that costs can only be recovered once oil is produced.

A source of disagreement at this point can be the definition of costs. This is the basis for the determination of the profitoil volume that is the part of production remaining after costs in the form of oil have been deducted. The sharing of production follows a preagreed split between the FOC and the state or its NOC. In theory the state controls the operation but de facto the risktaking private partner manages the project unless the NOC takes up its option to participate in the venture, which has become more common over time.

PSAs address the important issue of ownership of oil reserves which has made this contract form politically acceptable in most developing countries. Before the introduction of PSAs, the concession agreement vested, for all intents and purposes, the ownership with the foreign company at the wellhead. Under PSAs reserves and all installations and plants built by the FOC are government property.

The PSA is attractive to foreign firms because they can book the reserves in their balance sheets notwithstanding the fact that they do not own them. It seems that the rationale is that the company is entitled to produce for a long period of time, in many cases for as long as the field is alive. During this time, it can book the reserves because of access rather than legal title.

A PSA does not allow for up or downgrading of the contract terms once the exploration period comes to an end and information about the exact size and characteristics of the deposit is available. The same problem arises at the start of exploration because the work obligation during this phase is finalised before work begins. It would appear that it is in the FOC's interest to have a short initial exploration period and then negotiate the work programme for subsequent phases if these are needed.

Once development commences cost oil enables the FOC to recover its costs even if the project is not profitable. Under different contract forms costs are often deductible from taxable income which in the case of PSAs is the FOC's profit oil. If the project does not realise any profit, then there might not be a taxable income against which to deduct costs. With cost oil, however, at least part of the expenditure can be recovered provided there is some cash flow. Not surprisingly, FOCs are therefore keen on highcost recovery limits and some PSAs indeed set the maximum cost oil at 100 percent. The problem for the government is that the higher the cost recovery the lower the nominal profit oil to be shared between the parties. One way around this dilemma is to impose royalties thereby generating a guaranteed minimum revenue stream.

Depending on the discount rate marginal projects might not be profitable if the fiscal system is not sufficiently geared towards economic rents. Governments have recognised that this kind of rigidity can work detrimentally to their goal of maximising revenue. Thus, most PSAs now offer sliding scales for the calculation of profit oil.

Conclusion

The sector of oil and gas in Uganda is still growing. For this reason, numerous decisions have to be made regarding its exploration, development and production. Production Sharing agreements provide a great opportunity for Uganda to acquire the expertise required to extract the oil and still have ample profit oil after removal of the cost.

The government should strive to give PSAs more relevance in the laws of Uganda so that it is readily known and acceptable to all the parties affected by the terms concluded in the contract.

CHAPTER

ELEVEN

Efficacy of the Legal regime governing local or national content.

Introduction.

Local content refers to an increase in the utilization of domestic labor and businesses by oil and gas companies where nontax benefits stay incountry or in the backyards of resource region and local ownership and capital (equity) in the longterm. Local content is composed of employment skills transfer, technology transfer, business development and competitiveness, greater participation in the extractive sector, development of downstream industries and a quantifiable retained national net product leaving the host nation and communities better off than the preresource extraction periods.

Local or national content[367] (state or public participation in resource exploitation) goes to the root foundation of the right to development and economic rights enshrined in the Ugandan Constitution.[368] **The National Oil and Gas Policy** includes two key objectives addressing the country's local content aspirations that is; **Objective 7** that ensure optimum participation in oil and gas activities and

[367] The National Oil and Gas Policy, Objective 7 "To ensure optimum participation in oil and gas activities."
and Objective 8 "To support the development and maintenance of national expertise".
[368] The Republic of Uganda Constitution, 1995. Article 40 and 45.

Objective 8 which supports the development and maintenance of national expertise.

Section 56 (3) (f)[369] provides that "an applicant for a petroleum exploration licence is expected to support his application with a statement on how it intends to train and employ Ugandans." There is however no specific provision in the same law ensuring that, once trained, the same transnational oil companies should absorb the trained Ugandans. Training and employment of Ugandans is further provided for under Sections **126 and 127**, which reinforces **Section 56 (3) (f)** by demanding that the licensee submits to the Petroleum Authority of Uganda a detailed programme for recruitment and training of Ugandans and transfer of knowledge to Ugandans. The lacuna in this law is that there are no training and employment targets set within these provisions and nor does the law provide any form of sanctions for noncompliance. These provisions are repeated in the **section 54 and section 55 of the Petroleum, (Refining, Conversion and midstream Storage) Act Transmission and midstream storage) Act 2013**. These provisions are to a lesser extent consistent with the provisions of the Model Production Sharing Agreement for Uganda (2006)[370], which has a number of provisions on the employment and training of nationals for the sustainable management of the industry.

Both the upstream and midstream laws lack provisions that ensure that Ugandans employed by the transnational oil companies receive the same treatment, pay and opportunities at their work place with their foreign counterparts. **A report by the Office of the Auditor general**[371] revealed that Ugandans working in three transnational oil companies (CNOOC and Total) were being underpaid compared to their foreign counterparts. The report discovered that expatriates on average earned five to ten times more than nationals, while other expatriates were found to have overstayed past the due dates for the nationalization of their positions.

[369] The Petroleum (Exploration, Development and Production) Act for the (Upstream), 2013.
[370] Model Production Sharing Agreement for Uganda (2006): Article 21.
[371] Muhumuza K. (2015): "Auditor General Faults and Government and Oil Companies on skilling Locals."

Both the upstream and midstream laws require licensee holders in the exploration and refinery phases to give priority to local goods and services provided by Ugandan entrepreneurs. While these laws[372] "give preference" to local goods and services, the term is too broad and subject to abuse by the more sophisticated multinational oil companies. The law allows multinational oil companies to use locally present foreign service providers who have built a longstanding relationship with them in the process clouding out local firms.

Much as **section 8 of the Petroleum (Exploration, Development and Production) (National Content Regulations 2016)** demands that multinational oil companies, their contractors and subcontractors notify local goods and services providers of upcoming contracts as early as possible, there is no specific timeframe within which such information should be made available. This leaves the local firms at the mercy of multinational oil companies, which could elect to provide such information in a time frame that is too late for the local suppliers to participate. There are no national content targets, nor standardized procurement procedures for local business entities and no efforts by government at both the central and local government levels to develop the capacity of local suppliers for the oil and gas sector. A **recent study commissioned by the MEMD**[373] defines local content in terms of value addition, implying that ownership of the company performing the valueadded activities should not matter. The study further argues, that in a globalized industry, a local subsidiary of a multinational company can be just as effective in using domestic inputs and developing capacity and competence in Uganda as a company in which Ugandans hold a majority of the shares and that national content should be measured as value added covering value generation in both indigenous and foreign owned firms.

[372] Model Production Sharing Agreement (2006): Article 20 (Purchases in Uganda).
[373] Enhancing National Participation in the Oil and Gas Industry in Uganda, 2011

Environment, Land Compensation and Security

The oil and gas laws should be revised to include the precautionary principle of a balance between human rights and economic development[374] in a bid to protect the right to a clean and health environment, and related rights alongside mineral development. **Principle 4 of the Rio Declaration**[375] **and Article 39** of the Constitution of Uganda recognize the right of every person to a clean and healthy environment. To protect this right, **Part X of the Petroleum Exploration and Production Department Act** sets in motion provisions against pollution in Part X thereof and **part VII of the National Environment Act**. However, **Section 131** of the upstream law is ambiguous on liability for pollution damage caused without a licence. The law ought to be revised to Include the precautionary principle in order to strike a balance between human riughy

Aside from finding companies liable for pollution, regardless of fault, both the upstream and midstream laws **(Section 130 and Section 58 (1)** fail to provide for a compensation regime for victims of such pollution or any losses resulting from poor management of petroleum operations, in particular, the unforeseeable longterm damages such may have on the environment and human health. It would appear that according to **Section 131** there is no liability for pollution damages if caused with a licence, which legalizes pollution. Liability for pollution damage should accrue with and without a licence. However, there are more clear and detailed provisions in the National Environment Management Bill (clauses 95100). Clause 100 states that a person (including a legal company) who pollutes the environment, is strictly liable for the damage caused to human health or the environment regardless of fault. In time there will be need to harmonize the upstream legal provisions on pollution control with the principal legislation on environmental management.

Article 26 of the Constitution provides for the right to protection from deprivation of property and guarantees the right to everyone to own property

[374] Refer in the Supreme Court of India, in Susethat Vs State of Tamil Nadu: Civil Appeal 3418 of 2006.
[375] Rio Declaration, 1992.

individually or in association with others. It sets aside conditions for compulsory deprivation of property in public use or in the interest of defence, public safety, public order, public morality or public health. **Article 26(2) (b)** further provides that there must be prompt payment of fair and adequate compensation, prior to the taking of possession or acquisition of private property. A right to seek a court remedy for any aggrieved party is equally accorded.

Noticeably, there are no specific provisions addressing land access rights disputes between international oil companies and local communities, nor are there provisions for compensation and resettlement of displaced communities. This has exacerbated conflicts between government, multinational oil companies, and local communities in the oil rich region culminating into court disputes among others.

The government, multinational oil companies, and international service providers in the oil and gas industry have been faulted for the everincreasing land conflicts in the oil rich region. The existing institutional and legal systems fail to recognize the legal interests and rights of communal land owners in the face of multinational business interests. This has led to an increase in land grabbing, violent evictions and displacement of thousands of communal land owners and consequently a spate of court cases against government.[376] *Oil in Uganda*, a local online newsletter reveals an increase in land grabbing, evictions and violent displacements of customary landowners by international business entities in collusion with local businessmen and elites from Kampala.[377]

In operationalizing **Article 244 (1) of the Constitution**[378] on minerals and petroleum resources, the Uganda National Land Policy lays down strategies to be implemented by government in ensuring appropriate management and governance of strategic natural resources.[379] These provisions appear sufficient to remedy the current injustices faced by customary landowners in the oil rich region and reinforce the right to protection from deprivation of property and to culture and

[376] Ssekika, E. (2014): Oil: a year of court battles, slow progress" Weekly Observer, 30th December, 2014
[377] Oil in Uganda, Oil and Land Conflicts in the Albertine, June 30th, 2015
[378] The Constitutional (Amendment) Act No.11 of 2005. Replacement of Article 244 (1).
[379] Uganda National Land Policy (2013): Clause 30 of the policy.

similar rights. However, the decision of government to retain 93% shares from royalties, only relinquishing a paltry 6% to be shared between local governments in the oil producing region may be too little to guarantee the desired financial benefits optimization.[380] Government rewards cultural institutions with a relatively insignificant 1%, while it completely ignores communal land owners and victims of violent evictions and displacements.[381]

There is no legal recognition of traditional mechanisms for dispute resolution or customary law as a framework for the processing of disputes under customary tenure. The government must demonstrate the political will to protect and remedy the violations faced by customary land owners. The government should reinstate district land tribunals suspended by the judiciary in 2006 for lack of adequate budgetary support.

The upstream law is explicit on surface rights. Section 135 provides that "a licensee holder cannot exercise any rights under their licence without the written consent of the landowner." Extensively, the provision attempts to provide for the coexistence of petroleum development with landowners' rights; notably Section 136 enables landowners in an exploration area to retain the right to graze stock or to cultivate the surface of the land insofar as the grazing or cultivation does not interfere with petroleum activities or safety zones in the area. However, Section 138 of the upstream law enables a petroleum production licence holder to acquire exclusive rights over a block in a development area. The law disarms the landowner's opportunity to negotiate for an enhanced value of their property by subjecting it to the government valuer's determination. This is because the government valuer is by law instructed to disregard the increase in the value of land as a result of the presence of petroleum. There is also a risk that some landowners may not be compensated for disturbance of their rights and for any damage done to the surface of the land as a result of oil and gas related activities, if complaints or claims are made four years after the fact (Section 139(2) of the upstream law.

[380] The Public Finance Management Act No.3 of 2015. Section 75.
[381] Ibid Section 35.

Security for the oil and gas development projects in the Albertine Graben is provided by an elite special government military unit and private security firms.[382] The Uganda Human Rights Commission has reported the denial of district labour officers access to oil well pads in Buliisa District, while civil society organisations have complained of illegal detentions and harassment from the security and military in the region.[383] Currently the upstream and midstream laws are silent on human rights and there are no set parameters or codes of practice guiding military, police or private security firms in the oil region with respect to human rights. Oil companies are however dutybound to provide for their own security detail under Sections 143 and 66 of the Upstream and Midstream laws respectively.

Access to Information

Under **Article 41 of the 1995 Constitution**, every citizen of Uganda has the right of access to information in the possession of the State, except where the release of such information is likely to prejudice security or interfere with the right of another person. It is on this basis that the **Access to Information Act, 20**05 was enacted. The Act was also designed to promote an efficient, effective, transparent and accountable government and to empower the public to effectively scrutinize and participate in government decisions that affect them.[384] Even with such information being accessed, there remains a challenge in ensuring that Ugandansthe majority of whom are illiterate or have only basic Englishare able to be included in its dissemination and debate.[385] Furthermore, the processes of accessing information are tedious and can be expensive. Finally, the culture of government secrecy over state affairs remains deeply entrenched, to the extent that even the courts of law are reluctant to compel the government to do so. In Charles

[382] Matsiko, H. (2015): "Guns in the oil region" The Independent, July 5th, 2015
[383] Uganda Human Rights Commission, (2013): *"A Special Report on Oil in Uganda: Emerging Human Rights Issues.*
Special focus on selected districts in the Albertine Graben"
[384] Section 3 of the A2I Act, 2005
[385] International Alert (2011), "Oil and Gas Laws in Uganda: A legislators' Guide," Oil Discussion Paper No.1 pp. 21.

Mwanguhya Mpagi & Angelo Izama vs. The Attorney General[386] in which two journalists sought copies of agreements made between the government of Uganda and various companies involved in the prospecting and exploitation of oil.[387] However, the court held that the two journalists did not show how they would use the information for the benefit of the public. According to the Court, Government business is not in its entirety, supposed to be in the public domain.

Importance of enforcing local content provisions.

Resourcerich countries are increasingly inserting requirements for local content ("local content provisions") into their legal framework, through legislation, regulations, contracts, and bidding practices. If successful, a policy to increase local content can lead to job creation, boost the domestic private sector, facilitate technology transfer and build a competitive local workforce. However, local content goals are often unfulfilled and the opportunities are not captured. For example, local content provisions typically require investors to meet targets measured as a percentage of investment, hours worked, equipment supplied, or jobs created. If targets are too high, they may either scare away investment or remain unmet as investors accept the fines or find loopholes. If they are too low, the country will not maximize potential linkages. This shows the importance of the framing of local content provisions. Targets, and other local content objectives, need to be carefully quantified, adapted to the local context and collaborative. Because local content provisions can be key to translating resource investments into sustainable benefits for the local population, this project examines the detail of the existing legal frameworks for local content in a number of countries.

A 2011 study into national content in the oil gas sector examined "how Uganda may benefit from the participation of Ugandans and Ugandan firms in the petroleum activities". Some of the findings have been implemented and

[386] Miscellaneous Case No. 751 of 2009

[387] *Analysis of the Court Ruling in Charles Mwanguhya Mpagi and Angelo Izama vs. Attorney General (Miscellaneous Cause No. 751 of 2009) against the Framework of the Uganda Access to Information Act, 2005 and International Access to Information Standards,*

others are yet to be fully implemented into the legal framework. Key findings include. The National Content Study found that local ownership is not key, as long as value addition is undertaken in Uganda. Uganda is in the process of developing many laws that recognize local content. It was found that Uganda will develop many other laws apart from the National Oil and Gas Policy, 2008 which recognize local content and also envision a role for government in identifying the skills needed for local participation in the industry, and ensuring the availability of training courses to attain those skills. Consequently, **the Petroleum (Exploration, Development and Production) (National Content Regulations 2016), the Petroleum, (Refining, Conversion and midstream Storage) Act Transmission and midstream storage) Act 2013 and the Petroleum (Exploration, Development and Production) Act for the (Upstream), 2013** were enacted and all these recognize local content.

Applications for license.

According to **section 6 of the National Local Content regulations** 2016, the minister shall consider national content before licensing.

•According to **section 7of the National Content regulations 2016**, an application for a production license must include particulars of the applicant's proposals for employment and training of Ugandan citizens, and for procurement of goods and services from Uganda. A production license will not be granted unless these proposals are "satisfactory".

Section 17 of the National Content regulations 2016, the licensee must submit a detailed program for recruitment and training of Ugandan citizens, within 12 months of the grant of the license, and annually after that.

Section 16(2) of the National Content regulations 2016 is to the effect that the training program must include training in all phases of operations, and take into account gender, equity, persons with disabilities and host communities.

Under the **Model PSA, article 18.1** provides that the licensee is required to train and employ "suitably qualified" Ugandan citizens, as well as after commercial production starts, to train Ugandan citizens for positions including administrative

and executive management positions. The Licensee must also require its subcontractors to do this Under the Model PSA, the licensee must gradually replace its expatriate workforce with "suitably qualified and experienced" Ugandan citizens. The licensee must convince the Advisory Committee established under the PSA for the project that no "suitably qualified or experienced" Ugandan citizens are available for key senior management or technical positions before it can hire expatriate staff.

Under the Model PSA, the licensee must provide an annual programme for training and for phasing in Ugandan citizens to the Advisory Committee for approval. The Licensee must also submit to the Government an annual programme for training government personnel on skilled and technical jobs in petroleum operations, and deposit with the Government fixed monetary amounts for training of personnel selected by the Government as stated in Model PSA, Art. 18.1, 18.2 and 18.3.

Section 19 of the National **/ local content Policy 2016,** also envisions training for Government personnel, "as one of the ways to facilitate professional dialogue with oil companies" and lists training Government personnel to monitor petroleum exploration and development as an action to be undertaken.

Procuring goods and services under the concept of local content.

The Policy refers to the promotion of the use of Ugandan goods and services in the industry, of participation of Ugandan entrepreneurs in providing goods and services and of "public private partnerships whose benefits outweigh their cost, and whose costs and benefits are mutually and fairly shared by the partners.

It is recognized under **section 9 of the National Content Regulations** that the licensee must give preference to goods "produced or available in Uganda" and services provided by Ugandan citizens and companies (undefined), which must have the "capacity to add value" and to meet the licensee's health, safety and environment standards, and meet criteria specified in regulations to be prescribed. If the goods and services required are not available in Uganda, they may be

provided by a foreign company, but only where it enters into a joint venture with a Ugandan company with a share capital of at least 48%.

In the **Model PSA, (Model PSA Art. 17.1),** preference must be given to Ugandan goods and services unless they "are offered on terms which are not equal to or better than imported goods and services with regard to quality, price and availability at the time and in the quantities required.

In the Model PSA, the company is required to establish "appropriate" procedures for procurement of goods and services to ensure that suppliers and subcontractors in Uganda are given "adequate" opportunity to compete. Tender procedures must be approved by the Advisory Committee for the project, established under the PSA (Model PSA, Art. 17.2).

Monitoring and enforcement of local or national content.

Local content can be enforced by submitting Annual reports to the Uganda Petroleum Authority. It can be, monitored by showing the licensee's and its contractors' and subcontractors' achievements in using local goods and services over the past year and in respect of recruitment and training by presenting a detailed execution of the licensee's recruitment and training programme (Reg, Art. 126(5)). Annual reports are also required under the Model PSA with respect to both procurements of Ugandan goods and services and employment and training of Ugandan citizens (Arts. 17.3 and 18.1).

International law regime governing local content.

Agreement on TradeRelated Investment Measures (TRIMs) Uganda has been member of the WTO since January 1, 1995. All World Trade Organization (WTO) Members must adopt and abide by the obligations of TRIMs. This can impact a country's ability to impose certain local content requirements (referred to as "investment measures"), to the extent they affect trade in goods. Uganda, as a Least Developed Country, is only required to implement TRIMs to the extent

consistent with its individual development, financial and trade needs and administrative and institutional capabilities, subject to notification to the General Council.

The terms and conditions of local content under the TRIMS.

The contracting company must purchase or use products of domestic origin. TRIMs prohibits discrimination between goods of domestic and imported origin;

TRIMS limits the amount of imported products that an enterprise may purchase or use depending on the volume or value of local products that the enterprise exports.

restricting foreign exchange necessary to import (e.g., restricting the importation by an enterprise of products used in local production by restricting its access to foreign exchange).

The General Agreement on Trade in Services ("GATS").

The General Agreement on Trade in Services ("GATS"), covers investment measures related to services (in Article XVI), including the following which are relevant to local content such as Requirements to use domestic service suppliers, Limitation on the number of service suppliers, Limitation on the total value of service transactions or assets and Limitation on the total number of service operations or quantity of service output, Limitation on the total number of natural persons permitted, restrictions on the requirements for certain types of legal entities (e.g., joint venture requirements) and Imposition of domestic equity

GATS only applies to those service sectors that the country chooses to include in its Schedule of Commitments. Uganda's commitments relate only to tourism and travel related sectors and GATS is therefore unlikely to affect the implementation of Uganda's local content framework.

The Bilateral investment treaties Uganda has ratified concerning local content.

Investment treaties are international agreements between two or more countries which establish the terms and conditions of foreign investment within each country and provide rights directly to the investors of each country which is party to the treaty. As at 1 June 2013, Uganda had entered into 15 bilateral investment treaties (BITs) but only 7 were in force General Agreement on Trade in Services ("GATS"). The treaties can contain restrictions on local content requirements.

Investment treaties can contain the following types of provisions, each of which affects a country's ability to impose local content requirements:

Nondiscrimination provisions ("national treatment" and "mostfavored nation" obligations), which are relevant in the context of local content when the host countries require some foreign investors to source from certain goods and service providers but don't impose similar requirements on other investors and host countries give an advantage to some domestic or foreign goods and services providers, but not to a foreign provider whose state has a relevant treaty with the host country. This is relevant only where the foreign provider of goods or services has or, intends to have, a presence in the host country.

Restrictions on capital transfers and **preestablishment protections**, which prevent a state from imposing conditions on foreign investors that are not imposed on domestic investors, such as requirements to transfer technology to local firms, to establish the firm through a joint venture, or to reinvest a certain amount of capital

in the host country;

Incorporation of the TRIMs agreement; and explicit prohibition of performance r**equiremen**ts that go beyond what is restricted by the TRIMs Agreement.

Either Contracting Party shall extend fair or equitable treatment in accordance with the principles of International Law to investments made by nationals and companies of the other Contracting Party on its territory or in its maritime area, and shall ensure that the exercise of the right thus recognized shall not be hindered by law or in practice. In particular, though not exclusively, shall be considered as de jure or de facto impediments to fair and equitable treatment any restriction to free mouvment (sic), purchase and sale of goods and services, as well as any other measures that have a similar effect".

The National Content Study recognizes that *for national content ambitions in the petroleum industry to become a success, capacity building and industrial diversity are prerequisites. Thus, it is crucial for Uganda to pursue long term political commitment for capacity building to reap the benefits of national participation".*

It is important however, to emphasize that successful national content development cannot be achieved by regulation and legislation alone. An extensive framework often tends to lead to rules that are too ambitiously and strictly enforced, which

easily leads to consumption of wealth, inferior industry development, violation of international obligations and corruption, national content should be achieved through capacity building and real contributions to capacity building, by creating a credible atmosphere for industrial collaboration as well as for the transfer of competence and technology, are the only route to create lasting value to society".

Local Content and the Value Chain

The oil and gas sector is spread along a value chain of recognizably different stages, some of which may even act as separate subsectors. At each stage of the value chain different technologies and inputs are utilized, so that the potential for local content enhancement is likely to be different along the value chain. Over time, as the oil industry develops from its initial stages, the nature and extent of local content is likely to vary; some stages lend themselves more to the use of local inputs while others tend to rely more on imported inputs. The ability of the local economy to supply these various inputs also depends on its level of development and industrialization.

• *Exploration*. Suitable sedimentary basins for oil and/or gas exploration are usually identified using relatively simple means such as aerial and satellite photography, as well as magnetic surveys. More detailed information about specific locations is then obtained through seismic surveys, which are considerably more expensive. Through complex computer analysis, the data are interpreted to create images of geological formations and possible deposits of hydrocarbons. Exploratory drilling using rigs suitable for the specific environment (that is, land, shallow water, or deep water) is the next step. Much ancillary equipment, products, and services are associated with drilling, and many petroleum companies typically contract an outside services company for these purposes. This stage of the value chain is very highly specialized, and areas where oil has been newly discovered will find that there is little domestic capacity to supply the inputs. Although there will be some demand for relatively unskilled services and for basic construction, these will be small in scale since exploration is in itself a relatively constrained activity.

• *Development*. If hydrocarbons have been found in sufficient quantity, the development process begins with the drilling of appraisal wells in order to better assess the size and commercial viability of the discovery. The development phase

also is relatively small in scale and specialized, so that again local content is likely to be very limited. Moreover, as with the exploration phase, the search for oil can prove financially unviable, leading to the cessation of activity. Any local content created would then be short lived. This in turn suggests that local firms will be cautious about investing in exploration and development activitiesunless and until the results suggest that economically viable amounts of oil can be recovered.

- *Production*. The development phase is followed by drilling for fullscale production, and the building of infrastructure to connect the wells to local processing facilities or evacuation routes. Onshore infrastructure tends to be less complex and much cheaper than offshore infrastructure. The speed at which the pressure in the reservoir forces the petroleum upward is known as the flow rate; it depends, for example, on the properties of the reservoir rock and, in the case of crude oil, on the viscosityin short, on the reservoir's characteristics. Natural (primary) pressure typically recovers much less than 50 percent of oil and 75 percent of gas. In order to boost flow rates and overall recovery factors in the face of inevitable natural decline rates, various methods can be used. Secondary recovery methods include the injection of water or gas into the reservoir, and the installation of surfacemounted or submersible pumps. Tertiary recovery methods (or enhanced oil recovery, EOR) involve the use of sophisticated techniques that alter the original properties of the oil.

Even in a standard upstream project it is not unusual for five years to pass between the initial exploration stages and fullscale commercial operations. For projects with challenging access, geological, or infrastructure requirements, the lead times can be longer still. These time horizons, coupled with the fact that sudden changes in wellflow management can damage underlying reservoirs, result in structural rigidities in petroleum supply.

As an oil project moves into the production phase, the scale of operations increases and the duration for which inputs are required lengthens substantially. The inputs required may also, on average, be less specialized than during the exploration and development phases, providing better opportunities for local firms to gear up to take part in supplying some components of goods required, and some of the lessspecialized skills. The scale of the activity may suggest opportunities to increase local content but, once the initial investment has been carried out, the level of inputs required is small relative to the value of the output produced.

Indeed, once the major production structures are in place, the actual requirements for continuing inputs declines sharply, apart from crucial utility inputs such as electricity and water. These will often be supplied by local companies, but in certain cases the oil company has to provide its own sources for such inputs.

- *Oil and gas treatment and liquefied natural gas*. Naturalgasprocessing plants purify raw natural gas produced from underground gas fields or extracted at the surface from fluids produced by oil wells. A fully operational plant delivers pipelinequality natural gas that can be used as fuel by residential, commercial, and industrial consumers. In the plant, contaminants are removed and heavier hydrocarbons are captured for other commercial uses. If gas is to be transported in the form of liquefied natural gas (LNG) then a liquefaction plant is needed prior to transportation. The relation to local content possibilities is similar to that for oil production itself.
- *Transport and storage*. From a production site, crude oil and gas need to be transported to the appropriate processing facility; from there they are distributed or marketed. Petroleum can also be stored at various points along the value chain for reasons that include securing supply and price hedging/ speculation. Crude oil is stored in largediameter holding tanks and is transported by pipeline, truck, railroad, and/or tanker to refineries for processing. Ocean tankers are the most common medium of intercontinental transport. Refineries, which usually are located near major import hubs to limit additional transport charges, purchase crude oil on the open market or directly from producers.

Having completed the refining process, oil products can be distributed by the same means as crude oil pipelinde and road transport.

Natural gas may be stored underground in a variety of methods, most commonly in depleted reservoirs, aquifers, or salt caverns. The transport options for gas depend on its physical state. Natural gas liquids (NGLs) can be transported either by pipeline or by tanker truck, but dry gas (methane) can only be transported by pipeline, and even then not across the seabed of deep oceans.

Piped gas has to be transported all the way from the production site to the final destination (a power station, industry, or domestic consumer, for example) using multiple types of pipelines and pipeline networks along the way. By adjusting the degree of pipeline compression, such networks can also be used as additional storage facilities. The construction of pipelines and storage facilities can generate

large demands for construction workers, although these are only temporary. Moreover, in the case of pipelines, the location of the construction demand moves across country, spreading these temporary jobs among a larger number of people. The use of road transport requires a permanent staff of drivers and other facilitatorsjobs that will most often be filled by local labor.

Refining. Crude oil must be refined into oil products prior to consumption, with the main product categories being fuel oil, gas oil, jet/kerosene, gasoline, naphtha, and liquefied petroleum gas. The three main energyrelated uses for oil are transport, power generation, and heating. There are also non energy or process uses, such as feedstock for the petrochemicals industry, that require a further conversion of the input in order to produce a product for the final market.

Primary distribution and marketing. Marketing refers to the distribution and sale of refined products, whether through wholesale or retail. Road transportation fuels are primarily distributed at retail stations; heating oil is usually delivered to residential and industrial customers; kerosene is purchased directly by individual airlines and airports or is distributed to households through retail outlets; and residual fuels are also sold directly to shipping companies, utilities, and industrial plants.

The distribution of piped gas to the end consumer is usually done by utility companies, but petroleum firms are involved in longerdistance transmission and in direct deliveries to industrial users, power plants. Primary distribution requires less specialized capital, and many of the associated jobs are not highly skilled, so that the local content tends to be larger.

Salient points from the Uganda National local content Act.

On 20 May 2020, the Parliament of the Republic of Uganda passed the National Local Content Bill, 2019, (**National Local Content Act or Act)** into law and it now awaits the President's assent.

The Act seeks to address and remedy the shortcomings and defects with all existing policy, legislation and guidelines touching on the subject of local content in Uganda and include, the Public Procurement and Disposal of Public Assets Act, 2003, (PPDA), the Petroleum (Exploration, Development and Production) Act, 2013, the Petroleum (Exploration, Development and Production) (National

Content) Regulations, 2016, the Guidelines on Reservation Schemes to Promote Local Content, 2018 and the 'Buy Uganda Build Uganda' (BUBU) Policy.

The overall object of the National Local Content Act therefore is to impose local content obligations on ALL persons using public resources or carrying on an activity under a license in Uganda.

SALIENT FEATURES OF THE LOCAL CONTENT ACT.

Application and Interpretation

The Act applies to persons and entities: (i) carrying on an activity where public money is used or carrying out public procurement in accordance with the PPDA; (ii) carrying out a licensable activity under the provisions of the Mining Act, 2003, the Electricity Act, 1990, the Uganda Tourism Act, 2008, or any other licence under an Act of Parliament.

The Act also applies to persons in possession of an investment licence or enjoying a tax incentive; an entity under a public private partnership agreement pursuant to the Public Private Partnership Act, 2015; any person carrying out public works whose activities are financed through public borrowing or any similar arrangement.

Designation of a Department

The Act establishes a Local Content Department under the Ministry of Finance, Planning and Economic Development to implement the provisions of the Act, (Department). The functions of the Department include: coordinating and managing local content in Uganda, advising Government on local content issues, developing a local content plan, approving local content plans, and undertaking public education on local content in Uganda.

They also include developing guidelines for the implementation of local content, monitoring and evaluating performance of entities under the Act, and promoting development of local content in Uganda. The Department shall have powers to institute inquiries and review contracts subject to Article 119 of the Constitution.

The Act places an obligation on a local content entity to give preference to goods manufactured and services produced in Uganda. Exception is made where such goods or services do not meet the required quality, quantity or timeline for delivery or completion. In which case, the local content entity must ensure that the required goods or services are provided by an entity that has a joint venture with a Ugandan company or citizen.

Employment of Ugandan citizens.

persons to whom the Act applies are bound to employ Ugandans and can only employ noncitizens after it has been certified by the Department that there are no Ugandans capable of performing the work. Where a noncitizen has been approved for a position, the law requires that provision is made for skills transfer and the entity must submit a succession plan in respect to the role performed by the noncitizen. The grant of work permits for foreign nationals must now be supported by a letter from the Department certifying that an applicant possesses skills necessary for employment and that no Ugandan possess the skills for a role. All positions held by Ugandans will attract emoluments commensurate to the role and, in the case of any difference with a noncitizen, it will not be more than 10%.

CHAPTER

TWELVE

Corporate Social Responsibilty.

Introduction.

Corporate Governance is a system of rules, practices and processes by which companies are directed and controlled. Corporate governance essentially involves balancing the interests of a company's many stakeholders, such as shareholders, management, customers, suppliers, financiers, government and the community.

There is no universal accepted definition of Corporate Social Responsibility (CSR) despite the fact that this term has existed since the early 1950s. The comprehensive definition of CSR was given by **Archie B. Carroll**, who delineated the concept as consisting of "economic, legal, ethical and discretionary expectations" that community has of a company at a specific time.[388] This means that the concept of CRS aims at not only the stake holders but other constituencies such as its employees, suppliers, customer's local community, government, environmental groups and other special interest groups.

Carroll and Buchholtz's fourpart definition of CSR makes explicit the multifaceted

[388] Archie B Carroll., 1979. A Three-Dimensional Conceptual Model of Corporate Performance. *Academy Of Management Review*, 4(4), Pp. 499.

nature of social responsibility.[389]

The **economic responsibilities** cited in the definition refer to society's expectation that companies will produce goods and services that are needed and desired by customers and sell those goods and services at a reasonable price. Companies are expected to be efficient, profitable, and to keep shareholder interests in mind.

The **legal responsibilities** relate to the expectation that companies will comply with the laws set down by society to govern competition in the marketplace. Companies have thousands of legal responsibilities governing almost every aspect of their operations, including consumer and product laws, environmental laws, and employment laws.

The **ethical responsibilities** concern societal expectations that go beyond the law, such as the expectation that companies will conduct their affairs in a fair and just way. This means that companies are expected to do more than just comply with the law, but also make proactive efforts to anticipate and meet the norms of society even if those norms are not formally enacted in law.

The **discretionary responsibilities** of companies refer to society's expectation that companies be good citizens. This may involve such things as philanthropic support of programs benefiting a community or nation. It also involves donating employee expertise and time to worthy causes.

One of the main criticism is in regard to its lack of adaptability to the context.[390] Thus, even if the CSR agenda aims to shape the activities according to the needs of the people in different communities, it seems that those ideas remain only on paper. Furthermore, it is interesting to point out that the programs are always set on the principles leading the company and not on the real needs of the people involved.

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[389] Archie B. Carroll and Mark S. Schwartz, CORPORATE SOCIAL RESPONSIBILITY: A THREE-DOMAIN APPROACH, 2003. *Business Ethics Quarterly,* Volume 13, Issue 4. ISSN 1052-150X. pp. 503–530

[390] Pugliese F (2014). Corporate Social Responsibility And Local Perceptions: A Case Study In Western Ghana

According to Frynas, oil and gas companies have expressed various criticisms resulting in three main views: “CSR is a waste of time; CSR is about managing perceptions and making people inside and outside the company feel good about themselves; CSR is a red herring in terms of development projects”.[391] In instances when the companies have included CSR onto their agenda, they have failed to fulfill that mission such as the requirement to employ residents from the local communities and yet CRS would require that the local community is trained to work.

Corporate Social Responsibility in oil and gas

CSR appears to be an emerging issue because companies are increasingly being held responsible not only for their own activities but for those of their suppliers, the community where they are located and the people who use their products. This is at least partly due to the highly visible negative effects of daytoday operations such as oil spills and the resulting protests by civil society groups and indigenous people. Prominent examples of publicized industry ‘debacles’ include oil tanker accidents such as the ExxonValdez, indigenous unrest such as antiShell protests in Nigeria and the involvement of oil companies in human rights abuses such as BP in Colombia. Such events are widely reported by the media and have put particular pressure on multinational oil companies such as Shell and BP, which are perhaps more visible and their brand image is more vulnerable than companies in some other sectors of the economy.[392]

The implementation of CSR is affected by profitability, industry sensitivity, size of the company, media exposure, board composition and liquidity ratios.

[391] Jedrzej George Frynas., 2005. The False Development Promise Of Corporate Social Responsibility: Evidence From Multinational Oil Companies, In *International Affairs*, 582.

[392] Jedrzej George Frynas., 2005. The False Development Promise Of Corporate Social Responsibility: Evidence From Multinational Oil Companies.

Benefits of Employing CSR as an Integral Part of Business Strategy of Oil and Gas Companies.

The expectation of corporates to 'give back to society' closely relate to the theory of 'social contract', developed by Donaldson wherein society grants legitimacy to the company as long as the social benefits exceed the social costs.[393] CSR activities undertaken by corporates are expected to bring competitive advantage and ultimately, improve the financial performance of the company.

Additionally, in countries where labour unions are more prominent it is expected that companies will perform better on 'implicit' CSR areas, since powerful unions are likely to push for extended benefits for employees, focusing more on health and safety provisions and progressive labour relations policies.[394] Likewise, it has been claimed that a combination of strong state regulation and collective bargaining encourage socially responsible behavior in companies and are likely to increase the level of social and environmental standards in corporate operations.[395] Most companies purport to pursue not only the goal of increased revenues and profits, but also the goal of community and societal betterment.

[393] Thomas Donaldson. (1982). *Corporations And Morality*. Englewood Cliffs, Nj: Prentice Hall.

[394] Ioannis Ioannou., and George Serafeim. (2012). *What Drives Corporate Social Performance? The Role Of Nation-Level Institutions.* Journal of International Business Studies, 43, Pp. 834-864.

[395] John L Campbell. (2007). *Why Would Corporations Behave In Socially Responsible Way? An Institutional Theory Of Corporate Social Responsibility*. Academy Of Management Review, 32(3), Pp. 946-967.

CHAPTER

THIRTEEN

Oil and gas revenue management.

In addition to the anticipated benefits from the oil sector in terms of employment and business opportunities for Ugandans, investment capital and abundant fuel for electricity, the major potential benefits to accrue from the industry lie in the revenue streams to be paid by companies and from the sale of oil once production starts. Given current indications, anticipated revenue from oil could double Uganda's revenue base within six to ten years, providing an unprecedented opportunity for public spending on infrastructure; economic productivityenhancing measures in key sectors such as agriculture, quality education, health, water and sanitation service provision; local government capacity; and town and urban planning. Given experience in other oil rich countries, these potential benefits may not come to pass unless there is a clear and concise framework ensuring revenues are indeed well managed in the interests of current and future generations.

Some of the relevant current laws governing taxation of oil are mostly to be found in the 1985 Act, the 1997 Income Tax Act (the ITA), the 2010 Income Tax Amendment Act and the 2013 oil and gas revenue management policy. The latter amends section 21 of the ITA by clearly stating that the sale of shares in a private limited liability company is not exempt from tax; in other words, clearly introducing a tax obligation on any exploration company that intends to sell its exploration and production rights. Section 4 defines petroleum revenue as income on petroleum operations, government share of production, signature bonuses,

surface rents, royalties and other duties and fees payable under the petroleum agreement.

The ITA provides for taxation of the production of petroleum and natural gas. Cost oil and allowable deductible expenditures are ascertained in the ITA. It also provides for the mode of taxing petroleum companies in case the companies transfer their interests to other parties. The ITA lays down accounting principles to be applied in taxing contractors and taxation of crossboundary shared petroleum resources. Timelines for filing returns and payment of taxes are also stipulated and it is an offence not to furnish returns or to file inaccurate returns, and the fines are quite a deterrent.[396]

A comparative analysis of the best practice in other jurisdictions.

Emerging international norms for good governance of natural resources emphasise good fiscal governance, especially revenue transparency. The key recommendation is that all revenue streams and transactions should be clearly traceable and accounted for in the state budget. Moreover, the state needs to have adequate accounting and auditing capacity to ensure that revenues are collected and managed according to internationally recognised standards of accounting and reporting. Finally, regular public disclosure of revenues is also recommended, along the lines of initiatives such as the EITI.

Two key and synergistic initiatives one of which promotes a mandatory approach to revenue transparency and one which takes a voluntary approach are the international civil society campaign Publish What You Pay (PWYP), launched in 2002, and the multistakeholder initiative launched by the UK government in the same year called the Extractive Industries Transparency Initiative (EITI).

[396] Section 23 of the 2010 Income Tax Amendment Act.

PWYP is a global civil society coalition, working with member organisations in over 70 countries, that helps citizens of resourcerich developing countries hold their governments accountable for the management of revenues from the oil, gas and mining industries. As its name suggests, it does so mainly by advocating for mandatory disclosure by extractive sector companies of the payments they make to governments for access to oil, gas and minerals, and of government revenues earned from the extractive sector, 'as a necessary first step towards a more accountable system for the management of natural resources'. Part of PWYP advocacy to achieve this end promotes changes to stock market listing rules requiring extractive sector companies to publish payments to foreign governments on an individual country basis. In 2008 the efforts of the US PWYP coalition in this direction culminated in the introduction of the Extractive Industries Transparency Disclosure Act (EITD) in the US Congress. This is a bill which, now that it has been passed, requires disclosure of payments by all oil, gas and mining companies listed on the New York Stock Exchange, where 27 out of the 30 largest extractive sector companies that operate internationally are listed. PWYP also calls for bilateral and multilateral agencies 'to require public disclosure of revenues and contracts for all extractive industry investment projects, development policy lending, and technical assistance programmes'. More recently, PWYP has moved beyond advocating for transparency in collection and expenditure of revenues to call for public disclosure of extractive industry contracts and for licensing procedures to be carried out transparently in line with best international practice.

EITI was launched in response to PWYP's call for greater extractive sector transparency. It is a voluntary initiative in which participating mineral and oilrich governments agree to publish their receipts from oil, gas and mining activities, and extractive sector companies their payments, as a block figure of all company payments per country, leading to an independent reconciliation of the reported figures, with any discrepancies being published and explained. Although participation is voluntary, there are specific steps a government must implement in order first to become a "candidate" and then to reach "compliance" within two

years. Compliance with all six binding criteria of the EITI process is validated independently.

Twentyfive countries are currently candidates of the EITI, though only one (Azerbaijan) has achieved compliance. Many candidates are African resource rich countries including Cameroon, CongoBrazzaville, DRC, Equatorial Guinea,

Gabon, Ghana, Nigeria and Tanzania. Norway is the only industrialised country that has signed up to implement the EITI. Around 40 oil, gas and mining companies support and participate in the EITI, which is also supported by donor countries such as Canada, France, Norway, the UK and the US, plus the international financial institutions and investors. The EITI has a secretariat based in Norway, an international board and a multidonor trust fund to finance technical assistance to candidates. CSOs such as PWYP also participate in the EITI, and have lobbied hard for independent civil society participation to become one of the binding criteria

of the EITI process, which it now is. CSOs must participate actively in the multi stakeholder committees implementing the EITI at the national level, and civil society is also represented on the international board. In the four years of its existence,

the EITI has achieved global recognition as a revenue transparency standard, and uniquely for a multistakeholder governance initiative of this sort it has also been endorsed by the UN, G8, G20, AU, OIF and EU.

However, the EITI has also incurred criticism precisely because of its limited, voluntary and nonbinding nature, which can mean that implementation depends on the political will of the government in question. In some countries, CSOs have been victims of intimidation, and overall there has been limited progress in countries achieving compliance status. These concerns have led to a renewed effort by the EITI secretariat to increase the robustness of the initiative[397].

[397] For more information, see www.publishwhatyoupay.org and www.eitransparency.org. For a discussion of some of the limitations on countries achieving compliance status to date, see Oxfam America and Integrated Social Development Centre (ISODEC) (2009). Ghana's big test: Oil's challenge to democratic development. Boston: Oxfam America. p.15. Available at

In 2010 US President Barack Obama signed into law the Wall Street Reform Act. Towards the end of this 2,300page Act, there is a provision requiring extractive industry companies registered with the US Securities and Exchange Commission (SEC), to produce annual reports detailing payments made to any foreign government. Companies must be registered with the SEC in order to trade on US stock exchanges.

Twentynine of the world's thirtytwo largest multinational oil companies and eight of the world's ten largest mining companies are registered and must file annual reports with the SEC meaning that this provision represents a major victory for campaigners who have long argued for better information disclosure by the corporate sector. The information disclosed about payments to governments will help parliamentarians, media and civil society track these funds and promote accountability in the sector.

Advocates are working to encourage similar legislation to be taken up in Europe. If successful, two of the three most significant oil companies operating in Uganda Tullow Oil and Total would be required to start detailing this information. To this end, CSCO in Uganda together with PWYP Uganda recently sent a letter to the UK government stating the case for taking this forward. Some Ugandan parliamentarians have reiterated the argument, with Hon. Banyenzaki having an open letter published on the issue in the UK Financial Times in March 2011.

Revenues should be managed in the context of an overarching macrofiscal framework that recognises the volatility, uncertainty and cyclical nature of their prices, and over time the exhaustibility of oil, gas and mining resources, and ensuring they are linked to national budget processes. All revenue streams and

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http://www.oxfamamerica.org/files/ghanas-big-test.pdf. See also 'Civil society protection a priority; other measures needed to complement EITI implementation', PWYP (press release), 17th February 2009. Available at http://www.publishwhatyoupay.org/en/resources/doha-2009-civil-society-protection-priority-other-measures-needed-complement-eiti-implemen

transactions should be clearly traceable and accounted for in the state budget, independently audited and there should be regular public disclosure of revenues, along the lines of initiatives such as the EITI. The importance of transparent decisionmaking over whether revenues are used for current spending, as opposed to setting them aside for expenditure smoothing or saving for future generations, and the importance of good governance in managing any saving or stabilisation are also highlighted. There should also be "rulebased" and transparent criteria for sharing benefits between central and local government. The development of mechanisms and policies to enhance transparent collection of revenues from oil, gas and mining activities so that they can be mobilised for development and poverty reduction is key. The rationale for this is that 'by increasing transparency and public information, civil society groups, journalists and parliaments can play a more active role in "following the money" and building systems of democratic decisionmaking on how resource wealth should be managed and spent'[398].

In considering mechanisms for harnessing oil and mineral wealth for longterm development, experts have explored different "expendituresmoothing" mechanisms governments can opt for to counteract revenue volatiy, and to set aside revenues for future spending, especially postoil. To date there is some debate as to whether or not this should be done through the establishment of a stability and savings fund for the revenues (as is the case in one model revenue management scheme, the São Tomé and Príncipe Oil Law. One expert argues that 'saving the money into a sovereign wealth fund is wrong for these countries, as their big problem is lack of domestic capital'; though at the same time, 'neither should the revenues be used in the ordinary state budget because they come from a depleting natural resource. Instead, nations should invest in investing, by increasing the mass of domestic capital available.[399]'

[399] Oxfam America and ISODEC (2009). Op. cit.

Others may disagree with this view. As the World Bank's Extractive Industries Value Chain notes, 'to avoid wasteful expenditure and/or the resource curse, special "oil and mineral funds" have been created in a number of producing countries'. The purpose of such funds can be to smooth expenditures over time or to save revenues "for a rainy day", to combat the negative impacts of price volatility; to set money aside for future generations; and as an emergencies fund to be drawn on in case of extraordinary events, such as natural disasters.[400]
The bestknown example of such an oil fund was set up in 1990 by Norway; it has now become the country's pension fund. All oil revenues are channelled into this fund, which is managed by Norges Bank and at the end of 2008 was valued at around US$330 billion. Around 4 percent (considered to be a normal rate of return) is transferred annually to the state budget. Other examples of countries that have set up stabilisation and/or future generations funds include TimorLeste and São Tomé.

Whether these saving funds are seen as effective forms of managing revenues or not, there is consensus on how they should be managed, if established. Firstly,[401] there should be transparent oversight procedures, including independent audits, preferably enshrined in a legal framework. Secondly, the fund should be integrated within the state's overall fiscal management, that is, good fiscal discipline should be maintained; and finally, they should have prudent asset management guidelines.

São Tomé and Príncipe's 2004 Oil Revenue Law contains many elements of the best practices outlined above. It is inspired by two explicit underlying principles: the first takes into account the finite nature of oil resources, thereby introducing mechanisms that will allow São Tomé and Príncipe to face the postpetroleum era with minimum economic distress. The second centres on oil revenue management auditing, transparency and oversight mechanisms. São Tomé is also drafting, with

[400] E. M. Alba (2009). Op. cit.
[401] P. Collier (2007). The bottom billion: Why the poorest countries are failing and what can be done about it. Oxford: Oxford University Press.

the help of experts at Columbia University's Earth Institute, a National Development Plan, which 'will include a range of public investments and policy changes needed for the elimination of poverty on the islands'.

Transparency in oil revenue management and sustainable development.

According to *Emelu (2005)* openness and access to information are fundamental rights in activities that may positively or negatively impact individuals, communities and states. Emelu adds that it is important that information that will enable stakeholders to assess how their interests are being affected is disclosed. There is thus a continuous need to recognize the important roles that different stakeholders have to play in order to guarantee transparency and proper accountability in the oil and gas dealings as the sector starts being productive (Garcia, 2002).

Moss (2009) proposed that the compliance to postulated guidelines and laws or policies governing the oil and gas industry should ensure high standards of transparency and accountability in licensing, procurement, exploration, development and production operations as well as management of revenues from oil and gas. Likewise, Shepherd (2013) in connection with the Regulatory Best Practice that has been in practice in the country for over 15 years and based on the principle that a regulatory agency should be separate and independent from the entities being regulated, in this case oil companies advise that a policymaking body should be separate from the regulatory agency and the competing producers and suppliers of the goods and services. And as such the National Oil and Gas policy was formulated based on this model (Odyek, 2016). This model led to the setting up of the following three separate institutions; an oil and gas policy making and monitoring body (a Directorate of Petroleum in the Ministry responsible for oil and gas), a regulatory agency (Petroleum Authority of Uganda) and a separate commercial entity (the Uganda National Oil Company) incorporated for the chief

reason of fostering transparency and accountability in all oil and gas transactions while simultaneously ensuring compliance to oil and gas laws of the land.It is also worth mentioning that strict observance of clauses that support disclosure of payments and revenues from oil and gas using simple and easily understood principles in line with accepted national and international financial reporting standards will largely contribute to the sustainability of gains anticipated from the oil industry (MEMD, 2008 and Odyek, 2016).

Oil Revenue Management Regime

Revenue management is the most important link in the chain of oil exploitation. Even the best production process cannot cure the debilitating effects of a poor use of oil proceeds.[402] It determines whether the oilexploitation process labored through for years at a huge cost yields real benefit so as to become a great asset to the nation, or yields only the infamous resource curse. Flawed revenue management has the power to cripple nascent economies, extraordinarily grow poverty and income inequality, breed more entrenched autocracies and catalyze conflict, amongst other possibilities.

The Public Financial Management Act (PFMA) establishes a Petroleum Fund into which all the revenues which accrue to government from the resource shall be paid.[403] All petroleum revenue due to the government is to be collected by the Uganda Revenue Authority (URA) by the 7th day of the next month by the person due to make payment.[404] For purposes of accountability, Section 60 of the Act requires the Accountant General to maintain proper books of accounts and proper records. The Accountant General must submit semiannual and annual reports to the Minister, Secretary to the Treasury and the Auditor General. Section 61 of the Act requires the Minister to present to Parliament the estimated Petroleum revenue

[402] Oloka-Onyango J. (2018): Courting the Oil Curse or playing by the rules? An Analysis of the Legal and Regulatory Framework Governing Oil in Uganda Centre for Research on Peace and Development (CRPD) Working Paper No. 58 pp. 9.
[403] Sections 56(1) and (2).
[404] Section 57(1).

for the financial year as well as both semiannual and annual reports indicating the various transactions in and out of the Petroleum Fund. These reports are to be published in newspapers and on the website. This provision not only enhances transparency over the monies collected, it also ensures public involvement in the same. However, the Act gives the Minister (of Energy and Mineral Development) the responsibility for the overall management of the Petroleum Fund, which is anomalous to the effort of reducing the concentration of power in a single individual without making provision for the necessary checks and balances. The aim should be to create multitiered mechanisms of accountability rather than to concentrate power in the hands of a single individual.

The Petroleum Revenue Investment Reserve (PRIR) is another significant feature created by the PFMA Act. The PRIR operates in such a way that by warrant of the Auditor General, Parliament is given the power to appropriate money to be paid from the Petroleum Fund to the PRIR which money shall be invested in accordance with the petroleum revenue investment policy issued by the Minister in consultation with the Secretary to the Treasury and on the advice of the Investment Advisory Committee.[405]

Under Section 64(13), the operational management of the PRIR is placed in the hands of Bank of Uganda (BoU) to be managed within the framework of a written agreement between the Minister and the Governor. This agreement is to be based on the principles of transparency, accountability, intergenerational fairness and equity and shall provide for liability for paying damages for the government that may arise out of negligence on the part of BoU or an external manager/service provider operating under an agreement with the Bank.[406] To ensure accountability and transparency in the petroleum sector, Section 73 requires the Petroleum Fund and the PRIR to be audited in accordance with the National Audit Act, 2008. In order to ensure total safety of the assets in the Petroleum Fund, Section 74 prohibits the financial assets of the Petroleum Fund from being earmarked,

[405] Section 62 and 63.
[406] Section 64(4)(a-b).

pledged, loaned out or otherwise encumbered by any person or entity. Government shall not borrow money from the Petroleum Fund or hold a financial instrument that may place a contingent liability on the Fund. Consequently, any contract that encumbers a financial asset of the Petroleum Fund is null and void.

In the spirit of transparency and accountability, section 66 of the PFMA Act creates the Investment Advisory Committee to advise the Minister on the investments made under the reserve. Section 68 sets out the functions of the committee to include; advising the Minister on the performance of the PRIR as well as other related issues. In giving its advice, the committee must take into account the economic conditions, opportunities and constraints in the investment markets and the constraints under which BoU operates.[407] The committee is also tasked with submitting a report on its performance within 30 days every 3 months to the Minister.[408] This will enable the Minister to keep track of the committee's performance and provide accountability. However, there is no stipulation requiring these reports to be presented to Parliament or shared with the public.

Several observations can be made about the manner in which the issue of revenuesharing is formulated in the law. First of all, there is no individual reporting line for these payments to enable local communities and subjects hold their local governments accountable for such monies. Using local government budget lines makes it complicated for ordinary stakeholders within the districts to know if the local governments are getting a fair share.[409] Secondly, the percentages allocated to the local government and cultural institutions are peanuts compared to what the central government retains yet it is the local governments that interact directly with the people and bring services directly to them. This also runs counter to the expressed principles of devolution and decentralization

[407] Section 68(3).
[408] Section 68(4).
[409] Avocats Sans Frontieres (ASF) (2015): *Business, Human rights and Uganda's oil and gas industry: A Briefing of Existing Gaps in the Legal and Policy Framework*, pp. 8

embedded in the 1995 Constitution, aside from providing more avenues for corruption at the centre.

Finally, because these provisions are not enshrined in the Constitution but are merely ordinary legislation, they can easily be changed to the detriment of the local actors. There is thus a need to achieve consensus on the sharing formulae, especially with the communities based within the production areas and a sufficiently entrenched codification of the same in order to avoid disruptive and illegitimate tampering. It is in the best interests of the nation that this be done to avoid even the remotest possibility of any forms of conflict that usually arise from revenue/royalty sharing arrangements as is the case with Nigeria.[410]

Taxation of Gas and natural gas development

On their split of profit oil, oil and gas firms will be liable to the regular personal and company taxes, as stipulated by the applicable tax legislation. Windfall profits, resource rent, and environmental taxes are some of the other fees. Furthermore, as the sector grows, operations even farther down the value chain will be levied as well.[411] These operations include refining operations and gas and oil product sales. Tax measures applicable to oil and gas firms should be included in appropriate tax law instead of in mining and oil and gas agreements for fiscal performance. Whereas the newest model PSA relates to the ITA's tax rules, tax provisions have also been included in recently completed mining agreements. If tax terms are brokered on a circumstance basis, the government faces a threat because the licensee or company is more likely to get better information about the worth of a resource and is also more talented at bargaining. Another difficulty with casebycase agreements is that tax provisions will vary based on the dialogues. The Uganda Revenue Authority would have to implement several tax systems, which will add to its administrative load.

[410] Oyefusi, A. (2007): Oil-dependence and Civil conflict in Nigeria, WPS 200709, Centre for the Study of African Economies

[411] Oil and Gas Revenue Management Policy (2012). Ministry of Finance, Planning and Economic Development, February 2012.

Oil and gas production has a number of nonlegal considerations. These include problems that come with managing large amounts of money from mineral wealth. These issues are mostly macroeconomic, fiscal, and governancerelated. Countries that have utilized natural resource income to develop their communities have followed best business practices in oil and gas revenue administration all across the world. Six elements of gas and oil production have been explored under the subjects of management, corruption control, accountability, transparency, revenue collection, and oil and gas taxes. When dealing with these issues, Uganda must adhere to some essential standards, such as the Extractive Industry Transparency Initiative (EITI), an international benchmark that promotes transparency of earnings from mineral wealth. Despite anticorruption laws in place, Uganda continues to confront the difficulties of corruption that may be described as "the misuse of entrusted authority for personal benefits" according to Transparency International. Like corruption, accountability is particularly difficult to achieve in a country where the president and his supporters so completely dominate the policy making process. Natural resource wealth is easily susceptible to rentseeking and corruption due to high level secrecy within the industry and high dependency on natural resource wealth as government revenue for most resourcerich nations. This occurs mostly because of information asymmetry that exists between the people and the few individuals saddled with the responsibility to manage natural resource wealth. As a result, resource transparency increases the access to information to stakeholders, enabling them to seek accountability, equitable distribution, and ethical use of resource money.

Introduction.

In the state of affairs, a most heated controversial would be the manner of sharing profits between government and parties to a PSA. Odyek (2016) reports that notwithstanding the fact that final requisites of the revenue sharing agreements with oil producers are not yet known, government revenue from oil is expected to be substantial. One estimate, based on an average oil price of US$75 per barrel,

puts revenues in the region of 1015 per cent of Gross Domestic Product at peak production (World Bank, 2010). The discovery of crude oil consequently has the potential to provide significant impetus to the Ugandan economy and to enable it to better address its Sustainable Development Objectives, provided oil revenues are managed aptly.

According to predictions of International Energy Agency (2015), oil and gas will meet around 50% of the world's energy needs in 2035. Likewise, the contribution of oil and gas towards social development by improving education and public health is immense as it has been instrumental in ensuring the economic growth of many societies by creating a major source of income, tax revenues and jobs (Turek, 2013). Turek however, posits that the oil and gas industry's new challenge is to find fuels that are environmentally and socially responsible for sustainable development; a development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

In Norway, responsibility for management of the oil sector is split between a national oil company, a petroleum authority and government institutions (Kato, 2006). It is the model that Uganda seems set to follow and has set out to build capacity nationally. However, Kato argues that while the checks and balances built into such a system are positive, the complexity of setting up such an institutionally heavy system risks confusion over roles, and expense. Jaen (2010) advises that there is a need to put in place the institutional framework required to manage and regulate this new sector of development. This framework will necessitate the introduction of new legislation and institutions, together with the enhancement of existing ones. Significant training and other capacity building efforts will have to be undertaken in order to enable the established institutions to effectively carry out their different mandates (Uganda and Gas Info, 2015 and World Bank, 2010).It will be important for Uganda to monitor the effectiveness of its systems carefully, to ensure that expert voices are not drowned out. It may equally be worth considering the example of Ghana and Chile, both of which have set up

independent advisory bodies to help government with prudent investment of revenues (Gelb, 2010 and Shepherd, 2013) while also being guided by the National Oil and Gas Policy. This policy and other petroleum acts should contribute to budget transparency if aggressively implemented; with income and expenditures published regularly and publicly, and the due process mechanism introduced to ensure a competitive bidding process for government contracts besides ensuring an efficient set of statutes forming the basis for the oil and gas tax system (MEMD, 2008 and 2009).

Seeing as Uganda is in the advantageous position of being an established democracy, with enshrined legal and media freedoms, the fact that much decisionmaking remains relatively centralized and the population is spread across remote rural communities, means that the public may feel disconnected from a collective development goal (Kock, 2012). The National Development Plan and commitment to public consultation are indications that the government is committed to communicating its vision and for this reason the recently announced 'Vision 2040' is a further positive step. However, the risk remains that oil spending will be poorly understood and therefore subject to disagreement, rumour and possible division (Henstridge, 2012). Uganda can nevertheless learn from a number of initiatives from around the world to enhance popular citizens' buyin. These include regular public consultation on oil in Trinidad and Tobago and Liberia, to an enhanced role for parliament in approving spending in Botswana and East Timor, an annual public debate on oil policy as seen in São Tomé and Príncipe, or the management of the oil Heritage Fund by a committee of the State Assembly of the province of Alberta in
Canada. Many parliaments around the world, including those in Azerbaijan, Egypt and Sierra Leone, also have the right to ratify all new oilrelated contracts and ensure proper oil revenue accountability (Kato, 2006; Duran, 2015 and Shepherd, 2013). Similarly, the 2016 Uganda general elections should present an opportunity for the citizens to voice their repugnance at or support for the Movement

government with regard to future oil and gas revenue management in the country (Musisi, 2016).

Uganda has hydrocarbon resources, read oil. However, oil under the ground is worthless unless it can be extracted and transformed usefully (Starling, 2004). Despite the fact that producing oil for sale involves dwindling geological, manufacturing, and logistical bottlenecks (Moss, 2009; Basdevant, 2008 and Gelb, 2010), this project focused on the more important commercial challenge. Since at some stage oil will run out, sustainable development depends on the rents from resource extraction being converted into other sources of income (Boheene, 2011). The challenge, then, is what to do with the anticipated revenue from efficacious production of oil, and sustaining such an opportunity. To address that challenge, this project proposes the need to have a clearer idea of how much revenue is expected. That, in turn, pivots on three closely linked choices: transparency and principlebased environment, sound tax administration and contracts'
negotiation capacity, and the involvement of Ugandans. It also depends on the price of oil, which is notoriously difficult to forecast. Each of those decisions has an impact on the timing and scale of revenue flows, and of new or contingent liabilities on the public finances. To give two examples: if transparency and principles are unsound, then the anticipated revenue will be swindled; if tax administration and contract negotiation capacity are unsound, these failures will significantly lower returns to investment in production, and further delay any flow of revenue to government (Sykes, 2008).

Uganda has the right vision about what to do with its newly found oil wealth: invest in infrastructure and other types of domestic capital to accelerate convergence to middleincome country levels (Barbier, 2003). To realize this worthy vision, three major and not improbable underlying risks should be prevented. Foremost, the country needs to avoid massive mismanagement and eventual 'oil curse', through strengthening political accountability and Oversight on the executive branch of the government (Kock, 2012). Subsequently, there is

need to avoid excessive real exchange rate overvaluation and the ensuing inefficient sectoral specialization, through first investing in the capacity to effectively manage investment before launching the envisaged investment programme (Longlong, 2012). Finally, the NRM government should avoid isolating Ugandans and also embrace private sectorled growth. Thus, getting the policies, sequencing and alignment wrong, and ignoring issues of absorptive capacity and good governance; international experience indicates that a 'boom' in oil revenues can become a 'curse', depressing economic growth, worsening poverty and increasing political instability (Shepherd, 2013). Therefore, the researcher believes that Oil in Uganda is not primarily a challenge for geologists, engineers or for commercial people in the oil business but an economic challenge for Uganda's policymakers.

Initially there was a lot of exuberance over the big oil and gas finds in East Africa, but now the reality is setting in, along with the challenges of how to get from discovery to production to export to developmental impact (Choudhury, 2012). In fact, many workers in aid organizations have noted that oil operations, instead of improving conditions in the host countries have led to a most regrettable deterioration in these conditions. And in Uganda, the prospect of future oil revenues has been fronted by the government to incur excessive increases in public debt, in order to front load, the increase in expenditures, yet actual future oil revenues may not be large enough to enable Government to service its debt (*Bank of Uganda, 2011).*

In that respect, Choudhury (2012), Kato (2006), Shepherd (2013) and Gelb (2010) believe that dependence on petroleum revenues can undermine a country's competitiveness in other sectors,

leaving it vulnerable to the inevitable decline in production once the resource is exhausted.

Institutional Capacity Building for Oil and Gas governance

Continuity in nationwide institutional capacity building, the development of the necessary regulatory framework, infrastructure and manpower, is widely believed to be an essential ingredient in enabling the country to participate in, and benefit from, oil and gas activities.[412] For this reason the oil and gas sector is anticipated to contribute to the development of sustainability, endurance and prosperity. Therefore, Tadwong (2016) opines that capacity building for both the authorities and national entrepreneurs should be promoted and the oil companies operating in the country should ideally be at the forefront of this effort and in the transfer of technology.

Likewise, Kock (2012) believes that the oil and gas authorities, in recognizing the need to enhance the current institutional framework will contribute to the promotion and exploration of oil and gas in the country. This is built on the requisite to enhance this framework with a view of enabling it to handle the continuing exploration effort together with the development and production of oil and gas. Henstridge (2012) posits that there is an additional need to put in place an institutional framework that will handle the refining of oil, conversion of gas to valuable products like ammonia, together with the transportation and storage of oil, gas and their byproducts.

In effect, although the volatility in oil and gas revenues cannot be avoided, it is still possible to avoid the adverse impact on macroeconomic stability by delinking Government spending from oil revenues intertemporally (i.e. in each individual time period). Bank of Uganda (2011) proposes that this can be achieved by establishing a fiscal rule which determines the size of the fiscal deficit independently of short term oil revenues but on a sustainable long term basis. An example of such a rule is a nonoil fiscal deficit rule. Basically, the Government

[412] (Boohene, 2011; Longlong, 2012 and Johnston, 2014).

should aim to have a reasonably smooth path of expenditures, relative to nonoil revenues (e.g. VAT, personal income tax). During periods of large oil revenue inflows, the budget would accrue surpluses, while deficits would be incurred during periods in which oil revenues are unusually low. However, it is crucially important that the fiscal rule followed by Government is consistent with a sustainable path of expenditures and public borrowing over the long term. Certainly, Kock (2012) and Henstridge (2012) accept as true that establishment of an appropriate framework should as a must take into consideration the different roles of the state and those of the oil companies in the implementation of oil and gas activities.

The Citizens' part in the Management of the anticipated Oil and Gas revenues

Because the relationships between government, oil companies, and the people should be conducted and maintained in a spirit of mutual respect, cooperation and trust, mutual understanding should be promoted and this system of cooperation can therefore be viewed by all Ugandans especially those within the communities situated in the oil and gas producing regions and any pipeline corridors (Emielu, 2005; Kato, 2006 and Shepherd, 2013). Emielu believes that the interests of local communities in areas where oil and gas production is undertaken should categorically be taken into account by, among other things, sharing of royalties in line with the Constitution and any relevant laws passed by Parliament. All these efforts are important as they could significantly contribute to the diffusion of conflicts and emphasize peaceful resolution of disputes. Similarly, where oil and gas activities or their impacts extend to neighbouring countries, this spirit should be exercised in accordance with the principles grounded in the country's foreign policy (Duran, 2015).

Additionally, there is a pressing need to recognize the role Local Governments, Civil Society Organizations (CSOs) and Cultural Institutions can play through advocacy, mobilization and dialogue with the people. These institutions are largely

accepted as crucial to holding the different players accountable with regard to oil and gas issues and are always major players in getting the voices of the poor into designing, monitoring and implementation of government programmes The oil and gas government programme should therefore not be any different since the CSOs may also be contracted in the delivery of various services, especially in the communities where oil and gas activities will be undertaken. It goes without saying that factoring in the perceptions of residents, as voiced in particular discourses on oil developments, are instructive as to the realities residents perceive. Such discursive realities in turn shape social and political behaviour, in this case, the oil and gas anticipated socioeconomic gains (Kock, 2012).

The Permanent Income Hypothesis (PIH)

The PIH is based upon a theory by Milton Friedman, a Nobel Laureate for Economics, which states that an economic actor will aim to smooth their consumption and expenditure out between income peaks and troughs, and essentially expend the average of their expected total lifetime income. When applied to a country's oil or gas wealth, the PIH implies that a government will spend only the equivalent to the interest of their country's total oil and gas wealth. The

Magnitudes termed "permanent income" and "permanent consumption" that play such a critical role in the theoretical analysis cannot be observed directly for any individual consumer unit. The most that can be observed are actual receipts and expenditures during some finite period, supplemented, perhaps, by some verbal statements about expectations for the future. The theoretical constructs are ex ante magnitudes; the empirical data are ex post. Yet in order to use the theoretical analysis to interpret empirical data, a correspondence must be established between the theoretical constructs and the observed magnitudes (Friedman, 1957)

São Tomé and Príncipe was the first country in Africa to adopt a rule, based on Milton Friedman's permanent income hypothesis (PIH), drawing from the successes of Norway, which was anticipated to guarantee sustainable government consumption and give pivotal consideration to intergenerational equity while

giving the country a predictable stream of oil revenues to meet pressing development needs. This was achieved through investing all oil and gas revenue externally in a sovereign wealth fund, which then generates interest (Segura, 2006).

In Uganda, ordinarily, the oil and gas revenues should, like all other Government revenues, be deposited in the revenue account of the Consolidated Fund, and allocated in accordance with normal budgetary process, but to help crystallize public support in building a resource buffer for the future; also given the complexity of accountability for multiple petroleum revenue streams and to provide an easy and transparent way to present and manage the stocks and flows of oil revenues and the anticipated challenges that management of these revenues pose, the resources must be managed under a transparent and segregated arrangement distinct from the Consolidated

Fund, into which all revenues directly attributed to petroleum activities are deposited (MEMD, 2008 & 2009). As such a Petroleum Fund was established in Bank of Uganda, which will be under the control of the Ministry of Finance, Planning and Economic Development on behalf of Government. The Fund will be a “financing fund” for aiding budget financing and providing for

savings for future generations and making certain that the sustainability goal is met (Sanya, 2016).

Meghir (2004) proposed that the above model has the advantage of avoiding the instability of the spendasyougoapproach, while also preserving the wealth for future generations to benefit from, and it also makes greater sums available for expenditure than the Bird in the Hand approach, while still preserving wealth for the future. However, Basdevant (2008) argues that this approach, by allowing the government to spend an even amount of wealth during and after the resources’ production, and saving for future generations both overlooks current generation’s poverty, and the greater economic utility which capital expenditure may have in a capitalscarce environment. But according to MEMD (2009), Uganda included an option that allows resolving present budgetary needs with the budget financing objective integrated within the Fund’s operational objectives. Therefore, while the

exact size of Uganda's oil wealth is still uncertain, even using very conservative assumptions similar to Sao Tome, it is projected to be significant; enough to allow for stable financing of development needs, in perpetuity, from the returns of the sustainability of the country's development. It is a possibility that the country's oil wealth will end up being so large relative to the size of the country, that absorptive capacity constraints could prevent full and efficient use of the annual funding dictated by the PIH rule. Milton Friedman's permanent income hypothesis (PIH) guarantees sustainable government consumption and gives pivotal consideration to intergenerational equity while giving the country a predictable stream of oil revenues to meet pressing development needs (Basdevant, 2008; Meghir, 2004 and Segura, 2006).

Anticipated Transparency and Accountability challenges in the management of the Oil Revenue

It has been perceived for a while now that because of weak states, bad governance, impotent policies and laws on the management of oil and other resources, the rich and more organized warlords benefit the most from the resources as opposed to the citizens. This has been witnessed in countries like Nigeria, Chad and Niger with the likes of Sao Tome yet countries like Norway,

Trinidad and Tobago as well as Saudi Arabia are flourishing in the oil industry (Kato, 2006 and Barbier, 2003). It is highly likely that the reason for the latter's success in the oil business is

because they have put in place functional systems to diminish corruption and enforce proper financial accountability of their oil revenues with a particular focus on development sustainability (Tadwong, 2016). It is therefore noteworthy that because discussions on fiscal rules for many of these oilrich countries gravitate heavily to these considerations and the tradeoffs they entail, particularly gauged against the need to ensure fiscal sustainability, there is need for profound fiscal deliberation in the legislative and executive government arms (Abjorensen, 2014).

Sykes (2008) advanced that the objective of fiscal rules is to guide fiscal policy, usually through constraints on policy design. In fact, he conveyed that the effectiveness of policy implementation can be further measured against indicators of fiscal performance. Starling (2004) believes that usually, though in some cases not specifically, the goal of such rules is to guarantee fiscal sustainability. He adds that in the case of oilrich countries, recent literature shows, monitoring the nonoil balance is a good benchmark for evaluating the fiscal stance. Therefore, in designing fiscal rules, countries must also think about absorptive capacity constraints; at technical, institutional and infrastructure levels and the need to ensure an effective tracking system to minimize wasteful public spending. Ultimately, Segura (2006) vetoes that the decision on which fiscal rule to adopt is to some degree countryspecific and that there is no single optimal rule for this or for guaranteeing fiscal sustainability. Segura's argument suggests that even with the so many preparations that have been done so far, being fiscally astute alone won't cut it. Uganda
still needs to fill all existent corruptioninducing ambiguities in order to guarantee meaningful gain from the anticipated oil revenue.

In contrast, when we study how the president and his team have handled the selection of firms for the refinery building tender, there is evidence to suggest that it has been stained by bits of corruption. Musisi of the *Daily Monitor* discovered that when requests for qualification documents were put out and several firms, applied, only four firms made it to the last round; Russia's RT Global Resources, Japan's Maruben Corporation, China's Petroleum Pipeline Bureau (CPPB), and South Korea's SK Engineering and Construction Co. Ltd. Musisi intimated
that the idea that CPPB was knocked out over what was believed to be political connections to former Prime Minister Amama Mbabazi, whose relationship with the powers that be had collapsed was clear indication that CPPB was on the list in part because of Amama Mbabazi rather than on merit. But also its disqualification was skewed because of Amama's manumission from the ruling party. Similarly, the government's announcement that RT Global Resources was

the preferred bidder to develop the Greenfield refinery, which is a subsidiary of Rostec, a defense and technology corporation, picked fresh on the heels of sanctions by the US and European Union slapped on Sergei Chemezov, Rostec's chief executive, a former officer in the Russian spy agencyKGB, begs the question why the government would risk handing over such huge contracts to internationally sanctioned firms (Musisi, 2016). It is evident that the principles of transparency seemingly in place are already flawed which spells doom for the oil industry if the status quo is upheld. The much desired sustainability of development programmes aided by oil revenues is then dealt a huge blow.

Anticipated Institutional Capacity bottlenecks for Oil and Gas Revenue Management

Looking at the situation in São Tomé and Príncipe, for the five years preceding 2006, the country had created a number of institutions to ensure sound regulation of the hydrocarbons sector. The policy objective had been to address the "curse" of oil that has been identified in many resource
rich countries. Against this background, São Tomé and Príncipe drafted a number of laws to make management of oil revenues balanced, transparent, and accountable. Crafting the laws and enabling regulations was an open democratic process in which representatives from all political factions and social segments participated, in consultation with international experts (Segura, 2006). In 2007, however, widespread criticism by major domestic and international stakeholders of possible economic and financial losses to the country under the original institutional framework for oil extraction and production terms broke out and while they were later amended, and indeed secured better terms generally, in several cases imbalances in profit distribution were not fully redressed in São Tomé and Príncipe's favour.

The situation in Uganda is quite similar to Sao Tome's predicament. Although many reports
suggest that major strides have been taken to finalize institutional capacity development for oil production, media discoveries suggest otherwise. For instance,

after feasibility studies had been done and dusted, as expected, in August 2015, President Museveni and President Uhuru Kenyatta signed an MoU to seal the deal on the Lamu route. However, barely an hour later after the announcement had been made; Kenyatta's technocrats expressed discomfort at some of the conditions that Uganda had set. As the Kenyan team went back to consult, Total also kicked up the storm by opposing a pipeline to Northern Kenya, citing security concerns there. Much as Uganda seemed in favour of the Lamu route, which connects to the LAPSETT corridor, Total with its financial muscle stood ground, and immediately the Ugandan technocrats startedoff discussions with their Tanzanian technocrats. In summary, Uganda finds itself in a very difficult position, a position that requires the country to charm both Total and Kenya together with other partners rather than stick to terms that will be commercially viable for Uganda (Musisi, 2016 and Odyek, 2016).

More media reports in 2015 indicated that the government and RT, the tendered firm for building the refinery had been conducting negotiations in connection with the construction of the oil refinery but as 2015 drew closer, no conclusions had been reached on all deliverables besides the commencement and completion dates much as technocrats in government told the country negotiations would be closed by December, 2015. Moreover, RT's representatives further

disclosed to the media that they still needed more time for more feasibility studies on the project, studying the quality of crude oil and also to beat the thick bureaucracy on tax exemptions in additional to securing permits. Correspondingly, for production to start, huge investments were required in the sector for development of a refinery, pipeline and development of oil fields including massive investments in central processing facilities in which oil is stabilized. To date, no firm has been awarded the tender for the CPFs (Musisi, 2016). Respectively, contracting and awarding tenders still faces the unfortunate depreciation of the shilling. This means that awarding contracts in foreign currency causes shilling depreciation which culminates into supplementary budgetary expenditure and yet the Ministry of Finance has still not resolved the fundamental issue of hedging, against the exchange rate risk (Sanya, 2016).

In the same way, while higher institutions of learning have been promoting oil and gas courses for graduates, 2015 started off with the three IOCs trimming and merging staff positions owing to the need to reduce operational costs hinged on the plummeting oil prices. Tullow kicked up the storm by laying off at least 120 employees. Total followed suit, layingoff 30 workers and more later. The reasons the two firms gave was that the completion of the exploration phase meant that all drilling operations and related activities had been completed, therefore, as they prepare for the production phase, there was need for substantial reduction of operations and related activities (Musisi, 2016; Odyek, 2016 and Tadwong, 2016).All these challenges point to the fact that Institutional Capacity development in Uganda's oil Industry has been significantly weighed down yet more still needs to be done.

Anticipated motivations behind citizens' imminent discontentment with the management of the oil revenue

Oil and gas activities should be most efficient and effective so as to maximize their returns thus effective revenue management must be promoted by striving to ensure that petroleum revenues are used to boost balanced growth and sustainable development to directly benefit the people of the country. The discovery and rapid development of Uganda's oil sector presents the country with unique economic opportunity to address a myriad developmental challenges. However, in as much as oil revenues stands to bolster the national economy, several locallevel social challenges in the oilproducing region have to be addressed if government wants to avoid the formation of grievance politics. Tadwong (2016) found that villages along LakeAlbert and those located in an area earmarked for the construction of an oil refinery are confronted with severe uncertainty and fear. These fears and uncertainties stem from tensions (such as access to land, fish in the lake and other subsistence resources) that precede oil exploration and infrastructure development operations. However, as oil exploration and production operations expand, these existing tensions have been compounded and given more political significance,

owing to oilrelated developments that put more pressure on communities (Henstridge, 2012 and Shepherd, 2013).

Likewise, resource extraction operations are notorious for alienating residents and blatantly ignoring the plight of people while super profits accrue in offshore bank accounts from the sale of the resource. What emerges from such friction is grievance politics and the likelihood of the societal nexus becoming hostile to both corporate and state actors that champion an extractive operation (IEA, 2015). It is therefore important to understand that 'the societal nexus wherein states and corporations operate is a politicized space where the experiences of displacement, poverty, and alienation give rise to actions that challenge reigning orders. By identifying discourses regarding oil developments on Lake Albert, Uganda will identify the existential frustrations that may, if not addressed by state or corporate interventions, form the foundation for social actors in the region to challenge 'reigning orders'; in this case the Ugandan state and Tullow Oil. The China National Offshore Oil Company (CNOOC) and Total have signed a deal with Tullow Oil for production of the resource, and will therefore also be scrutinized by communities eager to follow developments in the oil sector. (Kock 2012).

According to Odyek (2016), fair and equitable distribution of the Petroleum Fund investment activities and infrastructural projects nationwide is key to ensuring sustainable economic development in Uganda. Odyek believes that communities in the catchment area of the crude oil activities need additional compensation in the form of massive job creation. Abjoresnsen (2014) on the other hand suggests that the development of a wellplanned and designed modern economic city for at least 2 million habitants in the Western region with a vibrant petrochemical industry would be adequatecompensation for the Western region. The upcoming crude oil boom in the same region should provide the platform for a turnaround in the development of the region so as to eliminate any possible strife among the people of the region (Hobenu, 2010).

Effect of transparency and accountability on the sustainability of Uganda's oil sector development.

The assertions that a system of audit and reporting should be regularly fastened to mitigate corruption and that all information on oil revenue management should be made publicly available on the website of the body mandated to manage the resource was the widely held view of the respondents, with key respondents from Bank of Uganda admitting that in the absence of such transparency, governments and companies may behave in ways that will enhance the wealth of the few elite and yield no benefit to the many citizens and that when companies and the government are fully transparent, citizens, journalists, civil society, researchers and investigators can track revenue flows, holding public officials accountable and discouraging corruption.

The Global Witness (2014) similarly advances that natural resources are the property of all citizens, and governments are only the custodians of those assets. The contracts that govern them should be available to the public. They say that making contracts publicly available not only builds trust in government but, more importantly, it empowers citizens to check how their interests are safeguarded and governed which ultimately enhances transparency. The Global Witness incidentally adds that there is now a wide recognition that greater transparency in the extractive sector is key to good resource management and that publishing revenue information would be enhanced by an understanding of the contracts that underpin those revenues since the International Monetary Fund and the World Bank have also endorsed contract
transparency.

Effect of tax administration and contract negotiation on the sustainability of Uganda's oil sector and development.

In my wellconsidered opinion, I opine that increasing the state's share of benefits (tax revenue) as oil projects' profitability increases and fostering of competitive

bidding for contracts will minimize opportunities for corruption and swell the Consolidated Fund. This supposition is buoyed by BOU experts who reaffirmed that the competitive bidding policy should as a matter of principle bring out clear terms of developing the resources so that they can be expeditiously exploited in the interest of energy security of the country and improving the investment climate. The study also determined that the marginal effect of instituting proper tax administration and contract negotiation processes will have a more positively significant effect to the sustainability of the oil resource while citizens' involvement may not have a significant effect.

According to International Alert (2011), Oil, gas and mining contracts, such as production sharing agreements (PSAs), set out the terms which govern the relationship between host governments and extractive companies. They dictate the amount of money the government will get, any special dispensations like tax breaks, the key obligations for companies and government, the protections for people and environment and what information will be kept secret. On this background, the researcher recognizes that these documents are fundamental to any meaningful understanding of the deal between a state and big international oil companies trying to profit from countries' natural resources and therefore intense scrutiny by the government is mandatory

to ascertain whether the country is getting a good financial deal for its natural resources or whether the resources should be extracted at all as this has been branded highly significant to sustainability of the oil sector.

Effect of citizens' involvement in the oil matters on the sustainability of Uganda's oil sector and development

The researcher found out that the view that employment opportunities in the oil sector should be prioritized for the local people over foreigners was the widely held view by the majority of respondents. In addition, key respondents intimated that capacity building and industrial diversity should be considered prerequisites. Thus, it is crucial for Uganda to pursue longterm political commitment for capacity building to reap the benefits of national participation. Similarly, responses

in favour of the assertions that the government should use a portion of the oil revenue to finance few projects with huge social and economic benefits to citizens were common. Correspondingly, according to Byaruhanga (2011), the current phase of oil exploration in Uganda offers a unique and exciting chance to alleviate poverty and create broadbased development and improved standards of living across the country yet at the same time, many Ugandans are well aware that much has been written and discussed about the “resource curse” which underscores the importance of preparing adequately to utilize positively the benefits that will accrue from oil wealth.

Conclusion;

The legislative structure encapsulating the fiscal system within which Uganda's oil and gas production is taking place has been addressed. Sustainable resource administration necessitates a multifaceted national plan. According to Article 244 of the Republic of Uganda's constitution (as modified), all resources and oil and gas in, on, or beneath any land or waters in Uganda are conferred with in government on behalf of the citizens of Uganda. The National Oil and Gas Policy is the principal policy that guides the administration of Uganda's oil and gas within the constitutional setting (NOGP). Given the overriding purpose of utilizing the resource to alleviate poverty and provide longterm value to Citizens, NOGP acknowledges that the establishment of structures, including legislation and personnel, essential for efficient administration and control of the subsector, should be a central objective. The petroleum fund for oil and gas production was established under the oil and gas Revenue Management Policy of 2012 and the Public
Management Act of 2015.

CHAPTER

FOURTEEN

Corruption and corporate governance.

Introduction.

Uganda currently has a comprehensive legal and institutional framework for the regulation and prohibition of corruption. The legal system in Uganda comprises the 1995 Constitution as the supreme law according to article 2 of the constitution. It contains provisions on measures, concepts and institutions that are geared to preventing, monitoring and combating corruption. Under the National Objectives and Direct Principles of State policy, the Constitution stipulates that the State and citizens of Uganda are to "preserve and protect and promote a culture of preserving public property"[413] and that all measures should be undertaken to eradicate corruption and abuse of office or misuse of power by those in public office. The Constitution makes all public offices and those in positions of leadership answerable and accountable to the people of Uganda. Besides, the Constitution enjoins the citizens of Uganda to preserve and protect public property and combat corruption.[414] There acts include the Prevention of Corruption Act Cap 121 which defines "corruption" and prohibits corrupt acts and the Penal Code Act Cap 120 which provides for corruptionrelated offences. Different institutions have been created to institutionalize the fight against corruption namely; Directorate of Public Prosecutions (DPP) (for criminal prosecution), the Inspectorate of

[413]1995 Constitution, objective xxv.

[414] Ibid., Art. 17(2)(d) and (i).

Government (ombudsman), the Auditor General (for financial probity), the Uganda Police Force and in particular the Criminal Investigations Department (CID) (for investigating crimes), courts (for adjudication purposes), Parliament (by its oversight function through its committees, in particular the Public Accounts Committee (PAC) and the power of censure of ministers), and the Directorate of Ethics and Integrity.

Despite the various international conventions, municipal laws and institutional arrangements that Uganda has promulgated, corruption is still central to the myriad of governance problems faced in Uganda and a challenge to the successful exploitation of oil resources.

Corruption is further promoted by the huge multinational oil companies who often maneuver for control of the oil fields through clandestine operations, corrupting government officials; or outright military interventions.[415] This resource curse leads to private sector engaging in rent seeking activities instead of productive engagement.[416] Corruption further distorts the allocation of resources in the economy by limit the ability of governments to distribute public sector positions and resources equitably.[417]

Uganda's current anticorruption legal and regulatory framework is based on the traditional approaches such as repression and prevention, with little recourse on transparency and stakeholder involvement, and no specific reference to the oil industry issues. Further, the current legal and regulatory regime does not address the specific problems and complexities of the oil exploitation industry.

There are weaknesses in the law related to the management of corruption. **The Prevention of Corruption Act,** which is the major anticorruption law is restrictive in the sense that it only applies to members, officers and servants of a public body and does not encompass private companies and corporations. It also addresses only the offence of bribery. Further, the **Inspectorate of Government Act** is limits the

[415]Nigeria Environmental Action Study Team (NEST), Nigeria's Threatened Environment, Ibadan, 1991.

[416] Mehlum, H., Moene, K. and Torvik, R. (2006), "Institutions and the resource curseThe Economic Journal, 116, 1-20

[417] Robinson, J. A., Torvik, R. and Verdier, T. (2006), "Political foundations of the resource curse",Journal of Development Economics, 79, 447-468

jurisdiction of the Inspectorate of Government to Government Departments undertakings only. Further, the **Leadership Code Act** provides that contents of the declaration are to be treated as public information, but they are only accessible to the members of the public upon application to the IG in a form prescribed under the Code.[418] This, given the level of literacy in Uganda is selfdefeating since it is unlikely that the majority of the population will be familiar with such a procedure. The law also addresses only a specific category of people (leaders) as defined in the Act.

It therefore follows that such people will enjoy their illgotten wealth unchecked. It is also important to note that Uganda lacks laws that target the proceeds of corruption and yet corruption empowers the offenders with economic gain.

Finally, the general enforcement environment is weak and specific enforcement mechanisms function poorly, as in many developing countries, corrupt practices thrive and oil exploitation cannot be sustainable, equitable or transparent. There is further absent codes and ethics to regulate internal affairs of private oil corporations and the public servants who might engage in corruption.

According to ***Dev Kar and Devon CartwrightSmith*** both argue that addressing this problem requires concerted effort by both African nations and by western countries through greater transparency in the global financial system which can curtail illicit out Africa's oil boom is unlikely to foster any significant poverty reduction. Oil producing countries will continue to produce corruption and mismanagement, environmental destruction, human rights violations, and conflict.

Uganda has sectoral legislations regulating the petroleum industries, while also ratifying certain conventions on promotion of transparency and fighting corruption. African Oil producing countries such as Nigeria, Angola, CongoBrazzaville, Cameroon and Gabon, have been largely unable to convert their oil wealth into broadbased poverty reduction and neither have they been able to diversify their economies or prepare for a postoil future[419]. To the contrary,

[418]Section 7 of the Leadership Code Act

[419]Gary I (2003), "Bottom of the Barrel**:** Africa's Oil Boom and the Poor Catholic Relief Services", Terry Lynn Karl, Stanford University also author of Paradox of Plenty: Oil Booms and Petro-States,

petroleum has become a magnet for conflict and, in some cases, civil war[420] and yet oil is supposed to improve the lives of the poor through increased investment in education, health, water, roads, agriculture and other vital necessities[421].

Presently, Africa's oil revenues are inserted into governments lacking in transparency, accountability and fairness. Without improving their democratic institutions and administrative capacity, it is unlikely that African oil exporters will be able to use petrodollars to fuel poverty reduction; instead, oil monies are more likely to make matters worse for the poor.

In order to improve outcomes for the poor, all actors need to change some of their practices and work together in a more concerted manner because unless the main players in the oil story make specific policy changes. It is urgent that improvements be made now to emphasize transparency and fairness, the construction of capable and accountable institutions, and the respect for human rights and the promotion of democratic space in oilproducing countries.

Nigeria's oil was discovered 50 years and even at one time, Nigeria is the sixthlargest producer of oil in the world, with $2.2 million a day in oil revenue, much of its population is destitute and the average person lives on less than a dollar a day. This shows how oil discovery has brought dire poverty and lack of development and fostered government corruption. The region's oil industry also has had a profound effect on the environment and health, pointing out that the past two decades have seen the equivalent of two oil spills a day, and a 2006 World Wildlife Fund Report[422] called the Niger Delta one of the most polluted places on Earth. Further, due to the inequitable sharing of resources from the oil industry, Nigeria has suffered conflicts, largely due to a militant group known as the Movement for the Emancipation of the Niger Delta, or MEND, which attacks oil facilities and takes oil workers hostage, leading to more than a quarter of Nigeria's oil production being stopped and making it be overtaken by Angola as the largest

Available at http://internationalbudget.org/wp-content/uploads/Bottom-of-the-Barrel-Africas-Oil-Boom-and-the-Poor... [Accessed July 14th 2015]

[420] Ibid
[421] Gary I (2003), Ibid
[422] 2006 World Wildlife Fund Report

producer in Africa. The lessons learnt from the Nigerian oil story should not be ignored by Uganda since almost all problems faced by Nigeria are similar to those faced by Uganda. [423]

Commenting on the relationship between natural resource exploitation and conflicts, Bannon and Collier argue that countries with high riskeconomic characteristics such as low income, low growth and dependence on natural resources have a higher risk of conflict.[424] Furthermore, natural resource rents increase the risk of civil war because they are not well managed.

Van Der Veen points out that in order for African countries to use oil and gas for development, it is important to strengthen governance.[425] His thesis is supported by Abuka *et al.* (2007) who throw more light on this issue by saying that the basic framework for oil and gas development is a robust petroleum law to ensure proper governance of the sector through defining the roles of the state, establishing key institutions, describing the basic licensing and contractual framework setting the outline of the fiscal regime and defining the relationship between the oil and gas laws with other existing laws. While countries such as Sao Tome and Principe have established the required laws, in most African countries, such as Uganda the laws remain inadequate.

Uganda is also a signatory to various international initiatives to combat corruption, based on the current international anticorruption conventions. These treaties are designed to address the global character of the problem through cooperation and to help bridge gaps in domestic policy.

According to **article 19 of the Universal Declaration of Human Rights,** of which Uganda is a party, seeking and imparting information is a human right. This access to information enhances transparency which in turn is considered important

[423]Wiwa, Diana, "The Role of Women in the Struggle for Environmental Justice in Ogoni," Delta website, <http://www.oneworld.org/delta/news4.html#1>, October 1997.

[424]Bannon, I and Collier, P. (2003). Natural Resources and Conflict: What We can Do? Chapter 1. The International Bank for Reconstruction and Development/The World Bank.

[425]Van der Veen, P. (2006). Oil for development, strengthening good governance in Oil-Producing African countries: The role of the World Bank, Oil, Gas and Mining Policy Division, The World Bank.

because it reduces the possibilities of undermining institutions through corruption and is a prerequisite for the establishment of proper regulatory institutions and other institutions that deal with resource curse problems (Isaksen et al. 2007).[426] Information also improves citizens' ability to challenge corruption, since reliable quantitative information is more difficult for politicians and other public officials to brush aside as anecdotal, partial, or simply irrelevant.

The relationship between corruption and access to information was canvassed by **Reinikka** and **Svensson (2005**). Following surveys in Uganda which showed that only 13% of education grants actually reached schools in the 1990s, the rest being captured by local government, the Ugandan government started to publish monthly grants to districts in newspapers. This had a substantial effect on the amounts that schools received, in 2001 more than 80% of grants on average reached schools. They find that the effect of access to this information on grants received was statistically significant.[427] Further, a study by **Olken (2004**) provides an important nuance to this result, by showing that the effect of information depends very much on the incentives to act on reports of leakage of funds.[428] Such transparency makes it more likely that corrupt officials are detected.

Resourcerich countries that have a malfunctioning bureaucracy and poor laws and policies in the oil and gas sector tend to attain lower growth outcomes and more violent conflicts than those that have high quality (Weberian) systems of public administration and sound laws, policies and institutions established for the management of the oil resource. This means that the benefits of resource abundance are reaped by a few state elites in alliance with foreign oil companies. On the other hand, however, the nation as a whole benefit when such legal, policy and institutional frameworks are developmentenhancing legal recommendations

[426]Isaksen, J., Amundsen, I., Wiig, A., with Abreu, C. (2007). Budget, State and People. Budget Process, Civil Society and Transparency in Angola. July 2007 Bergen: CMI

[427] Reinikka, R. and Svensoon, J. (2005) 'Fighting Corruption to Improve Schooling: Evidence from a Newspaper Campaign in Uganda', Journal of the European Economic Association 2 (2-3): 1-9.

[428] Olken. B. A. (2004), Monitoring corruption: Evidence from a field experiment in Indonesia, Washington D.C.: National Bureau of Economic Research, November 2004

on averting the resource curse.

Problems associated with the resource curse (Oil)

Julius Kiiza *et al*[429] assert that the resource curse is associated with eight distinctive problems. First is the national risk of entrenching a primary commodity economy that is dependent on God given (or 'natural') advantages. Yet, globalization not only spells doom for economies that are 'stuck in the Garden of Eden', it calls for the structural transformation of the national economy into a high valueadded industrial and information economy. Second is the problem of repositioning government as the key driver of growth (to the detriment of the private sector). Third, is the erosion of citizens' duties and obligations such as payment of taxes (because government is expected to use 'windfall' revenues to finance public services). Fourth is the problem of political instability (such as in Nigeria, DRC or Angola). Fifth is the problem of 'leakages' or corruption, which is common in resourcerich countries (such as Nigeria) that have weak institutions of governance. Sixth is the risk of entrenching authoritarian rule or unaccountable governance. Seventh is the risk posed by oil related activities to people's health and, in particular, the possible negative effects of oil spills on fisheries and the environment. And eighth is the problem of exaggerated expectations.

Paul Collier, **the author of the bestselling 'The Bottom Billion**[430]**'** discusses and analyses the ethical, political and economic challenges in managing natural resources, especially oil resources in African countries and their use. Professor Collier's analysis includes specific findings from his own recent research in economics and governance in Third world Countries. His point of

[429]Julius Kiiza, Lawrence Bategeka and Sarah Sewanyana: Righting Resource Curse Wrongs in Uganda: The case of Oil Discovery and Management of Popular expectations, Economic Policy Research Center, July 2011.

[430]

departure is that "natural resources especially oil constitute a massive opportunity and that it is only when they are properly harnessed that they can be transformative. However, he points to a complicated chain of decisions, from initial exploration (where, he says, "basic prospecting should be undertaken as a public good, and it should be financed predominantly by donors") to extraction and marketing. Any weak link in the chain of decision making, legislation, policy and institutional frameworks could have adverse consequences for the whole. Collier's work is interesting and illuminating, but sometimes hard to follow, despite the author's efforts to write for the general audience. My research is clear and easy to follow and although it draws examples from around the globe, it is restricted to the factual situations in Uganda.

Solutions to the Oil / resource curse.

In **May 2012, Columbia University published a paper titled, 'Oil: Uganda's Opportunity for Prosperity.'**[431] The paper argues that Uganda faces great challenges of ensuring that it extracts the full value from its oil endowment. The paper asserts that thorough preparations are required at all levels to avoid the 'resource curse'. The paper makes a total of 56 policy recommendations to establish the necessary legal, governance, environmental and social foundations for a strong oil sector before fullscale production begins in 2016. The major concerns highlighted by the paper include the need to upgrade petroleumrelated laws, establish stronger institutions that are betterequipped to monitor the oil industry and enforce regulations, ensure the disciplined management of oil revenues, implement safeguards against the environmental impact on and around the Albertine Graben and ensure fairness surrounding land rights and compensation for affected communities. Although many of these recommendations require shortterm implementation, they also stress the need for a longterm perspective. The legal, policy and institutional framework that Uganda sets up today will have repercussions past the oil age. The paper

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concludes that the country is off to a good start, but that much work remains to be done if sustainable economic development rather than the oil curse is to be the end result from Uganda's oil exploration, development and production.

Manfred *et al*[432] considers various options for spending, saving and investing oil revenues. A major concern is to avoid the 'Dutch Disease' (whereby nonoil sectors of the economy, notably agriculture, become relatively less competitive and healthy). Using a "recursivedynamic computable general equilibrium model" it plots several scenarios and cautiously recommends a policy of public investment spending that is "biased in favor of agriculture and food processing." It also endorses the idea of saving some of the revenues to spread government spending over time, and thereby reduce the impact of Dutch Disease. The combination of these measures, the paper concludes, are likely to ensure that "poorer rural households will benefit the most, but without sacrificing urban poverty reduction." Although the paper is useful to Uganda's young oil and gas sector in so far as avoiding the 'Dutch Disease' is concerned, the paper is restricted to the revenue management pillar and neglects the other pillars necessary for the management of a vibrant oil and gas sector. This research gives a wholistic and general analysis of all the pillars necessary for the efficient and effective management of the oil and gas sector in Uganda if indeed the 'Dutch Disease' is to be avoided.

Ross M[433], argues that although SubSaharan Africa is blessed with natural resource endowments, a significant number of people still subsist on less than 1$ a day with endless civil wars. Indeed, countries that are greatly dependent on natural resources are more prone to civil wars, which could lead to a reduction in growth and an increase in poverty. Ross argues that a country's reliance on non fuel mineral export or fuel exports tends to create high poverty rates and research also shows that resourcedependent economies grow more slowly than resourcepoor economies.

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[433]Ross, M. (2003). The Natural Resource Curse: How wealth Can Make You Poor. Chapter 2. The International Bank for Reconstruction and Development/The World Bank.

Michael L. Ross,[41] in his ground breaking analysis asserts that countries that have abundant oil reserves have less democracy, less economic stability and more political instability and civil wars than countries without oil; he critically makes a comparative analysis of this oil curse and how it can be fixed. Ross looks at how developing countries are shaped by their mineral wealth and how they can turn their oil into a blessing. He traces the oil curse to the upheaval of the 1970's when oil prices soared and governments across the developing world seized control of their countries' oil industries bypassing state institutions and laws governing their oil and gas sectors. He shows how in the oil curse, oil wealth typically creates less economic growth than it should and why it creates more problems in poor states than in rich ones. He also warns that the global thirst for oil and petroleum is causing oil companies to drill in increasingly poor states which could further spread the oil curse. In summary, this classical analysis explains why good geology often leads to bad governance. However, although Ross' work is a thorough analysis of the historical foundations of the oil 'curse' and in fact gives a deeper analysis into the phenomenon, his work majorly concentrates on countries that have been traditional oil producers and makes little or no reference to the recent climbers into the oil producing class such as Uganda. In addition the book is a detailed rhetoric of the causes and consequences of the oil curse in oil producing countries but gives no solutions or recommendations to recent oil producers on how to avert the 'oil curse'.

Uganda has also ratified the **African Union Convention on Preventing and Combating Corruption, 2003[434] in** September 2004 which requires State Parties to pursue, as a matter of priority, a common penal policy aimed at protecting society against corruption. Moreover, this Convention contains detailed requirements for facilitating transparency in member states' governments, cooperation and mutual assistance obligations, and a legal framework for

[434]Available at http://www.africa-union.org/Official_documents/... Accessed on Monday November 16, 2009

prosecuting corrupt acts.[435] Further, Uganda is a subscriber to the **New Partnership for Africa's Development (NEPAD) good governance principles.**
In addition, Uganda is a signatory to the **United Nations Convention Against Corruption (UNCAC)[436]** which is one of the most comprehensive conventions addressing corruption and also the only UN convention that addresses civil service reform. Countries that have ratified UNCAC are required to undertake substantial measures to address corruption in their respective countries four thematic pillars of preventive measures, criminalization of offences and law enforcement, international cooperation and asset recovery.[437] Finally, Uganda has ratified the **Paris Declaration[438]** which urges donors to align with their partners' national development strategies and to use strengthened country systems.[439]
Apart from the **international conventions**, the constitution of Uganda provides that parliament shall enact laws regulating the exploitation and development of minerals and such exploitation shall take into account the interests of the individual land owners, local governments and the government. **Article 244 of the constitution** further states that all minerals are held by the government on behalf of the people of Uganda.

Uganda has also recently passed an access to information legislation, **the Access to information Act 2003** which seeks, *inter alia*, enhance transparency and hence reduce corruption The legal framework of Uganda has three main operating Acts and the regulations there under that is to say; **The Petroleum Act[440]; The Petroleum Exploitation and Production Act[441]; and The Petroleum Supply**

[435]African Parliamentarians Network Against Corruption (APNAC), END OF PROJECT REPORT: Sensitisation on the domestication of the AU Convention on Preventing and Combating Corruption, 2006
[436] Came into force on 14 December 2005
[437]Ibid
[438]Came into force in 2005
[439]Hannes Hechler, Exploring the links between UNCAC and the Paris Declaration , U4 Brief Papers, September 2009 - No. 25, available at www.U4.no accessed on Monday November 16, 2009
[440]Chapter 149
[441]Chapter 150

Act 2003.

What remains is an analysis of how viable and practicable the current legal and regulatory regime in Uganda is and the necessary reforms that should be implemented to enhance transparency, accountability and good governance of the oil sector. This is the substance of this paper. Further, whereas despite the above obligations, Uganda is still a very corrupt society[442] and there is need for further reform of the legal and regulatory framework to ensure that corruption is adequately addressed for the progressive exploitation of oil resources in Uganda.

Introduction

The Government of Uganda just like most constitutional governments in the world derives its legality and legal force from the Constitution whose content has evolved over time to present one of the more progressive constitutional regimes in Africa. The constitution is divided into two substantive parts first of which is the **National Objectives and Directive Principles of State Policy (NODPOSP)** which provide guidelines of the objectives through which the government should fulfill its national obligations. The second part is the **more substantive provisions** of the constitution which **contains 19 chapters** providing for an extensive crosssection of rules that prescribe the spine of Uganda's national legal and regulatory framework.

Indeed the Constitution stresses under **Article 1 (1)** that all power belongs to the people who are entitled to exercise their sovereignty in accordance with it and all authority of the state is derived from the people in Uganda and the people ought to be governed through their will and consent[443]. The Constitution is therefore an embodiment of the will and aspirations of the people of Uganda in regard to how they wish to be governed and how they want to resources in their country to be managed. In that regard therefore, the Constitution is the supreme law in Uganda as per **article 2** and has binding force on all authorities and persons in the country to the extent that any other law that is inconsistent with it is void to the extent of its inconsistency.

[442]Infra note
[443]Article 1(1), Constitution of the Republic of Uganda

National Objective XIII enjoins the state to protect important natural resources, including land, water, wetlands, minerals, oil, fauna and flora on behalf of the people of Uganda. The key component here for the purpose of this thesis is the obligation to protect minerals and oil on behalf of the people of Uganda which primarily underlines the principle that the management of oil resources in Uganda is a duty that the government has towards to the people of Uganda. **National Objective XXVI** further emphasizes the relevance and authority of public offices when it states that all public offices shall be held in trust for the people and places all people who are in positions and leadership including in the oil sector answerable to the people. Anticipating the challenge of corruption in public offices, the constitution also requires that lawful measures be taken to expose, combat and eradicate corruption and abuse or misuse of power by those holding political and other public offices as it has direct effect on governance and accountability of public officers on their responsibilities while in public offices[444]. These principles have been created to ensure that all public offices including offices responsible for management of oil resources in Uganda are run in public interest. Their importance is further reiterated by the Constitutional Amendment of 2005 that introduced Article 8A requiring that the country be governed on the basis of principles of national interest and common good enshrined in the national objectives and principles of state policy. Some scholars argue that the introduction of Article 8A into the Constitution conferred binding constitutional force onto the National Objectives and Directive Principles of State Policy to the extent that they are judicially enforceable.

The legal and regulatory framework for the prevention and combating corruption in Uganda has provisions ranging from international commitments to the constitution to Acts of Parliament and to the regulations.

Regional and International Commitments

Uganda has made some commitments regionally and internationally specifically in relation to combating corruption by which its governance should be guided. These

[444]Obj. XXVI (iii)

are briefly discussed below.

The East African Community

Uganda is party to the East African Community which was reconstituted by Treaty for the Establishment of the East African Community completed in 1999. **Article 6(d) of the Treaty** calls upon member states to establish good governance through adherence to the principles of democracy, the rule of law, accountability, transparency, social justice, equal opportunities and gender equality among others. **Article 151 (1) of the treaty** which mandates partner states to create protocols to facilitate the aspirations of the treaty, the EAC created **the Protocol on Preventing and Combating Corruption** whose objectives are prescribed as to promote and strengthen the development, by each of the Partner States, of mechanisms needed to prevent, and combat corruption, to promote, facilitate and regulate cooperation among the Partner States to ensure the efficiency and effectiveness of measures for preventing and combating corruption and to develop and harmonize laws, policies and strategies relating to prevention, and combating corruption[445]. **Article 4 of the protocol** prescribes various measures for the prevention, enforcement, asset recovery and forfeiture, regional cooperation; and technical assistance among partners states in relation to corruption in the EAC region.

Particularly interesting in the Protocol is **article 1**1which provides for transfer of criminal proceedings where it is considered that it is in the interest of justice that a corruption case be transferred between the partner states especially in cases involving several jurisdictions. With the transnational nature of oil companies, this provision is important for the prosecution of corruption cases in the oil sector as trial can be transferred as between the partner states as justice deems fit. It should be noted that the Ugandan government can be made accountable before the East Africa Court of Justice should it fail to implement the provisions of the Treaty

[445] Article 2, EAC Protocol on Preventing and Combating Corruption (2012), Available at http://federation.eac.int/index.php?option=com_docman&task=doc_download&gid=133&Itemid=70 [Accessed July 16th 2021]

and the Protocol[446] in addition to being held accountable to the East African Legislative Assembly[447].

African Union Convention on Preventing and Combating Corruption (CPCC).

Just like the EAC, the African Union has developed a framework to provide for the prevention and combating of corruption among member states on the continent[448]. The Convention came about as a consequence of a decision of the 37th ordinary session of the Assembly of the Heads of State and Government held in Lusaka in July 2001 and the 1st session of the Assembly of the Union in Durban, South Africa in July 2002 relating to the establishment of the New Partnership for Africa's Development (NEPAD) which called for the setting up of a coordinated mechanism to combat corruption effectively[449]. Though remaining within the same scope of the content of the EAC Protocol, the **CPCC** prescribes a more extensive array of objectives biased towards strengthening regional cooperation and **article 2 of the Convention** proposes measures for enforcement mechanisms as being to;

*"*1. Promote and strengthen the development in Africa by each State Party, of mechanisms required to prevent, detect, punish and eradicate corruption and related offences in the public and private sectors.

2. Promote, facilitate and regulate cooperation among the State Parties to ensure the effectiveness of measures and actions to prevent, detect, punish and eradicate corruption and related offences in Africa.

3. Coordinate and harmonize the policies and legislation between State Parties for the purposes of prevention, detection, punishment and eradication of corruption on the continent.

4. Promote socioeconomic development by removing obstacles to the enjoyment of economic, social and cultural rights as well as civil and political rights.

[446]Article 27, Treaty for the Establishment of the East African Community

[447]Article 49 (2), Ibid

[448] African Union Convention on Preventing and Combating Corruption (CPCC) http://au.int/en/sites/default/files/AFRICAN_UNION_CONVENTION_PREVENTING_COMBATING_CORRUPTION.pdf

[449]Preamble, AU CPCC

5. Establish the necessary conditions to foster transparency and accountability in the management of public affairs."

The convention appropriately avoids the conventional definition of corruption which defines offences and merely prescribes acts and omissions to which the **convention is applicable including solicitation or acceptance of money or other gifts, offering or granting favours, illicit enrichment by public officials, diversion of public funds, offering or soliciting favours for valuable consideration and concealment of the proceeds of corruption among others**[450]. This is a great model for prescribing for prevention and combating corruption because the ordinary offences defined for corruption like bribery and embezzlement have been criticised for being unreasonably restrictive in interpretation and misleading to the conceptualisation of corruption related offences[451]. The Convention requires member states to adopt legislative and other measures to establish criminal offences relating to what is conventionally referred to as money laundering but which the convention defines as the conversion, transfer or disposal of property knowing that such property is the proceeds of corruption or related offences to conceal or disguise the illicit origin of the property, the concealment of the true nature, source location, movement of or rights of property proceeding from corruption and acquisition, possession or use of property with full knowledge at the time of receipt that the property has been obtained through corruption.[452]

The convention creates an Advisory Board **(article 22)** on Corruption to oversee the implementation of the aspirations of the CPCC and its mandate involves several functions relating to monitoring and oversight of the provisions of the CPCC and their implementation by the partner states.

The United Nations Convention against Corruption, 2004

In **December 2000**, the United Nations General Assembly through Resolution 55/61 constituted an adhoc committee for the negotiation of an effective

[450]Article 4
[451]O Woulters, p. 33
[452]Article 6, AU CPCC

international legal instrument against corruption [453] . Following several developments from then up to 2003, the UN general Assembly passed **Resolution 58/4 of 31 October 2003** by which it was agreed to adopt the United Nations Convention Against Corruption. **The purpose of the convention is prescribed in article 1 of the Convention** as to promote and strengthen measures to prevent and combat corruption more efficiently and effectively, promote, facilitate and support international cooperation and technical assistance in the prevention of and fight against corruption, including in asset recovery and promote integrity, accountability and proper management of public affairs and public property.

Article 5(1) of the Convention requires member states to develop and implement or maintain effective, coordinated anticorruption policies that promote the participation of society and reflect the principles of the rule of law, proper management of public affairs and public property, integrity, transparency and accountability. This is in addition to article 15 of the Convention which provides prescribing for criminalisation and enforcement of the law pertaining to corruption including prescribing offences for bribery of public officials and foreign officials and officials of public international organisations [454] . These provisions have unfortunately not been specifically replicated in national legislation on corruption in Uganda especially when there have been several reports of instances of international companies influencing tendering and licensing processes by the government[455].

The treaty also prescribes measures for international cooperation in combating corruption, asset recovery in corruption cases and technical assistance and

[453]United Nations General Assembly Resolution No 58/4 of 31 October 2003

[454]Article 16

[455] Several reports though unconfirmed have been made in local and international media about Tullow Oil bribing government officials in Uganda including the President himself: Associated Press, Rodney Muhumuza, Politics, bribery charges swirl around Ugandan oil, May 18th 2013, http://bigstory.ap.org/article/politics-bribery-charges-swirl-around-ugandan-oil [November 14th 2014], The Independent, Haggai Matsiko, Did Tullow Oil Bribe Museveni? March 22nd 2013, http://allafrica.com/stories/201303250813.html [Accessed November 14th 2013], The Telegraph, Harriet Dennys, Tullow Oil apologises to Ugandan government over bribery allegations, March 22nd 2013,http://www.telegraph.co.uk/finance/newsbysector/energy/oilandgas/9949319/Tullow-Oil-apologises-to-Ugandan-government-over-bribery-allegations.html [Accessed November 14th 2013]

information exchange among others. This was strengthened by the creation of the UNCAC review mechanism in 2010 which includes country selfassessments, a country visit by a review team, and the drafting of a review report submitted to the country under review for approval[456].

Comparatively, it has been observed that the AU CPCC appears to have a stronger binding force since it embodies more mandatory language such as requiring member states to "undertake" or "commit themselves to" as compared to the UNCAC which embodies a mixture of discretionary and mandatory language such as "shall adopt", "shall consider adopting" or "may adopt" etc[457]. The legal obligation for compliance is therefore much hire with the provisions of the AU CPCC as compared to the obligations required by the UN CAC.[458]

Constitutional Foundation for AntiCorruption Regulation

Several provisions have substantively been made in the Constitution that are aimed at among others combating and preventing corruption. In a bid to promote transparency in public institutions, **Article 41 of the Constitution of the Republic of Uganda** entitles every citizen in Uganda to access information in the possession of the state or any organ of the state. In furtherance of the obligation of parliament in facilitating such access, the Access to Information Act was enacted in 2003 and this was followed by Access to Information Regulations of 2007which extrapolate the right to access information and prescribe procedures through which a member of the public can assess any information in the possession of a public body. The Act however has been criticised for its exclusion of cabinet records and their committees which in the context of this study are key to promoting transparency in the petroleum industry because this exemption falls out of the ambit of the right to access information in possession of a public body as prescribed by the

[456]Resolution 3/1, Adopted at the 2009 UNCAC Conference of States Parties (COSP3)

[457]Transparency International Anti-Corruption Help Desk, Comparative Analysis of the UN CAC and the AU CPCC, http://www.transparency.org/files/content/corruptionqas/Comparative_analysis_of_the_UNCAC_and_the_AU_Convention_2014.pdf [Accessed November 15th 2014]

[458]Ibid

constitution.[459]

To combat corruption directly, the Constitution has thorough express provision prescribed for the office of the **Inspectorate of the Government**. The Inspectorate of Government has prescribed functions in **article 225** (1)(a) which can be summed up as to promote rule of law in administration, eliminate corruption and abuse of public offices, to punish public officers culpable for corruption and abuse of office and promote civic awareness on the values of constitutionalism. Under **article 225(1),** the Inspectorate has the specific mandate to investigate on its own initiative or upon complaint made to it by any member of the public, whether or not that person has personally suffered any injustice by reason of that matter. In that regard, the Constitution confers on the Inspectorate an extensive jurisdiction that includes officers or leaders whether employed in the public service or not and other designated institutions or organisations.[460] To fulfil this mandate, the Constitution confers on the Inspectorate extensive powers including power to investigate, arrest, prosecute or cause the same in cases involving corruption and abuse of authority or public office to give such orders as are necessary for the performance of her duties and to enter and inspect premises where necessary and retain any document or item connected with investigation among others. The mandate of the Inspectorate to investigate and prosecute has been thoroughly dissected by the Supreme Court.[461]

In furtherance of **parliament's responsibility for the Inspectorate, the Inspectorate** is obliged to make annual reports to the parliament with a copy to the president on its performance of its functions with recommendations as may be necessary[462] which ought to be discussed expeditiously[463] but should in any case be laid before the floor parliament not later than 30 days after it has been submitted by the IGG.[464] The reports usually cover a wide cross section issues

[459]R. Ikoja- Odongo & Dick Kawooya, An Examination of Recent Developments, East African Journal of Peace and Human Rights Vol. 12 (2) 2006
[460]Article 226
[461]John Ken-Lukyamuzi v Attorney General and Another (Constitutional Appeal No. 2 of 2007)
[462]Article 231 (1)
[463]Article 231 (5)
[464]Article 231 (3)

mainly involving the IGG's implementation of her mandate including complaints made, investigations conducted, prosecutions made, civil cases conducted and the challenges the IGG has faced in the period among others. In the last two reports, a total of 5 complaints were made against the Ministry of Energy and Mineral Development[465].

Alongside the Inspectorate of Government is the **Director of Public Prosecutions (DPP**) whose position is created by **Article 120 of the constitution**. The DPP is directly responsible for all criminal prosecution in Uganda. Specifically, **article 120(3) of the constitution** prescribes the mandate of the DPP to direct the police to investigate any information of a criminal nature and to report to him or her expeditiously, to institute criminal proceedings against any person or authority in any court with competent jurisdiction other than a court martial' to take over and continue any criminal proceedings instituted by any other person or authority, to discontinue at any stage before judgment is delivered, any criminal proceedings to which this article relates, instituted by himself or herself or any other person or authority; except that the Director of Public Prosecutions shall not discontinue any proceedings commenced by another person or authority except with the consent of the court.

It should be reiterated that **the IGG and the DPP** share similar functions in the prosecution of offences related to corruption in Uganda with the general distinction being that the DPP is generally mandated to investigate and prosecute criminal offences generally while the IGG is generally mandated to investigate and prosecute offences related to corruption specifically under the **AntiCorruption Act**. That the IGG is directly responsible for offences pertaining to corruption in Uganda and it is therefore absurd that the AntiCorruption Act would confer upon the IGG and the DPP responsibility for the investigating and prosecuting

[465] Inspectorate of Government, Report to Parliament, January – June 2013, http://www.igg.go.ug/static/files/publications/Report_to_Parliament_2013.pdf [Accessed November 15th 2014], inspectorate of Government, Report to Parliament, July – December 2013, http://www.igg.go.ug/static/files/publications/IGG_REPORT_DEC_2013_2.pdf [Accessed 15th November 2014]

corruption cases in Uganda and similarly confer upon them similar powers.[466]

While the Inspectorate of Government has been created to combat corruption and misuse of public office, the competencies of the Inspectorate of Government do not include financial auditing to ensure the public finances are not misused or unlawfully managed. Envisaging the need for an officer to monitor and audit the use of public funds the constitution made provision for the Auditor General who is appointed by the President with the Approval of Parliament.[467] The functions of the Auditor General have been prescribed by the constitution by **article 163(3) of the constitution,** audit and report on the public accounts of Uganda and of all public offices, including the courts, the central and local government administrations, universities and public institutions of like nature, and any public corporation or other bodies or organisations established by an Act of Parliament, conduct financial and value for money audits in respect of any project involving public funds, consultation with the Public Service Commission, employ and discipline his or her own staff; and have power to engage private auditors to assist him or her in the performance of his or her functions.

It is the duty of the **Auditor General to** ensure that public finances are being utilized in the right way by public officers and that there is value for money being recovered from investment of public finances into an activity. In relation to this thesis, the Auditor General would ensure that all of the money that has been deployed into the oil sector is being used lawfully and effectively but also that all the oil revenue being recovered from oil surveying, extraction and production activities are being added to the consolidated fund without any unlawful leakages along the cash flow chain. It is for this very serious reason that the constitution requires the Auditor General to be a qualified accountant of not less than 15 years' standing and a person high moral character and proven integrity.[468]

The Auditor General submits annual reports to the parliament[469] which discusses

[466]Section 36, Anti-Corruption Act
[467]Article 163 (1)
[468]Article 163 (2)
[469]Article 163 (4)

them within six months and takes appropriate action[470] but the president may require that the Auditor General audit accounts of any body or organization.[471].

It should be noted though that while the role of the Auditor General is to audit and report on the public accounts of Uganda, [472] the Constitution attributes departmental responsibility for the funds expended at the Ministry or Department level. The Permanent Secretary of a Ministry or the Accounting Officer of a Department is accountable to parliament for the funds spent in that Ministry or Department[473]. The parliament has often summoned permanent secretaries or accounting officers where it is determined that public funds have been swindled or misused by the ministry or government department and Parliament has in some instances ordered for removal of permanent secretaries for failure to account for public funds.[474] The responsibility of the ministry or department is supplemented by the allocating responsibility to any person who directs or is involved in the use of public funds contrary to existing instructions and the constitution requires that they be held accountable for any loss arising and be required to make good the loss even if he or she has ceased to hold office.[475] Unfortunately, this provision has been conservatively interpreted by the courts of law and legislation pertaining to penalties for convicts of corruption of abuse of public offences and very few have been compelled to refund the monies misused or appropriated.[476]

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[470]Article 163 (5)

[471]Article 163 (7)

[472]Ibid

[473]Article 164 (1)

[474]In June 2013, Parliament reportedly ordered the removal of three permanent secretaries from the Ministry of Internal Affairs (Dr. Stephen Kagoda), Dr Asuman Lukwago (Ministry of Health) and Pius Bigirimana (Ministry for Gender) directed the Ministry of Public Services to identify new candidates for the positions after they failed to account for public funds allocated to their Ministries. (The New Vision, July 15, 2013 , **Moses Mulondo and Mary Karugaba, Parliament orders on removal of 3 permanent secretaries, http://www.newvision.co.ug/news/645060-parliament-orders-on-removal-of-3-permanent-secretaries.html [Accessed 20th October 2021])**

[475]Article 164 (2)

[476]For Example in Uganda V David Chandi Jamwa HC Criminal Suit No 87 of 2010, the accused was convicted of causing financial loss to NSSF to the tune of Ushs 3 billion and was merely sentenced to 12 years in jail and excluded from holding any public office for 10 years but no order for compensation or return of the money was made. That is Ushs 3Billion of tax payers money that will never be recovered

The Constitution provides for the **Leadership code of conduct**, which sets the standards for public officers to abide by as far as the ethical fulfillment of their obligations and responsibilities[477]. Specifically, article 223(2) of the Constitution requires that specified officers to declare their incomes, assets and liabilities from time to time and how they acquired or incurred them, as the case may be and prescribe the penalties to be imposed for breach of the code, without prejudice to the application of criminal penalties prescribed for the breach in question, prescribe powers, procedures and practices for ensuring the effective enforcement of the code; and make any other provision as may be necessary for ensuring the promotion and maintenance of honesty, probity, impartiality and integrity in public affairs and the protection of public funds and other public property.

The Constitution goes a step further and mandates the parliament to create laws for the disqualification of any person who has been dismissed or removed from office who by reason of breach of the code of conduct from holding any other public office whether appointive or elective and either generally or for a prescribed period measures specifically designed to combat corruption and abuse of public office. However, it the creation of the tribunal leads to clash of power between the tribunal and the IGG's work. It is not uncommon for justice to be impeded especially where two government bodies claim the mandate of enforcing the same issue and end up clashing to the detriment of public interest. The Supreme Court in the case of **Jen Lukyamuzi V Attorney General (constitutional Appeal number 2 of 2007)** expressed itself on the matter by stating that until such a Tribunal is constituted, the IGG retains the mandate of enforcing the Leadership Code of Conduct but once it is constituted it shall play a complementary role as a tribunal with the IGG being only a prosecutor.

THE INTERNATIONAL ROLE IN COMBATTING CORRUPITION:

The EITI Legal Framework

[477] Article 233(1)

The EITI is the global standard for the good governance of oil, gas and mineral resources. When implemented by a country, the EITI ensures transparency and accountability about how a country's natural resources are governed. This ranges from how the rights are issued, to how the resources are monetised, to how they benefit the citizens and the economy. The Standard is composed of two parts. Part I deals with the implementation of the Standard and part II deals with the governance and management of the international EITI.[478]

What is now known as the EITI evolved from the first statement of the EITI Principles agreed at the Lancaster House Conference in June 2003. Today, the EITI Standard contain these and all the requirements for implementing the EITI. These beliefs and aims are endorsed by all EITI stakeholders.[479]

The EITI Principles provide the cornerstone of the initiative. They are: We share a belief that the prudent use of natural resource wealth should be an important engine for sustainable economic growth that contributes to sustainable development and poverty reduction, but if not managed properly, can create negative economic and social impacts.

a. We affirm that management of natural resource wealth for the benefit of a country's citizens is in the domain of sovereign governments to be exercised in the interest of their national development.

b. We recognise that the benefits of resource extraction occur as revenue streams over many years and can be highly price dependent.

c. We recognise that a public understanding of government revenues and expenditure over time could help public debate and inform choice of appropriate and realistic options for sustainable development.

d. We underline the importance of transparency by governments and companies in the extractive industries and the need to enhance public financial management and accountability.

e. We recognise that achievement of greater transparency must be set in the context of respect for contracts and laws.

[478] https://eiti.org/standard/overview
[479] https://eiti.org/document/eiti-principles

f. We recognise the enhanced environment for domestic and foreign direct investment that financial transparency may bring.

g. We believe in the principle and practice of accountability by government to all citizens for the stewardship of revenue streams and public expenditure.

h. We are committed to encouraging high standards of transparency and accountability in public life, government operations and in business.

i. We believe that a broadly consistent and workable approach to the disclosure of payments and revenues is required, which is simple to undertake and to use.

j. We believe that payments' disclosure in a given country should involve all extractive industry companies operating in that country.

k. In seeking solutions, we believe that all stakeholders have important and relevant contributions to make including governments and their agencies, extractive industry companies, service companies, multilateral organisations, financial organisations, investors and nongovernmental organisations.

Section 3 of the EITI Standard provides for requirements that must be adhered to by countries implementing the EITI. The EITI Requirements are minimum requirements and implementing countries are encouraged to go beyond them where stakeholders agree that this is appropriate. Stakeholders are encouraged to consult additional guidance materials on how to best ensure that the requirements are met. They include an oversight by the mutistakeholder group which is constituted of the government, the IOC, the Civil society, a multistakeholder group and a plan for extraction. Secondly, a legal and institutional framework, including allocation of contracts and licenses. There must be exploration and production of Oil and Gas; comprehensive disclosure of taxes and revenues; social and economic spending on the local communities; and assessment of outcomes and impact.

Section 6 provides for participation of civil society. This is because the active participation of civil society in the EITI process is key to ensure that the EITI leads to greater accountability. Section 7 provides for the expectations for EITI supporting companies which are inter alia; to publicly declare support for the EITI Principles and, by promoting transparency throughout the extractive industries, help public debate and provide opportunities for sustainable development.

In Conclusion therefore, The oil and gas sector has over the years developed a wellstructured and elaborate legal framework as showed above. This framework is what this paper sought to compare to the standard developed by the EITI.

CHALLENGES ENCOUNTERED IN HARMONIZING THE LEGAL FRAMEWORK WITH THE EITI STANDARD.

The layout of the laws that govern the OGM in Uganda seem to be detailed and well elaborated. This is perfect to the extent that the standard set by EITI seems to fit perfectly into the laws of Uganda. However, there still remains a doubt of whether the two can be said to be in synch.

Uganda has been described by the oil industry press as Africa's 'hottest inland exploration frontier'. Exploration is taking place across the entire Albertine Rift in Uganda, with five out of nine oilprospecting blocks established by the government currently allocated to companies for exploration purposes. Current estimates put the country's oil potential at around 2.5 billion barrels of recoverable reserves from the three blocks that have so far been drilled. Some analysts anticipate Uganda's Albertine Graben may hold more than 6 billion barrels of oil, placing Uganda among the foremost African oil producers. Given the volatility of oil prices, it is difficult to estimate Uganda's likely revenues from oil. Yet, if production goes ahead without hitches, the country's budget looks likely to receive a major windfall – potentially doubling Uganda's revenue base within six to ten years.

This boost to national income offers Uganda a unique and exciting chance to alleviate poverty and create broadbased development and improved standards of living across the country. But international experience points to challenges which are often faced by resourcerich developing countries in translating mineral wealth into peace and prosperity. Much has been written about the "resource curse". Developing countries that become reliant on oil and minerals can see a deepening of a range of political, economic and social challenges.

The paradox of plenty resource curse

In trying to discuss the resource curse it is very important to understand term "oil curse". This is coined from the wider term "resource curse". It refers to the tendency of oil rich (resourcerich) countries to have weaker economic performance than countries without oil (resourcepoor) countries.[480]Resourcepoor countries are forced to innovate and attain economic viability. By contrast, resourcerich countries suffer the paradox of plenty and remain poor. In simple terms, the oil curse is a situation whereby abundance of tradable natural oil reserves paradoxically leads to economic stagnation, the death of other traditional and nontraditional exports such as agricultural and manufactured products, and conflicts over the allocation of the oil resources.

Common features have emerged of the oil curse which include increased chances of conflict in a country; the tendency for the real exchange rate to become overly appreciated; exposing the country to volatility, especially in commodity prices, with the attendant adverse impact on growth; environmental costs: Oil operations damage the environment and have adverse effects on the livelihoods of the communities around the production areas; the cash economy created by oil undermines those trying to work for longerterm and more sustainable development initiatives. People become disinterested in anything that does not deliver instant cash, with agriculture and industry as the prime casualties. The growth of oil cash culture therefore undermines real and sustainable development.[481]

The usual explanation for this is the Dutch Disease, named for the hardships that befell the Netherlands after it found North Sea gas. When a country strikes hydrocarbons, a sudden inflow of dollardenominated revenues often leads to a sharp appreciation in the domestic currency. That tends to make nonoil sectors like agriculture and manufacturing less competitive on world markets, thus

[480]Michael L. Ross, The oil curse: How Petroleum wealth shapes the Development of Nations, 2012, Princeton University Press, p.13

[481]Arthur B, Hope K, Benson T, Escaping the Oil Curse and Making Poverty History: A Review of the Oil and Gas Policy and Legal Framework for Uganda, 2006, ACODE, Kampala, Policy Research Series No. 20, p.5.

leaving oil to dominate the economy. Jeffrey Sachs and Andrew Warner have provided that the hypothesis of the Dutch Disease syndrome is that countries with abundant natural resources tend to innovate at a slower pace than resourcepoor ones.[482] The reason for this is over dependence on the easy money accruing from natural resources, which undermines the linkages between the various sectors of the economy that usually serve to keep the economy strong and healthy.

The key weakness of the ResourceCurse Argument is that it misses one key point, namely, that the real source of the curse is not the natural resource. It is the economic and political mismanagement. This arises from weak state capacity to use windfall revenues to steer the country to economic growth and development. It arises from weak laws, policies and institutions incapable of properly governing the oilresource for longterm development and the inability to utilize the oil revenues to transform the national economy from primary commodity production to higher valueadded industrial and information activities.

Indeed, for example, evidence shows that the link between oil and political violence is a result not of resource abundance *per se* but poor economic growth, high corruption and authoritarianism. By implication, resource abundance begets poor performers in some cases, and good performers in others. For example, the abundance of oil in Nigeria blocked, rather than promoted, economic transformation. Political instability for example in the Niger Delta, accrued as rival claimants to the political economy disagreed violently over the allocation of the oil resources. In other words, resource abundance was a curse rather than a blessing for Nigeria.

By contrast, countries such as Norway have benefited from the oil resource abundance. Norway, for example, was one of the poorest countries in Europe by the time of its oil discovery. In the 1960s, Norway still lagged behind its Scandinavian neighbours in GDP per capita and other economic indicators. By the 1990s, Norway had overtaken Denmark and Sweden.[483] Today, Norway is

[482]See, Indra de Soysa, 2000. The Resource Curse: Are Civil Wars Driven by Rapacity or Paucity?, Journal on Greed and grievance: economic agendas in civil wars.

[483]Hildegunn Kyvik Nordas and Ola Kvaloy, Oil Related Producer Services and Productivity: the case of Norway,2000, London, Sweet and Maxwell, p.28

one of the world's richest and wellgoverned countries, with some of the best human development indicators. The paramount question that then arises is, how one explains the economic record of oilrich Norway in comparison with oilrich disasters such as Nigeria and what lessons of good practice can Uganda draw from both effective and ineffective performers.

There is a claim that Uganda has designed robust ownership structures and peopleled laws and institutions to man the nascent petroleum industry before production starts, to avoid the socalled 'oil curse.' "We need to build human capacity and create institutions that can manage the resources right from the beginning," President Yoweri Museveni said during the East African Petroleum conference and exhibition in Kampala. "We even had to suspend licensing of oil companies until core staffs in petroleum geosciences were trained and the necessary institutions created."[484] In order to ensure that the resource will be used to yield lasting benefits to the present and future generations, there is need for a sound regulatory environment that fosters transparency in oil revenue allocations, and since the EITI is acclaimed to have this antidote therefore the need to analyze its potency in this regard as far as Uganda is concerned.

Illicit Financial Flows

Over the last two decades, great strides have been made in terms of holding extractive industries accountable. More information than ever about revenue flows to governments from the oil gas and mining industries is now publicly available.[485] But new research suggests that such information disclosure, while important, is not by itself enough to hold companies to account, and address issues like Illicit financial
flows.[486]

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[484]Ibrahim Kasita, Uganda: Nation Positions Itself to Prevent Oil Curse', the New Vision, 9 February 2011

[485] Gaventa J. (2019), Can transparency make extractive industries more accountable?, 8th February, [online] Available at; https://www.ids.ac.uk/opinions/can-transparency-make-extractive-industries-more-accountable/ (Accessed; 29th August 2020), As demonstrated at the Global Assembly of Publish What You Pay held in Dakar, Senegal

[486] Ibid

While there is some evidence that Transparency in the extractives sector can contribute to greater accountability, the question of whether this leads to more accountability, or to broader governance, social and development outcomes remains largely unanswered. Moving forward, it is therefore considered critical to distinguish whether transparency is conceived as means to achieve a further end, or whether it is seen as an end in itself. [487]

Issues of accountability relating to the extractives industries are global and longstanding. The theory of change in the transparency gospel is that through making information available, the public will be able to hold these companies more accountable for their actions, and diminish corruption and illicit financial flows.[488] As a result, "impact" tends to be measured in terms of compliance with standards or changes in procedures at the organisational or institutional level, rather than broader development or governance outcomes.

A recent study in Mozambique[489] questions this theory of change. The research explored why greater transparency of information has not necessarily led to greater social and political action for accountability. Like many African countries, Mozambique is experiencing massive outside investments in recently discovered natural resources, including rich deposits of natural gas and oil, as well as coal and other natural minerals.[490] Over the last decade, NGOs have done brave and often pioneering work to elicit information on the extractive industry, and to publish it in hardhitting reports, widely reported in the press, and discussed at highlevel stakeholder meetings.

[487] In other words, a clearer distinction needs to be made between short term outcomes (transparency), intermediate outcomes (e.g. participation and accountability), and long term outcomes (social and developmental gains).

[488] Julia VH. (2015), Theoretical Framework For Financial Flows In The Extractive Sector, May, [online] Available at; https://www.colaboratorio.org/wp-content/uploads/2017/05/Marco-te%c3%b3rico-flujos-extractiva.pdf (Accessed; 29th August 2020)

[489] Awortwi, N. & Nuvunga, A. (2019) Sound of One Hand Clapping: Information Disclosure for Social and Political Action for Accountability in Extractive Governance in Mozambique, IDS Working Paper 523, Brighton: IDS, [online] Available at; https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/14305 (Accessed; 29th August 2021)

[490] Ibid

Yet, neither these numerous investigative reports nor the EITI validation reports have inspired social and political action such as public protest or state prosecution.[491] Corruption and illicit financial flows continue, and despite the newfound mineral wealth, the country remains one of the poorest in Africa.

If information disclosure has not been enough to galvanise citizen and institutional action, then what possibly can? This paper therefore suggests that more than mere transparency should be done. Use the information intentionally to foster and promote citizen action, strengthen grassroots participation and voice on mining issues and improve links with other related civil society movements working on gender, climate and tax justice in the extractives field. It should now be widely recognised that transparency needs to be accompanied by measures to encourage uptake and use for accountability purposes.[492]

Coming out at a time where increasing push back and repression threaten the space for citizens[493] to speak the truth to power, this is a bold call and to that end, Gaventa (2019) suggests that new ways to communicate work be found to accommodate constituencies like rural youth. Use local framings like the Ogboni leaders and oil companies in the Niger Delta,[494] Build economic literacy at the local level, and build alliances as well because the civil society cannot do it alone,

[491] Awortwi, N. & Nuvunga, A (2019) Beyond Information Disclosure to Achieve Accountability in the Extractive Sector, February, Issue 163, [Online] Available at; https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/14304/IDS%20PolicyBriefing%20163_online.pdf?sequence=1&isAllowed=y (Accessed; 29th August 2020)

[492] McGee, R. & Gaventa, J. (2010) Review of Impact and Effectiveness of Transparency and Accountability Initiatives: Synthesis report, 14-15 October, [online] Available at; https://www.ids.ac.uk/download.php?file=files/dmfile/IETASynthesisReportMcGeeGaventaFinal28Oct2010.pdf (Accessed 23rd August 2020)

[493] Hossain, N.; Khurana, N.; Mohmand, S.; Nazneen, S.; Oosterom, M.; Roberts, T.; Santos, R.; Shankland, A. and Schröder, P. (2018) What Does Closing Civic Space Mean for Development? A Literature Review and Proposed Conceptual Framework, IDS Working Paper 515, Brighton: IDS, [online] Available at; https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/13962 (Accessed 23rd August 2020)

[494] Ogboni leaders use the framing to mideekor in the Ogoni struggle to hold the oil companies to account. Mideekor refers to a local labour practice where the owners of palm trees hire fields to palm wine tappers. The tappers keep the produce for the first four days for themselves, but the fifth is the landlord's miideekor. To renege on the mideekor is culturally unacceptable. Using this concept to explain the responsibilities of the oil companies to pay their mideekor to the local communities helped to build the movement.

they need support mobilisation from below, and help to shape the larger political incentives that give teeth to voice. In a time of increasing threats against those who use information to challenge powerful extractive companies, this work is more important than transparency alone.

A recent study produced by Global Financial Integrity (GFI)[495] estimates illicit financial flows out of all developing countries at $858 billion to $1.06 trillion a year. Among developing countries, Africa presents the most analytical difficulties because countries with inadequate data account for nearly 37 percent of regional GDP. One thing is certain: while African countries have had to shoulder a heavy debt burden, a number of researchers[496] have shown that sustained illicit outflows have turned the continent into a net creditor to the rest of the world.

Seminal research[497] at GFI on the absorption of illicit funds show that while some of the private assets held outside their countries by developing country nationals may be legitimate, the bulk of such funds are certainly not. This is because estimates of illicit capital outflow provided by economic models such as the World Bank Residual model and the Trade Misinvoicing account for the bulk of deposits reported by banks to the Bank for International Settlements (BIS) and by offshore financial centers.

Conclusion

It can be deduced from the above discussion that the issue is not a disparity between the requirements of the EITI and the laws of Uganda but the outside projected issues that are capable of eating up the system without any respect to the laws in place.

Key Laws on Anti Corruption

While the Constitution lays the foundation for preventing corruption in Uganda, further regulation has been developed by the parliament to supplement the

[495] Illicit Financial Flows From Africa Hidden Resource For Development www.gfip.org

[496] such as Ndikumana and Boyce (2008),

[497] In December 2008 Global Financial Integrity released its ground breaking analysis of Illicit Financial Flows from Developing Countries: 2002-2006 its estimated such flows at $859 billion to $1.06 trillion a year.

provisions of the constitution.[498]

The AntiCorruption Act 2009

In 2009, the government enacted the **AntiCorruption Act in 2009** to provide for the effectual prevention of corruption in both the public and the private sector, to repeal and replace the Prevention of Corruption Act, to consequentially amend the Penal Code Act, the Leadership Code Act and to provide for other related matters[499].

The Act shuns limiting the understanding of corruption by prescribing an inclusive definition and instead gives an extensive crosssection of acts and omissions which in the estimation of the Act amount to corruption. According to **section 2 of the Act,** a person commits the offence of corruption if he or she does any of the following if he solicite or accepts an offer, when hen offers any thing to a public officer, using a public official for something unrelated, offering or promising any undue advantage by a person who confirms that he is able to exert any improper influence over decision making, or one who makes a fraudulent acquisition or conceal property or someone who makes an act or omission in the discharge of his duties.

The **AntiCorruption Act** also lists several other offences like corruptly procuring public tender, Bribery a public officer, Diversion of public resource, Influence peddling, Conflict of Interest and loss of public property among many other offences. For the purposes of this thesis, the scope of the definition of corruption will be limited to the elements of the definition of corruption as prescribed under Section 2 of the Act but will continuously refer to other offences created by the Act in the context to which they apply to Section 2. In tandem with the legality principle in **Article 28 (7) of the Constitution**, the Act prescribes the punishment for a person convicted of corruption to be imprisonment not exceeding ten years or a fine not exceeding two hundred and forty currency points or both.[500] It should be

[498]Under its mandate under Article 79 of the Constitution

[499]The Short Title, The Anti-Corruption Act, 2009, Davis Wesley Tusingwire V Attorney General, Constitutional Petition No. 2 of 2013, Available at http://www.ulii.org/ug/judgment/constitutional-court/2013/15 [Accessed July 16, 2021]

[500]Section 26 (1)

noted though that where the matter or transaction to which the offence relates is a contract or a proposal for a contract with any public body or a subcontract to execute any work comprised in such a contract, the convict will be liable to a term of imprisonment not exceeding twelve years or a fine not exceeding two hundred and eighty eight currency points or both. It should be noted though that the IGG and the Director of Public Prosecutions possess a joint mandate to investigate[501] and prosecute suspects under this act and either of them can prosecute a person under the Act but all offences under the Act can only be prosecuted with their consent.[502] It should be noted also that the **AntiCorruption Act amends the Penal Code Act Cap120** and repeals most of the offences pertaining to corruption in the Penal Code because they have been more extensively provided for in the AntiCorruption Act.[503] Therefore, the state cannot purport to charge a person with an offence relating to corruption under the Penal Code if it has been moved to the AntiCorruption Act and subsequently repealed from the Penal Code Act. The same applies to the Leadership Code Act who's Sections 8, 9 and 13 are repealed but Section 20 (3) was amended to provide for a harsher punishment.[504]

The Whistleblowers Protection Act, 2010

In the spirit of fostering transparency and accountability among public entities, the government enacted the **Whistleblowers Protection Act 2010** to provide for the procedures by which individuals in both the private and public sector may in the public interest disclose information that relates to irregular, illegal or corrupt practices and to provide for the protection against victimization of persons who make disclosures.

A **whistleblower is defined by the Act to refer to a person who makes a disclosure of an impropriety under the Act** while a disclosure means any declaration of information made by a whistleblower with regard to the conduct of one or more persons where the whistleblower has reason to believe that the information given shows or tends to show that a criminal offence or other unlawful

[501]Section 33
[502]Section 49
[503]Section 69
[504]Section 70

act has been committed, is being committed or is likely to be committed, that a miscarriage of justice has occurred, is occurring or is likely to occur, that a person has failed, is failing or is likely to fail to comply with any legal obligation to which that person is subject or that any matter referred to in paragraphs (a) to (c) has been, is being or is likely to be deliberately concealed.[505]

A disclosure is only protected where the disclosure is made in good faith, the whistleblower reasonably believes that the disclosure and any allegation of impropriety contained in it are substantially true, the disclosure is made to an authorised officer, the whistleblower maintains the confidentiality of his or her identity as whistleblower and takes reasonable steps to avoid its discovery and maintains the confidentiality of the information contained in the disclosure.[506] The persons qualified to make disclosures are laid out under **Section 3 of the Act** and are pretty comprehensive generally providing for an extensive category of people. The persons qualified to receive the disclosures are prescribed under **Section 4** divided into two categories, the employers where the disclosure pertains to the place of employment and externally to a crosssection of stakeholders including the Inspectorate of Government, the Directorate of Public Prosecutions and the Uganda Human Rights Commission inter alia where the complaint does not pertain to the whistleblower's employment or the whistleblower reasonably believes that he or she will be subjected to occupational detriment if he or she makes a disclosure to his or her employer or where the whistleblower reasonably believes or fears that evidence relating to the impropriety will be concealed or destroyed if he or she makes the disclosure to his or her employer or where the complaint has already been made and no action has been taken or the whistle blower reasonably believes or fears that the employer will take no action.[507]

The Act confers upon the whistle blower extensive protection including protection from victimization as a consequence of the disclosure, immunity from court action on grounds of breach of confidence as a consequence of the disclosure where the

[505]Section 1
[506]Section 2 (2)
[507]Section 4 (2)

whistle blower acts in good faith[508] and adequate state protection where the whistleblower has reason to believe that his or her life or property or the life or property of a member of the whistleblower's family is endangered or likely to be endangered as a result of the disclosure.[509]

It should be noted also that disclosing the identity of the whistle blower, failure to keep confidential the details of the disclosure, victimization of the whistle blower, making false disclosures and failing to take action on a disclosure are offences which are punishable under Part VI of the Act.

The AntiMoney Laundering Act, 2013

There is typically a lot of movement of money in the petroleum industry and this comes with illicit movement of money between industry players and regulatory authorities among others. Money laundering has been stated to be able to occur from relatively minor crimes some of which include corruption like breach of laws and regulations, tax evasions and benefit fraud among others and the purpose of the money laundering is not always to obscure the ownership of the illegitimate funds but to obscure their point of origin which in the case of this thesis could be an illegal advance to secure exploration and production rights pertaining to an oil well.[510]

Money Laundering is the process of turning illegitimately obtained property into seemingly legitimate property and it includes concealing or disguising the nature, source, location, disposition or movement of the proceeds of crime and any activity which constitutes a crime under section 3 of this Act."

It proceeds further to enumerate the acts and omissions which are culpable as money laundering and states that it is prohibited for any person to intentionally:[511]

[508]Section 10
[509]Section 11
[510]The Law Society (UK), Anti-Money Laundering, http://www.lawsociety.org.uk/advice/practice-notes/aml/introduction/ [Accessed October, 4th 2021]
[511]Section 3

"(a) convert, transfer, transport or transmit property, knowing or suspecting that such property to be the proceeds of crime, for the purpose of concealing or disguising the illicit origin of the property or of assisting any person who is involved in the commission of the crime generating the proceeds to evade the legal consequences of his or her actions; or
(b) conceal, disguise or impede the establishment of the true nature, source, location, disposition, movement or ownership of or rights with respect to property, knowing or suspecting that such property to be the proceeds of crime; or
(c) acquire, possess, use or administer property, knowing, at the time of receipt, that the property is the proceeds of crime; or
(d) act to avoid the transaction reporting requirements provided in Part III of this Act; or
(e) assist another to benefit from known proceeds of crime; or
(f) use known proceeds of crime to facilitate the commission of a crime; or
(g) participate in, associate with, conspire to commit, attempt to commit, aid and abet, or facilitate and counsel the commission of any of the acts described in subsections (a) to (f)."

The above laws should be read in conjunction with the **AntiCorruption Act** to reconcile the crimes associated with Corruption with the offences prescribed under the AntiMoney Laundering Act since corruption in the public sector has been observed to involve the movement of large sums of money.[512]

It should be noted that the act confers extraterritorial jurisdiction on acts performed by any person even not being a Ugandan citizen if that person in one way or the other facilitates or participates in the commission of the acts or omissions prescribed under section 3 which implies that corrupt international players in the local petroleum industry can be prosecuted under the **AntiMoney Laundering**

[512] The Inspector, Raphael Baku, Fighting Corruption is the responsibility of every Ugandan, http://www.igg.go.ug/static/files/publications/NewsletterIGG2_for_web.pdf [Accessed October 14th 2021]

Act[513].

For the purposes of its implementation, the Act prescribes for the creation of the Financial Intelligence Authority [514] with very wide ranging powers in the implementation of the Act and the objectives:[515]

"(a) enhance the identification of the proceeds of crime and the combating of money laundering;
(b) ensure compliance with this Act;
(c) enhance public awareness and understanding of matters related to money laundering.
(d) make information collected by it available to competent authorities and to facilitate the administration and enforcement of the laws of Uganda; and
(e) exchange information with similar bodies whose countries have treaties, agreements or arrangements with the Government of Uganda regarding money laundering and similar offences."

The administrative importance of the Act is that it creates this separate authority unlike the AntiCorruption Act that confers authority on both the DPP and the IGG and if well implemented, this Authority can do for money laundering the decent work that the IGG is doing for corruption in Uganda.

The Leadership Code of Conduct Act, 2002

In addition to the Constitutional provisions creating the Leadership Code of Conduct, the Leadership Code of Conduct Act requires every leader submit to the Inspector General a written declaration of the leader's income, assets and liabilities and those of his or her spouse, child and dependant in the prescribed form[516]. The Act then proceeds to under the second schedule enumerate all of the people who are referred to as leaders and who bear the obligation of making the requisite declaration under **Section 4 of the Act (Section 1, Second schedule, Leadership**

[513]Section 2 (1)(d)
[514]Section 18 (1)
[515]Section 19
[516]Section 4

Code of Conduct Act).

The mandate of enforcing the content of the Leadership Code of Conduct is bestowed upon the Inspectorate of Government so it should be emphasized that the provisions of the Leadership code of conduct ought to be reconciled with the provisions of laws specifically created to regulate corruption and abuse of office.[517] The **Leadership Code Act 2002** which was created to amplify the provisions of the constitution on the Leadership code of conduct and to provide for a minimum standard of behaviour and conduct for leaders; to require leaders to declare their incomes, assets and liabilities and to put in place an effective enforcement mechanism clarifies the mandate of the Inspectorate of Government in regard to the Code as follows:

"(2) In enforcing this Code, the Inspectorate shall carry out the following functions

(a) to receive and examine declarations lodged with it under this Code;

(b) to examine whether or not a leader has corrupt influence or has corruptly entered into a contract with a government or public body or foreign business organisation contrary to this Code;

(c) to inquire or cause an inquiry to be conducted on its own initiative or on a complaint made by any person, into any alleged breach of this Code by any leader;

(d) to investigate and report on any allegations of highhanded, outrageous, infamous or disgraceful conduct or any other behaviour or conduct on the part of a leader in accordance with the definition of the words highhanded; outrageous, disgraceful conduct and infamous to be provided for by the regulations to be made by the Minister;

(e) to recommend awards, disbursements and such payments or rewards as it may consider appropriate in connection with any assistance rendered in the enforcement of this Code; and

(f) to carry out any other functions prescribed by or under this Code."

Complaints pertaining to the breach of the code by the leader can be made to the

[517]Article 234, Constitution of the Republic of Uganda

Inspectorate of Government who can determine the complaint and make a decision on the complaint[518]. Appeals may be made against the decision of the Inspectorate of Government to the High Court in case a party is aggrieved by the findings of the IGG within 30 days after receipt of notice of the findings[519].

Other Agencies Specifically Enforcing the Prevention and Combating of Corruption in Uganda.

Directorate of Ethics and Integrity

The Constitution of Uganda under **Article 99 (**4) empowers the president to create special committees and agencies to support the implementation of government aspirations and obligations. Originally constituted as the AntiCorruption Unit, the Directorate for Ethics and Integrity was reconstituted in 1998 to be guide policy development in combating corruption in Uganda and to ensure ethics and integrity in public offices[520]. The Directorate is constituted under the Office of the President but headed by the Permanent Secretary Ministry of Ethics and Integrity and doubles as the Secretariat for the AntiCorruption InterAgency Forum which is constituted by a crosssection of public entities involved in the fight against corruption[521].

The Directorate consists of three departments namely Finance and Administration, Ethics Education and the Legal Department[522]. The Legal Department is the substantive department of the Directorate and works to strengthen the legal and policy framework for fighting corruption in Uganda with an extensive array of functions including reviewing the existing anti corruption legislation and policy, identifying new and emerging issues in the fight against corruption and developing

[518]Section 18, Section 19, Leadership Code Act
[519]Section 33
[520]Background of the Directorate, Directorate for Ethics and Integrity, Office of the President, http://www.dei.go.ug/background.html [Accessed November 17th 2014]
[521] Inter Agency Forum (IAF), Office of the President, http://www.dei.go.ug/IAF.html, [Accessed October,17th 2021]
[522]Directorate for Ethics and Integrity, Office of the President, http://www.dei.go.ug/ps%27s%20office.html, [Accessed October 7th 2021]

new legislation or measures to address the same, ensuring compliance with anti corruption laws and policy by monitoring their implementation and ensuring that Uganda's legal and policy frame work is in harmony with international anti corruption legal instrument.

The Anticorruption Division of the High Court of Uganda

Citing the need to form a specialized arm of the High Court to specifically prosecute cases pertaining to corruption in Uganda, the judiciary established the AntiCorruption Division of the High Court which started hearing cases in December 2008[523].

The Court was established by the Chief Justice through his administrative powers under Article **133 (1) (b) of the Constitution** to provide for a comprehensive and competent mechanism to expeditiously try corruption and corruption related cases[524]. The AntiCorruption Court was created to contain 2 chief magistrates and four magistrates and these judicial officers were constituted in court only for their mandated to be challenged in the constitutional court[525]. In **David Wesley Tusingwire V Attorney General**, Court clarified that magistrates have jurisdiction to hear corruption cases as follows;

The Constitution specifically empowers the government to management of interests in minerals and petroleum resources that the country.

It stresses that the entire property in, and the control of all petroleum in or under any land or water in Uganda are vested in the government on behalf of the Republic of Uganda.[526] The Constitutional amendment of 2005 elevates the rights of the state to own and control the property in petroleum natural resources and instead of vesting it in the government on behalf the people of the Republic of

[523] Anti-Corruption Division, The Judiciary, http://www.judicature.go.ug/data/smenu/19/Anti-Corruption_Division.html, [Accessed November 5th 2021]

[524](Article 131 (1), Constitution of the Republic of Uganda) The Chief Justice... (b) may issue orders and directions to the courts necessary for the proper and efficient administration of justice.

[525] David Wesley Tusingwire v Attorney General Constitutional Petition No. 2 of 2013, http://www.ulii.org/ug/judgment/constitutional-court/2013/15 [Accessed November 15th 2021]

[526]Article 244(1) as amended

Uganda as is the norm with most constitutional provisions conferring authority on the government over public resources, it vests it in the government on behalf of the Republic of Uganda.

The Constitution also sets the stage for utilisation and management of petroleum by enjoining the parliament to make laws for the exploitation of petroleum, sharing of royalties arising from mineral and petroleum exploitations, conditions for payment of indemnities arising out of exploitation of minerals and petroleum and the conditions regarding the restoration of derelict lands.[527]

The executive arm of the government responsible for the implementation of policies in Uganda is the Cabinet which consists of the President, the Prime Minister and Cabinet Ministers.[528] Cabinet Ministers are appointed by the president with the approval of the Parliament and is selected from the members of parliament or persons qualified to be elected as members of parliament[529]. The Cabinet minister is the highest ranking policy organ of the government and is responsible for running the functions of the government in a given ministry[530] and the constitution makes provision for the cabinet minister to be assisted by other ministers referred to as Minister of state in the implementation of their functions[531]. Ministers are generally accountable to their appointing authority the president in the administration of their functions and are administratively responsible for all decisions made by the cabinet[532].

Ministry of Energy and Mineral Development (MEMD)

Regulation of petroleum in Uganda is vested under the ambit of the Ministry of Energy and Mineral Development and its mandate is "to establish, promote the

[527] Article 244 (2)
[528] Article 111 (1)
[529] Article 113 (1)
[530] Article 113 (3)
[531] Article 114 (1)
[532] Article 117, Ibid, Government of Uganda, Office of the President, Cabinet Secretariat, The Cabinet Handbook, p.18, http://www.cabinetgovernment.net/docs/addis-ababa/4b-uganda-the-cabinet-handbook.pdf [Accessed November 18th 2014]

development, strategically manage and safeguard the rational and sustainable exploitation and utilization of energy and mineral resources for social and economic development."[533] The Ministry is under the supervision of the Permanent Secretary who is appointed by the President in accordance with the advice of the Public Service Commission and is responsible for organisation and operation of the Ministry, advising the Minister on the business of the Ministry implementing the policies of the government and ensuring the proper expenditure of public funds by the Ministry.[534] The mandate of the Minister and the permanent secretary is separated by the fact that the minister is responsible for policies in the ministry while the permanent secretary is responsible for the day to day operation of the ministry and is the ministry's accounting officer.[535]

The Ministry of Energy and Mineral Development is generally responsible for originating and developing laws and policies for the regulation of the production and exploitation of Oil and Gas in Uganda. Within the Ministry are departments to which specific functions have been committed. In the context of this thesis, the Ministry of Energy and Mineral Development has specifically constituted two departments, the Petroleum Exploration and Development Department and the Petroleum Supply Department each of which are responsible for different functions in the regulation and management of petroleum in Uganda[536]. The roles of the key departments are discussed below.

The Petroleum Exploration and Production Department

With Uganda still very much still in the exploration and production stage of its petroleum industry, the Petroleum Exploration and Production Department has been the busiest of the petroleum regulation departments in the MEMD. Originally

[533]Mandate & Mission, Ministry of Energy and Mineral Development, http://www.energyandminerals.go.ug/index.php?id=3 [Accessed November 18th 2014]
[534]Article 174
[535]Government of Uganda, Office of the President, Cabinet Secretariat, The Cabinet Handbook, p.12, http://www.cabinetgovernment.net/docs/addis-ababa/4b-uganda-the-cabinet-handbook.pdf [Accessed November 18th 2014]
[536]Departments, Ministry of Energy and Mineral Development, http://www.energyandminerals.go.ug/index.php?id=3 [Accessed November 18th 2014]

this Department was constituted upon the enactment of the Petroleum Exploration and Development Act cap. 150 and the creation of the Commissioner for Petroleum Exploration and Production[537]. The Act conferred on the Commissioner, hence the department an extensive array of powers in exploration and production of petroleum in Uganda including licensing, monitoring and supervising, granting and revoking petroleum exploration and production licenses and registration of exploration and production companies in Uganda.

However with the enactment of the **Petroleum (Exploration, Development and Production) Act No 3 of 2013**, the functions of the Commissioner and the department have greatly been devolved with the creation of the Petroleum Authority of Uganda and the National Oil Company with the Act only allowing for the Commissioner and other officers to continue in existence but not prescribing their functions and mandate[538]. It can be argued though that the Commissioner and the Department shall continue to assist the Minister in playing the policy functions that have been allocated to her under the Act including granting and revoking licences, initiating, developing and implementing oil and gas policy, submitting draft legislation to Parliament, issuing petroleum regulations, negotiating and endorsing petroleum agreements, and approving field development plans among others[539]. With the Petroleum Authority and the National Oil Company yet to be constituted, the Department continues to perform its functions under the old act but it remains to be seen just how relevant the Authority will be upon the full constitution of the two statutory bodies.

The Petroleum Supply Department

The Petroleum Supply department is responsible for the downstream activities of the petroleum industry and its mandate is to promote, regulate and monitor petroleum supply in Uganda in an environmentally safe and sustainable, free and competitive market so as to meet the petroleum products needs of the people of

[537]Section 6
[538]Section 191
[539]Section 8

Uganda in an economically sustainable manner.[540] The downstream activities of the Petroleum industry are regulated by the Petroleum Supply Act No 13 of 2003 whose enforcement is the Mandate of the Commissioner for the Petroleum Supply Department.[541] Specifically, the commissioner is responsible for the performance of a wide cross section of functions relating to the supply of petroleum in Uganda including licensin3g of petroleum supply in Uganda, establishing and managing the National Petroleum Information System, monitoring of petroleum supply, establishment and management of the National Strategic Petroleum Stocks and offering technical advice on petroleum supply to the Minister among others[542].

The other functions of the Department are to provide data to be used in national plans for petroleum products, make forecasts of petroleum products requirements in the country, and working out strategize for the requirements and monitor and advise on petroleum supplies to ensure sufficiency and availability.[543]

The Petroleum Authority of Uganda (PAU)

With the enactment of the Petroleum (Exploration, Development and Production) Act of 2013 (PEDPA), the Petroleum Authority of Uganda was created as a statutory body.[544] The Petroleum (Exploration, Development and Production Act attempts to confer the Petroleum Authority of Uganda with a very specific mandate by being as general as possible to apply to petroleum exploration, development and production. PAU has the mandate of monitoring and regulating exploration, development and production of petroleum in Uganda and specifically the PAU is mandated to *monitor and regulate petroleum activities including reserve estimation and measurement of the produced oil and gas, review and approve any proposed exploration activity contained in the annual work programme, appraisal programme and production forecasts submitted by a*

[540] Petroleum Supply, Ministry of Energy and Mineral Development, http://www.energyandminerals.go.ug/index.php?id=25 [Accessed November 17th 2021]
[541]Section 7 (1)
[542]Section 7 (2)
[543] Petroleum Supply, Ministry of Energy and Mineral Development, http://www.energyandminerals.go.ug/index.php?id=25 [Accessed November 17th 2021]
[544]Section 9

licensee,assess tailend production and cessation of petroleum activities and decommissioning, participate in the measurement of petroleum to allow for estimation and assessment of royalty and profit oil or gas due to the State and be responsible for the approval of

The PAU is meant to be an independent body responsible for the monitoring and regulation of petroleum exploration, development and production but even before it is constituted concerns have been raised about its independence as it has been conferred very little decision making by the Act and playing a majorly technical function in the industry.[545] This is in addition to a restriction on board members or employees of the Authority not to disclose any information obtained during their employment which could frustrate and stand in contravention to the Access to Information Act and the Whistleblowers Act.[546] It is not difficult to presume that these bottlenecks have been created to facilitate corruption and frustrate efforts to avoid abuse of office in a very key sector in Uganda. This is regardless of the efforts the Act has taken to guarantee the independence of the Authority by prescribing for example that any direction of the minister to the Authority be published in the Gazette[547] and the requirement that a board member of the PAU can't be a shareholder of any petroleum entity.[548]

The National Oil Company (NOC)

In addition to the Petroleum Authority of Uganda, the PEDPA also creates the National Oil Company (NOC) as a State Owned Company registered under the Companies Act, 2012 which is responsible for the management of the commercial aspects of the petroleum activities in Uganda and protection of the state's interests in petroleum agreements.[549] The functions of the NOC have been prescribed as:[550]

[545]RWI, ISLP, Comments on Uganda Petroleum (Exploration, Development and Production) Bill, 2012 (Bill No. 1), http://www.resourcegovernance.org/sites/default/files/RWI_ISLP_Skadden_Analysis_of_Uganda%20EP_Bill.pdf [Accessed Oc tober 16th 2021]
[546]Section 32
[547]Section 13, 14
[548]Section 18
[549]Section 42 (1)

(a) to handle the state's commercial interests in the petroleum subsector;
(b) to manage state participation in petroleum activities;
(c) to manage the marketing of the country's share of petroleum received in kind;
(d) to manage the business aspects of state participation.
(e) to investigate and propose new upstream, midstream and downstream ventures initially locally but later internationally.

One of the biggest challenges of the provisions relating to the National Oil Company is the omission by the Act to define some of the key elements that define the mandate of the National Oil Company and distinguish them from the functions of the Minister and the Petroleum Authority of Uganda for example it is not really clear what amounts to commercial interests in the context of the functions of the National Oil Company and neither is it clear what amounts to management of state petroleum activities, a role which could have primarily been conferred on the Petroleum Authority of Uganda.

The Act for example requires the Board of Directors to submitted audited accounts among others to the annual general meeting which implies the existence of members of the company who will annually participate in the Annual General Meeting [551] . Considering that petroleum resources have been constitutionally vested in the State and the National Oil Company is responsible for managing state interests in petroleum activities, the only member in the Company should lawfully be the state since the petroleum resources are vested in it. It is key that the provisions pertaining to the National Oil Company be strengthened to clarify its mandate, constitution and ownership to promote transparency in the management of the country's petroleum resources.

[550]Section 43
[551]Section 45

A Comparative Analysis of Anti Corruption Regulatory Frameworks in Selected Oil and Gas Producing Jurisdictions

This chapter analyses the legal and regulatory frameworks for fighting corruption in some oil and gas producing countries referred to as failed countries in Africa. While oil just like other natural resources are owned by the State in most countries, permits and licences to exploit such resources are required to maximise benefit, realise technology transfer, protect the environment in the relevant area and as a matter of national security in the context of protecting an important national resource.[552] Effective regulation is therefore important to curb corruption in the process of the securing and implementation of licenses to exploit these resources to avoid adverse effects which may arise from the failure to regulate the resources effectively.[553] Regulation of oil production typically covers a licensing phase, an exploration phase, a production or operational phase, and a postproduction or decommissioning phase and corruption is capable of occurring at any of these levels.[554]

Oil producing and exporting States tend to bear a striking and broad resemblance to each other in State capacities and macro economic performance, despite differences in types of political regimes, cultures, geostrategic locations, and the like. Because the exploitation of oil coincides with the process of modern State building, petrostates have peculiar characteristics that shape them. The fact that opportunities for exceptional gain and loss arise from the possession of petroleum is unquestionable. As thus, some countries gain whereas others lose but the benchmark is the internal management mechanism in place for the management of the oil resource.

Dependence on minerals produces a bundle of characteristics that, when taken together, are unique to mining countries, petroStates inclusive. With the

[552]Al-Kasim F, Søreide T, Williams A (2008), Grand corruption in the regulation of oil, U4-Anti-Corruption Resource Center, Issue 2:2008
[553]Ibid
[554]Ibid

exception of depletability, most of these characteristics are not given, as many economic theories postulate. They are a product of prior choices, made mostly outside these countries, about how mining industries should be organized. These "natural" characteristics are shared by all petrostates, but they are present in an especially exaggerated form; thus they can be considered a special subset of mining states.

First mining states are economically dependent on a single resource. Oil exporters are differentiated from other mining states by the overwhelming acuteness of the dependence. For example in 1980, for oil exporters, the average ratio of oil exporters to total exporters was far higher (96.3% for surplus oil exporters and 82.5% for other major oil exporters) than the equivalent average ratio for nonoil primary commodity exporters (50.7%).[555] Even those countries that are considered to be heavily dependent on minerals, such as the Democratic Republic of the Congo with its copper or Bolivia with its tin, do not reach the level of dependence of oil exporting countries.[556] One result of this extreme dependence is often noted: petrostates are especially vulnerable to export earning instability, which in turn has negative b, b , consequences for the rate of growth, levels of investment and inflation.[557]

Second, mining states depend on an industrial sector that is highly capital intensive and that is an enclave. While capitalintensive, large scale and technologically complex industrialization is common in many developing countries, its magnitude is of a different order with petroleum. Petroleum and coal head the list of manufacturing industries ranked according to the degree of capital intensity.[558] This extreme capital intensity has two key effects. Oil exporters

[555]International Monetary Fund, International Financial Statistics, and staff estimates; cited in Amuzegar Jahangir, 1982, "Oil Wealth: A Very Mixed Blessing," Foreign Affairs, 60 (4)

[557]Glezakos, Constatine, "Export Instability and Economic Growth: A Statistical Verification," 1973, Economic Development and Cultural Change 21 (July), pp. 670-679

[558]Nankani, Gobind, "Development Problems of Mineral Exporting Countries", 1979, Staff Working Paper 354, World Bank, Washington, D.C. (August), p.29.

historically have led unusually high levels of foreign ownership or control (or both) of their main resource because oil exploration initially required capital and technology that they did not posses. At the same time, this industry is characterized by low employment generation and a skewed wage structure. As the industry's wage scale surpasses that of other domestic sectors, it exerts an upward pull on the rest of the economy. The resulting wage followership produces a labour aristocracy, on one hand and unemployment among the unskilled, on the other. In effect, oil led development results in a foreigncontrolled, high wage economy characterized by strong unions and unemployment.[559]

Third, mining states rely on a primary commodity that is depletable. These states do not depend on agricultural cash crops like coffee or cotton, which can be replanted and reproduced year after year. Once minerals are processed and sold on the international market, stock is permanently and irreversibly depleted, which can be justified economically only by simultaneous investment that yields the highest possible rate of return. In effect, the trade off between extracting minerals and leaving them in the ground depends on both the expected rates of return on investment from oil revenues and projected oil outcomes.[560]

Fourth, mining countries and especially oil exporters are dependent on a resource capable of generating extraordinary rents. These rents are not 'natural'; they are derived from the unusual organization of the world petroleum market (for example monopoly rents), variability in the quality of fields or oil (for example economic rents) and/or petroleum's special status as a strategic resource. Oil is the most important internationally traded commodity as measured by volume and monetary

[559]Lewis Stephen R., "Development Problems of Mineral Rich Countries", 1982, Research Memorandum 74, Williams Centre for Development Economics, Williamstown, Mass, p.12.

[560]Jabarti Anwar, "The Oil Crisis: A Producer's Dilemma", in Ragaei El Mallakh and Carl Mc Guire, eds., U.S and World Energy Resources: Proceedings of the Third International Conference, Boulder, Colo.: International Research Center for Energy and Economic Development, p.7.

value.[561] The significance of its role leads to relatively inelastic demand, which, when combined with the small number and large size of resource owners, the high entry costs into the industry, and the difficulties inherent in energy substitution, produces extraordinary rents with a distinctive character: they have almost nothing to do with the productive process of the domestic economy.[562] In fact, there is no significant relationship between the level of oil production in an enclave and the performance of the local economy.

Finally, in developing countries like Uganda, mineral rents accrue directly to the State. By virtue of custom, laws that grant subsoil rights to the State, prior choices, and, eventually, nationalistic ideology, export earnings from minerals are deposited into the national treasuries of developing countries. Therefore all mineral States, including petroStates are rentier and distributive States.[563] Their economic power and ultimately their political authority rest on their dual capacity to extract rents externally from the global environment and subsequently to distribute these revenues internally.

Nigeria.

Nigeria has been ranked as the world's sixth largest oil producing country and the eighth largest producer of crude oil, which contributes up to 40% to its Gross Domestic Product (GDP), 95% to its total exports and about 80% to national budgetary revenue.[564] Nigeria derives a significant strategic importance arising from its high quality crude oil which makes it easier to process its final products

[561]Danielsen Albert, The Evolution of OPEC, 1982, New York: Harcourt Brace Jovanovich, p.23.

[562]Hughes, Helen, "Economic Rents, the Distribution of Gains from Mineral Exploitation and Mineral Development Policy," World Development 3, p.11, 12.

[563] Delacroix Jacques, "The Distributive State in the World System", Studies in Comparative International Development 15 (fall), p.11.

[564]Oluduro O (2012), 'Oil exploitation and human rights violations in Nigeria's oil producing communities', Department of Public Law, Ghent University, Belgium, Afrika Focus Volume 25, Nr. 2,

and therefore makes it highly demanded.[565] Despite this tremendous natural resource endowment, vast parts of the country have poor water quality; there is pollution, disruption and degradation of farmlands and fishing ports, destruction of wildlife and biodiversity, loss of fertile soil without adequate compensation or a planned mitigation policy for the areas affected.[566]

To appropriately understand the issue of corruption arising in the oil industry in Nigeria it is important to examine the history of regulation of Nigeria. *Nigerian Bitumen Corporation, a German company* was the first to explore crude oil in Nigeria as early **as 1908** and subsequent to German's loss of the First World War of 1914, control of Nigeria moved to the United Kingdom and the Nigeria Bitumen Corporation ceased its operations.[567] By the **Mineral Oil Ordinance No. 17 of 1914,** all powers to grant prospecting rights to search for, win and work mineral oils were vested in the Colonial Administration and these licenses were only available to British subjects and citizens.[568] This would lay a foundation for the exclusivity in the Oil sector in Nigeria that would buttress practises of exclusivity which have since facilitated corruption within the sector. This law and its subsequent amendment in **1925** facilitated an exploitation of Nigeria's oil resources by the colonial government through the period of Nigeria's colonialism and the postcolonial period up to 1969 when the government created the Petroleum Act of 1969 and the Petroleum (Drilling and Production) Regulations of 1969 to assume more control of the Country's oil resources.[569] The government would subsequently create the **Nigerian National Oil Corporation (NNOC) by Act No. 18 of 1971** which would later be reconstituted into the **National Petroleum Corporation through Act No. 33 of 1977.[570]**

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[565] Alexandra Gillies (2009), Reforming corrupt ion out of Nigerian oil? Part one: Mapping corruption risks in oil sector governance, U4 Brief- Anti-Corruption Resource Centre, February 2009-No.2

[566] Supra Oluduro (2012)

[567] Ayodele-Akaakar FO, 'Appraising the Oil & Gas Laws: A Search For Enduring Legislation For The Niger Delta Region'

[568] Section 6(1)(a), Mineral Oil Ordinance No. 17 of 1914

[569] Onyekachi DWC, 'An Appraisal of the Legal Framework for the Regulation of Nigerian Oil and Gas Industry, with Appropriate Recommendations', p.5-6

[570] Ibid

The NNPC is responsible for the controlling upstream and downstream activities in the Oil Sector in Nigeria, with expansive functions involving the operation of 12 subsidiary firms which include refineries, petro chemical plants and oil trading companies.[571] Among these subsidiaries is the **National Petroleum Investment Management Services (NAPIMS)** which is responsible for granting concessions and entering into contracts with oil governments on behalf of the government.[572] The NNPC is overseen by the Ministry of Petroleum which is mostly run by the president support of the Ministry of State for Petroleum who exercises minimal unilateral authority over the activities of the ministry.[573] The Ministry has primary supervisory oversight over the oil and gas industry and is responsible for the formulation, implementation and coordination of government policy for the industry.[574]

The Ministry regulates the oil industry through the Department of Petroleum Resources (DPR) which is responsible for monitoring and supervising all licensed petroleum industry activities with a view of ensuring compliance.[575] The DPR is responsible for among others issuance of oil exploration licenses, oil prospecting licenses and oil mining leases; production sharing contracts and service agreements or service contracts and granting consent to assignment of licenses and contractual interests in oil and gas assets.[576] The DPR is also responsible for the allocation of oil blocks, the collection of royalties, the enforcement of sector regulations (safety, environment, gas flaring, etc.), and other technical oversight tasks.[577] It should be noted though that the DPR formally existed as a unit within the NNPC but now exists separately though they are some issues relating to the segregation of the roles of the two entities that affect their efficiencies including the weak capacity of the DPR to perform its functions, NNPC intrusion into

[571]Supra, Alexandra Gillies (2009)
[572] Ibid
[573] Ibid
[574]Owolabi T et al, (2014) 'Oil and Gas Regulation in Nigeria: Overview', Olaniwun Ajayi LP, Multi-Jurisdictional Guide, Energy and Natural Resources, Available at http://us.practicallaw.com/5-523-4794 [Accessed July 16th 2015]
[575]Ibid
[576] Ibid
[577] Supra, Alexandra Gillies (2009)

regulatory and policymaking functions, lack of NNPC oversight and accountability, and weak incentives for efficiency and performance of both the bodies.[578]

The above set up in which the control of mineral oil resources is vested within in the control of one Ministry, that is the Ministry of Petroleum and effectively in the Presidency has been criticised for being the greatest manifestation of the lack of the transparency and accountability within Nigeria's regulatory framework for the oil industry.[579] The Minister is in charge of licensing of all activities in the oil sector, has power to cause arrests in relation to oil activities, can order suspension of operations under a license or a lease, can revoke any license or lease.[580] Unfortunately, the Minister has barely summoned these powers to protect the multitude of peopl3e who have been affected as a result of oil and gas development activities by not intervening to redress fatal accidents, spillages and environmental degradation from upstream activities among others.[581]

It has been reported that corruption has manifested the following ways in Nigeria's regulation of Oil and Gas.

The Awarding of Oil Blocks

Evidence from Nigeria indicates that the stage of awarding the oil blocks can be the most vulnerable stage as far as corruption is concerned as it is the stage investors stand to gain most from. Because of the archaic laws and the autocratic military interventions in the running of the oil and gas sector, the awards of oil blocks were formally granted at the discretion of the State as and well he wished.[582] The Ministry of Petroleum has full control allocation of licences for the exploration, prospecting and mining of oil without any adequate oversight mechanisms and this resulted in President Obasanjo revoking 11 licenses given to

[578] Ibid
[579] Supra, Ayodele-Akaakar FO, p.8
[580] Ibid
[581] Ibid
[582]Usman SO (2011), The Opacity and Conduit of Corruption in the Nigeria Oil Sector: Beyond the Rhetoric of the Anti-Corruption Crusade, Journal of Sustainable Development in Africa (Volume 13, No.2, 2011) ISSN: 1520-5509

senior military officers before the departure of the military government.[583] The government consequently included a bidding process for the awarding of oil blocks however the bids rounds by the DPR in 2000, 2005, 2006 and 2007 was grossly abused raising several queries like companies being forced into partnerships without explanation, signature bonus deadlines being unevenly enforced, the award of preferential "first refusal" rights to companies which promised to make power sector investments yet some of the companies lacked the capacity to accomplish the required tasks as would be later established.[584] Further probes into these bids disclosed manipulation of the bidding process and some of the grants were revoked.[585] It is therefore essential that the process of awarding of licenses to explore, produce and supply oil are subject to stringent oversight mechanisms that remove the corruption risk that autonomy comes with.

Export of Crude and Importation of Refined Products

The NNPC issues export contracts to traders including international oil trading companies, affiliated companies and some foreign government who buy crude from the NNPC at market price and sell it to refineries and other buyers worldwide and the same applies to imports for petroleum products.[586]

The exportation of crude oil has presented major risks for corruption in Nigeria through a deliberate increase in the daily quota of crude against figures allocated by the Organisation of Petroleum Exporting Countries (OPEC), diversion of interest of income from illegal transferred money from the NPPC joint venture account and the diversion of money through nonexistent joint venture account cash call arrears[587]. Nigeria has a set up in which it subsidises the oil prices on the local market which though create a tangible benefit for Nigerians from their oil resources is a substantive opportunity for corruption[588]. Distributors import refined products at international market price and sell them locally at the local subsidised

[583]Supra, Alexandra Gillies (2009)
[584]Ibid
[585] Ibid
[586]IBid
[587]Supra, Usman SO (2011)
[588]Supra, Alexandra Gillies (2009)

price with the difference being reimbursed to them by the NNPC. The distributors however buy the petroleum from local refineries at the local price then sell it to the local market at the same subsidised price and then collect their reimbursement from the NNPC just as if they had imported it at the international price[589].

Where an oil producing state, just like Uganda has limited capacity to process its own oil resources and deals crude oil on the world market, it is essential that competitive monitoring structures be put in place to monitor the exportation of crude oil and the importation of oil products.

Awarding of Contracts

The oil industry in Nigeria awards a cross section of licenses to oil companies including the concession agreements, joint ventures, product sharing contracts and risk service contracts.[590] While in principle it is the operator company that awards the contracts, the NNPC maintains a high degree of control over the contracts and this interference is where the risk of corruption is found.[591] In 2008, Albert Stanley of Kellogg, Brown and Root, an American oil company pled guilty to paying around US$180 million to the NPPC and other Ministry officials to secure four contracts worth US$6 billion.[592] Corruption in awarding of contracts has been reported to move beyond awarding tenders to include the manipulation of results in favour of companies in which government officials have a stake, giving preference to companies owned by allies in exchange for some economic future gain or political gain among others. Without effective oversight mechanisms in the bidding process awards for contracts can be flouted for private gain by whatever government official or cartel of government officials who have been entrusted with securing the best deal for the state.

Theft of Crude Oil

The Nigerian Oil industry has also consistently suffered with theft of crude oil or

[589]Ibid
[590]Olaniwun Ajayi LP, 'Nigeria Oil and Gas', Freshfields Bruckhaus Deringer LLP, March 2013, p.4
[591]Supra, Alexandra Gillies (2009)
[592]Ibid

what has been referred to as bunkering or blood oil.[593] Oil bunkering occurs through smallscale pilfering of condensate and petroleum product destined for the local market mainly by local people; stealing crude oil either by hacking into the pipeline directly or by tapping the wellhead through removing the structure at the top (called the Christmas tree) and attaching a hose to siphon off the oil and is funded by major international syndicates; and excess lifting of crude oil beyond the licensed amount, using forged bills of lading, which are the documents issued by a carrier to a shipper, listing and acknowledging receipt of goods for transport and specifying terms of delivery and this involves oil company staff and the NNPC as well as government officials.[594]

It has been reported that Nigeria loses around 100,000 barrels of oil per day which standing at around 5% of the oil Nigeria produces daily is a significant loss of public resources.[595] While it may be argued that the government can only be accused of very little as far as the theft of crude oil is concerned, poor governance around oil and rampant fraud and corruption have been identified as key facilitating factors for the theft of oil in Nigeria.[596] The multinational nature of the challenge of oil bunkering implies that an approach to deal with the challenge of oil theft needs to move beyond tightening international mechanisms for monitoring crude oil supply mechanisms to also engage regional channels through which bunkering maybe conducted.

Equatorial Guinea.

Equatorial Guinea has been reported as SubSaharan Africa's third largest oil producer yet the country has very little to show for its oil wealth.[597] Measuring a paltry 28000km2 with a population estimated at around half a million, Equatorial

[593]Asuni JB (2009), 'Blood Oil in the Niger Delta', United States Institute of Peace, Special Report
[594]Ibid
[595] Katsouris C and Sayne A (2013), 'Nigeria's Criminal Crude: International Options to Combat the Export of Stolen Oil', Chatham House
[596] Ibid
[597]BBC News, Equatorial Guinea country profile – Overview, January 23rd 2015, Available at http://www.bbc.com/news/world-africa-13317174 [Accessed July 4th 2015]

discovered large deposits of oil and gas in the 1990s and this transformed it into one of Africa fastest growing economies with Oil and Gas accounting for 91% of its revenue and exports by 2007.[598] Oil and Gas exploration and production is conducted across five fields in the country including Ceiba Field, The Zafiro Field complex, Alba Field, Okume Complex, Aseng and Alen.[599] Ceiba Field discovered in 1999 achieved peak production of 72,000 barrels per day (bb/d) in 2001 but daily production is estimated at 19400bb/d; Zafiro Field Complex discovered in 1995 and produces an average 109000 bb/d; Alba Field was discovered in 1983 but was developed in 1991 solely for its condensate production and is estimated to produce 44000bb/d of condensate, 13000bb/d of propane and 7500bb/d of Butane; Okume Complex was discovered in 2001 and started production in 2006 and achieved peak production of 86000bb/d in 2010 though daily average production is estimated at 59000bb/d; Asenf was discovered in 2007 and production started in 2011 reaching a daily average production of 60,000 bb/d; and Allen was discovered in 2005 and production commenced in with a daily production estimated at 37500 bb/d.[600]

Oil and gas production in Equatorial Guinea is regulated under Decree Law No. 8/2006 of *November 2006 (Hydrocarbons Law) and the Petroleum Regulation of the Republic of Equatorial Guinea Num. 4/2013 (Petroleum Regulation).* The Ministry of Mines, Industry and Energy (MMIE) is responsible for the formulation, regulation and monitoring of Petroleum Operation policies, as well as the administration, planning, implementation, supervision, inspection, auditing and enforcement of all Petroleum Operations and all activities relating thereto; negotiating, signing and executing all Contracts entered into between the State and Contractors, as well as for amending the terms of any Contracts to ensure that

[598] Aguemon H and Pambou Y, Equatorial Guinea, Accessed http://fic.wharton.upenn.edu/fic/africa/Equatorial%20Guinea%20_2_.pdf [July 4th 2015]

[599] Republic of equatorial Guinea, Ministry of Mines, Industry and Energy, Oil Production, Available at http://www.equatorialoil.com/Oil_production.html [July 4th 2015]

[600] Ibid

Petroleum Operations are carried out for the benefit of the State.[601]
Oil transactions in Equatorial Guinea are conducted through PSCs which the state participates in through two companies GEPetrol which is the National oil company and SONAGAS which is the National Gas Company. [602]

GEPetrol is an autonomous entity that acts as the government's representative in all PSCs for oil exploration, overseas international sales and the distribution of extracted oil and gas crudes. [603] SONAGAS is similarly an autonomous government entity that is responsible for developing gas projects in the country to diversify the energy bases and incomes in the country from the use of its natural gas resources.[604]
Despite, this natural endowment in oil resources and relatively well structured set up for the regulation of oil and gas in Equatorial Guinea, there has been reported a huge disparity between the revenues generated from the oil production in the country and the standards of living including among others poverty levels in the country. The African Development Bank (ADB) has reported that despite a significant surge in per capita to an estimated USD29.940 in 2013 which has supported rapid development of infrastructure, there has been no diversification of the economy and neither have there been improvements in people's living conditions.[605] This is illustrated by the fact that while its Human Development Index (HDI) stood at 0.554 in 2013, ranking it 136th out of 187 countries, it is also ranked 59th in terms of per capita GDP among the same number of countries.[606] Recession hit the country in 2013 amidst a decline in oil production because oil

[601]Article 9, HyrdoCarbons Law of Equatorial Guinea, Decree Law No. 8/2006 of November 2006 (English Translated Version)
[602]Colón MC (2014), Oil and Gas regulation in Equatorial Guinea: Overview, Rights to Oil and Gas, Practical Law, Available at http://us.practicallaw.com/5-565-2347?source=relatedcontent [Accessed July 4th 2015]
[603]Presidential Decree No 9 of 2001
[604]Presidential Decree No. 45/2005
[605] African Development Bank (2014), Equatorial Guinea Economic Outlook, Available at http://www.afdb.org/en/countries/central-africa/equatorial-guinea/equatorial-guinea-economic-outlook/ [Accessed July 4th 2021]
[606] Ibid

production has since peaked. AfDB reports that the country has posted negative growth in GDP since 2012 and this is expected to continue through 2015.[607] This is a particularly worrying trend for a country which has positioned itself to be highly dependent on its petroleum resources because while the rest of the country seems to have minimally benefitted from the petroleum resources, the country appears to have passed its best days as far as exploitation of its petroleum resources are concerned and there appear to be only darker days ahead.

Media reports of corruption and nepotism in Equatorial Guinea are not scarce. The BBC reports a US Senate investigations which found that President Obiang's family had received significant payments from US oil companies such as Exxon Mobil and Amerada Hess in 2004 while in 2014 President Obiang's son Teodoro Nguema Obiang 'Teodorin', a government minister, was forced to relinquish more than 30 million dollars of assets in the United States allegedly acquired with stolen oil money.[608]

This relinquishment is only a drop in the ocean of assets that Teodorin has amassed through illegal practices of appropriating revenues relating to oil and gas in Equatorial Guinea. In February 2010, the US Senate Permanent SubCommittee on Investigations found that between 2004 and 2008, Teodorin had used US lawyers, bankers, and real estate and escrow agents to move more than $110 million in suspect funds through US bank accounts, including $30 million to purchase a residence in Malibu and $38.5 million to purchase an aircraft in addition to an extensive catalogue of properties and assets that he had amassed.[609] And yet the United States has been conspicuously looked away from the rampant corruption in the country's oil sector and this has been attributed the United States'

[607] Ibid

[608] BBC News, Equatorial Guinea country profile – Overview, January 23rd 2015, Available at http://www.bbc.com/news/world-africa-13317174 [Accessed July 4th 2021]

[609] United States Senate (2010), 'Keeping Foreign Corruption Out of The United States: Four Case Histories', Permanent Subcommittee on Investigations Released in Conjunction with the Permanent Subcommittee on Investigations, February 4, 2010 Hearing, Available at http://www.hsgac.senate.gov/download/report-psi-staff-report-keeping-foreign-corruption-out-of-the-united-states-four-case-histories [Accessed July 4th 2015]

strong corporate presence in the sector but also the fact that Equatorial Guinea is a strong ally in a politically volatile region[610].

The Open Society Justice Initiative (OSJI) has monitored and assessed the strategies of corruption used to plunder the country's oil resources in Equatorial Guinea and they include the following[611]:

– *Large scale expropriation of properties and businesses from individual and communal proprietors through among others purported development needs, fictitious determinations of property "abandonment", technical disqualifications of legal title claims, or payment of token inadequate compensations or deliberate appropriation with no legal pretext provided;*

– *Sham coinvestment transactions by government officials who use their influence to obtain direct equity holdings in the enterprises of foreign companies for little or no consideration;*

– *Flaunting government procurement, construction, and licensing contracts "negotiated" by officials irremediably tainted by conflicts of interest;*

– *Secret offthebooks "contributions" by foreign companies to or for the benefit of leading government officials, Use of political and economic power to ensure that the government officials' own private enterprises receive sole authorization for provision of all important local goods and services required for hydrocarbon extraction activities; and*

– *Direct diversion of millions of dollars from government revenue accounts into the private accounts of senior officials, often through use of offshore shell corporations.*

While the Equatorial Guinea was member of the Extractive Industries Transparency International's (EITI) since 2008, it was delisted in 2010 due to its

[610]Jad Mouawad, 'Oil Corruption in Equatorial Guinea', New York Times, July 9, 2009 7:01 am, Available at http://green.blogs.nytimes.com/2009/07/09/oil-corruption-in-equatorial-guinea/?_r=0 [Accessed on July 4th 2015]

[611]Open Society Justice Initiative (OSJI) (2010), 'Corruption and Its Consequences In Equatorial Guinea: A Briefing Paper', Updated March 2010, Available at http://www.opensocietyfoundations.org/sites/default/files/equatorial-guinea-20100317.pdf [Accessed July 4th 2015]

failure to meet transparency standards set by the EITI Board including the accounting for the use of public funds by disclosing natural resource revenues, and removing obstacles to civil society participation in oil resource governance[612]

Angola.

Angola is ranked as the second largest producer of crude oil in SubSaharan Africa only behind Nigeria and produces about 1.6 million bb/d with a potential of up to 2million bb/d by 2014[613]. The country has up to 9.5 billion barrels in proven crude oil reserves of a light sweet crude oil containing low volumes of sulphur which is ideal for producing derivatives like gasoline, kerosene and high quality diesel.[614]

Oil was discovered in Angola in **1955** but production started in **1960 e**ventually overtaking coffee as Angola's principal export by 1973 and it developed rapidly becoming OPEC's official 12th member in 2007.[615] Angola has 44 oil blocks both onshore and offshore with only 11 blocks in production mode while the rest of the 33 are in exploration mode which implies that production levels can only increase in the country compared to Equatorial Guinea whose production levels have since peaked.[616]

The legal framework of the oil sector consists of two key laws including the **Law No. 10/04 of 12 November 2004 (Oil Activities Law)**, which regulates and defines the prospection, search, assessment, development, concession and decommissioning activities of the oil sector, and Law No. 13/04 of 24 December 2004 (Taxation of Oil Activities Law), which establishes the taxation of oil and

[612]Human Rights Watch (2012), Equatorial Guinea: DC Meeting Set as Corruption Details Emerge, Available at http://www.hrw.org/news/2012/06/15/equatorial-guinea-dc-meeting-set-corruption-details-emerge [Accessed 10th October 2021]

[613]Ramos ML (2012), 'Angola's Oil Industry Operations', Open Society Initiative for Southern Africa, Available at http://www.osisa.org/sites/default/files/angola_oil_english_final_less_photos.pdf [Accessed on 14th September 2021]

[614]Ibid

[615]Ibid

[616]Ibid

gas activities defining costs, deductions, tax charges and taxable income.[617] In addition, the Regulation No. 1/09 of 27 January 2009 specifically governs, defines and provides for the requirements and provisions of the Oil Activities Law while the supply of services to companies of the oil and gas sector is regulated by the Law on Oil and Gas Activities (Law No. 10/04 of 2012 November); the General Governing Framework for the Procurement of Services and Goods to National Companies, by companies in the oil and gas sector (Ministry of Petroleum (MinPet) Dispatch No. 127/03 of 25 November); and the Applicable Regime to Public Tenders within the oil and gas sector (Decree No. 48/06 of 1 September).[618] The Ministry of Petroleum is responsible for the formulation, conduction, execution, supervision and control of the executive policy regarding the oil sector, namely concerning the hydrocarbons research, production, refinement, crude oil marketing, storage, transportation and distribution of oil derivatives.[619]

Under the mandate of the Petroleum is Sonangol which is a state owned company with the mandate to manage the countries petroleum and natural gas and is responsible for licensing all petroleum activities.[620] Sonangol typically grants concessions through Joint Ventures (JVs) and Product Sharing Agreements (PSAs).[621]

Angola, just like both of the oil rich countries reviewed above has heavily struggle with a lack of transparency in the governance and management of its oil resources with and this has been reflected in the gross disparity between its natural

[617] Palmer B (2012), Oil Regulation In 35 jurisdictions worldwide, Getting the Deal Through, Available at http://www.avm-advogados.com/wp-content/uploads/2012/07/OR2012-Angola.pdf [Accessed July 4th 2015]

[618] Ibid, Also see Tinyefuza MG (2013), Escaping the Oil Curse: The Role of Sound Legal, Policy and Institutional Frameworks in the Oil and Gas Sector in Uganda, Available at https://www.academia.edu/9420751/ESCAPING_THE_OIL_CURSE_THE_ROLE_OF_SOUND_LEGAL_POLICY_AND_INSTITUTIONAL_FRAMEWORKS_IN_THE_OIL_AND_GAS_SECTOR_IN_UGANDA [Accessed September 16th 2021]

[619] Ibid

[620] Article 6, Oil Activities Law. Sonangol was instituted through Directive No. 52 of 1976 to manage the country's oil resources

[621] Supra, Palmer B (2012)

endowment and the standard of living of the majority of people living within the country. Oil production accounts for up to 94% of its exports, 55% of its GDP and 80% of overall government revenue and yet the country has an extremely poor income distribution with 70% of the population living below USD 2 a day amidst poor access to basic health care and a life expectancy of just 41 years.[622] Ranking at 142 out of 163 countries on Transparency International's Corruption Index, the government of Angola has been reported to be highly unaccountable to its own population characterised by a poor nontransparent institutional environment where the majority of national resources are owned by the people near the president.[623]

There have been several reports of corruption in Angola's oil sector through embezzlement of financial assets from the natural resources by the government official and collusion of government officials with international oil companies to get a personal financial gain.[624] Foreign oil companies have been reported to give funds to a foundation linked to the president, the IMF has reported that oil companies have paid signature bonuses for new licenses outside the control of the Treasury leading to a loss of up to USD 115million while the Attorney General has announced that between October 2009 and January 2010 up to USD137 million was embezzled from the treasury in relation to oil transactions.[625]

The Human Rights Watch in a report in 2010 similarly disclosed several acts of corruption by several highly placed people within the government of Angola.[626] It reported the findings of the 2010 United States Senate Permanent Subcommittee on Investigations which reported that oil revenue had fuelled corruption and

[622]Kolstad I, Wiig A, and Williams A (2008), Tackling Corruption in Oil Rich Countries: The Role of Transparency, U4 Brief-Anti-Corruption Resource Center, February 2008-No.3
[623]Ibid
[624]Gaspar A, 'The Management of the Angolan Oil Revenues: Are there any Chances to Change Course of the Resource Curse?' University of Dundee
[625]Ibid
[626]Human Rights Watch (2010), 'Transparency and Accountability in Angola: An Update'

mismanagement in Angola by highlighting the cases of two Angolan Officials.[627] These included Pierre Falcone who was at the Center of an arms for oil corruption scandal during the Angolan Civil war. Dr. Aguinaldo Jaime, formerly the Central Bank governor of Angola and later the country's deputy prime minister, who transferred up to US$50 million from Angolan central bank accounts to private accounts in the United States while he was the Central Bank governor.[628]

The report also mentioned China International Fund which having positioned itself between the Chinese and Angolan governments was able to secure several oil contracts for the government of China.[629]

It is therefore evident that corruption in the Oil sector in the Angolan government is highly organized running from the head of the state through the nationally owned parastatals with designated intermediaries to facilitate the swindling of funds. Greater monitoring and accountability mechanisms are required in this case to oversee the grant of oil awards and contracts and to monitor the movement of financial resources relating to oil and gas.

The perfect classic example of success; Norway.

When it comes to oiland investing Norway is a classic example of a perfect story of success. The fact that Norway had a highly institutionalized apparatus and strongly entrenched routines prior to becoming an oil exporter provides an opportunity to demonstrate the advantages of a more highly institutionalized and less politicized administrative structure for handling bonanzas. While political and social upheavals in major oil producersVenezuela, Nigeria, Russia, the Persian Gulfdominate headlines, Norway since 1971 has quietly been pumping massive quantities of crude from the icy waters of the North Sea. Today, Norway is the

[627]United States Senate (2010), 'Keeping Foreign Corruption Out of the United States: Four Case Histories', Permanent Subcommittee on Investigations Released in Conjunction with the Permanent Subcommittee on Investigations, February 4, 2010 Hearing, Available at http://www.hsgac.senate.gov/download/report-psi-staff-report-keeping-foreign-corruption-out-of-the-united-states-four-case-histories [Accessed July 4th 2015]
[628]Human Rights Watch (2010)
[629]Ibid

world's thirdlargest oil exporter, behind only Saudi Arabia and Russia, and the seventhlargest oil producer.[630]

The Norwegians have proven that oil doesn't have to be an obstacle to stability and longterm growth. As I have already pointed out in the previous Chapter, Political Scientists, Social and Legal Scholars like to talk about the " *'curse' of oil."* Over the past several decades, in many of the oil producing countries, there has been a sorry economic state of affairs that ensues when tribal kingdoms, authoritarian regimes, kleptocracies, and leftwing dictatorships get their hands on national oil revenues. Easy oil cash entrenches corrupt establishments, discourages sound longterm economic planning, and is almost never channeled in ways that promote development. For Norway, this was not the path to follow. Uganda is on the verge of finding out whether it will succumb to the oil curse or defeat it. Norway offers an interesting model for the Ugandans to consider. Assuming commercial production ever begins, Uganda will decide how to use the nation's oil wealth to benefit its putative ownersthe poverty stricken citizenry.

Less than 20 years after they started producing oil, the Norwegians realized their geological good luck would only be temporary.

The Norwegian economy remains heavily dependent on oil (though much less than the Saudi economy): Petroleum industries account for about 17 percent of Norwegian GDP and a hefty 45 percent of exports. But the rapid growth of the fund means Norway won't suffer massively if the oil market suddenly tanks or if production begins to dwindle. (In 30 years, Norway has pumped about 29 percent of its total reserves.)[631] In a land of high taxes, the fund functions as a substitute for national savings. When the government runs deficits, it's allowed to transfer cash out of the funds. Unlike many other oildependent economieslike Russia and Saudi Arabia Norway won't have to alter spending habits dramatically if revenues suddenly decline.

[630]Available at www.eia.gov/tools/faqs/faq (accessed 20 May 2013)

Norway's ability to avoid the resourcecurse is attributed to the country's clear policies which were well implemented by the institutions that were put in place to manage its oil and gas activities.[632] By the time the extraction of oil started in the early 1970s, Norway was not just a developed economy with per capita GDP of over US$10,000 (PPP); it was (and continues to be) 'a highly egalitarian society that prides itself on being that'.[633] In other words, egalitarianism was socially embedded. Second, Norway was a mature democracy. Norwegian politicians hardly posed any risk of wasting public resources on selfish political activities (such as bribing the electorate).

Norway also stands in a marked contrast to the other oil exporters in its ability to ward off the insidious rentier behavior that accompanied booms elsewhere. Its governments could thus retain the historically acquired flexibility that permitted them to limit lockin and to engage in timely rather than postponed adjustments. Oil revenues were not dissipated through corruption and white collar projects.[634] Although they were utilized to increase government borrowing rapidly, more than half of the external debt was used to develop the Petroleum sector[635] and once the dangers of over borrowing were apparent, even Statoil was no longer permitted to seek credit in its own name.[636] Unlike other exporters, Norway virtually halted borrowing as part of voluntary contraction efforts between 1978 and 1981. By 1983, when other oil exporters were sinking into a dangerous debt cycle, Norway's foreign debt had been largely paid.[637] Perhaps

[632]Larsen, E., Escaping the Resource Curse and the Dutch Disease: When and Why Norway Caught Up with and Forged Ahead of Its Neighbors, American Journal of Economics and Sociology, vol. 65, No. 3, July 2006.

[634]Lind T. and G. A Mackay, Norwegian Oil Policies, 1980, London: C. Hurst, p.45.

[635]Galenson Walter, A Welfare State Strikes Oil: The Norwegian Experience, 1986, Lanham, Md., and London, University Press of America, p.54.

[636]The Financial Times, May 11, 1982, p.30.

[637] El Mallakh, Ragaei, Oystein Noreng and Barry W. Poulson, Petroleum and Economic Development: The Cases of Mexico and Norway, 1984, Lexington Mass, Lexington Books, p.134.

most indicative of its different behavior, the Norwegian Government sought to protect the State's nonoil fiscal capacity. As corporate revenues from petroleum shot up, it resisted the strong temptation to permit oil revenues to replace its normal revenue base by lowering taxes. Unlike all other oil exporters, it managed to sustain its domestic tax base, although it did suffer some erosion. Taxes remained progressive, and they contributed to another unique outcome: petroleum revenues, which produced wider income disparities in most other exporters, contributed to a more equal distribution of income here.[638] Rather than replace nonoil taxation, Norway put much of its recent bonuses into a 'Petroleum Fund', set up to store wealth for the next century when its oil starts to run out. Take together, these factors cushioned the adjustment necessary in the face of oscillating oil prices and generally protected Norwegians from the tremendous swings that citizens in other exporting countries experienced.

The case of Norway yields two significant and somewhat contradictory lessons. On one hand, strong preexisting institutions in both the state and the regime make a significant difference both for managing the entry into the petroleum industry and for handling subsequent booms. In Norway, where the State capacity was high, such institutions counteracted the temptation to accelerate development, defused potentially divisive political issues through the use of routine procedures, developed clear alternatives, corrected mistaken policy decisions, and controlled the spread of rent seeking behavior. On the other hand, the case of Norway is a powerful statement to the "overwhelmingness" of booms. Even a stable democracy that faced no immediate need to purchase the loyalty of its citizens and that was a blessed diversified economy and developed State was initially incapable of resisting the tremendous incentives to spend more than it should. Of course, Uganda isn't directly analogous to Norway. And I'm sure most Ugandans would rather have a dividend cheque than see their oil wealth pile up in a vast investment pool. But Uganda has endured enough internal and external social,

political and economic shocks in the past few decades. Maybe the nation needs a fiscal shock absorber more than a gift certificate. Drawing on insights from both the Norwegian and Nigerian states, Uganda can draw experiences and lessons to help it in the shaping of its oil and gas sector to meet popular expectations.

From the preceding chapters, it is apparent that corruption is highly prevalent in African countries involved in the production oil and gas. For some countries such as Equatorial Guinea, the quantity of oil resources available to the country has since started receding yet minimal benefits have been realized from the resources in the context of the national economy. Uganda has similarly placed a lot of hope on the ability of its oil and gas potential to transform its national economy, but with corruption we stand to witness a similar scenario with all of the oil resources being swindled way before the country derives any economic benefits from it. The following are some of the best practices that have been deployed across the world and indeed that have been proposed to set a standard for recommendations which Uganda can adopt to curb corruption in its oil and gas industry.

Realizing Transparency.

Transparency is important to address corruption in Oil rich countries by providing information about access to revenues that are generated by natural resources.[639] Transparency may be realised through several public reform initiatives from collection of revenues to awarding of contracts and public sector promotions.[640] Transparency in this sense requires states to make as much information about oil transactions as available as possible all the way from the making bids for the grant of licenses to the bidding process and clearly highlighting the criteria for award of contracts and licenses in addition to grounds for the setting of signature bonuses.

The Extractive Industries Transparency Initiative (EITI) to date remains the most reliable monitoring forum for transparency in the management of natural resources by governments. The EITI has several requirements for a state to fulfil for its

[639]Kolstad I, Wiig A, and Williams A (2008), Tackling Corruption in Oil Rich Countries: The Role of Transparency, U4 Brief-Anti-Corruption Resource Center, February 2008-No.3

[640]Ibid

application for membership to be accepted and they quoted here below.[641]

The EITI requires effective oversight by the multistakeholder group.

The EITI requires effective multistakeholder oversight, including a functioning multistakeholder group that involves the government, companies, and the full, independent, active and effective participation of civil society. The key elements of this requirement Regular disclosure of natural resource revenue streams and payments from extractive companies is of little practical use without public awareness, understanding of what the figures mean, and public debate about how resource revenues can be used effectively. Requirement 6 ensures that stakeholders are engaged in dialogue about natural resource revenue management.

The EITI requires that the multistakeholder group takes steps to act on lessons learned and review the outcomes and impact of EITI implementation.

EITI Reports lead to the fulfilment of the EITI Principles by contributing to wider public debate. It is also vital that lessons learnt during implementation are acted upon, that discrepancies identified in EITI Reports are explained and, if necessary, addressed, and that EITI implementation is on a stable, sustainable footing."

It should be noted that the EITI is a voluntary initiative however its standard is reputable and members are required to submit annual EITI reports prepared by an independent person on the progress of the state's implementation of the principles and the standards of the EITI[642]. The EITI has been criticised however for monitoring transparency and accountability at the transactional level of oil revenues and barely has any provisions relating to the expenditure of oil resources[643]. Also the EITI has very limited coercive capacity beyond its mere reputation and the only measure the EITI is capable of effecting against violating members is to delist them from the membership or otherwise suspend them which

[641]The EITI Standard, Available at https://eiti.org/files/English_EITI_STANDARD.pdf [Accessed July 6th 2021]

[642]Ibid, Also see EITI Requirements, Available at https://eiti.org/eiti/requirements [Accessed July 15th 2015] and EITI Contextual Narrative Requirements (MSG Discussion Document) (2013), Available at http://www.doi.gov/eiti/FACA/upload/Contextual_Narrative_Matrix_FINAL_for_MSG_Meeting-_04-28-14.pdf [Accessed September 16th 2021]

[643]Kolstad I, Wiig A, and Williams A (2008), Supra

makes them a barking dog that doesn't really bite much.

It is upon this basis that Kolstad I, Wiig A, and Williams A (2008) state that transparency alone is not enough and propose the use of education, government accountability and availing of incentives for information use[644]. They argue, rightly so, that education is important for a population to process information on corruption and should be supported by information on the conduct or performance of public officials backed by an ability to punish abuses of office. They also argue that people need to be able to benefit from using and acting upon information which has been shared by indicating a correlation between the levels of transparency and the social economic detriment that people suffer due to the highlighted absence of transparency. These mechanisms enable any transparency mechanisms that may be put in place by fostering participation of the public to monitor the implementation of the transparency measures and how they impact on the deployment of oil and gas resources towards improving social economic welfare.

Ernst and Young's Comprehensive AntiCorruption Programme

Ernst and Young has developed a comprehensive programme for the prevention of corruption in the oil and gas industry and the programme is laid down in 8 steps.[645] While the Programme has been developed and proposed in the context of how Companies can prevent corruption in their oil and gas operations, the programme highlights a very useful mechanisms which can be utilised by the government to avoid corruption.

As the first step, the Program requires the government to conduct an assessment of the potential risks which should identify and analyse the potential corruption risks

[644]Ibid

[645]Ernst and Young (2014), 'Managing bribery and corruption risks in the oil and gas industry', Available at http://www.ey.com/Publication/vwLUAssets/EY-Managing-bribery-and-corruption-risk-in-the-oil-and-gas-industry/$FILE/EY-Managing-bribery-and-corruption-risk-in-the-oil-and-gas-industry.pdf [Accessed July 4th 2021]

posed by the nature of a company's operations, the degree of business with governmental entities, its use of agents and other intermediaries (for example, freight forwarders and customs agents), the countries where it does business, the regulatory environment and other factors.[646] In the context of the government, the government in this case takes cognisance of the existence of corruption within its oil industry and makes deliberate effort to identify the highest risk sources of corruption so that it can develop measures towards addressing such risks.

Secondly the government develops a sectoral anticorruption policy based on the addressing the risks that have been identified within the industry with a deliberate and unambiguous basis that corruption is not tolerated within the industry. Clear guidelines are underlined for all oil transactions and adequate information availed for all stakeholders that is necessary to break bureaucratic barriers that may facilitate the practice of corruption within the industry.

Thirdly, the development of the sectoral anticorruption policy should be hastily followed by efficient implementation through the sector to ensure that the mechanisms proposed by the policy have been put in place and compliance is being fully implemented.

The biggest challenge in preventing corruption in the oil industry is the unbridled flow of financial resources and that is why the fourth step is to implement anticorruption financial controls. This should be conducted through strict enforcement of travel and expenses rules related to meals and entertainment, and the detailed reporting of the people entertained and the business purpose and monthly bank reconciliations to monitor the flows of revenues and to detect with urgency the misappropriation and possible offbook payments to officials within the government.[647]

[646]Ibid
[647]Ibid

The program is implemented by individuals and that is why anticorruption compliance training within the sector is important as the fifth step. This should include the training of any person in a position to obtain or allocate business through bribery or other corrupt means and should extend to all internal audit, accounting, financial and legal employees who are responsible for monitoring compliance with the anticorruption standards set.

The program should be monitored as the sixth step and this implies regularly carrying out anticorruption audits through data mining and forensic data analytics test for substantive compliance by seeking to identify potential violations or red flags.[648] This is also necessary for the purposes of identifying and raising new corruption risks that have arisen as the people work around the corner to beat the system. It is essential that the monitoring function is separated from the institutional framework to ensure that there is impartiality and noninterference with the sole mechanism that has been developed to ensure that the program works.

Mergers and Acquisitions between corporate entities involved in the production of oil and gas involve significant revenues as was evidenced by Tullow Oil's acquisition of Heritage Oil's assets in the Albertine Grabben and they pose a significant opportunity for corruption to be perpetrated by the players involved[649]. The seventh step therefore is to incorporate anticorruption measures into Mergers and Acquisitions to buttress due diligence as an obligation of the companies to detect past corruption lest they adopt the liabilities that may arise from past corruption.

The final step that completes and reinitiates the cycle of the program is to conduct comprehensive corruption risk assessments periodically to ensure that the program is continuously evolving to meet the risks posed by the changing business and

[648] Ibid

[649] Jeff Mbanga, Questions as Tullow settles $250m tax row, The Observer, 24th June 2015, Available at http://www.observer.ug/business/38-business/38413-questions-as-tullow-settles-250m-tax-row [Accessed July 3rd 2015]

regulatory environment[650].

The key challenge with this programme is that it has been designed as an internal programme with very minimal interaction with external forces which would reinforce the impartiality of its monitoring and accountability mechanisms. In a government setting, this programme can however be spread across the three organs of the government with the risk assessment being conducted by the government ministry responsible for oil and gas while the monitoring and continuous assessments and sanctioning is effected by the legislature and the judiciary.

The Role of Development Partners.

While it important to take cognisance of the principle of state sovereignty upon which integrity of states is protected in all interstate relations, the role of international development partners in combatting corruption within state governments who individuals appropriate natural resource revenues to the detriment of the public interest cannot be understated. Angola has for a long time had been at logger heads with the International Monetary Fund (IMF) but due to the unpredictable volatility of the oil prices on the oil market, Angola has consistently found itself running back to the IMF for development support in times of need[651].

Through a StandBy Arrangement between the government of Angola and the IMF signed in 2009, the IMF has been able to realise significant accountability and transparency measures in relation to Angola's oil and gas industry including full disclosure of the government's oil revenue, a public audit of Sonangol and audited accounts of expenditures of oil revenues as a prerequisite to lending [652]. Disbursements are therefore made basing on Angola's compliance with the terms of the standby agreement as far as realising transparency and accountability are concerned. It should however be noted that while initiative itself has yielded some results like publishing of the government's oil revenue on the Ministry of Finance

[650]Supra, Ernst and Young (2014)
[651]Human Rights Watch (2010)
[652]Ibid

website, most of the conditions in the arrangement have been largely unfulfilled by the government of Angola. Monitoring mechanisms are therefore essential.

Similar arrangements can therefore be implemented by Uganda's development partners with an interest in promoting accountability and transparency in natural resource governance as condition upon which lending to the country may be made.

Al Kasim et al (2008) have also made a number of policy recommendations for the regulation of corruption in the oil and gas industry in the context of oil rich countries[653]. Highlighting the role of development partners they note that the intention behind oilrelated aid is to improve governance of the oil industry in developing countries yet in many cases donor countries find themselves in conflicts of interest since increased regulation may not foster the interests of their firms. They propose that the development communities should pursue a consistent foreign policy buttressed by development of domestic institutions, conditions on local content, and moderate rates of oil development which are critically important to reduce corruption risks and ensure welfareenhancing production. Yet they also emphasize that in all development initiatives, donor countries need to clearly highlight their commercial interests and how they may relate to the country's oil production sector.

They also recommend that the development community should seek to create a workable oil industry with workable solutions. This may be done through offering training on governance issues relating to each step of the oil production chain which can open a space for dialogue on rather more challenging issues relating to the governance of oil regulation relating to corruption in the industry. They also recommend that the government should streamline its legislation and clarify tendering processes including procedures relating to prequalification, tenders and selection criteria which have a significant risk of corruption, setting up appeal mechanisms or allowing for international endorsement of prequalification measures by an independent body, and development of a good balance between discretionary decision making and improvement in information laws.

They further recommend the building of accountable institutions through three key

[653]Supra, Al-Kasim F, Søreide T, Williams A (2008)

ways including by reducing the opportunities for public officials to misuse their positions or condone violations of rules by monitoring each step of the decisionmaking process; requiring status reports from those in positions in power and requiring them to defend their choices and setting up appeal mechanisms without fear of sanctions by for example taking the government to court for apparently unfair awards made.

Combating corruption in Uganda's oil and gas sector.

While several authors and stakeholders have proposed various mechanisms for combatting corruption in the regulation of Oil and Gas, any measures proposed ought to consider the particular context of Uganda and should be designed to address the challenges and shortcomings within Uganda's Oil industry. It should be emphasized that this is a very complex area given the varying vested interests involved within the oil industry and the high number of players with the potential to perpetrate corruption.[654] It has been proposed that the prevalence of unwanted behavior can be reduced by increasing sanctions through formal changes in regulation or by increasing the risk of detection through improved enforcement of existing regulations[655]. This part is therefore going to make recommendations for curbing corruption in the oil and gas industry in Uganda through three key thematic approaches; regulatory reform, institutional development and Development Community intervention.

Regulatory Reform.

The Ugandan Constitution states that oil is a resource that should benefit all Ugandans[656]. Building a strong and internationally accepted system of checks and balances between oil management institutions and the government can ensure that

[654]Supra, Al-Kasim F, Søreide T, Williams A (2008)

[655]Ibid

[656]The Inspectorate of Government (IGG), the Directorate of Ethics and Integrity, Directorate of Public Prosecution (DPP), the Auditor General (AG), the Public Accountants Committee (PAC), the Criminal Investigations Department (CID) and the Non-Performing Assets Recovery Trust (NPART).

government objectives are aligned with the interests of all Ugandans. Why countries exhibit different patterns of accumulation and distribution over the course of their development is one of the essential questions of political economy. Uncovering and interpreting distinctive patterns of development depends on exposing the complex interaction between economic growth and institutional change. Economies shape political institutions and are in turn shaped by them. The fiscal link between economies and polities is by no means the only explanation for the differing capacity of states, but it is the fundamental one. The following are suggestions on how the Institutional capacity of Uganda's oil and gas sector can be enhanced.

Establishing a clear division of decisionmaking powers across multiple Ministries/Agencies

Its current form, the Petroleum (Exploration, Development and Production) Act vests too much authority in the Ministry of Energy and Mineral Development ("MEMD") and the Petroleum Authority. As the following case study demonstrates, a lack of checks and balances can lead to disastrous consequences.

In order to avoid conflict of interests between regulation of the industry and revenue maximization, the functions of licensing, monitoring and enforcement should be structurally separated. Indeed, the entity that grants a license is naturally biased towards ensuring its continuance, as to revoke the license at a later stage implies error in the initial grant. These pressures are more acute when a national oil company is involved as that company will lose public image or acceptance in such an event. For this reason, monitoring and enforcement of regulation and license conditions must be conducted by a separate entity with true independence to carry out their functions.

Section 9 of the Petroleum (Exploration, Development and Production) Act defines the functions of the Minister in an overly broad manner (including grant and revocation of licenses, issue of petroleum regulations and negotiation of petroleum agreements), without specifying how that power is to be exercised.

No single person can be reasonably expected to simultaneously achieve all of the functions granted to the Minister under the Petroleum Legislation, let alone balance them appropriately. Regulation of these functions should lie with the most relevant, preferably expert, administrators, and need to be granted to coequal Ministries or authorities as part of an institutional checks and balances system, a timetested approach accepted throughout the world.

The 2008 National Oil and Gas Policy for Uganda ("NOGP") lays the groundwork for good governance through a meticulous separation of powers. More specifically, in sections 7.2 to 7.6, the document details the specific functions that should be undertaken by Parliament, the MEMD, the Petroleum Authority and several other government ministries and agencies. A similarly thorough separation of powers should have been incorporated within the Petroleum Legislation. While the concept of a "onestop shop" to streamline the administrative process is often demanded by investor and appears appealing in concept, I believe that the ministries of health and safety, environment as well as social affairs need to be involved in the licensing, monitoring and enforcement process. This can either require oil projects to be subject to each of those ministries (in addition to the MEMD/Petroleum Authority), or require the Petroleum Authority to involve the ministries in its decisionmaking process and to gain their consent prior to making decisions.

Therefore, the Act, needed to clearly define which powers are to be allocated to the MEMD, the various environmental ministries, both local and regional government authorities, and the ongoing role of parliamentary oversight. Moreover, this process should allow active engagement by civil society through the transparent release of information and third party monitoring and evaluation. Therefore, there is need to ensure that licensing, monitoring and revenue collection are handled by separate agencies, with the Petroleum Authority in charge of licensing, environmental monitoring and compliance undertaken by the National Environmental Management Authority ("NEMA"), and revenue collection by the Uganda Revenue Authority ("URA"). Mandate the Attorney General and the Inspectorate of Governance to oversee all agencies.

Create an oversight role of Parliament

Parliament must be given the tools to actively oversee the agencies involved in oil development. Parliament's role, thus far, has been limited. The new Petroleum Legislation should have been debated, tabled for public comments, and approved with adequate civil society and public input before PSAs were signed with the oil companies, if for no other reason than to avoid public suspicion and anxiety. Nevertheless, Parliament still has a strong role to play in oil management and governance. However, before Parliament can begin to fulfill its role, it needs to have full, unfettered access to all of the PSAs, oil revenue data and projections. Agencies should directly report to the Parliament (in addition to their accountability to the Minister) on a regular basis.

In addition, section 7.2.1(c) of the NOGP already provides that Parliament should be in charge of "monitoring performance in the petroleum sector through policy statements and annual budgets". This Parliament oversight role could be achieved through the creation of a parliamentary oversight committee on oil and gas. Such a committee would be responsible for issuing recommendations and updating policy throughout the lifecycle of oil in Uganda. This includes updating the national petroleum policies as circumstances change and ensuring that ministries are functioning independently and effectively. They could also have ratification powers over Petroleum Authority appointees, and authority to reject Environmental Impact Assessments ("EIAs") upon its own initiative although this is a preserve of the National Environment Authority (NEMA). This may necessitate the redelegation or redistribution of ministerial authorities if they are seen to be inadequate. Agencies should be legally required to provide information and attend hearings of the committee upon MPs' request.

One of Uganda's strengths is its relatively vibrant civil society sector. A strong civil society is key to the strength of a country's Institutions, for example, civil society can be a source of information to MPs and the government. Thanks to its eyes and ears on the ground, it can monitor the actions of oil companies and civil servants entrusted to implement and carry out government policy. Parliament should regularly involve civil society in committee meetings, and

proactively release information to civil society for feedback and comments. For example, civil society can alert the committee if an EIA has ignored some critical aspect or has not been thoroughly acted upon, or assist the committee in formulating requests for additional information. Therefore, there is need to create a joint parliamentary and governmental oversight committee with clear oversight and ratification powers and strong involvement of civil society.

Get Parliament approval for key nominations

It is critical to ensure that the most qualified candidates are selected. Selection criteria should clearly be laid out in the Act or elsewhere. For instance, it would make sense to require the inclusion of at least an economist and one geologist on the Board of the Petroleum Authority. It should be also disclosed to the public how the nominees meet these criteria. Furthermore, it is important to ensure that nomination decisions are made in the best interest of the country by avoiding favoritism. One option is to give the Parliament the power to select candidates. The Parliament is a body consisting of democratically elected representatives of Ugandan society. As entrenched in the Constitution, some underrepresented groups such as women, the disabled and workers also have quotas in the Parliament. Hence, this is a good entity to nominate the board members of the Petroleum Authority. Alternatively, the Parliamentary Committee on Natural resources can assume this role, but it should reflect the diversity of the Ugandan society in terms of region, ethnicity, religion, gender, political affiliations and other necessary considerations.

This process could work in the following way. First, Parliament or the Committee makes a list of selected candidates. Following this, the Cabinet further selects qualified persons to be nominated as board members. Parliament gives the final approval to the Cabinet's selection and ensures that all members are independent and qualified. The second policy option is to have Parliament confirm nominations. If the Petroleum Authority is to be independent, approval from Parliament should be a requirement for appointees. A good example is the appointment procedure for positions within Uganda's major oversight agencies. For instance, the Auditor General, the IGG and the Deputy Inspector of

Government are appointed by the President with the approval of the Parliament. Such increased oversight will give more independence and impartiality to the Petroleum Authority, which will nurture confidence of the Ugandan people in the Authority. It is also recommended that the Petroleum Authority should directly report to the Parliament and that members of the Authority should get approval from Parliament.

Protect appointees' independence and impartiality by giving them security of tenure.

Section 21(2) of the Petroleum (Exploration, Development and Production) Act 2012 gives the Minister of Energy the ability to remove a member of the board of the Petroleum Authority, which undermines the independence of the Authority. The Act should have created a separate process to determine the termination of appointment, such as a special tribunal. For example, the justices of the High Court can be removed by the President but only upon recommendation of a special tribunal.[657] Such a process would improve the security of tenure and independence of appointees under the new oil Law. The same protection can be found to safeguard the tenure of Auditor General, [658] of the Inspector General and of the Deputy Inspector of Government, who may be removed from office by the President but only "on the recommendation of a special tribunal constituted by Parliament".[659]

Give agencies broader investigation powers

Broader enforcement powers would give agencies and ministries in charge of implementing oil regulations greater leeway in monitoring oil activities and investigating suspected violations of a license's conditions. Watchdog agencies

[657]Art 144 of the1995 Constitution of the Republic of Uganda.

[658]The National Audit Act of 2008, section 7 (1).

[659]Inspectorate of Government Act of 2002, section 5.

should for their part have similar powers in order to investigate corruption allegations and prevent the misappropriation of funds. As a matter of fact, the Auditor General already has the power to carry out special audits, and investigations under **section 22 of the National Audit Act**, while the Inspectorate of Government Act gives the Inspectorate powers of investigation, search and access. The Leadership Code Act at section 3 also provides for such powers, while the AntiCorruption Act of 2009 gives the IGG and the Director of Public Prosecution the power of investigation, of search and seizure, and to obtain information. These regulations should be used more often to investigate corruption allegations, and recommendations stemming from these automatically acted upon by relevant authorities. More specifically, the Attorney General should be required to either commence proceedings against individuals or companies implicated in such reports, or provide a detailed accounting of why it chooses not to go ahead with a formal indictment.

The Petroleum (Exploration, Development and Production) Act should have similarly given agencies that are in charge of enforcing oil regulations the power to conduct unannounced audits and inspections of oil industry actors to ensure that they are operating in compliance with all applicable laws. For this purpose, the Authority and other agencies should have been given the power to compel companies to produce copies of certain documents or reports in the hope of identifying violations quickly before any permanent damage is done. Failure on the part of oil companies to comply with such requests on a timely basis should lead to the automatic suspension of their license.

Give agencies the power to impose sanctions or suspend operations when an agency finds that oil industry actors have violated their contractual or legal obligations

Section 160 of the Act stipulates that a company's management team will also bear personal responsibility and liability for not establishing reliable and solid policies and procedures and for failure in oversight, while section 162 imposes penalties for willful or negligent contravention of directives under the Act. These are steps in the right direction. For example, **section 6(2) (b**) prohibiting the

conduct of petroleum activities without proper licenses imposes a fine on companies for breach not exceeding 100,000 currency points. At present exchange rates, this equates to less than USD 1 million. For large oil companies, this is not a real penalty. Unauthorized conduct of petroleum activities is equivalent to theft from the Ugandan people and must be punished severely. At a minimum, corporation executives should have been subjected to criminal penalties for breaches of this provision. If there is no personal consequence for managers, history tells us that managers will take unnecessary and serious risks at the public expense or cost. **Sections 87(1) and (2) of the Act**, gives companies the ability to lobby for lesser penalties for default or to "buy" their way out of default. Automatic suspensions/cancellation of licenses, especially in case of noncompliance with environment, health and safety laws should have been put in place under the new law. Companies will only be deterred into compliance if automatic suspension or cancellation of licenses is included in the legislation. Moreover, this provision should be selfexecuting that is, the license should automatically be suspended upon simple notice by the Minister that a serious violation of the terms of the license has occurred.

Focus capacity building on key institutions

In many sectors, Uganda currently lacks the human capital to fulfill all necessary tasks. Moreover, the transition towards democracy has not yet reformed a civil service system based on individuals or single leaders rather than on organizational knowledge and procedures. Another concern is low pay, which creates incentives for the best, most knowledgeable staff to move to higher paying jobs in the private sector. As oil investment grows and oil companies increase their staff, there will be more incentives for educated Ugandans to leave for new, higher paying positions in oil development.

A wellfunctioning civil service should not be dependent on a single person, no matter what their status. Strong guidelines should be instituted, in addition to a code of conduct, to promote organizational efficiency. This includes; meritbased promotions regardless of tenure or connections to political leaders, increasing careerdevelopment opportunities, and increased emphasis on training at the lower

levels of the bureaucracy to create a groundswell of human capital. Instead of delaying oil development, it is essential that Government has the ability to conduct effective oversight now. Though the preference should always be to use Ugandans instead of foreign staff, in the short term, it will likely be necessary that certain gaps and/or vacancies be filled by nonUgandans. Donors, as stated above, can provide some of this capacity, but consultants, NGOs and IGOs should be allowed to provide staff under strict guidelines set forth by Parliament. Moreover, part of any contract for foreign assistance should include requirements for the training of Ugandans to fill those positions in the future. This should also be the system for sectors related to overall development, including the hiring of foreign teachers and healthcare workers until local staff can fill the role.

Several regulatory amendments

a). Amendment of Article 41 of the Constitution and Section 5 of the Access to Information Act, No. 4 of 2005 to extend the right to access public information to include the right to access information in possession of private interest that is essential to public interest. Section 2 and Section 25 of the Access to Information Act, No. 4 of 2005 should be revoked to grant the public access to cabinet minutes that involve matters of public interest like decisions to award oil contracts;

b.) Amendment of the Constitution to remove the discretionary power to appoint the key officers responsible for enforcement of anticorruption measures, that is, IGG, the DPP and the Auditor General and place it in an independent tribunal constituted by Parliament for the purposes of appointing these officers. These agencies also need to be made selfaccounting entities with dedicated budgetary quotas to enable them finance their activities. The IGG and the DPP should also be made to specifically account to the parliament on a periodic basis their prosecutions and their failure to prefer prosecutions against certain public interest cases giving justification for the same. Article 244 (1) of the Constitution should be amended to vest the mineral resources of Uganda in the in the people of Uganda and the Article 244(3) should be amended to create a constitutional obligation to manage the oil resources for the benefit of the people of Uganda.

c). The AntiCorruption Act should be amended to clearly distinguish the mandate of the IGG and the DPP and the mandate to prosecute corruption should be strictly left in the docket of the IGG and yet penalties for corruption should be made more stringent to reinforce compliance.

d). Section 5 (2) of the Whistleblowers Act should be amended to make the requirements for protection of Whistleblowers more relaxed to encourage whistle blowing while there should be created a specific obligation to act on the reports of a whistleblower;

The Act severely limits public access to key pieces of information. For instance, **section 33** (Duty not to disclose information) prohibits members of the Petroleum Authority from disclosing any information which they may have obtained in the course their employment whereas,

section 157 (b) (Obstruction of an authorized officer), provides that: "any person who knowingly or recklessly makes a statement or produces a document that is false or misleading in a material particular to the authorized officer engaged in carrying out his or her duties and functions under this Act" commits an offense and is liable to be convicted to a fine or to imprisonment. The Act does not require any public disclosure on the amounts of oil extracted from the ground, or the revenue generated by the industry.

Other data such as the licenses themselves, the field development plans and assignments can be revealed to the public only if disclosure doesn't violate "confidentiality of the data and commercial interests". Unfortunately, the Act does not define the scope of confidentiality, leaving it subject to interpretation, and posing the risk that this interpretation could prevent disclosure in many cases. The Act also requires payment of a fee to access the information, but does not state how much should be paid.

Under **Section 148 of the Act**, the Minister may, subject to confidentiality of the data and commercial interests, and in accordance with the Access to Information Act, 2005, make available to the public details of all agreements, licenses and any amendments to the licenses or agreements whether or not

terminated or valid; details of exemptions from, or variations or suspensions of, the conditions of a license; licenses; the approved field development plan; and all assignments and other approved arrangements in respect of the license. This is in line with the right to Access to Information under Article 41 of the Constitution. However, section 148(2) gives the minister powers to prescribe fees for access to information in the Oil sector. Although this provision is subject to the Access to Information Act 2005, it sets a standard higher than that envisaged under **Article 41 of the 1995 Constitution** of the Republic of Uganda which guarantees the Right to Access to Information in the hands of the State save for cases where such access to information prejudices the state.

In addition, **Section 148 of the Act** restricts access to information to consent agreements made between the government and the licensee. The reference to Access to Information Act in the Section is to the effect that person accesses information depending on the nature of the agreement signed between government of Uganda and the licensee. This violates the constitutional guarantees on access to information. Uganda's legal regime on access to information does not subject it to any form of agreement. The Access to Information Act also has enough guarantees to protect information.

So far as whistle blowing is concerned, the right to access information is fundamental benchmark of our Bill of rights as enshrined in the 1995 Constitution of the Republic of Uganda.[660] The **Access to Information Act 2003 and** the subsequent **Access to Information Regulations 2007** were enacted to operationalize this Constitutional provision. It is also important to note that access to information is a great tool in the promotion of transparency and accountability in the oil and gas sector. For example, whistleblowers wishing to reveal information related to alleged abuses of power, corruption or other illegal acts should be properly protected and encouraged to come forward. The Petroleum (Exploration, Development and Production) Act, 2012, raises concerns in this regard, especially as it will get in conflict with the Whistle Blowers

[660]Article 41(1), thereof.

Protection Act which is the main law for the protection of whistleblowers. These provisions of this new oil legislation could be used to prosecute whistleblowers who come forward with allegations of wrongdoing that either stem from information received in the course of their employment, or that are insufficiently documented. Whistleblowers are in reality the active conscience of a society as well as the government. Already serious concerns have been raised after whistle blowing Legislators tabled before Parliament damming documents accusing Tullow Oil of bribing Ugandan cabinet ministers to gain better concessions in the Ugandan oil and gas sector. "M.Ps maintains that the oil company paid 17 million pound sterling to the minister of Foreign Affairs Sam Kutesa as a bribe for his services in acquiring oil contracts in Uganda."[661] Moreover, public attention has been focused on the lack of transparency surrounding the oil contracts between private companies and Uganda's government. These deals, known as Production Sharing Agreements (PSAs), are now public documents but are still not freely accessible by the public.[662] The Whistleblower Protection Act of 2010 offers procedures for Ugandan citizens to report corruption or improper conduct. The Inspectorate of Government Act, the Leadership Code Act, and the AntiCorruption Act also provide protection for whistleblowers. The Oil laws should be harmonized with these regulations to provide protection for whistleblowers in the oil sector as well.

d). Development of an Oil Sector AntiCorruption Policy that identifies all of the corruptions risks in the Country and proposes measures through which such measures may be combated.

Royalty sharing and the issue of Bunyoro Kitara Kingdom

Although sections 151 156 of the Petroleum (Exploration, Development and

[661]Isaac Imaka, We have more on Tulow, M.Ps say, The Daily Monitor, April 13, 2012.

[662]International Alert, Harnessing Oil for Peace, Volume 2, Investing in Peace, September 2009, p. 28; Joshua Kyalimpa, Pressure Mounts to Make Public Oil Agreements, IPS, 4th March 2010

Production) Act, 2012, provides for the payment of royalties to government from oil activities, the Act has no clear provisions on how oil revenues will be shared. Of course it's a correct assertion that since the Act was intended to cater for upstream activities of the petroleum industry that is to say the exploration, and extraction portion of the oil business it would be unfair to criticize it for not dealing with downstream activities, not to mention the broader macroeconomic and social implications of the oil boom and its aftermath of oil revenue sharing. That notwithstanding, one aspect that needs to be immediately addressed, in clear and unambiguous terms is the issue of benefit sharing and to bring this Act in harmony with other revenue related laws such as the Income tax Act.[663] I hope the issue of Revenue sharing will be settled by the Public Finance Bill now before Parliament. On 31st May 2012, the King of Bunyoro Kitara Kingdom, *Omukama* Gafabusa appeared before the Parliamentary Committee on natural resources where he presented a petition asking government to consider his subjects in the management of oil resources which were discovered in the Bunyoro subregion. Although oil may be a national resource and there would be no need of a special provision for oil revenue allocation to Bunyoro region, it is important to consider the fact that these are the indigenous communities where this oil has been discovered and who will be greatly affected by oil activities, areas that depict scenes of immense poverty and least levels of socioeconomic development. "For the first time am doing this during my 17 years on the throne of BunyoroKitara," he told the Committee. "I am presenting this petition as a stake holder the Draft Petroleum Bill has ignored in spite of the fact that the Uganda Constitution recognizes my mandate as a trustee for my subjects. [664] This oversight by legislators is breeding ground for conflict reminiscent of least development oilstates. The failure to satisfactorily address the above issue has caused much trouble in Nigeria for example. The Nigerian

[663]Cap. 240 Laws of Uganda

[664]Isaac Imaka, Bunyoro wants 12.5% of oil funds, the Daily Monitor 1st June 2012.

experience demonstrates that not only do you have to put in place a revenue sharing arrangement, but you have to ensure that the revenues are properly used, in manner that benefits the people. In Nigeria, as the opulence and ostentation of the oilroyalty collecting elites became widely visible, public reactions ranged from resentment and protest, to adulation, solidarity, jubilee, and, most significantly, highstakes bandwagonism, widespread motivation and drive to plunder. Despite the profusion of highstakes acquisition in the oil and gas industry, poverty was widespread at the bottom in the oil producing areas. "The predatory logic and lopsidedness of the rentier space favored the amassing actors at the expense of the acquisition players. The insecurity in the acquisitive middle class aggravated the accumulation desperation, a tendency that resonated with the middle class in the larger society"[665]. For example, in the oilrich Niger Delta that produced the wealth, the popular reaction was resentment, leading to an explosion of antioil protest and resistance against the state. "Since the mid 1990s, the minority ethnic communities of the oilbearing Niger Delta region have assertively established themselves as stakeholders in the accumulation process. They have waged a formidable struggle of unrelenting violent protests, including oil theft, pipeline sabotage, and kidnappings. Prior to this period, these ethnic communities were for the most part lowstakes clients and partisans."[666] It will require a great deal of international pressure not only to compel the state to participate in a consequential roundtable with oilbearing communities, but also to secure its commitment to farreaching, proactive concessions that help meet the aspirations of the Niger Delta people. There is, therefore, need to develop an elaborate benefitsharing regime not only for the Bunyoro region alone but also for all the indigenous oil communities in Uganda, complete with safeguards to ensure that the people do share in the benefits in a meaningful way.

Institutional Development

Institutional development in this sense relates to the development of the capacity

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of the organs of government that have been developed with the mandate to combat corruption. The following institutional measures should be deployed by the government:

Dutch disease vaccine

Targeted investment will not necessarily be sufficient to kickstart growth. In fact, too much investment could harm it. As noted earlier on, economic diversification has proved extremely difficult for resourcedependent countries because of the economic distortion effects known as the 'Dutch Disease' when oil revenues flood into a country, the local currency increases in value, making exports uncompetitive. Agriculture, owing to its reliance on exporting, is particularly vulnerable to economic conditions, notably the value of the local currency. Countries catch the 'Dutch Disease' when too great a proportion of revenues from natural resources are allowed to circulate in the economy, most often as a result of being spent by government on large scale projects. It is for this reason that oil revenues must be spent extremely carefully. Politicians are under constant pressure to spend more, particularly in a country such as Uganda where the needs are obvious and deep. Spending too much too quickly on developing the agricultural economy or infrastructure could result in the Ugandan shilling becoming overvalued, and agricultural exports becoming too expensive harming progress rather than helping. There is a real risk that well intentioned spending ends up damaging the Ugandan economy rather than building it.

Options for oil revenue management

Uganda faces a difficult balancing act, between spending wisely on agricultural development, infrastructure and so on and saving enough to maintain economic stability. In other words, spend on developing agriculture, but ensure that progress is not undermined by spending too fast. A mechanism that automatically allocates a proportion of income to savings can be extremely helpful in this regard, and could be crucial in the fulfillment of a development vision that has agriculture at its heart. Most commonly, this takes the form of some type of sovereign wealth fund. But the current Ugandan legislation on oil does not envisage the creation of

a fund, or even the stipulation of a formal fiscal rule laying down in law the percentage of revenues to be invested. Instead, the division of funds between the regular budget and the Petroleum Investment Reserve will be decided on a yearbyyear basis by the minister and Parliament. There is a clear risk that political pressures will result in revenues being spent rather than invested. This would in turn risk macroeconomic instability and currency appreciation which would be fatal to agricultureled development.

There are many options for how such a mechanism might function. The most common is a sovereign wealth fund, such as the Norwegian Government Pension Fund, Trinidad and Tobago's Heritage and Stabilization Fund, or the Kuwait Investment Authority. Even Nigeria has now instituted a stabilization fund called "the sovereign wealth fund" which was launched in 2011, though recent controversy has highlighted the imperative of clear rules and broad political consensus in establishing a fund.[156] Funds have a wide variety of roles, purposes and management structures, the most important of which are to protect oil revenues from political pressures, and act as a buffer against oil price volatility. These reserves range from nearly $600 billion held by Norway to less than $3 billion in Trinidad's fund. There are also many options for binding fiscal rules that govern how much money is released to the budget annually, and how much withheld. In Norway, 100% of oil revenues are transferred to the fund, and budget spending is restricted to interest earned on the fund holdings; whereas Trinidad and Tobago deposits all earnings that exceed estimated oil revenues by more than 10% in its fund, and may withdraw from it if earnings drop more than 10% below estimated receipts. Nigeria's sovereign wealth funds[157] are topped up to a given percentage of gross domestic product decided every two years. Ghana saves 30% of its oil revenues in Heritage and Stabilization funds. Balancing between spending and saving is a delicate and complex decision, particularly in a country with significant development needs. Offering specific advice on the type of fund or fiscal control mechanism that might be most suitable for Uganda is beyond the scope of this research. But it is clear that how much to spend and how

much to save is fundamental to generating sustainable growth, particularly on agricultural development. And real growth in the rural economy is vital to both overall Ugandan development and the future governance of oil it will allow the growth of an entrepreneurial class able to moderate the excesses of future generations of politicians. One of the key factors of Uganda's postconflict success has been macroeconomic stability, a success that can contribute to longterm success in oil management if it creates the conditions for the emergence of an agricultural commercial class. Oil can be the key to fuelling growth but should not be allowed to disrupt it.

On February 8th 2012, following a 2011 Parliamentary resolution compelling the Executive to initiate laws for the oil sector, Mr. Kamanda Bataringaya, the Minister for Minerals (as he then was), tabled before Parliament the Petroleum (Exploration, Development and Production) Bill 2012 or otherwise, the Upstream Bill. The Bill was debated for over a year amid wide opposition and disagreement among the Legislators. However as expected, the ruling National Resistance Movement (NRM) used its overwhelming majority in Parliament to pass the controversial Petroleum (Exploration, Development, Production) Act 2012 that prepares Uganda to move from oil exploration to production between 2014 and 2017. "President Museveni put a lot of pressure on members. He was calling members to vote against their own conscience and intimidating them at the same time," remarked Hon. Theodore Ssekikubo, a member of the House.[667] There is no doubt that this controversy might have affected the quality of this important piece of legislation.

The Act was passed along with another one the **Petroleum (Refining, Gas Processing, Conversion, Transportation and Storage) Act** which had been introduced in parliament around the same time. At the time of this research the two Acts are the substantive and fundamental Laws governing the oil and gas

[667]Grace Matsiko, "NRM M.Ps accuse Museveni of influencing the outcome of oil Bill", the Daily Monitor, Dec 10th 2012.

sector in Uganda. However, although this study makes reference to the entire legal regime governing oil and gas activities in Uganda, my major emphasis will be on the **Petroleum (Exploration, Development and Production) Act 2012** or otherwise 'the upstream' Act since it is the major legal instrument before Uganda commences large scale commercial output of oil and gas.

The Act seeks to give effect to Article 244 of the 1995 Constitution of Uganda which provides that subject to Article 26 of the same Constitution all minerals and petroleum in, on or under any land or waters in Uganda are vested in the Government on behalf of the Republic of Uganda. The long title to the Petroleum (Exploration, Development and Production) Act 2012 reads thus:

An Act to give effect to article 244 of the Constitution; to regulate petroleum exploration, development and production; to establish the Petroleum Authority of Uganda; to provide for the establishment of the National Oil Company; to regulate the licensing and participation of commercial entities in petroleum activities; to provide for an open, transparent and competitive process of licensing; to create a conducive environment for the promotion of exploration, development and production of Uganda's petroleum potential; to provide for efficient and safe petroleum activities; to provide for the cessation of petroleum activities and decommissioning of infrastructure; to provide for the payment arising from petroleum activities; to provide for the conditions for the restoration of derelict lands; to repeal the Petroleum (Exploration and Production) Act, Cap 150; and for related matters.

Therefore, the major focus of the Act is to regulate the production, exploration and development of petroleum in Uganda. The major rationale behind the enactment is that the previous petroleum laws in Uganda did not extensively deal with exploration, development and production of the country's petroleum resources and cover issues such as the licensing, exploration, development and marketing Uganda's petroleum potential for investment. The Petroleum (Exploration, Development and Production) Act 2012 also sets up institutions for management of the petroleum resource in Uganda, including the National

Petroleum Authority[668] and the National Oil Company[669].

The following sections are therefore dedicated to out lining and analyzing the key concerns in the Petroleum (Exploration, Development and Production) Act 2012 and its adequacy in the quest to finding sustainable economic growth and development out of the oil wealth.

Powers and duties of the minister

Throughout the entire parliamentary debates when the Act was still a Bill, no clause in the Bill was as controversial as clause 9. It was debated amid opposition and great disagreement among the Legislators:

"Last week, several M.Ps stormed out of Parliament protesting the recommitting of Clause 9 (now section 9 of the Act) which vests the powers of negotiating and awarding exploration contracts to the Minister of Energy, which they claimed would be cheating Ugandans."[670]

Among other things this provision vests with the minister the discretionary powers to: Granting and revoking of Petroleum licenses; Negotiating, endorsing and administering Petroleum agreements; Initiating, developing and implementing the oil and gas policy; Issuing petroleum Regulations and submitting draft legislation to parliament; Approving Plans for Field Development; Promoting and sustaining transparency in the oil and gas sector and Approving data management.

Although the Section mandates the minister to grant and revoke licenses, negotiate and endorse contracts on behalf of government, it does not state with whom the minister can perform such duties. The same minister is mandated to approve plans for field development, promote and sustain transparency in the sector, develop Regulations and policies for the same. By concentrating such wide discretionary powers in one person to both issue oil licenses and regulate

[668]Section 11 of the Petroleum (Exploration, Development and Production) Act, 2012

[669]Ibid, section 43.

[670]Leslie Muhindo, "Oil Bills Debated amid Controversy", the Daily Monitor, Tuesday November 22, 2012.

the industry, the Act creates the potential for insufficient capacity and conflicts of interest. Moreover, this Minister is appointed by the President and is personally answerable to him. This provision is a major launch pad for opportunistic and individualistic exploitation of oil resources, abuse of discretionary powers and corruption.

It is also noted with dismay that Section 54 of the same Act allows the same Minister to receive direct exploration bid applications if, he is acting in a matter of national interest in respect of areas that are adjacent to the existing reservoirs. The area of exploration contracts is a technical matter and vesting all the discretionary powers in one individual who may lack the technical capacity to deal with matters of oil exploration is very dangerous to the success of the Ugandan oil and gas industry. It would for example be prudent practice if the Act provided that the Minister acts with the Petroleum Authority in the execution of his numerous roles under the Act.

Continuation of Licenses

The Petroleum (Exploration, Development and Production) Act 2012 contains a transitional provision that is ambiguous in effect. Section 188(1) (a) of the Act provides that licenses issued under the old law "shall have effect from the commencement of this Act as if granted under this Act". This suggests that existing licenses should be subject to the provisions of the new law. However, the same section under 188(2) provides for the opposite that "the terms and conditions including the rights and obligations under a license or petroleum agreement in force immediately before the commencement of this Act, shall not be less favorable than those that applied immediately before the commencement of this Act". This ambiguity, lack of clarity and contradiction could potentially be used by licensees to argue, for example, that section 127 of the same Act, which provides for strict liability of the licensees in the case of pollution damage, should not apply to them because the obligations that it imposes upon them are more onerous than those that prevailed under the previous law. In short, this gives existing licensees extensive stabilization by law, even in the event such a clause is absent from their license or petroleum agreement. For example, as a matter of

fact, the Government of Uganda signed a Production Sharing Agreement with Tullow Oil on February 3rd, 2012 before the Acts could be finalized, it would be imperative that the Act clearly specifies that the new law applies in all respects to existing agreements

Addressing the issue of Conflict of interest

Section 159 of the Act regulates conflicts of interest, by prohibiting public officials involved in the implementation of the Act from having a stake in the oil matters that they regulate. Although this provision is a right step in the right direction it falls short of extending to family members and agents, to private or public companies or business enterprises in which such public officials, their spouses or agents have controlling interests. Already, there are early warning signals of personalization of the oil and gas sector by highranking political officials including the president himself and his blueeyed boys. "In June 2010, it was announced that Uganda's Presidential Guard Brigade would be integrated into the Army's Special Forces Unit in a bid to protect and enhance the country's strategic assets, including oil fields along the border. The Special Forces Unit is led by Lt Col (read Brig) Muhoozi Kainerugaba, the President's son".[671] The Saracen private security company is contracted to provide security inside some drilling sites. A United Nations report names President Museveni's brother, Gen Caleb Akandwanaho alias Salim Saleh as the majority shareholder in the Ugandan branch of the company.[672] Museveni's close relations are evidence of increased personalization of control by him of the oil and gas sector. Such deviation from international best practices and democratic principles is highly undesirable at this stage.

There are some Ugandan legal instruments which can be emulated by the oil legislation in so far as guarding against the danger of conflict of interest in the oil

[671] Wall Street Journal, Uganda Presidential Guards to help boost security in the oil region, June 6th 2010; Parselelo Kantai, Striking it rich, the Africa Report, 1st Feb 2010; Paul Amuro, Suspicion, distress as PGB seals off Amuru Oil Fields, Daily Monitor, February 22nd 2009; Khareen Pech, Peace, Profit or plunder, Insitute of Security Studies.

[672]

and gas sector is concerned. The Leadership Code Act of 2002 addresses conflicts of interest among highranking government officials. **Section 9(5)** prohibits officials from participating in activities where they have personal interests, while **Section 12(1**) prohibits them from making contracts with the government or foreign business organizations. These regulations are extended to the leaders' family members and business organizations in which the leaders or their family members have a controlling interest. The **2005 Code of Conduct and Ethics ("Code of Ethics")** regulates the conduct of lower ranking public officials. It promotes governance, transparency and accountability among public officers and in particular ensures that public officials are accountable for all resources under them. It also prohibits public officials from accepting (and giving) gifts and bribes. This code extends to their family members. In addition, under section (i), the Code of Ethics states that public officers shall not put themselves in a position where their personal interests conflict with their duties and responsibilities as public officers and they are also prohibited from entering into any contracts with the government. These obligations are extended to the public officers' family members and private companies in which the public officers or their family members hold a controlling interest. The foregoing are healthy legislative provisions which the new oil legislation had to be perfectly in harmony with.

Oil is one strategic commodity of the world that government, from super powers to minor states will never allow to be free from political control.[673] The two major oil and gas institutions established by the Act are the Petroleum Authority of Uganda[674] and the National Oil Company of Uganda[675]. Although these are established as independent institutions, free from political manipulation, a clear

[673]Youssef M. Ibrahim, "The 21st Century, a time for new oil wars", Daily Star, Beirut, 23 Jan 2004.

[674]Section 10, Petroleum (Exploration, Development and Production) Act 2012.

[675]Ibid, section 43

perusal of the Act reveals the contrary. The Petroleum Authority is mandated to monitor and regulate exploration, development and production of petroleum in Uganda. Its independence is strongly echoed by Section 15 of the same Act. However, under **Section 14 of the** Act, the Minister may give directions in writing to the authority with respect to the policy to be observed and implemented by the Authority and the Authority shall comply with the directions. The extent of such directions is not defined in the Act. This creates an obvious risk that the independence of the Authority will be undermined by political interference.

In the same regard, the **National Oil Company** established under the Act, shall be incorporated and be managed under the Companies Act[676], to manage and handle the state's commercial interests in the petroleum subsector. However, **Section 47 of the Act** allows the Minister to issue instructions in respect of the National Oil 3Company's execution of its management task under the Act including the stipulation of rules relating to the duty of secrecy of Board members and employees. It's legally unperceivable and ridiculous, how a company incorporated under the Companies Act (*supra*) can be managed in that manner. In addition, Company law dictates that it is only the shareholders of the National Oil Company who can have a say in the company and hence Uganda citizens' interests will be valid only to the extent of the shares government owns in the National Oil Company. "Previous experience in Uganda has not shown government to be a good business entity and where government has owned shares in private companies many have been dogged with corruption, waste and lack of competitiveness"[677]. It is not clear how the other shareholders for National Oil Company will be selected and how many shares government and other shareholders will have. This provision can thus be manipulated to favor selected individuals who may not necessarily have the competence to be shareholders. It is also possible for government to be a minority shareholder in National Oil Company with a limited say. This would inevitably result into failures by the

[676]Cap.110, Laws of Uganda.

[677]

government to protect citizens' interests in the National Oil Company. Equally ridiculous, is that there is no stipulation in the Act, that the Minister for Petroleum will be appointed by Parliament yet it is the Minister's role to appoint Board members of the Authority and those in key positions in the National Oil Company tasked with managing commercial aspects of petroleum activities and the participating interests in the licenses. Such minister is appointed by the President. This creates a risk that the oversight function of Parliament over the Petroleum Authority and the National Oil Company is negated, and that management roles in such institutions could be given out on the basis of personal connections, loyalties and state patronage, rather than on merit.

Several institutional amendments

- The Directorate of Ethics and Integrity should be given a specific legal mandate to monitor compliance with anticorruption measures or it should be coopted by the IGG. The Directorate should also be made to account for its failure to conduct a national selfassessment to compliance with international treaties since its inception which is one of its obligations;
- The Permanent Secretary should be conferred with more power in relation with petroleum exploration and production since he/she is the accounting officer of the Ministry who should personally be held accountable for corruption within the Ministry;
- The PEPDA should be revised to disband the Commissioner for Petroleum Exploration since his/her functions have been usurped by the creation of the PAU and the NOC. The PEPDA needs to also be amended to clarify the relationship between the MEMD and PAU and NOC;

Options for oil Institution.

The standard model for the organization of oil regulation is one that sees a 'separation of powers' between a Petroleum Authority, National Oil Company and Ministry. This is the model adopted by Norway, which brings the major advantage of dividing licensing and monitoring functions from the daytoday pressures of government, and allowing an independent national oil company to

develop technical capacity. But as one recent study[678] of countries with low governance capacity has found, such a framework demands the investment of significant resources to function effectively. Another option is to devolve management to the relevant ministry, which is less costly and can result in strong oversight, but risks the politicization of decisionmaking.

Finally, management can be given the responsibility of regulation, which can build capacity quickly in an environment where the state has low capacity, but concentration of power in a single institution poses risks to transparency and accountability. Lowcapacity countries seem to have done better when responsibility for management has been concentrated, either in a National Oil company or in a Ministry, largely because this enables expertise to be developed quickly and cheaply, but with the caveat that concentration of responsibilities brings risks. Angola is a good example of these risks, where a National Oil Company successfully managed the technical side of oil production, but at the same time enabled largescale corruption through a lack of accountability links between the management of the National Oil Company and the political elite left revenues vulnerable to misuse. Gabon, where management was left to a Ministry rather than a National Oil Company, suffered from a similar domination by personal interests. Neither has it to date used oil revenues for sustainable development. But it is also important to note that a formal division of powers is not sufficient to ensure robust management if political will is lacking political interests will win out. In East Timor, for instance, a system that embodied the division of responsibility between a National Oil Company, the Ministry and the Authority has been overridden by the political elite to the point where 'in practice, power over the sector is concentrated in the hands of a few powerful individuals'.[679] In East Timor strong public trust in government has averted too many negative consequences. But in countries with less robust governance, a separation of powers may bring costs as noted, multiple agencies demand

[678]Much of the following analysis is synthesized from Patrick R.P. Heller and Valérie Marcel, 'Institutional Design in Low-Capacity Oil Hotspots', Revenue Watch Institute, 2012.

[679]International Alert, Supra, note 81.

significant resources to function effectively with little material benefit.

A final option might be to sequence the development of oil management institutions. In Ghana, the system was in the past dominated by a National Oil company, only for government to institute new bodies later to avoid the risks of mismanagement and poor transparency associated with the primacy of a single agency. In Ghana, a National Oil Company was founded in 1983, when state capacity was weak. But growing concerns over transparency and effectiveness led it to institute a Petroleum Commission in 2011, ending the National Oil Company's monopoly over technical advice.

There is also the potential for confused lines of authority. The new oil legislation lays down some important rules for ensuring the impartiality of the Petroleum Authority, intended to 'monitor and regulate' petroleum activities.[680] But there are also significant ambiguities, most notably over the relationship between that body and the minister. The Petroleum Authority is set up as independent but in practice may play more of an advisory role, and it is required by law to comply with written instructions from the minister. The risk of political interference in its decisionmaking is clear, as is a possible blurring of lines of accountability. As Revenue Watch Institute observes:

It would seem that there is some dual governance structure with the Authority and the Minister sharing the top seat depending on issues. This may lead to situations where the Minister and the Authority may try to deflect the responsibility for their actions onto the other.

These risks are even more acute in relation to the proposed NATOIL. Though, as seen, it is intended to handle the involvement of the Ugandan state in commercial oilrelated activities, the legislation in its current state does not define these terms,

[680]These include the provision that a board member cannot be a shareholder of any petroleum entity, the publication of ministerial directions to the authority, and the production of an annual report.

nor does it lay out the tasks the company will be charged with performing. NATOIL is likely to be the conduit for significant revenues from oil production to government budgets weakness in its structure could allow government to use revenues outside formal decisionmaking channels. It seems Uganda will have a hybrid 'separation of powers' system, with new institutions established but ultimate authority over the sector remaining with the government of the day. This would seem to bring certain disadvantages notably the expense and time of building the capacity and experience of wholly new institutions while at the same time not bringing the advantages of wholly independent, impartial operation, and may risk diluting or disempowering the impressive technical capacity that the government has built up in the Ministry of Energy.

e). The PAU needs to be reconstituted beyond a merely technical body to give it decision making powers over matters in its mandate. The confidentiality requirements of the Board members and employees need to be repealed to foster transparency;

f). The statutory framework for the NOC needs to be revised to bolster the mandate of the NOC especially as far as defining the meaning of 'commercial interests' and 'management of petroleum' is concerned. Also, the NOC should not be registered as a company under the Companies Act of Uganda but should derive its mandate from statutory provisions;

Development Community Intervention

To combat unbridled corruption by government entities without adequate recourse, development partners and the regional and international communities should get involved in developing a comprehensive framework for the monitoring of corruption within the oil sector in Uganda. The following measures therefore need to be taken to strengthen the corruption monitoring mechanisms in Uganda's oil sector;

a. The EAC should strengthen its monitoring mechanism for the EAC Protocol on Preventing and Combating Corruption to oversee the implementation of its

provisions by the states;

b. The African Commission should similarly strengthen its monitoring mechanism for the AU Convention for the Prevention and Combating of Corruption and buttress it with sanctions against member states that do not comply;

c. The UN should also strengthen its monitoring mechanism for UN Convention Against Corruption, 2004 to elevate its provisions to make them mandatory minimum standards and create sanctions for countries that do not comply with the selfassessment mechanisms;

d. Development partners should pressure the government to adopt the EITI, submit an application for membership and comply with the EITI standards. This can be supported by StandBy arrangements that set conditions for realisation of transparency and accountability in the oil sector as a condition upon which the provision of development funds may be based. They can also technically transfer to facilitate the building of capacities of institutions mandated with ensuring transparency and accountability in the Oil industry in Uganda.

e. Maintaining social cohesion: the importance of transparency and Access to Information Transparency is a watchword of much literature on the resource curse. But why transparency is important is seldom spelled out. It is all too frequently seen as a goal in itself or as a mechanism to discipline government. Of course, transparency of budgeting and resource flows is a vital aspect of preventing corruption, which will be made more important by the influx of money that comes from oil production. It is also key to preventing illinformed public opinion from driving government to use resources unwisely. As two analysts note: 'In many cases, the discovery of oil and other resources creates unrealistic expectations about future income, leading to increases in current expenditure, often on large and impractical projects'.[681] But transparency is also vitally important in maintaining social cohesion. Rumour flourishes in the absence of accurate, timely information. And rumour of advantages given to certain sections of society or resources unfairly distributed is the fuel of social division, particularly in a

[681] Shari Bryan and Barrie Hofman, 'Transparency and Accountability in Africa's Extractive Industries: The Role of the Executive', National Democratic Institute, 2007.

country with the latent social cleavages of Uganda. As the Extractive Industries Transparency Initiative (EITI) notes: 'Affected communities and ordinary citizens often assume that the government and companies are trying to keep the resource wealth for themselves and are undermining the economic development of the country through corruption and mismanagement.'[682] So while Ugandans are currently unified by the imperative of avoiding conflict, and the shared goal of economic growth, there are real risks that this consensus will be put under considerable strain by oil revenues, particularly if communities feel that others are gaining more benefit. Contract transparency is of paramount importance. Unfortunately, the oil debate in Uganda has been marred by rumours and a lack of clear information. This has been the case particularly in relation to the productionsharing agreements signed by the government, and associated allegations of bribery.[683] The Ugandan government has, to date, released partial details of the PSAs (Production Sharing Agreements) to parliament,[684] but has refused to disclose them to the public. The resulting controversy has been divisive and perhaps even unnecessary. It may well be the case that the PSAs have been well negotiated, as attested by independent auditors who have examined them. The fact that they nevertheless remain the centre of speculation and argument underlines the risks of information being controlled too closely. Their publication would meet popular demand some 79% of Ugandans say they should be released[685] calm suspicions and send a positive signal of future openness. In many countries around the world, PSAs are now released as a matter of law and prudent practice within their extractive industries sector. Though full disclosure of contracts is a relatively new phenomenon, driven by campaigns such

[682]Extractive Industries Transparency Initiative, 'Impact of EITI in Africa: Stories from the Ground', 2010.

[683] For a critical analysis, see Platform, 'Uganda's contracts – a bad deal made worse', http://www.platformlondon.org/carbonweb/documents/Ugandas_oil_contracts_A_Bad_Deal_Made_Worse_Tullow_Heritage.pdf. (accessed 24 May 2013)

[684]Afrobarometer , Round 5 Uganda Survey Results, 2012.

[685]Supra

as EITI and Publish What You Pay, it has been enshrined in law in both Ghana and Liberia,[686] and has become standard practice in Azerbaijan. Many more countries including Egypt, Liberia, Georgia and Kyrgyzstan give parliament the right to approve all contracts. Tullow Oil has published PSAs in Ghana, and has publicly stated it would be prepared to do so in regard to Uganda, should the government give its approval.[687] The São Tomé and Príncipe Revenue Law goes further and mandates public access to all payments.

By providing reliable and timely information, Government would go a long way in shaping public expectations. While not all information can be put to the public, some basic information dissemination/sharing is necessary to avoid false expectations and accusations. For example, Parliament has expressed concern that the Executive has kept them in the dark.[147] The information regarding oil discovery has arguably been a 'top secret' of the Executive and top bureaucrats. It is only recently that the Executive shared some key information with the Parliamentary Committee on Natural Resources. Such suspicions are likely to have a bearing on the country's politics and stability. Access to information more generally can also be enshrined in law, covering more than just contracts. It is here that EITI can play an important role. Launched in 2002, it has developed a methodology to impose a globally recognized standard on the publication of payments, bringing together companies, governments and civil society.[148] There are currently 14 countries assessed as compliant with EITI principles, including Nigeria, Ghana, Mongolia and Azerbaijan, and a further 22 are candidates. In Liberia, EITI is credited as having enabled discussions between government and local communities to discuss issues of concern, and it has also helped the Cameroonian government build capacity in monitoring and managing industry. In Nigeria, EITI has led to audit reports that have 'have placed immensely rich data and information in the public domain thereby strongly empowering civil society

[686] Peter Rosenblum and Susan Maples, 'Contracts Confidential: Ending Secret Deals in the Extractive Industries', Revenue Watch Institute, 2009

[687]

to hold government to account. Though Uganda has legally recognized the right of citizens to access information held by government, enshrined in the Access to Information Act (2005), this has not been fully operationalized, and is in any case contradicted by the provisions for confidentiality of information envisaged in new oilrelated legislation. Uganda has also in principle committed itself to EITI membership, but has not yet taken the necessary steps for inclusion.

f). Environmental Concerns. Poor people in developing countries often rely heavily on their immediate environment for their livelihoods. Whilst they are the most exposed to environmental risks and degradation, they are usually the worst represented in the relevant decisionmaking processes. Good natural resources management therefore depends on participatory, transparent, open and accountable governance that ensures the effective participation of the public in the preparation and implementation of environmental policies, legal frameworks, plans and projects. This was also a key principle recognized by governments, including Uganda, present at the UN Conference on Environment and Development (UNCED) in Rio de Janeiro in June 1992.[688]

The right to a clean and healthy environment is protected under the 1995 Constitution of the **Republic of Uganda.**[689] The Constitution obliges the state to ensure that natural resources are managed in such a way as to meet the development and environmental needs of present and future generations of Ugandans. The state is charged with promoting and implementing energy policies that will ensure that people's basic needs and those of environmental conservation are met. **Article 237(2) (b) of the Constitution** provides that the government or a local government holds in trust for the people and protects natural lakes, rivers,

[688]Principle 10 of the Rio Declaration on Environment and Development, Annex I of the report from UNCED, RiodeJaneiro,13to14June1992.availableatwww.unep.org/Documents.Multilingual/Default.asp?documentID=78&articleI D=1163

[689]Article 39, thereof

wetlands, forest reserves, game reserves, national parks and any land to be reserved for ecological and touristic purposes for the common good of all citizens. The spirit of these constitutional provisions is reechoed under **Section 3 of the 1995 National Environment Act**[690] and **Section 5(2) of the National Forestry and Tree Planting Act**[691]**.** The National Oil and Gas policy asserts the need to protect the environment as part of management of the petroleum sector. Objective 5.3.9 seeks to ensure that oil and gas activities are undertaken in a manner that conserves the environment and biodiversity. To achieve this objective, the state is required to carry out due diligence on oil companies applying for licenses in the country with regard to their technical and financial capabilities together with their environmental standards.

g) Legislation in the oil and gas sector should be live to environment concerns and to international best practices so far as there is a high overlap between ecologically sensitive and biodiversity rich areas and the occurrence of exploitable hydrocarbons in the Albertine Graben poses a particular challenge for oil exploration and development in Uganda. "The Albertine Graben is the most species rich ecoregion for vertebrates in Africa and contains 39% of Africa's mammal species, 51% of its bird species, 19% of its amphibian species and 14% of its plant and reptile species. On the other hand, the rate of biodiversity loss in Uganda is high and was calculated in 2004 to be1011% per decade or about 0.8% annually."[692] The principle threats to biodiversity in Uganda persist including habitat loss, modification and alteration along with unsustainable harvesting, pollution as well as introduction of alien species. The surroundings are key ecotourism sites and have even higher tourism potential. Oil and Gas exploitation

[690]Cap. 153 Laws of Uganda

[691]Act No. 8 of 2003

[692]"Strengthening the management of the oil and gas sector, an expansion of strengthening the state administration of the up-stream petroleum sector", Ministry of Energy and Mineral Development, p.8, available at www.norway.go.ug (accessed 11 March 2013)

and production activities have the potential for a variety of negative impacts on the environment. They induce, economic, social; and cultural changes through alteration in land use patterns, local population levels, social economic, and cultural systems. They also result into increases in aqueous and gaseous waste streams which may affect plant and animal communities due to changes in their environment through variations in water, air and soil/ sediment quality and through disturbance by noise, extraneous light and changes in vegetation cover. These negative impacts need to be mitigated and addressed to ensure ecosystem integrity.

Although, the **Petroleum (Exploration, Development and Production) Act** adequately addresses key environmental concerns and adopts international best practices it has some loop holes that need to be highlighted. **Section 4 of the Act** introduces the need to comply with environmental principles, and every licensee must take into account and give effect to the national environmental laws and other applicable laws, including international environmental conventions such as the Kyoto Protocol and the Rio Declaration. Arguably, this provision however lacks the compliance aspect. The phrasing 'take into account' is weak, and the Act should demand compliance.

Although the Act provides for safeguards against pollution and liability for damage from pollution effects, **section 126 (2) of the Act** limits liability to events happening in Uganda. It provides:
This Part applies to liability for pollution damage from a facility when the damage occurs in Uganda or affects a Ugandan vessel or a Ugandan facility in adjacent areas.
There are basically three scenarios that arise out of petroleum related pollution; pollution that happens in Uganda and affects a part of Uganda or a vessel in Uganda; pollution that happens outside Uganda and affects a Ugandan vessel or part of the territory of Uganda and pollution that happens in Uganda but affects a vessel or territory outside Uganda. A clear analysis of the provision reveals that

section 131 of the Bill covers only the first and second scenarios ignoring the third scenario. This does not cater for the international environmental concerns where pollution should be punished no matter where it occurs. Besides it may be difficult to actually determine territorial impact of pollution especially from petroleum products such as gas. Pollution parse should be a punishable crime without considering the territorial jurisdiction of its impact.
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h) Independent financial advice. The risks of politicized decisionmaking are also clearly present in the proposed structure for management of financial flows from oil. The model proposed by current legislation will see revenues from oil moved first into a holding fund and from there into either a Petroleum Investment Reserve (PIR), or directly into the government budget. The amount allocated to budgets or the PIR is to be decided annually, by the minister and parliament, according to a planned allocation scheme. These are some positive points in the current legislation. There are clear rules prohibiting the use of PIR funds as collateral for borrowing which has been the route to the buildup of significant debt in other oil producers in the past and the minister is required to provide regular audited financial statements to Parliament. The Act also foresees the constitution of an Investment Advisory Committee (IAC) charged with advising on investment decisions. This follows states such as Ghana, which set up a new investment advisory committee in early 2012. But the IAC is envisaged as having a membership that is appointed and determined by the minister, which may limit its independence from government. A further option would be to engage an outside agency to take investment decisions; East Timor, for instance, has appointed the Bank for International Settlements to invest its oil surplus in government bonds Indonesia's experience in the 1970s may be instructive. The global oil crisis of the 1970s greatly increased oil prices and profits, much of

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Report of the Parliamentary Committee on Natural Resources on the Draft Petroleum (Exploration, Development and Production Bill) 2012, p.16.

which was used to expand the national oil company (Pertamina) beyond production to include investments in tankers, steel and construction. Pertamina was run by a close associate of the President, and was reportedly used as a 'cash cow' by the political elite.[694] It became increasingly corrupt and built up more than $10 billion in debt, and eventually had to be bailed out by the government, more than doubling the national debt.[695] It was this crisis that reportedly strengthened the position of a team of technocrats, who were able to manage the booms and busts of the late 1970s and 1980s without damage to Indonesia's economy and to play a key role in Indonesia's successful development. Of course, there are significant differences between Indonesia and Uganda, but the overall pattern of executive interference in oil management leading to the temptation of corruption, inefficiencies and economic damage is clear. Whichever option for oilsector management Uganda eventually settles on, it will be vital that space is created and maintained for expert opinion to reach the key decisionmakers, and be acted on.

i). Engage the population in spending decisions. Making the right decisions on how to spend or save oil revenues is vitally important. But this is only half the picture. Given the stakes involved, the manner in which decisions are taken is also extremely important, notably to ensure that a majority of ordinary Ugandans feel involved in political decisionmaking, particularly around oil. However, recent survey data have highlighted some issues of concern. Even though a majority of Ugandans say they trust President Museveni, as well as their MP and local officials, 74% also said that politics and government were too complicated for them to understand.[696] As noted above, more than 50% of Ugandans say that none of the oil revenues, or only a small proportion, will be used for the benefit of

[694]Peter M. Lewis, Growing Apart: Oil, Politics and Economic Change in Indonesia and Nigeria, 2007, Michigan University press, p.58

[695]Ibid,

[696]The Afrobarometer survey gave an approval rating for President Museveni of 59%. Figures from Afrobarometer

all.[165] Unless steps are taken to bring the population on board with a collective vision for the spending of these revenues, divisions between the political elite and the majority of the population may widen. In technical terms, the most persuasive reason for this is the breakdown of the relationship between citizen and state government access to resource revenues lessens the need to rely on tax receipts, progressively eroding the connection between people and state. Tax is currently estimated to make up just 13% of GDP, a low rate even in comparison with the rest of Africa, making Uganda particularly vulnerable to these effects. As one commentator has written about oilproducing states:

An unusual combination of dependence, passivity, and entitlement marks the political culture of petroleum exporters … With basic needs met by an oftengenerous welfare state, with the absence of taxation … populations tend to be politically inactive, at least as long as the oil state can deliver.[697]

j). Set clear spending priorities

There is therefore a pressing need to implicate as much of the Ugandan population as possible in the overall direction the country is taking. One preliminary step would be to forge a legal link between oil revenues and specific development priorities, something not foreseen in current legislation. According to Revenue Watch, *Currently the PRM chapter in the public finance bill does not offer guidance on how the money that flows to the budget should be used. It does not make explicit that oil revenues should be used for capital investments, nor does it link the investment priorities to long term national development plans.*[698]

Uganda has already taken some positive steps. The government has elaborated a variety of overarching development visions, from a fiveyear National

[697] Terry Lynn Karl, 'Oil-Led Development: Social, Political and Economic Consequences', CDDRL Working Paper No. 80, Centre on Democracy, Development and the Rule of Law, Stanford University, January 2007, http://cddrl.stanford.edu. (accesed 12 may 2013)

[698] Revenue Watch Institute, 'Comments on Petroleum Revenue Management in the Draft Ugandan Public Finance Bill 2012', March 2012

Development Plan,[699] intended to be the first of six, which has been simplified into a 'citizen's guide' and translated into local languages, to the draft 'Vision 2040' set out by the National Planning Authority. There are also sectorspecific development visions, including for the development of agriculture and trade. They provide a clear framework through which the development path that Uganda will pursue can be widely communicated and understood. But all too often in the past, government plans have not been implemented, leaving the population confused by ad hoc decisionmaking. And though the government has established a communication department in the Ministry of Energy and has conducted public outreach, to date this has been on a relatively small scale. Unless the reasoning behind the allocation of resources is widely understood, public unhappiness with the government's performance may lead to pressure on it for increased spending determined by shortterm political priorities rather than longterm goals. Botswana offers an interesting illustration. There, an explicit link was created between resource incomes from diamonds and spending decisions.[700] The Botswana 'Vision 2016' development plan was formulated, in part, to 'to create the conditions where all people can feel that they have some stake in both the present and the future'.[701] Mineral revenues were reserved for capital projects, and all new projects, each of which had to be approved by Parliament, had to be included in a National Development Plan.[702] Botswana has been able to profit from its natural resources, recording one of the highest consistent growth rates in Africa, at the same time as maintaining its social cohesion. The involvement of the public in spending decisions has been one important factor in this success.

[699]The Republic of Uganda, National Development Plan 2010/11 – 2013/14, April 2010, available at http://npa.ug/docs/NDP2.pdf. (accessed 12 May 2012)

[700]ibid

[701]President Festus Mogae, 'Speech at a National Seminar on Managing Oil Revenue in Uganda', July 2008.

[702]Richard Steiner, 'Models of Public Oversight of Government and Industry', in Tsalik, Caspian Oil Windfalls

k). The importance of public consultation. However, even if spending is linked to clearly defined priorities, the decisions thus taken need to be communicated to the public, and feedback mechanisms established to allow the communication of popular views back into government. It is important to note that this is not the same as transparency simple access to information is not enough to drive meaningful popular engagement. As one expert has pointed out:

Transparency is a necessary, but not sufficient component of informed public participation in a democracy. To have an active voice, the public, or at least a representative body of the public, needs to have a legitimate and formalized role overseeing and interacting with industry and government.[703]

One way to do this is through regular public consultation. There are a number of examples of public consultations related to the oil industry. In São Tomé and Príncipe, community meetings were held to allow civil society and the population an opportunity to discuss the impact of oil and how revenues should be used.[704] In 2012, Liberia's national oil company launched a programme of national consultation on oil policy, which will see officials and civil society representatives visit all political subdivisions of the country. Trinidad and Tobago offers another instructive example of an oilproducing state that has taken steps to strengthen the buyin of the population to development programmes, in the context of booming oilrelated spending.

L)Empower Parliament. A second and more formal way of ensuring public understanding and buyin is through elected representatives. The key institution is of course Parliament. As the World Bank Institute has noted, 'Parliaments are uniquely positioned to understand and monitor the effects of extractive industries on the citizens and act as a bridge between the government, private sector and civil society.'[705] Uganda's parliament has taken an active role in the debate on

[703]

[704]ibid

[705]World Bank Institute, 'Parliamentary Oversight of the Extractive Industries Sector', 2008.

oil, notably since the institution of the 9th parliament after the 2011 elections. Most controversially, this included the establishment in late 2011 of an ad hoc committee on oil and gas, set up to investigate allegations of corruption around the signing of contracts with oil companies, which imposed a temporary moratorium on new agreements. The parliament enacted and passed the Petroleum (Exploration, Development and Production) Act, 2012 in early December 2012. A Parliamentary Forum on Oil and Gas has also been set up, bringing together interested parliamentarians from all parties and regions to more effectively share information and communicate with government. But the role parliament is able to play is perhaps somewhat lessened by the preponderance of NRM members, along with popular reservations about how elections are conducted, allegations of corruption and the difficulties of clear communication between members and constituents. MPs may also lack sufficient specific knowledge on oil issues to fill the communication gap effectively. And, as noted, the role of parliament in the management of the oil sector fore seen under the current oil and gas legislation may not place members at the centre of the debate. Of course, the Ugandan parliament approves both the national budget and individual policy areas, and it is important to note that Uganda's position as an established formal democracy puts it in a relatively strong position. But oil will increase the stress on the system and has a long track record of undermining governance. As one commentator has noted, 'The heart of the resource curse is that resource rents make democracy malfunction.[706]' Parliamentary role in oversight and communication Parliament is both a key mechanism for oversight of the oil industry and one of the institutions most vulnerable to the corrosive effect of oil, notably where democracy is still emerging and institutions are weak. According to Svetlana Tsalik,

The lack of transparency, absence of separation of powers, political discretion afforded the president's administration, and unclear property rights … make it extremely easy for the kind of patronage politics to emerge that characterize economies such as those of Saudi Arabia,Venezuela, and Nigeria.[707]

[706] Supra Nigeria and Algeria

[707] Svetlana Tsalik, 'The Hazards of Petroleum Wealth', in Tsalik, Caspian Oil Windfalls, p. 11.

Parliaments have multiple roles. They are responsible for passing the legislation that creates the framework for oil, and exercise normal oversight and budgetary control functions. This is perhaps most visible in countries with wellestablished democracies for instance, in the role of parliament in the development of Norway's oil and gas industry. In many states, they also have a role specific to the oil industry and related revenues. In some cases, this is specifically designed to increase public accountability. In São Tomé and Príncipe, the legislature is required to hold an annual debate on oil and gas policy.[708] These sessions must be open to the public and should be preceded by public consultations with civil society. Ministers, investment committee members, the auditor general and the oversight board are required to be present to answer questions from parliamentarians, and to discuss the activities of the fund including the required annual oil fund audits.[709]

Parliaments also have a key role in the management of oil revenues. In East Timor, the parliament has the right to refuse government requests to spend more than 3% of the petroleum fund. The legislative assembly of the Canadian province of Alberta created a new standing committee in 1997, which approves the business plan of a Heritage Fund set up to manage oil revenues, reviews the effectiveness of the fund and, importantly, holds public meetings with the population to discuss its investments and results. The committee's performance is judged in part by the level of popular understanding of the Heritage Fund, for instance whether half of the population can estimate its value.[710] Other important roles for parliament in many oilproducing countries include approving contracts signed with oil companies as noted above, states including Azerbaijan, Egypt, Georgia, Kyrgyzstan, Liberia, Sierra Leone and Yemen all require new contracts to be ratified by parliament – and acting as an oversight body for misuse of funds. However, the ability of parliament to contribute positively to both oversight and public understanding is limited by capacity gaps. One largescale survey of African oilproducing states carried out by

[708]ibid

[709]World Bank, 'Country Experience with Petroleum Revenue Funds', Part 1, 2009.

[710]

the National Democratic Institute (NDI) found parliamentary weakness to be a factor across all case studies, largely as a result of political and institutional constraints; members were subject to political pressure, or suffered from a lack of access to information and the necessary technical knowledge to understand it.[711] Regulation and oversight of the extractive industries require an understanding of complex technical and financial issues. In every country surveyed by the NDI, concerns were raised about the capacity of individual legislators to understand and contribute to management and oversight of the extractive sector.

Listen to local voices.

The need for real public understanding of spending decisions will perhaps be most acute in managing local tensions. It is populations in the oilproducing region that will suffer the deepest and most immediate changes to their lives, and there is already a great deal of concern that they will not receive sufficient compensation for the impact that oil production will have. These tensions have already begun to emerge in Uganda, as reflected in lobbying conducted by the traditional rulers of the Bunyroro kingdom – which covers much of the oilproducing region –for the allocation of 20% of revenues leading to increased local demands.[712]

The impact of oil production on local communities is predictable. The influx of money that natural resources bring can distort local economies, raising the cost of living, accommodation and land. Ghanaians in the oilproducing Western region are already concerned that prices have risen beyond the reach of many, particularly in urban centres. There have been significant purchases of land by wealthy investors, leaving little for traditional agricultural production. Primary production can also bring about significant environmental damage, which in turn can hit traditional livelihoods, particularly farming and fishing, and newer income streams such as tourism. Ghanaian fishing communities have clashed with security forces protecting offshore installations, and have reported depleted fish

[711] National Democratic Institute, 'Transparency and Accountability In Africa's Extractive Industries: The Role of the Legislature', 2007.

[712] Supra,

stocks.[713]

The situation is made more difficult when the new industry generates few new jobs for local people. Oil, as a technical and complex industry, does not demand the kind of mass labour that mining does. In fact, estimates are that Uganda's oil industry will directly create just 3,000 jobs. Many will be taken by expatriates with the necessary specialist skills. The resulting unemployment can, in a context of increased scarcity caused by rising prices, lead to political protest and even armed mobilization – the experience of violence in the Niger Delta offers a worstcase scenario of environmental degradation and local resentment leading to chronic conflict. The importance of these local issues has been acknowledged by the Ugandan government, notably in the proposed allocation of 7% of oil royalties to the oil producing region, though questions remain about what percentage of overall revenue will be made up of royalties,[714] and how these funds will be spent. In Chad, 5% of revenues were allocated to communities in oilproducing regions, but have reportedly either not arrived or not been used effectively – one report states that only 3% of villages affected by production have seen benefits, despite the widespread disruption of agricultural production.[715]

Consultation is one way in which local tensions can be managed. In Ghana, NGOs and donors have worked together to develop a framework bringing together local civil society, oil companies and government for regular consultations – allowing accurate information to be disseminated, questions to be asked, and local tensions dissipated.[185] In Chad, a Framework for Consultation and Dialogue has been launched to bring together oil companies and affected communities. As noted above, initiatives run through EITI have also had success in opening space for local dialogue.

These initiatives, though only nascent, also offer Uganda an interesting model for how local issues from land to employment, environmental damage or the cost of

[713]Supra

[714]Royalties are payments directly from oil companies, and do not include revenues from taxes and profit oil.

[715]Begona Inarra, 'Oil Exploitation in Chad and the Local Population', Africa Europe Faith and Justice Network, October 2012

living could be addressed. Local content (defined as 'local recruitment, training, purchases of local goods and services – that are designed to develop the industrial infrastructure and skills of the people in countries that host oil and gas projects') will also be vital.[716] The establishment of oilspecific training facilities, most importantly the Uganda Petroleum Institute, is a positive step towards building technical skills, key to ensuring that oilrelated jobs are taken by Ugandans. But it will only result in the training of a comparatively small number of technical specialists, and cannot hope to match the demand for jobs, particularly among communities whose livelihoods have been directly affected by oil production.

The risks for Uganda of poorly understood spending decisions, both locally and nationally, are twofold. Most obviously, as highlighted above, the resulting popular disengagement from the political sphere increases the distance between the majority of the population and government, undermining the social contract and weakening the incentives for the governing elite to act for the longterm benefit of the majority. Secondly, in the absence of a widely understood, coherent programme of spending, all groups in society are likely to feel disadvantaged, particularly in a society with the latent ethnic and regional divides of Uganda, and to demand the ad hoc allocation of resources to meet their particular needs. As noted above, this could be particularly acute at the level of local communities in the oilproducing region. The result could be increased intergroup tension, friction and even violence.

It is evident from the above that lack of transparency can increase public discontent. The resulting pressure on policymakers to meet expectations can lead to spending on shortterm or politically expedient projects rather that to meet longterm needs, resulting in waste and increased public discontent. The worstcase scenario for Uganda would be a downward spiral of popular confusion and unhappiness, a weakened economy, politically dominated management and deepening intergroup competition for a share of the take, particularly at a local

[716]The Ghana Local Governance and Decentralization Program is a donor-funded project working to increase public participation in local government. It has been developing a consultative framework for oil companies to discuss community needs with both government and local populations, in partnership with a local NGO called the Community Land and Development Foundation. More information can be found at www.colandef.com and www.logodep.org.

level. It is a path that has been trodden by many oilproducing states, most notoriously perhaps Nigeria. Most Nigerians are significantly poorer today than they were at the start of the oil boom, despite the receipt of some $340 billion in revenues. Average incomes are less than onethird of what they were in 1980, and per capita GDP remains at about 1965 levels[717].

But Uganda has time on its side. It is unlikely that production will start before 2016, with full capacity not reached until 2020 or later. Though oil has already begun to influence politics and society, the stresses that production and revenue flow will bring with them will not be fully felt for a decade. The debate on oil must move beyond the politics of the present. Instead, lessons must be learned from those countries that have successfully managed natural resources, as well as those that have suffered as a result. Transparency matters if Uganda's social cohesion is going to be maintained. A wellinformed national conversation on how to balance spending with saving is vital to the health of Uganda's agricultural sector, which is key to a positive future. The need to protect technical advice from political influence is vital in Uganda, as it is for all governments. And a population that understands how revenues are being spent is more likely to work with government rather than against it, building a positive feedback mechanism between people and the state that can act as a bulwark against future abuses.

Developments in Uganda's oil and gas sector present a mixed picture. On the one hand, the government has developed a progressive National Oil and Gas Policy which states the government's intention to adhere to international best practice standards. On the other, the industry is born into a deteriorating governance environment, characterized by the consolidation of Uganda's *neopatrimonial regime*; increasing perceptions of corruption and highlevel state looting; and some early warning signs that the government's own commitments to good governance standards laid out in its oil and gas policy are not being implemented. Experience from other resource rich, governancepoor environments suggests that, without immediate intervention, this will not end well.

[717] Figures taken from Jason Hickel, 'Saving Uganda From Its Oil', June 2011, available at http://www.thoughtleader.co.za/jasonhickel/2011/06/16/ (accessed 20 May 2013)3

CHAPTER

FIFTEEN

BYPASSING THE RESOURCE CURSE

"I have noticed that in this world, a serious injustice is done, God will give us wealth, honor and property yes, everything we want, but then will not let us enjoy it. Some stranger will enjoy it instead. It is useless and it just isn't right." (Ecclesiastes Chap. 6.12).

GENERAL INTRODUCTION.

An unusual meeting took place in October 2005 at St Matthew's church in Baltimore, in the U.S.A. After the sermon, some parishioners stayed behind to hear two emissaries from Africa explain the harm that America's gasoline guzzling does to the poor in faraway lands. An elderly parishioner raised his hand: "I know Africa is very rich in diamonds, gold and oil, but the people are very poor. Why are your governments so bad at managing that wealth?" Austin Onuoha, a humanrights activist from Nigeria, smiled and conceded, "You hit the nail right on the head.[718]

When it comes to wasted wealth, and the problems that bedevil poor countries that are rich in natural resources, especially oil, there is plenty of blame to go around. Economists have long observed that such countries tend to do badly. Resourcerich

[718] Arthur Bainomugisha, Hope Kivengyere, Benson Tusasirwe, Escaping the Oil Curse and Making Poverty History: A Review of the Oil and Gas Policy and Legal Framework for Uganda, 2006**,** ACODE, Kampala, Policy Research Series No. 20, p.5.

countries grow more slowly than other poor countrieseven after such variables as initial per capita income and trade policies are taken into account.

The recent discovery of commercially viable oil deposits in the Albertine Graben region which forms the northern part of the western arm of the Eastern African Rift Valley System will soon see Uganda joining the club of Organization of the Petroleum Exporting Countries (OPEC). Uganda's discovery of oil resources has also raised hopes and expectations among the citizens that, with the substantial revenues likely to be generated from the oil boom, the country will be able to escape from the fangs of biting poverty.

On the other hand, the discovery of oil has also caused anxiety about how the citizens are going to share the benefits of the oil boom[719] and the fear that, if not well governed through an accountable, transparent and peoplecentered system that ensures equity in revenue sharing, the resource could become Uganda's curse rather than a blessing[720].

Petroleum geologists have determined that the Mputa and Waraga oil fields have volumes of between 100 and 300 million barrels of oil. In the Waraga field, a maximum of 12,050 barrels of oil can be produced per day[721]. According to Hardman's Chief Executive Officer, the great news is the fact that flow tests from all the zones have exceeded the expectations of productivity[722].

Additional recent exploration findings by Tullow Oil Partners in Area 3A have revealed the existence of up to 500 million barrels of oil at the Kingfisher Well in Hoima. According Reuben Kashambuzi, the Commissioner for Petroleum Exploration and Production, production is now possible as the issue of commercial capacity has been settled[723].

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[719] Emmy Olaki, 'More oil is found: Hoima yields 500m barrels', The New Vision, October 12, 2006.

[720] 7 Grace Matsiko, Oil Rush: 3 Airports, Army Barracks built, The Daily Monitor, July 8, 2006.

[721] Uhuru Speech: Museveni outlines plan for oil, The New Vision, Tuesday October 10, 2006

[722]9 Emmy Olaki, Oil Production to start soon, 30m barrels found, The New Vision, August 31, 2006.

[723] Ibid.

Understanding the oil curse.

The term 'oil course' is coined from the wider term 'resource curse'. It refers to – the tendency of oil rich (resourcerich) countries to have weaker economic performance than countries without oil (resourcepoor) countries[724]. The 'paradox of plenty,' as the resourcecurse is often termed, is embedded in the ageold maxim: 'Necessity is the Mother of Innovation'. **Resource curse**, also known as the "*paradox of plenty*" refers to the paradox that countries with an abundance of natural resources, specifically nonrenewable resources like minerals and fuels, tend to have less economic growth, less democracy, and worse development outcomes than countries with fewer natural resources. For purposes of this chapter, resource curse was measured in terms of land grabbing, violent fights, crop destruction, destruction of cultural sites and failure to expose oil production agreements. Be it known that the curse is not the oil itself but the poor planning for it. It is the *economic and political mismanagement.*

Resource poor countries are forced to innovate and attain economic viability. By contrast, resourcerich countries suffer the paradox of plenty and remain poor.

In simple terms, the oil 'curse' is a situation whereby abundance of tradable natural oil reserves paradoxically leads to economic stagnation, the death of other traditional and nontraditional exports such as agricultural and manufactured products, and conflicts over the allocation of the oil resources.

Arthur Baineomugisha et al, assert that over time, common features have emerged of the "oil curse'' which include inter alia: increased chances of conflict in a country; the tendency for the real exchange rate to become overly appreciated; exposing the country to volatility, especially in commodity prices, with the attendant adverse impact on growth; environmental costs: Oil operations damage the environment and have adverse effects on the livelihoods of the communities around the production areas; the cash economy created by oil undermines those trying to work for longerterm and more sustainable development initiatives. People become disinterested in anything that does not deliver instant cash, with

[724] 11 Michael L. Ross, The oil curse: How Petroleum wealth shapes the Development of Nations, 2012, Princeton

agriculture and industry as the prime casualties. The growth of oil cash culture thus undermines real and sustainable development[725].

The usual explanation for this is the "Dutch Disease", named for the hardships that befell the Netherlands after it found North Sea gas. When a country strikes hydrocarbons, a sudden inflow of dollardenominated revenues often leads to a sharp appreciation in the domestic currency. That tends to make nonoil sectors like agriculture and manufacturing less competitive on world markets, thus leaving oil to dominate the economy. Jeffrey Sachs and Andrew Warner havprovided that the hypothesis of the Dutch Disease syndrome is that countries with abundant natural resources tend to innovate at a slower pace than resourcepoor ones[726]. The reason for this is over dependence on the easy money accruing from natural resources, which undermines the linkages between the various sectors of the economy that usually serve to keep the economy strong and healthy.

The key weakness of the ResourceCurse Argument is that it misses one key point, namely, that the real source of the 'curse' is not the natural resource. It is the economic and political mismanagement. This arises from weak state capacity to use 'windfall' revenues to steer the country to economic growth and development. It arises from weak laws, policies and institutions incapable of properly governing the 'oilresource' for longterm development and the inability to utilize the oil revenues to transform the national economy from primary commodity production to higher valueadded industrial and information activities. Indeed, for example, evidence shows that the link between oil and political violence is a result not of resource abundance per se but high corruption and authoritarianism[727].

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[725] Arthur Bainomugisha, Hope Kivengyere, Benson Tusasirwe, Escaping the Oil Curse and Making Poverty History: A Review of the Oil and Gas Policy and Legal Framework for Uganda, 2006**,** ACODE, Kampala, Policy Research Series No. 20, p.5.

[726] See, Indra de Soysa, The Resource Curse: Are Civil Wars Driven by Rapacity or Paucity? In, Nats Berdal and
David Malone (Eds.) Greed and Grievance: Economic Agendas in Civil Wars, Lynne Rienner Publishers, London,
2000.

[727] Wright, Gavin and Jesse Czelusta, 2002, Exorcizing the Resource Curse, available at http://wwwsiepr.stanford.edu/workp/swp02008.pdf (accessed 24 Jan 2013).

By implication, resource abundance begets poor performers in some cases, and good performers in others. For example, the abundance of oil in Nigeria blocked, rather than promoted, economic transformation. Political instability for example in the Niger Delta, accrued as rival claimants to the political economy disagreed violently over the allocation of the oil resources. In other words, resource abundance was a curse rather than a blessing for Nigeria. By contrast, countries such as Norway have benefited from the oil resource abundance. Norway, for example, was one of the poorest countries in Europe by the time of its oil discovery. In the 1960s, Norway still lagged behind its Scandinavian neighbors in GDP per capita and other economic indicators. By the 1990s, Norway had overtaken Denmark and Sweden[728].15 Today, Norway is one of the world's richest and wellgoverned countries, with some of the best human development indicators.

The paramount question that then arises is, how one explains the economic record of oilrich Norway in comparison with oilrich disasters such as Nigeria and what lessons of good practice can Uganda draw from both effective and ineffective performers.

[728] Hildegunn Kyvik Nordas and Ola Kvaloy, Oil Related Producer Services and Productivity: the case of Norway

Uganda has designed robust ownership structures and peopleled laws and institutions to man the nascent petroleum industry before production starts, to avoid the socalled 'oil curse.' "We need to build human capacity and create institutions that can manage the resources right from the beginning," President Yoweri Museveni said during the East African Petroleum conference and exhibition in Kampala. "We even had to suspend licensing of oil companies until core staffs in petroleum geosciences were trained and the necessary institutions created.[729]"16 In order to ensure that the resource will be used to yield lasting benefits to the present and future generations, there is need for a sound regulatory environment that fosters transparency in oil revenue allocations, balancing petroleum production with conservation of the different exploration areas' unique biodiversities and the wider environmental well being; ensuring the sectors of the economy will withstand fluctuating oil prices; enforcing high standards of corporate responsibility and compliance on part of the oil companies; ensuring that oil activities do not intensify land insecurity and other conflicts and building public participation and capacity to understand the new sector. Tackling the foregoing needs a sound legal, policy and institutional framework at all stages.

The hunt for oil in Uganda dates back to the early 1920's when significant oil exploration was done and substantial amounts of hydrocarbons traced in the Albertine Graben[730].17 This discovery was later to be followed by the first ever drilling of wells in 1938[731]. Further exploration was carried in the 1940's and 1950's and several shallow wells were drilled mainly for stratographic purposes.[732] However, oil activities were disrupted by Political turmoil that ravaged the country for so many years until the 1980's when aeromagnetic data across the entire Graben region was obtained. The aeromagnetic surveys carried out during 1983 and 1992 produced a ray of hope that indeed Uganda had the prospects of future oil reserves. The surveys were able to identify five sedimentary basins in the

[729] Ibrahim Kasita, "Uganda: Nation Positions Itself to Prevent Oil Curse'**,** the New Vision, 9 February 2011

[730] 17 Emmanuel Kasimbazi, Legal and Environmental Dimensions of Oil Exploration in Uganda, available at www.iucnael.org/.../365-emmanuel-kasimbazi-legal-and-environmental (accessed 13 Feb 2013)

[731] Ibid.
[732] Ibid.

country which included the Albertine Graben, Lake Kyoga basin, Hoima basin, Lake Wamala basin and the MorotoKadam basin[733]. Confirmatory ground surveys that were later carried out established that the most prospective basin with substantial drillable oil reserves was the Albertine Graben which is located in the western part of the country covering the districts of Masindi, Kibale and Hoima around Lake Albert and forming part of the western arm of the East African Rift Valley between the common Borders of Uganda and Congo and further stretching to the border with Sudan.

Uganda has been described by the oil industry press as Africa's 'hottest inland exploration frontier[734]'. Since 2008, major discoveries of oil have been made around Lake Albert, drilling began and early production is expected in 2016.[735] At least 800 million barrels of reserves have been established, and the Albertine Graben is estimated to hold up to two billion barrels of oil.

However, considerable uncertainty surrounds the figures and it is unclear up to this stage how much of this oil is commercially 'recoverable' and how many barrels a day will be produced.[736]

20 ACODE, Status of Oil and Gas Legislation, Infosheet no. 14 of 2011[733]

[734] World Bank (2010), Country Assistance Strategy for the Period FY 2011–15. p.60.

[735] Global Witness, 'Donor Engagement in the Oil and Gas Sector: An Agenda for Action', October 2010, available at www.globalwitness.org/sites/default/files/uganda_final_low.pdf (accessed 14 March 2013)

[736] Ugandan government in co-operation with Norway Ministry of Energy and Mineral Development, 'Strengthening the Management of the Oil and Gas Sector in Uganda', February 2010, p. 2; Brian Glover, Tullow Oil country
manager for Uganda, quoted in, 'Tullow Oil: New drilling could put Uganda in top 50 producers', Dow Jones
Newswires, 20th February 2009.

Additionally, it is a fact that oil prices are unstable and quite volatile hence it's difficult to estimate accurately Uganda's likely revenues from oil. It is nonetheless apparent that oil revenue will have a significant impact on a country with an economy the size of Uganda's. According to the World Bank, it has the potential to double government revenue within 6 to 10 years and to constitute an estimated 1015 percent of gross domestic product (GDP) at its peak[737]. However, this can only be possible if production goes on without hitches. This oil wealth comes along with a great window that will help Uganda escape from its poverty trap onto a path to sustainable growth and development.

Be that as it may, international experience points to challenges which are often faced by resourcerich developing countries in translating mineral wealth into economic recovery and prosperity. So much has been written about the "resource curse" and in particular the 'oil curse'. Developing countries that become reliant on oil and minerals usually face a range of political, economic and social challenges. Issues have emerged on how economic growth and development can be achieved by oil rich developing countries through the optimum and effective allocation of oil resources. Key among these issues is a country's legal, policy and institutional frameworks put in place for the regulation and control of the oil and gas sector. Countries with a sound legal, policy and institutional frameworks for the regulation of their oil and gas sectors often achieve sustainable economic growth and development from their oil revenues. The reverse is also true; countries which lack such sound laws, policies and institutions to regulate their oil and gas sectors often have the management of their oil revenues put in the hands of a few political elites usually the ruling class, are scenes of political conflicts, rampant corruption, massive poverty, environmental degradation, civil and social strife the oil curse.

Various debates on resource management in third world economies have been primarily focused on two sets of actors that play a role in shaping the processes of resource extraction. These are corporate and State actors. Their activities in the resource exploration, development and production processes are scrutinized and appraised. In terms of state actors, questions are asked about policy and legal frameworks, transparency, institutional capacity to manage and monitor extractive industries, and the manner in which the state manages revenues from these

[737] Supra, note 23.

resources. Petroleum wealth has the potential to help raise millions out of poverty, but it also has the risk of plunging Uganda towards the resource curse. A robust legislative, policy and institutional framework which provides for accountability and transparency in the management of the sector is the first vital step to ensuring that Uganda gets a fair deal for its resources and the ordinary citizen benefits. Despite the fact that oil in Uganda was discovered in 2006, the country still lacks a comprehensive legal, policy and institutional framework. It was only of recent that the Oil Bills have received assent and become law and but some of the provisions in these Acts are wanting so far as the efficient and effective management of the oil resource is concerned.

Understanding the oil curse.

A lot of work has been written and a lot of research has been carried out about the phenomenon oil curse but very little work is available so far as the oil and gas sector in Uganda is concerned in light of the oil curse. However, Uganda is another example of a developing country with potentially transformational oil reserves, but which is, for now, utterly dependent on aid, that can use the revenues from her oil reserves to escape dependence and attain socioeconomic prosperity. In the world's poorest countries, natural resources and for the purposes of this research, oil, are often the major potential drivers of economic growth and development. These countries could use the oil revenues to reduce poverty. Unfortunately, stories of successful natural resource use are hard to find in the developing world. Poor governance and widespread corruption mean that too often the wealth generated from natural assets seldom reaches government accounts.

The Political elite and quite often the ruling class hijack state oil institutions, take advantage of weak laws and policies governing the oil and gas sector and in collusion with the foreign owned oil companies primitively amass wealth by diverting the oil revenues to their private enrichment. The extra money from oil revenues corrodes governance and encourages highlevel statelooting. With a few years before these revenues from the oil start to flow, this research is significant so far as it uncovers a host of early warning signs that will guide Uganda's revenue management.

Arthur Baineomugisha et al, assert that over time, common features have emerged of the "oil curse'' which include *inter alia*: increased chances of conflict in a country; the tendency for the real exchange rate to become overly appreciated; exposing the country to volatility, especially in commodity prices, with the attendant adverse impact on growth; environmental costs: Oil operations damage the environment and have adverse effects on the livelihoods of the communities

around the production areas; the cash economy created by oil undermines those trying to work for longerterm and more sustainable development initiatives. People become disinterested in anything that does not deliver instant cash, with agriculture and industry as the prime casualties. The growth of oil cash culture thus undermines real and sustainable development[738].

Gary and Terry Lynn[739]wrote abefore Uganda's oil potentially was publicly nown and in his report the researchers discuss various earlier exporters notably in the gulf of Guinea, Chad, Cameroon. And concluded that without improving their democratic institutions and administrative capacity, it is unlikely that African oil exporters will be able to use Petro dollars to fuel poverty reduction but instead oil monies will result into the worst conditions if such monies are governed by wea institutions, poor laws and policies.

Michael L Rose, asserts that countries that have abundant oil reserves have less democracy, less economic stability, and more political turmoil than countries without oil.

According to him, in the oil curse, oil wealthy typically creates less economic growth than it should and more specially in poor countries. He warns that global thirst for oil and petroleum is causing companies to drill in increasingly poor states. By implication, resource abundance begets poor performers in some cases, and good performers in others. For example, the abundance of oil in Nigeria blocked, rather than promoted, economic transformation. Political instability for example in the Niger Delta, accrued as rival claimants to the political economy disagreed violently over the allocation of the oil resources. In other words, resource abundance was a curse rather than a blessing for Nigeria. By contrast, countries such as Norway have benefited from the oil resource abundance. Norway, for

[738] Arthur Bainomugisha, Hope Kivengyere, Benson Tusasirwe, *Escaping the Oil Curse and Making Poverty History: A Review of the Oil and Gas Policy and Legal Framework for Uganda*, 2006**,** ACODE, Kampala, Policy Research Series No. 20, p.5.

[739] Ian Gary and Terry Lynn, Bottom of the Barrel. Africas oil Booom and the poor, Catholic Relief Services,

example, was one of the poorest countries in Europe by the time of its oil discovery. In the 1960s, Norway still lagged behind its Scandinavian neighbors in GDP per capita and other economic indicators. By the 1990s, Norway had overtaken Denmark and Sweden.15 Today, Norway is one of the world's richest and wellgoverned countries, with some of the best human development indicators. The paramount question that then arises is, how one explains the economic record of oilrich Norway in comparison with oilrich disasters such as Nigeria and what lessons of good practice can Uganda draw from both effective and ineffective performers.

Uganda has designed robust ownership structures and peopleled laws and institutions to man the nascent petroleum industry before production starts, to avoid the socalled 'oil curse.' "We need to build human capacity and create institutions that can manage the resources right from the beginning," President Yoweri Museveni said during the East African Petroleum conference and exhibition in Kampala. "We even had to suspend licensing of oil companies until core staffs in petroleum geosciences were trained and the necessary institutions created. In order to ensure that the resource will be used to yield lasting benefits to the present and future generations, there is need for a sound regulatory environment that fosters transparency in oil revenue allocations, balancing petroleum production with conservation of the different exploration areas' unique biodiversities and the wider environmental well being; ensuring the sectors of the economy will withstand fluctuating oil prices; enforcing high standards of corporate responsibility and compliance on part of the oil companies; ensuring that oil activities do not intensify land insecurity and other conflicts and building public participation and capacity to understand the new sector. Tackling the foregoing needs a sound legal, policy and institutional framework at all stages.

Although, the UN General Assembly Resolutions have affirmed the sovereignty of the people over their natural wealth and resources, one of the most profound impacts of oil discovery that cuts across all districts is an apparent escalation of land conflicts associated with oil and gas in Uganda. Prior to the discovery, the majority of the community members in the oil refinery areas perceived oil refinery activities as an investment that would uplift their lives and the status of their region through among others provisions of employment opportunities and better standards of living; but is this reflected on ground today? This question created a puzzle that I have investigated and found mitigation measures to.

Historical background. The petroleum industry is not of recent origin, but petroleum's current status as the key component of politics, society, and technology has its roots in the early 20th century. The invention of the internal combustion engine was the major influence in the rise in the importance of petroleum (Andersen, 2008). The earliest known oil wells were drilled in China in 347 AD or earlier. They had depths of up to about 800 feet (240 m) and were drilled using bits attached to bamboo poles. By the 10th century, extensive bamboo pipelines connected oil wells with salt springs. The ancient records of China and Japan are said to contain many allusions to the use of natural gas for lighting and heating. Petroleum was known as burning water in Japan in the 7th century (Graham, Amos and Pluptre, 2003).

The first streets of Baghdad were paved with tar, derived from petroleum that became accessible from natural fields in the region. In the 9th century, oil fields were exploited in the area around modern Baku, Azerbaijan. These fields were documented by the Arab geographer Abu alHasan in the 10th century, and by Marco Polo in the 13th century, who described the output of those wells as hundreds of shiploads. In 1745 under the Empress Elisabeth of Russia, the first oil well and refinery were built in Ukhta by Fiodor Priadunov (Global, 2010). Through the process of distillation of the "rock oil" (petroleum), he received a kerosenelike substance, which was used in oil lamps by Russian churches and monasteries (though households still relied on candles). In 1846, Baku (settlement

BibiHeybat), the first ever well drilled with percussion tools to a depth of 21 meters for oil exploration (Kabanda, 2008).

In 1848, Young set up a small business refining the crude oil. The new oils were successful, but the supply of oil from the coal mine soon began to fail (eventually being exhausted in 1851). Young, noticing that the oil was dripping from the sandstone roof of the coal mine, theorized that it somehow originated from the action of heat on the coal seam and from this thought suggested that it might be produced artificially (Newig, 2007). By 1910, significant oil fields had been discovered in the Dutch East Indies (1885, in Sumatra), Persia (1908, in Masjed Soleiman), Peru (1863, in Zorritos District), Venezuela (1914, in Maracaibo Basin), and Mexico, and were being developed at an industrial level. Significant oil fields were exploited in Alberta (Canada) from 1947. First offshore oil drilling at Oil Rocks in the Caspian Sea off Azerbaijan eventually resulted in a city built on pylons in 1949 (KabaM'baye, 2010). The top three oil producing countries are Saudi Arabia, Russia, and the United States (Newig, 2007). About 80% of the world's readily accessible reserves are located in the Middle East, with 62.5% coming from the Arab 5: Saudi Arabia (12.5%), UAE, Iraq, Qatar and Kuwait. However, with high oil prices, Venezuela has larger reserves than Saudi Arabia due to its crude reserves derived from bitumen (Newig, 2007).

Generally, there is a consensus in the literature that oil as a natural resource has become a kind of paradox for developing economies that engage in its production. This growing concern is due to the rising and persistent nature of violent conflicts experienced in most of such states. Thus, oil revenues have become a threat to the achievement of sustainable democracy, peace and development in some oilrich developing economies like Nigeria, Angola, Gabon, Venezuela and Sudan (Andersen, 2008). This has resulted in claim that oil exploration activities institute poverty and economic inequalities, due to their impact on the environment. Thus, oil resources exploitation fuels environmental scarcity and competition, resulting in violent conflict, as other resources, such as land and water become scarce for other economic activities (KabaM'baye,

2010). De Silva and Ranjith (2011), for instance, contextualized such a situation as 'supply induced scarcity'.

Uganda is among the few African countries that are putting in place mechanisms to extract the oil resource besides the oil giants Libya, Egypt, Angola. Uganda has been described by the oil industry press as Africa's 'hottest inland exploration frontier'. If current estimates of the countries oil potential from exploration to date are correct *(around 1 to 6.5 billion barrels or bbl of recoverable reserves as of June 2016),* this would put Uganda among the foremost African oil producers, or 'among the world's top 50 producers (Kakuba, 2013). By comparison, oilrich Equatorial Guinea, dubbed the 'Kuwait of Africa', had proven reserves of 1.1 billion bbl in 2007. Given the recent volatility of oil prices, it is difficult to estimate Uganda's likely revenues from oil with any certainty.

Yet whatever the oil price, if production goes ahead without hitches, the country's budget looks likely to receive a major windfall, potentially doubling or even tripling Uganda's current export earnings that stand at US$2 billion. (Kasimbazi, 2012)

Planning and Resource Curse

Planning (also called forethought) is the process of thinking about and organizing the activities required to achieve a desired goal. It involves the creation and maintenance of a plan, such as psychological aspects that require conceptual skills (Kakuba, 2013). Bategeka, Kiiza and Ssewanyana (2009), in their article titled Managing Oil Revenue in Uganda point out that there are tests available, which can be used to measure someone's capability of planning well. As such, planning is a fundamental property of intelligent behavior. In this study, planning basically refers to the process that entailed the preparatory process of the oil activities in Hoima.

Planning has a specific process and is necessary for multiple occupations (particularly in fields such as management and business (Otoa, 2011). In each field there are different types of plans that help companies achieve efficiency and effectiveness. Olupot (2012) in his article titled "An Assessment of an Oil Spill in

Gladstone, Australia–Impacts on Intertidal Areas at One Month Postspill" notes that an important, albeit often ignored aspect of planning, is the relationship it holds to forecasting. Forecasting can be described as predicting what the future will look like, whereas planning predicts what the future should look like for multiple scenarios (Walakira, 2011). Different from the earlier study, this study looked at planning as an activity that combines forecasting with preparation of scenarios and how to react to them.

Kharaka and Otton (2003) who carried out a study on "Environmental Impacts of Petroleum Production" did find in their initial results from Kabinda petroleum environmental research sites that poor planning in oil industries may sometimes give rise to a resource curse. First there is an agency problem, or conflict of interest, involving members of the organization, who might be owners, managers, workers or consumers. The process of planning for development increases the amplitude of public finances and public expenditure programmes. The impatience for quick growth has often led to hasty decision making and consequent deficiencies in the planning, organization and execution of programmes.

According to Kasimbazi (n.d) in his article entitled "Legal and Environmental Dimensions of Oil Exploration in Uganda" indicates that the National Oil and Gas policy is the basis for planning in the oil industry. The NOGP promotes high standards of transparency and accountability in licensing, procurement, exploration, development and production operations as well as management of revenues from oil and gas. The policy also supports disclosure of payments and revenues from oil and gas using simple and understood principles in line with accepted national and international financial reporting standards. The policy confers on the Ministry of Energy and Mineral Development (MEMD) the main roles of Government in managing petroleum resources, that is, policy making and implementation; regulation of the subsector; and managing the commercial/business aspects. The MEMD is therefore the lead agency in implementation of the National Oil and Gas Policy for Uganda. Because the oil industry presents both great promises and great risks to Uganda, the MEMD provides civil society and the broader public with methods to express concerns

about oil regulation. If the civil society discovers that a regulation is not being followed or enforced, it can have more options to seek redress than initiating a long and costly court case against an oil company or government. However, the worry is that the poor planning for the NOGP may result in oil being a resource curse in Uganda. Put simply, as I will discuss shortly hereby, the curse is not the oil itself, it is the planning.

Furthermore, Kasimbazi (2011), in his study on "Environmental Regulation of Oil and Gas Exploration and Production in Uganda", notes that that NOGP names transparency and accountability as guiding policy principles on oil management. If these principles are adhered to, instances of crises in the industry witnessed in countries like Nigeria and Angola can be avoided. It is against this background that citizens in Nigeria and Angola have labelled oil and gas a resource curse. Openness and access to information are described as fundamental rights, and disclosure of information is treated as being very vital in relation to stakeholder involvement.

This information helps stakeholders to get details about resources and how they are being exploited in the country. The policy's future action points include the adoption of a new law regulating the payment, use and management of petroleum revenues, and participation "in the processes of the Extractive Industries and Transparency Initiative (EITI)" which supports improved governance through the verification and full publication of company payments and government revenues from oil, gas and mining. The policy emphasizes the role of different government authorities in the implementation of the oil and gas policy. However, the policy is silent on the issue of plan enforcement, and as a result, how to hold the different players in the oil industry accountable. In relation to local communities "all efforts shall be made to emphasize peaceful resolution of disputes".

Coordination and Resource Curse

Mamanga (2012), in his study on oil management in Nigeria, noted that coordination is the synchronization and integration of activities, responsibilities, and command and control structures to ensure that the resources of an organization

are used most efficiently in pursuit of the specified objectives. He further notes that along with organizing, monitoring, and controlling, coordinating is one of the key functions of management. Coordinating is the act of making all the people involved in a plan or activity work together in an organized way. Different from the earlier study, the researcher noted that coordination referred to supervision of the key oil activities.

Mbanga (2011) in his article in the Weekly Observer titled "Oil boom: Uganda faces environmental challenges" notes that the process of organizing people or groups so that they work together and well is referred to as coordination. The process of causing things to be the same or to go well is described by Mamanga (2012) as coordination. Coordination may entail the ability to move different parts of the industry or oil industry together so as to get the best fruits out of it all. War has been part and parcel of the Kabinda region of Angola, because of government's failure to coordinate activities there. Nakayi (2013) in her article *"Is Uganda's Oil region another northern Uganda in the making?"* draws on how poor coordination may be a resource curse and also draws attention to the effects of oil resources in fuelling and sustaining authoritarian rulers and bad governance, involving corruption and lack of transparency at state and corporate business level. According to her ideas, oil fuels grievance or greed amongst local oil communities, as they suffer from poverty in the midst of abundant resources (Nakayi, 2013). Other negative social effects of oil resources are the changes they bring to the political and economic affairs of such areas. These may include changing the social relations of the affected people, pitching members of local oil village communities against each other as they fight over recognition and access to oil revenues, and pitching the oil communities against the state and the oil producing companies (Kakuba, 2013).

Therefore, this research looks at the causes and effects of resourcefuelled violence at the community level. This is a deviation from major intellectual works on oil resources conflicts, which are statecentred and macrolevelbased, such as the works of Andersen (2000). Thus, unlike the macrolevel, a microlevel approach advances

our understanding of conflict by its ability to account for individual and group heterogeneity within one country or one conflict. Therefore, this work is born out of a desire to understand the contribution of oil resources to violent conflicts in local oil village communities in Hoima.

Neff, Nancy and Donald (2014) in their article titled "Offshore Oil and Gas Development Activities Potentially Causing Longterm Environmental Effects" offers a picture of the extensive economic developments and other potential benefits for oil host states accruing as a result of good coordination. This, according to her, is due to the fact that extractive industries can 'generate sizeable revenues, create jobs and business opportunities, and often bring new roads and access to water and power to isolated rural areas in which they are typically located' (Neff,

Nancy and Donald, 2014). This situation should bring about economic growths and developments such as reduction in poverty and infrastructural development to host states. However, in many developing states with oil resources as the main source of revenue, their cases are different, as oil resources and their revenue management have continually fuelled violent conflicts rather than having a positive impact on the lives of the people.

Olupot (2012) in his study titled "Oil *and Gas in Uganda: A Critical Assessment of the Benefits and Challenges of the Exploration to the Residents in Hoima"* notes that oil resourcesinduced conflicts in many cases create two or three parties to the conflict the government of the host state, the oil producing companies (which in most cases are MNCs) and the host local communities, which in this research will be referred to as oil village communities. The revenues from oil resources are maximized by the state and the MNCs, leaving the host oil communities in a state of alienation and deprivation. In many cases, such as in Nigeria's Delta oil region, such negative impact easily manifests in form of environmental degradation and poverty and has been a cause for grievance by oil communities (Olupot, 2012). However, beside the physical effects of oil resources on the host communities, there are other intense fundamental factors, such as coordination which may help

stop these conflicts (Olupot, 2012). Incidentally, the situations of struggle for power, leadership and access to the control of oil resources benefits arise out of the nature of the new relationship that exists between the parties that are directly or indirectly involved in oil production and utilisation.

To monitor or monitoring generally means to be aware of the state of a system; to observe a situation for any changes which may occur over time, using a monitoring or measuring device of some sort. To monitor is to supervise ongoing activities to ensure they are oncourse and on schedule in meeting the objectives and performance targets *(Andersen, 2000).* In addition, recent literature suggests that oil resources in developing states with weak governance structures, such as poor monitoring, continues to impact negatively on the stability, growth and sustainability of such countries, as human rights abuses are continuously on the increase (Andersen, 2000). This assumption of interest being the objective source of conflict is contentious, especially where such conflict has other contending issues like ethnicity, inequality and social exclusion. This is because conflicts and violence, just like other social processes, can seldom be explained by single cause and that the primary determining cause of social change is impossible to prove; instead, social change tends to represent a dynamic interaction of numerous factors over time (Responding to Conflict, 2005). This study therefore approached the problem using mixed methodological approaches compared to the earlier study that used purely qualitative methodological approaches to investigate the problem.
According to Newig (2007), in his study titled “Does Public Participation in Environmental Decisions Lead to Improved Environmental Quality?” notes that when the conflicts are not monitored in oil regions they escalate; and when this escalation crosses the threshold of violence, the costs and the difficulty of managing them increase significantly. Violence becomes the cause of more violence”. It therefore implies that in pursuance of different interests by parties in a relationship, conflicts arise. Consequently, the idea that the existence of different interests fuel conflicts, therefore makes the position of a ‘single cause’ in conflicts or violent conflict a contentious one, as there are indications or likelihoods that no

conflict will have a single cause, but could have main or major factors supported by other minor or secondary factors. Newig (2007) also provided a more robust explanation stating that "conflicts can have primary causes that take precedence over secondary ones but the variegated nature of human politics, economics and society means that a single factor cannot spark a conflict in a vacuum". In many cases, causes such as economics or social exclusion may easily be considered as violence, especially where they convey less or no physical harm. However, where such conflict situations breed violence, or develop into a violent conflict, there are concerns.

These imbalances in relations are mostly experienced with regards to growth, changes and development, which are demonstrated in relation to issues such as unequal social status, unequal wealth and access to resources, and unequal power, leading to problems such as discrimination, unemployment, poverty, oppression, among other forms of social exclusions (Responding to Conflict, 2000). These factors listed here are not different from definitions provided in the classical definitions of conflicts. In all, it is a demonstration of unequal stake in a relationship among or between parties, leading to incompatibility of goals. Therefore, all conflicts such as those on oil resources should first and foremost be seen from a traditional definition of conflict and violence. In this case study, it comprises of incompatibility of interests and values among parties who are directly or indirectly linked to the oil resources and how oil will be monitored. Furthermore, conflict is equally an outward expression of imbalanced relationship or relations of economic, political and socioculture which have cumulated into violent responses. Thus, conflicts take place within a structured framework of a relationship of dominance, resulting in an asymmetrical relationship, as one party is stronger and dominates the other.

Olupot (2012) in his work **"*Assessing Capacity for Participatory Natural Resource Management"*** notes that there are further arguments that oil and mineral dependent states tend to suffer from unusual high rates of corruption, authoritarian government, government ineffectiveness, military spending, and civil war. While considerable evidences are presented by Ross in support of the above findings,

they suffer from the problem of overgeneralisation. The research approach of examining all the regions of an oil producing state or country with the same indices or as a unit, limits its ability to differentiate the extent to which oil resources individually affect each region of such state, especially the oil village regions or communities where the bulk of the oil producing activities take place (Olupot, 2012). Unlike the focus of this study, most existing literature and findings paid more attention to the extent and effects of oil resources on the state. However, the few researches which focused on oil communities, found that the consequences of violent conflicts in oil village communities are linked mainly as an act of the state, with little or no contributions
from host communities.

A study held in Buliisa reveals that the residents there are not given feedback about the oil exploration process and there is no local government office dealing with issues of oil consultation. It was established from the district council employees that the existing governance structures do not create a focal person or department for oil issues at district level or below. Evidence suggests that the technical planning committees, made up of all heads of department is limited in terms of sharing and disseminating information with lower levels of local government. Oil activities are done in seclusion of the community members, a thing which demeans their social permit.

Findings revealed that there is a positive relationship between planning and the resource curse in oil producing areas in Uganda. The citizens disputed the fact that they were involved in the planning process. This is in line with De Silva (2011)[74016] in his work *"Natural Resource Governance, Sustainability and Poverty Reduction,"* who asserts that the right to participate including participating in planning for natural resources is enshrined under Article 21 in the UDHR and under article 25 in ICCPR, including treaty bodies and their general comments. The right of all citizens of a country to participate in public affairs is enshrined in article 25 of the International Covenant on Civil and Political Rights (hereinafter

[740] De Silva, Asoka and RanjithMahindapala (compilers). 2011. "Natural Resource Governance, Sustainability and Poverty Reduction- Proceeding of the Global Learning Workshop." Gland: IUCN.

called the ICCPR) which states that *every citizen shall have the right and the opportunity, without distinction and without unreasonable restrictions (a) to take part in the conduct of public affairs, directly or through freely chosen representatives; (b) to vote and to be elected at genuine periodic elections; (c) to have access, on general terms of equality, to public service in his country.* The ICCPR is legally binding for the countries that have ratified the covenant. Uganda is a party to several human rights mechanisms that provide for the right for public participation including the ICCPR, the ICESCR, CEDAW and the ACHPR.

THE POLICY AND LEGAL FRAMEWORK FOR SOLVING THE OIL CURSE.

The Policy Framework.

Generally, the policy framework is the foundation of the legal framework and law is ordinarily a result of policy. It is therefore prudent to first discuss the policy framework in the oil and gas sector in Uganda before dwelling into the legal framework. In February 2008, the Ministry of Energy and Mineral Development published the National Oil and Gas Policy (NOGP). The Policy explicitly recognizes many of the challenges associated with naturalresource wealth, including the need to mitigate the potential for negative economic and fiscal impacts that often stem from a sudden influx of revenue in the extractive industry sector.42. The National Oil and Gas Policy outlines internationally recognized mechanisms for managing impacts associated with the sudden influx of resource wealth to enable the country avert the resource and channel oil and gas revenue into sustainable development outcomes. "The policy also highlights the need for a long term national strategy to ensure optimal impacts from oil and gas exploitation by maximizing benefits to Ugandans along the industry "value chain". The overarching goal of the policy is that oil and gas development in Uganda will 'contribute [741]to early achievement of poverty eradication and create lasting value to society.

[741] Available at http://conserveuganda.files.wordpress.com/2010/06/national-oil-and-gas-policy-for-uganda.pdf

In particular, the NOGP concurs with the emerging global consensus on the critical importance of transparency in handling all aspects of naturalresource management, with transparency and accountability towards stakeholders enshrined as a guiding principle in Uganda's future governance framework 'Openness and access to information are fundamental rights in activities that may positively or negatively impact individuals, communities and states. It is important that information that will enable stakeholders to assess how their interests are being affected is disclosed. This policy recognizes the important roles different stakeholders have to play in order to achieve transparency and accountability in the oil and gas activities. This policy shall therefore promote high standards of transparency and accountability in licensing, procurement, exploration, development and production operations as well as management of revenues from oil and gas. The policy will also support disclosure of payments and revenues from oil and gas using simple and understood principles in line with accepted national and international financial reporting. The NOGP is a very important document and sets a high standard for the future governance of oil in Uganda. It is, however, more a set of principles than a detailed governance guide. The key stakeholders in Uganda's oil are spelt out in the National Oil and Gas Policy. They include the following: i) the central Government; ii) the oil exploration/extraction companies; iii) the district local governments of areas where oil has been discovered; and iv) the owners of land where oil has been discovered. As will be discussed later, Bunyoro Kitara Kingdom is demanding recognition as one of the key stakeholders. Petroleum exploration and production activities in Uganda were previously governed by the Petroleum (Exploration and production) Act, Chapter 150 of the Laws of Uganda, 2000; the Petroleum (Exploration and Production) (Conduct of Exploration Operations) Regulations, 1993 and the Production Sharing Agreements (PSA's). The Act came into effect in September, 1985 and was considered adequate for the petroleum operations being undertaken at that time. These activities included promotion, licensing of exploration acreage to oil companies and monitoring of their activities. The formulation of this Act was not guided by a policy on oil and gas; there was none and the level of skepticism in the country at that time

regarding the petroleum potential of the country was high. Up to 2003, there was no appreciation of the country's oil potential to the extent that even the Energy Policy of 2003 only catered for the establishment of that potential.However, following the unprecedented discoveries of oil and gas in the Albertine Graben and early confirmation of the commerciality of these discoveries, it became instructive to put in place a new regulatory framework to reflect the new reality. With the support of the Norwegian Government under the project: "Strengthening the State Administration of the Upstream Petroleum Sector in Uganda," the National Oil and Gas Policy was put in place and this lay the basis on which the development and management of the oil industry would be based. This Policy recommended, inter alia, the formulation of a new petroleum law for the country and it was upon this Policy that the new legislation on oil in Uganda is based: The Policy recommends upgrading of the existing regulatory framework by putting in place a new law for the administration of oil and gas activities and a law for the management of oil and gas revenues. The former will better provide for the development and production phases of the oil and gas value chain, bring on board international best practice in areas like improved oil recovery together with Health, Safety and Environmental standards. It will also operationalise the Oil and Gas Policy by providing for, among others, competitive licensing and national content in the sub sector. The latter will be formulated to regulate the payment, use and management of oil and gas revenues and their use to create lasting value for the entire nation. This will include prescribing the necessary frameworks to manage the revenues used to support the national economy and creation of a sustainable asset in form of a petroleum fund to store revenues not used in the national economy. It shall also provide for the sharing of royalties in accordance with the constitution. The Policy addresses the crosscutting issues between oil and gas activities and the country's education and research plans, employment opportunities and patterns, population distribution, land ownership and use, energy availability together with relationships with other countries. It also recognizes that if the country's petroleum resources and revenues are not well managed, the sub

sector has the potential to have the most negative impact on society, "The Oil Curse" or the paradox of plenty **Institutional and Regulatory Framework**.
Promotion of the country's petroleum potential together with implementing and regulating the initial exploration efforts had been ably undertaken by the Ministry of Energy and Mineral Development through the Petroleum Exploration and Production Department, (PEPD) and good results have been achieved. However, the increasing number of investors, subcontractors and other stakeholders are leading to an increase in the volume and complexity of tasks in managing this sub sector. In line with Government's institutional reform policy of Regulatory Best Practice (RBP), policy, regulation and the business/commercial aspects of the oil and gas sub sector, the NOGP recommended that these roles be separated. The Policy now recommended for the Ministry responsible for oil and gas to handle policy aspects while new institutions are set up to handle the regulatory and business/commercial aspects respectively.

The 1985 Act only recognized one department to handle all the upstream aspects of the oil and gas industry namely; Petroleum Exploration and Production Department (PEPD), headed by a commissioner. The National Oil and Gas Policy (NOGP) recommended the establishment of the Petroleum Authority of Uganda to handle the regulatory functions; the National Oil Company to handle the commercial interests of the state; and the Upstream Petroleum department as part of the Directorate of Petroleum to advise on policy issues and resource management. The Directorate of Petroleum will comprise the upstream, midstream and downstream departments. This is important because it ensures the necessary link between the downstream and the upstream subsectors of the oil industry. Traditionally, the MEMD (Ministry of Energy and Mineral Development) has had the upstream and downstream departments. With the discovery of commercial oil and gas resources in the country, the government has been focusing on future production and value addition of the discovered petroleum46. The Ministry has put in place a Midstream Unit to specifically promote, monitor and regulate crude oil and gas, storage and bulk transportation,

refining and gas conversion. The Unit is expected to grow into a fullyfledged Midstream Department. Consequently, the ministry is now developing the human resource capacity to undertake these new responsibilities. The NOGP recognized the need to update existing Legislation. The experience in PEPD in particular and Government in general is that if the legal and regulatory framework were not in place, management of the oil industry in the country to date would have been difficult. Government recognized the inadequacies in the existing regulations. A lot had changed in the oil industry since the enactment of the old law on oil and gas (the 1985 Act). The existing regulations cover exploration operations and do not adequately address development and production phases. The delay in the policy formulation and the enactment of the petroleum resource law contributed to the delay in amending the existing regulations as this is supposed to operationalize the new Act. Before the February 2008, when the NOGP was put in place, licensing was conducted on an open door policy first come, first served. Although this was the method of licensing available to the country then, it did not encourage competition and may have denied the country the opportunity of efficiency that comes with competition. The NOGP recommended competitive bidding in licensing; not only to get the best contractor, but also to have multiple contractors within the contract/exploration area unless circumstances dictate otherwise. This is in line with the Policy objective: "To ensure efficiency in licensing areas with the potential for oil and gas production in the country" by: Putting in place appropriate legislation; Acquiring and preparing data for licensing; Carrying out promotion; Preparing procedures and criteria for competitive licensing; Undertaking open and transparent licensing rounds; Reviewing and updating the Model PSA (Production Sharing Agreements) in light of recent developments in oil exploration in the country.

Institutional Cooperation and the environmental management pillar

The National Oil and Gas Policy recommended roles for various institutions of Government and civil society. Cooperation between the two will be necessary so as to avoid disharmony in the management of the oil industry in the country. One example where institutional cooperation is of paramount importance is in the

Environment Pillar which includes NEMA (National Environment Management Authority), UWA (Uganda Wildlife Authority), NFA (National Forestry Authority), Directorate of Water and that of Fisheries. Cooperation of these institutions will be critical for the implementation of Government policies on the environment.

Currently the various institutions under the environment pillar have cooperated in monitoring impacts of oil on a quarterly basis. There are monitoring committees at national and field levels. However, these committees will need to be strengthened to effectively execute their mandates. Environmental management in Uganda is aimed at achieving National Objectives and Directive Principles of State Policy, that promote sustainable development and public awareness of the need to manage land, air, and water resources in a balanced and sustainable manner for the present and future generations as enshrined in the 1995 Constitution of the Republic of Uganda.

The NOGP highlights the fact that the environment and biodiversity are neatly balanced for mutual benefit and survival and accepts responsibility to maintain this balance. To its credit, the policy recognizes[742] that oil activities all over the world interfere with this balance, both through normal activities and through accidents such as spillages. The policy needs to be specific and propose actual frameworks for dealing with environmental issues resulting from the exploitation of oil reserves. It should do more than discourage bad practices and promote good practices. It needs to recognize that wherever there is oil exploration, there are drastic effects on the environment. Therefore, the policy should be strong on the regulations to be followed as regards pollutants and toxins. Government must in addition scrutinize oil companies' inhouse guidelines and operating manuals to ensure that they are in line with what Uganda expects. The Policy states that the responsibility of maintaining a clean and healthy environment and the required safety during production is the responsibility of both government and the oil

companies, whose roles could be coordinated by NEMA[743]. The government and the oil companies must not be equal partners because this can lead to each passing the buck to the other. One must clearly have the upper hand and the authority to ensure that the lesser partner enforces the regulations.

The Constitution of the Republic of Uganda states clearly in Article 39 that, "Every Ugandan has a right to a clean and healthy environment." Therefore, the government has the responsibility to oblige any economic player to ensure this. The policy specifies new and general management plans taking into account the oil exploration activities. The general management plans specify different objectives of managing the protected areas and spells out actions on how to achieve the given objectives. However, the environment can benefit from petroleum operations by ensuring that these operations contribute to the conservation effort of the Government and its agencies thereby stemming or even reversing biodiversity loss.

Oil exploration and development environment issues are largely regulated through the National Environment Act and the other related regulations that prohibit degradation of the natural environment (Water, Air and Land), and promote the protection of biological diversity. Existing legislation, guidelines and policies that enforce/provide for detailed requirements for environment and pollution control are, however, inadequate for petroleum operations and the existing legal framework (policies, laws and regulations) in other sectors need to be updated as well. Furthermore, there is need to develop new regulations and standards relevant to the oil and gas sector since they don't exit. This problem is compounded by lack of baseline data and updates of data regarding forests and fisheries, among others, which need to be done as a matter of urgency. In many cases, human capacity and technical infrastructure in government agencies is currently inadequate to handle upstream and downstream oil and gas impacts on the environment.

[743] Available at http://conserveuganda.files.wordpress.com/2010/06/national-oil-and-gas-policy-for-uganda.pdf

In addition, there is insufficient knowledge about the environment and possible environmental impacts of oil and gas exploration in the areas with the potential for oil and gas production. This calls for integrating environmental safeguards in all stages of exploration, development and production, carrying out a Strategic Environmental Assessment (SEA) for the Albertine Graben to provide policy makers with information on upstream production and also guide the site specific Environmental Impact Assessment (EIA), oil spill contingency planning that will provide guidance on oil spill responses and actions (including a risk analysis of the oil and gas activities) and stakeholder sensitization**2.2.2.3. Revenue Management**

Oil and gas activities should be most efficient and effective so as to maximize their returns. This policy strives to ensure that oil and gas resources are managed efficiently through reducing costs of operations and maintaining optimal levels of production. It also promotes effective revenue management by striving to ensure that petroleum revenues are used to boost balanced growth and sustainable development. Revenues accruing from oil and gas resources shall not be used for consumer purposes, but for durable investments like infrastructure development and other activities which will contribute to lowering the cost of doing business in the country.

"The revenue of the state is the state", Edmund Burke remarked in his Reflections on the revolution in France, and his words are emphatically confirmed by the experience of oil exporters. The origin of the state's revenue reveals the links among modes of economic development, the transformation of political institutions, the shaping of preferences and ultimately, the capacity of states to design or alter their development trajectories. When minerals are the key source of wealth for a state, the mining revenues alter the framework for decision making. They affect not only the actual policy environment of officials but also alter other basic aspects such as the autonomy of goal formulation, the types of public institutions adopted, the prospects for building other extractive capabilities and the locus of authority.

The emergence of the oil and gas resources presents opportunities as well as challenges. The key advantage is that oil and gas revenues are generated by the discovery of a sub-soil asset - "a gift from nature". The discovery of oil and gas resources is expected to translate into an improvement in the Government's wealth and hence the expansion of the country's economic growth and development. However, experience shows that with oil revenues, there can be challenges, especially if these revenues are not well managed. The key question is how to avoid falling into the 'resource curse' trap, a complex phenomenon in which, through several economic, institutional and political economy transmission mechanisms, oil and gas revenues could translate into economic stagnation and waste. One of the transmission mechanisms is through the "Dutch Disease" phenomenon, that I have already referred to, which a reference to a set of negative macroeconomic effects is caused by a large increase in resource–funded spending. Large increases in spending, if mainly allocated to domestically produced goods, can push up domestic prices, and eventually appreciate the nominal and real exchange rate. This often results in a shift of capital and labor into the production of non-traded goods and an erosion of the competitiveness of the non-resource economy.

The NOGP recommends the establishment of Key Institutions and mechanisms to support Government efforts to develop a robust revenue management system with adequate checks and balances to mitigate any risks by contributing to speeding up the process of putting in place the policy, legal and regulatory framework before oil production starts, for example, the establishment of the Petroleum Authority of Uganda54 and he National Oil Company. However, there is need to contribute to building the required capacity in these institutions if these institutions are to execute their legal mandate under the new oil legislation. In addition, the Policy does not clearly stress the independence of these institutions so far as management of oil revenues is concerned which clearly leaves room for political manipulation from the state in access to such revenues.

Capacity and institution building

The importance of capacity building for the country's ability to benefit from oil activities cannot be overstated, as indeed the draft Policy clearly stipulates. The NOGP takes cognizance of this56 and commits government to using oil revenues for training and skills development. It also makes a commitment to provide appropriate training to government personnel in the fields relevant to the oil sector. Unfortunately, African countries have often created capacity among their human resources only to lose them to greener pastures, especially given the high marketability of the specialized skills required in the oil industry worldwide. The policy is silent on this issue and yet it should pronounce itself on the problem and indicate how this can be mitigated (especially through retention measures, special remuneration packages and other incentives).

Shocks from fluctuating oil prices

The policy acknowledges the problems resulting from very high prices (wasteful spending) and very low pieces (extreme insecurity), and lists 57 possible options as mechanisms to manage the shocks resulting from fluctuating oil prices. The policy specifically indicates that government will establish a Uganda Petroleum Fund whose role will be 'to ensure effective oil and gas revenue management and to contribute to overall price stabilization.' While this is a positive proposition, it is important for the policy to set out exactly how the Fund will be managed and controlled to ensure transparency, accountability and good management and, in particular, to ensure that it does not suffer from interference of political officials. Although the policy proposes legislation to ensure proper systems of financial management and accountability of oil revenues, the experience of Uganda indicates that legislation has not necessarily resulted in respect for proper systems of financial management. The stakes will be very high for the oil industry and the temptation not to respect proper financial guidelines is likely to be even higher than usual.

Oil revenues to boost growth and development and create lasting benefits to society The principle is well outlined under the NOGP and it stresses ensuring that

petroleum revenues are used to boost balanced growth and sustainable development of the economy. But this is such an important aspect of economic development that the policy should spell out proposed means of achieving these two most highly sought after achievements but which many developing countries have failed to realize. In particular, using oil activities to develop other sectors is going to be a very crucial issue in the economy. The option therefore is to develop benchmarks for the key sectors under the Poverty Eradication Action Plan (PEAP). The policy stresses the issue of creating lasting benefits to society. The policy should, therefore, have specifically spelt out ways of using oil resources to transform the economy, especially by using oil revenues to invest heavily in research, science and technology. The Policy proposes that exploration and production should be gradual and spread out so that the current generation does not deplete resources at the expense of future generations. It is important for the policy to specify that government should set a ceiling, publicly known, on how much oil the country will produce, how many barrels per day (bpd)Additionally, the policy rightly proposes that the country should avoid pressure to speed up production in order to accelerate revenue generation or rapid returns to investment by companies. This is important in a sense that Government should be able to provide the necessary oversight over oil companies to balance their profit interests and the long term interests of the country. Unless the temptation by the investors to reap back their investments in a short time is well managed, Uganda may run out of oil before its development goals.

Transparency and sustainability As I will later indicate in this research, lack of transparency has been the problem of many oil producing African countries and has been responsible for the dismal economic benefits from the huge oil activities in many of those countries. It is, therefore, heartening that, in cognizance of this problem, the Policy calls for openness and complete access to information as well as disclosure of revenues received from the oil/gas, according to generally accepted accounting principles and international financial reporting standards. The Policy58 proposes possible ways to ensure transparency. Among these, it is noted

that in order to improve the level of transparency and accountability, PSAs should include commitments on transparency issues. The policy also correctly notes that "appropriate transparency and accountability systems are only effective if information is readily available." However, government commitment to transparency in the oil industry is still questionable. For example, in 2006, the Solicitor General issued a statement to the effect that the government will not avail the oil exploration agreements to members of parliament because the agreements were confidential. This would seem to undermine the government's claim to be committed to transparency and accountability, reiterated in the Policy as indicated above.The Policy further acknowledges that corruption is still widespread in Uganda, and the oil and gas sector could fall prey to the practice.60 The policy recognizes that Uganda has poor monitoring and control mechanisms61 yet the proposals about revenue sharing need good and strong mechanisms to ensure that the policies are adhered to and respected. One of the proposals of how to ensure proper monitoring and control is to 'develop clear Petroleum Sharing Agreement documentation." This is more reason why the PSA documentation must not be kept secret from the public.

Roles of departments.

The policy envisages and specifies roles for the following organs:62 The Ministry of Energy & Mineral Development through the Petroleum Exploration and Production Department (PEPD); The National Petroleum Authority; The National Oil Company; Cabinet and Parliament. The roles of the proposed organs are quite numerous and extremely technical. In addition, there are other institutions which will be involved in specific aspects of the industry, for example the National Environment Management Authority (NEMA), Uganda Revenue Authority (URA), Uganda Wildlife Authority (UWA), The Auditor General and the Local Governments. The question is whether the country has the requisite expertise to ensure that those roles are carried out efficiently with maximum benefit to the country, and without duplication or unseemly institutional conflict. There is a real likelihood that the multiplicity of institutions could create unnecessary

bureaucracy in the whole system and delay the decisionmaking process, creating frustration.

Planning of resultant urban centers.

Urban centers, even in oil prospecting areas, will spring up through private individual efforts. It is necessary for the government, through the policy, to ensure that the urbanization triggered around the oil activities does not lead to the development of slums and, even more importantly, that in the post boom period, Uganda does not experience the phenomenon of ghost towns. Strict guidelines and regulations may be needed to control inmigration and settlements in the oil field areas.

The Legal Framework.

Article 237 of the 1995 Constitution of the Republic of Uganda vests all land in Uganda in the hands of citizens who shall hold it in accordance with the Constitution and the tenure systems created there under. This Provision created the Public Trust doctrine in that government was to hold in trust on behalf of the people all natural resources including all natural lakes, rivers, wetlands, forests, national parks and other ecologically important areas. However, it is important to note that the provision was silent on minerals and petroleum. Nonetheless Article 244 of the same Constitution specifically dealt with minerals. The Article did not squarely put the minerals into government hands although under its Clause 2, it was provided that in the exploitation of these minerals the interests of individual landowners, local governments and the Central Government had to be taken care of. But, this Article was totally silent on Petroleum and issues affecting it.

In 2005, the 1995 Constitution of the Republic of Uganda was amended.63 This Constitution Amendment was a step forward in the oil and gas sector in Uganda since for the first time it specifically provided for minerals and in particular for petroleum. Under the new Article 244, all minerals and petroleum in, on or under any land or waters in Uganda were vested in the Government on behalf of the Republic of Uganda and therefore, the Government not only became a mere trustee but also the owner of all the minerals and petroleum on behalf of the people of Uganda. In addition the Constitutional provisions that vested in parliament the

powers to make laws regulating the exploitation of minerals, sharing of royalties, payment of indemnities and restoration of derelict lands were equally to apply to petroleum or in other words, the oil and gas sector.Before the enactment of the Petroleum (Exploration, Development and Production) Act 2012 and the Petroleum (Refining, Gas Processing, Conversion, Transportation and Storage) Act 2012, the existing legal framework was largely inadequate for the regulation of the oil and gas sector.

The 1985 Petroleum (Exploration and Production) Act, Cap. 150, Laws of Uganda was assented to on the 13th June1985 and its date of commencement is 27 September 1985. However, this law largely remained dormant until the enactment of the two oil Bills of 2012 because there was virtually no petroleum exploration and production to be regulated and in fact the Petroleum (Exploration, Development and Production) Act 2012 repeals this law.

Prior to the 2012 Oil Legislation by Parliament, this Act was the substantive piece of legislation guiding oil exploration and production activities in the country. However, this piece of legislation was over two decades old hence outdated and therefore not alive to the new and emerging challenges created by the discovery of commercial quantities of oil and gas. For example, this Act was enacted at a time when worldwide, natural gas was not looked at as a viable source of energy. Indeed, this Act recognized gas as an inconvenient associate of petroleum. A case in point was **section 31 of the Act** which prohibited wasteful or environmentally damaging oil field practices whereas subsection **(2) and (3)** of the same provision empowered the holder of a petroleum exploitation license (the licensee) to flare or otherwise destroy by fire the natural gas encountered during oil operations. In recent years however, natural gas has emerged as a cheap and highly viable alternative source of energy and in fact Uganda's Oil and gas Policy, 2008, recognizes gas as a major component of oil.

In addition, the **National Oil and Gas Policy for Uganda, 2008,** required to be operationalised by a vibrant law if the major goal of the policy of achieving optimum development from the oil resource was to be achieved. Further, there was need to give effect to **Article 244 of the Constitution of the Republic of**

Uganda, 1995. Therefore, as indeed noted by the Parliamentary Committee on natural resources,67 this culminated in the need to overhaul the existing legal framework so as to enhance the effective handling of petroleum activities. The old oil legal regime was inadequate in effectively and efficiently addressing key oil exploration and production concerns which included, *inter alia*, the environment, revenue management, transparency, institutional management and capacity building.

The Current Legal Framework and Its Adequacy.

"The new Act will, among other things, include provisions for the development and production of natural gas; bring on board international best practices in areas like Improved Oil Recovery (IOR) together with Health, Safety and Environment (HSE) standards; provide a harmonious relationship with the proposed law on management of petroleum revenues; provide for National participation as an effort to enhance value creation by oil and gas activities; and provide for a more competitive licensing process." National Oil and Gas Policy for Uganda, February 2008.

On February 8th 2012, following a 2011 Parliamentary resolution compelling the Executive to initiate laws for the oil sector, *Mr. Kamanda Bataringaya, the Minister for Minerals (as he then was*), tabled before Parliament the Petroleum (Exploration, Development and Production) Bill 2012 or otherwise, the Upstream Bill. The Bill was debated for over a year amid wide opposition and disagreement among the Legislators. However as expected, the ruling National Resistance Movement (NRM) used its overwhelming majority in Parliament to pass the controversial *Petroleum (Exploration, Development, Production) Act 2012* that prepares Uganda to move from oil exploration to production between 2014 and 2017. "President Museveni put a lot of pressure on members. He was calling members to vote against their own conscience and intimidating them at the same time," remarked Hon. Theodore Ssekikubo, a member of the House. There is no doubt that this controversy might have affected the quality of this important piece of legislation.

The Act was passed along with another one – the Petroleum (Refining, Gas Processing, Conversion, Transportation and Storage) Act which had been introduced in parliament around the same time. At the time of this research the two Acts are the substantive and fundamental Laws governing the oil and gas sector in Uganda. However, although this study makes reference to the entire legal regime governing oil and gas activities in Uganda, my major emphasis will be on the Petroleum (Exploration, Development and Production) Act 2012 or otherwise 'the upstream' Act since it is the major legal instrument before Uganda commences large scale commercial output of oil and gas.

The Act seeks to give effect to **Article 244 of the 1995 Constitution of Uganda** which provides that subject to Article 26 of the same Constitution all minerals and petroleum in, on or under any land or waters in Uganda are vested in the Government on behalf of the Republic of Uganda. The long title to the **Petroleum (Exploration, Development and Production) Act 2012**.

An Act to give effect to **article 244 of the Constitution**; to regulate petroleum exploration, development and production; to establish the Petroleum Authority of Uganda; to provide for the establishment of the National Oil Company; to regulate the licensing and participation of commercial entities in petroleum activities; to provide for an open, transparent and competitive process of licensing; to create a conducive environment for the promotion of exploration, development and production of Uganda's petroleum potential; to provide for efficient and safe petroleum activities; to provide for the cessation of petroleum activities and decommissioning of infrastructure; to provide for the payment arising from petroleum activities; to provide for the conditions for the restoration of derelict lands; to repeal the **Petroleum (Exploration and Production) Act, Cap 150; a**nd for related matters. Therefore, the major focus of the Act is to regulate the production, exploration and development of petroleum in Uganda. The major rationale behind the enactment is that the previous petroleum laws in Uganda did not extensively deal with exploration, development and production of the country's petroleum resources and cover issues such as the licensing, exploration, development and marketing Uganda's petroleum potential for investment.

The **Petroleum (Exploration, Development and Production) Act 2012** also sets up institutions for management of the petroleum resource in Uganda, including the National Petroleum Authority and the National Oil Company.

The following sections are therefore dedicated to out lining and analyzing the key concerns in the **Petroleum (Exploration, Development and Production) Act 2012** and its adequacy in the quest to finding sustainable economic growth and development out of the oil wealth.

Powers and duties of the minister

Throughout the entire parliamentary debates when the Act was still a Bill, no clause in the Bill was as controversial as clause 9. It was debated amid opposition and great disagreement among the Legislators: *"Last week, several M.Ps stormed out of Parliament protesting the recommitting of Clause 9 (now section 9 of the Act) which vests the powers of negotiating and awarding exploration contracts to the Minister of Energy, which they claimed would be cheating Ugandans."*

Among other things this provision vests with the minister the discretionary powers to: Granting and revoking of Petroleum licenses; Negotiating, endorsing and administering Petroleum agreements; Initiating, developing and implementing the oil and gas policy; Issuing petroleum Regulations and submitting draft legislation to parliament; Approving Plans for Field Development; Promoting and sustaining transparency in the oil and gas sector and Approving data management. Although the Section mandates the minister to grant and revoke licenses, negotiate and endorse contracts on behalf of government, it does not state with whom the minister can perform such duties. The same minister is mandated to approve plans for field development, promote and sustain transparency in the sector, develop Regulations and policies for the same. By concentrating such wide discretionary powers in one person to both issue oil licenses and regulate the industry, the Act creates the potential for insufficient capacity and conflicts of interest. Moreover, this Minister is appointed by the President and is personally answerable to him. This provision is a major launch pad for opportunistic and individualistic exploitation of oil resources, abuse of discretionary powers and corruption.

It is also noted with dismay t3hat **Section 54 of the same Act** allows the same Minister to receive direct exploration bid applications if, he is acting in a matter of national interest in respect of areas that are adjacent to the existing reservoirs. The area of exploration contracts is a technical matter and vesting all the discretionary powers in one individual who may lack the technical capacity to deal with matters of oil exploration is very dangerous to the success of the Ugandan oil and gas industry. It would for example be prudent practice if the Act provided that the Minister acts with the Petroleum Authority in the execution of his numerous roles under the Act.

Continuation of Licenses

The **Petroleum (Exploration, Development and Production) Act 2012** contains a transitional provision that is ambiguous in effect. **Section 188(1) (a) of the Act** provides that licenses issued under the old law "shall have effect from the commencement of this Act as if granted under this Act". This suggests that existing licenses should be subject to the provisions of the new law. However, the same section under **188(2)** provides for the opposite that "the terms and conditions including the rights and obligations under a license or petroleum agreement in force immediately before the commencement of this Act, shall not be less favorable than those that applied immediately before the commencement of this Act". This ambiguity, lack of clarity and contradiction could potentially be used by licensees to argue, for example, that section 127 **of the same Act,** which provides for strict liability of the licensees in the case of pollution damage, should not apply to them because the obligations that it imposes upon them are more onerous than those that prevailed under the previous law. In short, this gives existing licensees extensive stabilization by law, even in the event such a clause is absent from their license or petroleum agreement. For example, as a matter of fact, the Government of Uganda signed a Production Sharing Agreement with Tullow Oil on February 3rd, 2012 before the Acts could be finalized, it would be imperative that the Act clearly specifies that the new law applies in all respects to existing agreements.

Conflict of interest

Section 159 of the Act regulates conflicts of interest, by prohibiting public officials involved in the implementation of the Act from having a stake in the oil matters that they regulate. Although this provision is a right step in the right direction it falls short of extending to family members and agents, to private or public companies or business enterprises in which such public officials, their spouses or agents have controlling interests. Already, there are early warning signals of personalization of the oil and gas sector by high ranking political officials including the president himself and his blue eyed boys. "In June 2010, it was announced that Uganda's Presidential Guard Brigade would be integrated into the Army's Special Forces Unit in a bid to protect and enhance the country's strategic assets, including oil fields along the border. The Special Forces Unit is led by Lt Col (read Brig) Muhoozi Kainerugaba, the President's son".

The Saracen private security company is contracted to provide security inside some drilling sites. A United Nations report names President Museveni's brother, Gen Caleb Akandwanaho alias Salim Saleh as the majority shareholder in the Ugandan branch of the company.73 Museveni's close relations are evidence of increased personalization of control by him of the oil and gas sector. Such deviation from international best practices and democratic principles is highly undesirable at this stage.

There are some Ugandan legal instruments which can be emulated by the oil legislation in so far as guarding against the danger of conflict of interest in the oil and gas sector is concerned. The Leadership Code Act of 2002 addresses conflicts of interest among highranking government officials. Section 9(5) prohibits officials from participating in activities where they have personal interests, while Section 12(1) prohibits them from making contracts with the government or foreign business organizations. These regulations are extended to the leaders' family members and business organizations in which the leaders or their family members have a controlling interest. The 2005 Code of Conduct and Ethics ("Code of Ethics") regulates the conduct of lower ranking public officials. It promotes governance, transparency and accountability among public officers and in

particular ensures that public officials are accountable for all resources under them. It also prohibits public officials from accepting (and giving) gifts and bribes. This code extends to their family members. In addition, under section 4.6 (i), the Code of Ethics states that public officers shall not put themselves in a position where their personal interests conflict with their duties and responsibilities as public officers and they are also prohibited from entering into any contracts with the government. These obligations are extended to the public officers' family members and private companies in which the public officers or their family members hold a controlling interest.

Lack of independence and politicization of the oil and gas institutions

Oil is one strategic commodity of the world that government, from super powers to minor states will never allow to be free from political control. The two major oil and gas institutions established by the Act are the Petroleum Authority of Uganda and the National Oil Company of Uganda. Although these are established as independent institutions, free from political manipulation, a clear perusal of the Act reveals the contrary. The Petroleum Authority is mandated to monitor and regulate exploration, development and production of petroleum in Uganda. Its independence is strongly echoed by Section 15 of the same Act. However, under Section 14 of the Act, the Minister may give directions in writing to the authority with respect to the policy to be observed and implemented by the Authority and the Authority shall comply with the directions. The extent of such directions is not defined in the Act. This creates an obvious risk that the independence of the Authority will be undermined by political interference.

In the same regard, the National Oil Company established under the Act, shall be incorporated and be managed under the Companies Act, to manage and handle the state's commercial interests in the petroleum subsector. However, Section 47 of the Act allows the Minister to issue instructions in respect of the National Oil Company's execution of its management task under the Act including the stipulation of rules relating to the duty of secrecy of Board members and employees. It's legally unperceivable and ridiculous, how a company

incorporated under the Companies Act (*supra*) can be managed in that manner. In addition, Company law dictates that it is only the shareholders of the National Oil Company who can have a say in the company and hence Uganda citizens' interests will be valid only to the extent of the shares government owns in the National Oil Company. "Previous experience in Uganda has not shown government to be a good business entity and where government has owned shares in private companies many have been dogged with corruption, waste and lack of competitiveness.

It is not clear how the other shareholders for National Oil Company will be selected and how many shares government and other shareholders will have. This provision can thus be manipulated to favor selected individuals who may not necessarily have the competence to be shareholders. It is also possible for government to be a minority shareholder in National Oil Company with a limited say. This would inevitably result into failures by the government to protect citizens' interests in the National Oil Company. Equally ridiculous, is that there is no stipulation in the Act, that the Minister for Petroleum will be appointed by Parliament yet it is the Minister's role to appoint Board members of the Authority and those in key positions in the National Oil Company tasked with managing commercial aspects of petroleum activities and the participating interests in the licenses. Such minister is appointed by the President. This creates a risk that the oversight function of Parliament over the Petroleum Authority and the National Oil Company is negated, and that management roles in such institutions could be given out on the basis of
personal connections, loyalties and state patronage, rather than on merit.

Transparency, Access to information and Whistle Blowing.

The Act severely limits public access to key pieces of information. For instance, section 33 (Duty not to disclose information) prohibits members of the Petroleum Authority from disclosing any information which they may have obtained in the course their employment whereas, *section 157 (b) (Obstruction of an authorized officer), provides that: "any person who knowingly or recklessly makes a statement or produces a document that is false or misleading in a material*

particular to the authorized officer engaged in carrying out his or her duties and functions under this Act" commits an offense and is liable to be convicted to a fine or to imprisonment. The Act does not require any public disclosure on the amounts of oil extracted from the ground, or the revenue generated by the industry.

Other data such as the licenses themselves, the field development plans and assignments can be revealed to the public only if disclosure doesn't violate "confidentiality of the data and commercial interests". Unfortunately, the Act does not define the scope of confidentiality, leaving it subject to interpretation, and posing the risk that this interpretation could prevent disclosure in many cases. The Act also requires payment of a fee to access the information, but does not state how much should be paid.

Under Section 148 of the Act, the Minister may, subject to confidentiality of the data and commercial interests, and in accordance with the Access to Information Act, 2005, make available to the public details of all agreements, licenses and any amendments to the licenses or agreements whether or not terminated or valid; details of exemptions from, or variations or suspensions of, the conditions of a license; licenses; the approved field development plan; and all assignments and other approved arrangements in respect of the license. This is in line with the right to Access to Information under Article 41 of the Constitution. However, section 148(2) gives the minister powers to prescribe fees for access to information in the Oil sector. Although this provision is subject to the Access to Information Act 2005, it sets a standard higher than that envisaged under Article 41 of the 1995 Constitution of the Republic of Uganda which guarantees the Right to Access to Information in the hands of the State save for cases where such access to information contravenes, *inter alia*, State security. In addition, Section 148 of the Act restricts access to information to consent agreements made between the government and the licensee. The reference to Access to Information Act in the Section is to the effect that person accesses information depending on the nature of the agreement signed between government of Uganda and the licensee. This violates the constitutional guarantees on access to information. Uganda's legal

regime on access to information does not subject it to any form of agreement. The Access to Information Act also has enough guarantees to protect informationSo far as whistle blowing is concerned, the right to access information is fundamental benchmark of our Bill of rights as enshrined in the 1995 Constitution of the Republic of Uganda.79 The Access to Information Act 2005 and the subsequent Access to Information Regulations 2007 were enacted to operationalize this Constitutional provision. It is also important to note that access to information is a great tool in the promotion of transparency and accountability in the oil and gas sector. For example, whistleblowers wishing to reveal information related to alleged abuses of power, corruption or other illegal acts should be properly protected and encouraged to come forward.

The **Petroleum (Exploration, Development and Production) Act, 2012**, raises concerns in this regard, especially as it will get in conflict with the Whistle Blowers Protection Act which is the main law for the protection of whistleblowers. These provisions of this new oil legislation could be used to prosecute whistleblowers who come forward with allegations of wrongdoing that either stem from information received in the course of their employment, or that are insufficiently documented. Whistleblowers are in reality the active conscience of a society as well as the government. Already serious concerns have been raised after whistle blowing Legislators tabled before Parliament damming documents accusing Tullow Oil of bribing Ugandan cabinet ministers to gain better concessions in the Ugandan oil and gas sector. “M. Ps maintain that the oil company paid 17millionpound sterling to the minister of Foreign Affairs Sam Kutesa as a bribe for his services in acquiring oil contracts in Uganda.”80 Moreover, public attention has been focused on the lack of transparency surrounding the oil contracts between private companies and Uganda’s government. These deals, known as Production Sharing Agreements (PSAs), are now public documents but are still not freely accessible by the public.

The **Whistleblower Protection Act of 2010** offers procedures for Ugandan citizens to report corruption or improper conduct. The Inspectorate of Government Act, the Leadership Code Act, and the AntiCorruption Act also provide protection

for whistleblowers. The Oil laws should be harmonized with these regulations to provide protection for whistleblowers in the oil sector as well.

Royalty sharing and the issue of Bunyoro Kitara Kingdom.

Although **sections 151 156 of the Petroleum (Exploration, Development and Production) Act, 2012,** provides for the payment of royalties to government from oil activities, the Act has no clear provisions on how oil revenues will be shared. Of course it's a correct assertion that since the Act was intended to cater for upstream activities of the petroleum industry – that is to say the exploration, and extraction portion of the oil business it would be unfair to criticize it for not dealing with downstream activities, not to mention the broader macroeconomic and social implications of the oil boom and its aftermath of oil revenue sharing. That notwithstanding, one aspect that needs to be immediately addressed, in clear and unambiguous terms is the issue of benefit sharing and to bring this Act in harmony with other revenue related laws such as the **Income Tax Act.**

On 31st May 2012, the King of Bunyoro Kitara Kingdom, *Omukama* Gafabusa appeared before the Parliamentary Committee on natural resources where he presented a petition asking government to consider his subjects in the management of oil resources which were discovered in the Bunyoro subregion. Although oil may be a national resource and there would be no need of a special provision for oil revenue allocation to Bunyoro region, it is important to consider the fact that these are the indigenous communities where this oil has been discovered and who will be greatly affected by oil activities, areas that depict scenes of immense poverty and least levels of socioeconomic development. "For the first time am doing this during my 17 years on the throne of BunyoroKitara," he told the Committee. "I am presenting this petition as a stake holder the Draft Petroleum Bill has ignored in spite of the fact that the Uganda Constitution recognizes my mandate as a trustee for my subjects."83 This oversight by legislators is breeding ground for conflict reminiscent of least development oilstates.

The failure to satisfactorily address the above issue has caused much trouble in Nigeria for example. The Nigerian experience demonstrates that not only do you have to put in place a revenue sharing arrangement, but you have to ensure that the

revenues are properly used, in a manner that benefits the people. In Nigeria, as the opulence and ostentation of the oilroyalty collecting elites became widely visible, public reactions ranged from resentment and protest, to adulation, solidarity, jubilee, and, most significantly, highstakes bandwagonism, widespread motivation and drive to plunder. Despite the profusion of highstakes acquisition in the oil and gas industry, poverty was widespread at the bottom in the oil producing areas. "The predatory logic and lopsidedness of the rentier space favored the amassing actors at the expense of the acquisition players. The insecurity in the acquisitive middle class aggravated the accumulation desperation, a tendency that resonated with the middle class in the larger society.

For example, in the **oilrich Niger Delta** that produced the wealth, the popular reaction was resentment, leading to an explosion of antioil protest and resistance against the state. "Since the mid1990s, the minority ethnic communities of the oilbearing Niger Delta region have assertively established themselves as stakeholders in the accumulation process. They have waged a formidable struggle of unrelenting violent protests, including oil theft, pipeline sabotage, and kidnappings. Prior to this period, these ethnic communities were for the most part lowstakes clients and partisans. It will require a great deal of international pressure not only to compel the state to participate in a consequential roundtable with oilbearing communities, but also to secure its commitment to farreaching, proactive concessions that help meet the aspirations of the Niger Delta people. There is, therefore, need to develop an elaborate benefitsharing regime not only for the Bunyoro region alone but also for all the indigenous oil communities in Uganda, complete with safeguards to ensure that the people do share in the benefits in a meaningful way.

Environmental Concerns.

Poor people in developing countries often rely heavily on their immediate environment for their livelihoods. Whilst they are the most exposed to environmental risks and degradation, they are usually the worst represented in the relevant decisionmaking processes. Good natural resources management therefore

depends on participatory, transparent, open and accountable governance that ensures the effective participation of the public in the preparation and implementation of environmental policies, legal frameworks, plans and projects. This was also a key principle recognized by governments, including Uganda, present at the UN Conference on Environment and Development (UNCED) in Rio de Janeiro in June 1992.

The right to a clean and healthy environment is protected under the 1995 Constitution of the Republic of Uganda. The Constitution obliges the state to ensure that natural resources are managed in such a way as to meet the development and environmental needs of present and future generations of Ugandans. The state is charged with promoting and implementing energy policies that will ensure that people's basic needs and those of environmental conservation are met. **Article 237(2) (b) of the Constitution** provides that the government or a local government holds in trust for the people and protects natural lakes, rivers, wetlands, forest reserves, game reserves, national parks and any land to be reserved for ecological and touristic purposes for the common good of all citizens. The spirit of these constitutional provisions is reechoed under **Section 3 of the 1995 National Environment Act and Section 5(2) of the National Forestry and Tree Planting Act**. The National Oil and Gas policy asserts the need to protect the environment as part of management of the petroleum sector. **Objective 5.3.9** seeks to ensure that oil and gas activities are undertaken in a manner that conserves the environment and biodiversity. To achieve this objective, the state is required to carry out due diligence on oil companies applying for licenses in the country with regard to their technical and financial capabilities together with their environmental standards.

Legislation in the oil and gas sector should be live to environment concerns and to international best practices so far as there is a high overlap between ecologically sensitive and biodiversity rich areas and the occurrence of exploitable hydrocarbons in the Albertine Graben poses a particular challenge for oil exploration and development in Uganda. "The Albertine Graben is the most species rich ecoregion for vertebrates in Africa and contains 39% of Africa's

mammal species, 51% of its bird species, 19% of its amphibian species and 14% of its plant and reptile species. On the other hand, the rate of biodiversity loss in Uganda is high and was calculated in 2004 to be 1011% per decade or about 0.8% annually." The principle threats to biodiversity in Uganda persist including habitat loss, modification and alteration along with unsustainable harvesting, pollution as well as introduction of alien species. The surroundings are key ecotourism sites and have even higher tourism potential. Oil and Gas exploitation and production activities have the potential for a variety of negative impacts on the environment. They induce, economic, social; and cultural changes through alteration in land use patterns, local population levels, social economic, and cultural systems. They also result into increases in aqueous and gaseous waste streams which may affect plant and animal communities due to changes in their environment through variations in water, air and soil/ sediment quality and through disturbance by noise, extraneous light and changes in vegetation cover. These negative impacts need to be mitigated and addressed to ensure ecosystem integrity.

Although, the **Petroleum (Exploration, Development and Production) Act** adequately addresses key environmental concerns and adopts international best practices it has some loop holes that need to be highlighted. **Section 4 of the Act** introduces the need to comply with environmental principles, and every licensee must take into account and give effect to the national environmental laws and other applicable laws, including international environmental conventions such as the **Kyoto Protocol and the Rio Declaration**. Arguably, this provision however lacks the compliance aspect. The phrasing 'take into account' is weak, and the Act should demand compliance.

Although the Act provides for safeguards against pollution and liability for damage from pollution effects, section 126 (2) of the Act limits liability to events happening in Uganda. It provides: '***This Part applies to liability for pollution damage from a facility when the damage occurs in Uganda or affects a Ugandan vessel or a Ugandan facility in adjacent areas.'*** There are basically three scenarios that arise out of petroleum related pollution; pollution that happens in

Uganda and affects a part of Uganda or a vessel in Uganda; pollution that happens outside Uganda and affects a Ugandan vessel or part of the territory of Uganda and pollution that happens in Uganda but affects a vessel or territory outside Uganda. A clear analysis of the provision reveals that **section 131 of the Bill** covers only the first and second scenarios ignoring the third scenario. This does not cater for the international environmental concerns where pollution should be punished no matter where it occurs. Besides it may be difficult to actually determine territorial impact of pollution especially from petroleum products such as gas. Pollution perse should be a punishable crime without considering the territorial jurisdiction of its impact.

LAND ACQUISITION IN THE OIL REGION.

The Land Act Cap 227 provides for the tenure, ownership and management of land and amends and consolidates the law relating to tenure, ownership and management of land and other related or incidental matters. In pursuance of the Constitution, the law vests all land in Uganda in the citizens of Uganda and recognizes four land tenure systems under which land is held in Uganda including; customary tenure, freehold, mailo and leasehold tenure. The Act defines the rights and powers of lawful occupants and bonafide occupants. It also places natural lakes, rivers, groundwater, natural ponds, natural streams, wetlands, forest reserves, national parks and any other land reserved for ecological or touristic purposes for the common good of the citizens of Uganda under trust of Government or a local government. In relation to prospecting or ascertaining suitability of land for public works, the Act provides a mechanism for entering on land which may follow mutual agreement between the undertakers or following an order by the minister where no agreement is reached.

Uganda's recent legislative and policy reforms, combined with a rapidly evolving economic situation, are raising new land and resource governance issues that need to be resolved and which are not adequately addressed by the new oil legislation. 5IF legal framework should have facilitated foreign investments in resourcebased enterprises while assuring a fair and adequate return for all Ugandans and avoiding

"land grabbing" and "speculation. It is clear that under Section 40 and 41 of the Act, ordinary occupants of land in which petroleum is discovered.

The history of the practice of arbitration in this country has not been a rosy one and, indeed, arbitrators in Uganda rarely satisfy all parties involved. Ultimately, not only do these provisions create the potential for conflicts, but they do not cater for other "nonsurface" rights which ordinarily accrue to a land owner. Of course the holder of a Petroleum Production License can avoid all this by acquiring an exclusive right to use the land (i.e. a lease). It is suggested that, as with the mining law, petroleum production license holders should be required to obtain leases.

A comparative analysis of the other resourcerich nations especially in developing countries reveals that issues of access to land and related resources, and forced displacement are a major reason of conflict. By providing for just and equitable practices around land, Uganda can avert similar problems:

The consideration of land acquisition and compensation in the oil producing areas should take cognizance of the range of customary land ownership patterns and the land rights of the people, which are recognized by the 1995 Constitution, that exist in the affected areas. This should further be translated into physical land surveying on the part of the government and awarding of land titles to peoplea process that remains prohibitive in terms of financial, legal and social resources and therefore cannot be undertaken by the common Ugandan – a significant barrier in protecting himself or herself from exploitation and land alienation and something which the GOU needs to seriously examine and address.

The Case for Strong and Reliable Institutions.

Introduction. Uganda's young democracy is built on solid principles: it operates as a multiparty parliamentary system, with separate legislative, judicial and executive branches of government, open markets, an outspoken opposition and a vibrant journalistic tradition. The strength of these institutions will be put to the test as the country begins tapping into its oil reserves. Oil development brings many economic, social and environmental challenges, all of which will need to be met headon through the adoption of comprehensive policies and laws. Ensuring

that these laws will be adequately enforced may prove to be Uganda's most difficult challenge. Indeed, although Uganda has relatively good laws, they are not consistently implemented. The 2009 Global Integrity Report, an international tool prepared by local researchers, academics and journalists to rate governance and anticorruption mechanisms, illustrates the extent of this gap. While it obtains a score of 99% on legal frameworks, Uganda only scores 45% on actual implementation, resulting in a large gap of 54%, one of the largest in the world. Access to justice, executive, accountability, political financing, and law enforcement are all highlighted as areas that require improvement.

Moreover, Uganda must overcome the threat of corruption, which many blame for exacerbating problems like Uganda's perennial medicine shortages in government hospitals, lack of scholastic materials in schools, low levels of investment, underperforming private sector, low revenue collections, and lack of faith in government programs and contracts.93 Unless appropriate measures are put in place, oil development will create more opportunities for corruption, with results that could be disastrous for Uganda. Indeed, government officials will play an essential role in ensuring the success of Uganda's oil venture: some will be in charge of preventing oil spills by enforcing environmental regulations, and others of avoiding misappropriation of funds by reviewing money transfers and expenditures. As such, it is imperative that government officials be sheltered from any attempt to corrupt them. Although there are presently seven institutions and departments in Uganda that are mandated to fight abuse and misuse of public offices and resources, most Ugandans (61.1%) feel that the government is not fully committed to fighting corruption. In general, access to capital markets and foreign investment is greatly improved when strong institutions at all levels of government provide transparency and abide by a clear and reliable decisionmaking process. Institutions can also play a key role in monitoring oil industry actors and, with the proper checks and balances in place, in overseeing other governmental institutions. The case studies that follow demonstrate that institutions do play a crucial role in the context of oil development.

Strengthening Checks and Balances of Decision Making Institutions.

The Ugandan Constitution states that oil is a resource that should benefit all Ugandans. Building a strong and internationally accepted system of checks and balances between oil management institutions and the government can ensure that government objectives are aligned with the interests of all Ugandans. Why countries exhibit different patterns of accumulation and distribution over the course of their development is one of the essential questions of political economy. Uncovering and interpreting distinctive patterns of development depends on exposing the complex interaction between economic growth and institutional change. Economies shape political institutions and are in turn shaped by them. The fiscal link between economies and polities is by no means the only explanation for the differing capacity of states, but it is the fundamental one. The following are suggestions on how the Institutional capacity of Uganda's oil and gas sector can be enhanced The Inspectorate of Government (IGG), the Directorate of Ethics and Integrity, Directorate of Public Prosecution (DPP), the Auditor General (AG), the Public Accountants Committee (PAC), the Criminal Investigations Department (CID) and the NonPerforming Assets Recovery Trust (NPART).

Ministries/Agencies.

Its current form, the Petroleum (Exploration, Development and Production) Act vests too much authority in the Ministry of Energy and Mineral Development ("MEMD") and the Petroleum Authority. As the following case study demonstrates, a lack of checks and balances can lead to disastrous consequences. In order to avoid conflict of interests between regulation of the industry and revenue maximization, the functions of licensing, monitoring and enforcement should be structurally separated. Indeed, the entity that grants a license is naturally biased towards ensuring its continuance, as to revoke the license at a later stage implies error in the initial grant. These pressures are more acute when a national oil company is involved as that company will lose public image or acceptance in such an event. For this reason, monitoring and enforcement of

regulation and license conditions must be conducted by a separate entity with true independence to carry out their functions.

Section 9 of the Petroleum (Exploration, Development and Production) Act defines the functions of the Minister in an overly broad manner (including grant and revocation of licenses, issue of petroleum regulations and negotiation of petroleum agreements), without specifying how that power is to be exercised. No single person can be reasonably expected to simultaneously achieve all of the functions granted to the Minister under the Petroleum Legislation, let alone balance them appropriately. Regulation of these functions should lie with the most relevant, preferably expert, administrators, and need to be granted to coequal Ministries or authorities as part of an institutional checks and balances system, a timetested approach accepted throughout the world.

The **2008 National Oil and Gas Policy for Uganda ("NOGP")** lays the groundwork for good governance through a meticulous separation of powers. More specifically, in principles 7.2 to 7.6, the document details the specific functions that should be undertaken by Parliament, the MEMD, the Petroleum Authority and several other government ministries and agencies. A similarly thorough separation of powers should have been incorporated within the Petroleum Legislation. Therefore the Act, needed to clearly define which powers are to be allocated to the MEMD, the various environmental ministries, both local and regional government authorities, and the ongoing role of parliamentary oversight. Moreover, this process should allow active engagement by civil society through the transparent release of information and thirdparty monitoring and evaluation. Therefore, there is need to ensure that licensing, monitoring and revenue collection are handled by separate agencies, with the Petroleum Authority in charge of licensing, environmental monitoring and compliance undertaken by the National Environmental Management Authority ("NEMA"), and revenue collection by the Uganda Revenue Authority ("URA"). Mandate the Attorney General and the Inspectorate of Governance to oversee all agencies.

Create an oversight role of Parliament

Parliament must be given the tools to actively oversee the agencies involved in oil development. Parliament's role, thus far, has been limited. The new Petroleum Legislation should have been debated, tabled for public comments, and approved with adequate civil society and public input before PSAs were signed with the oil companies, if for no other reason than to avoid public suspicion and anxiety. Nevertheless, Parliament still has a strong role to play in oil management and governance. However, before Parliament can begin to fulfill its role, it needs to have full, unfettered access to all of the PSAs, oil revenue data and projections. Agencies should directly report to the Parliament (in addition to their accountability to the Minister) on a regular basis.

Agencies should be legally required to provide information and attend hearings of the committee upon MPs' request. One of Uganda's strengths is its relatively vibrant civil society sector. A strong civil society is key to the strength of a country's Institutions, for example, civil society can be a source of information to MPs and the government. Thanks to its eyes and ears on the ground, it can monitor the actions of oil companies and civil servants entrusted to implement and carry out government policy. Parliament should regularly involve civil society in committee meetings, and proactively release information to civil society for feedback and comments. For example, civil society can alert the committee if an EIA has ignored some critical aspect or has not been thoroughly acted upon, or assist the committee in formulating requests for additional information. Therefore, there is need to create a joint parliamentary and governmental oversight committee with clear oversight and ratification powers and strong involvement of civil society.

Get Parliament approval for key nominations.

It is critical to ensure that the most qualified candidates are selected. Selection criteria should clearly be laid out in the Act or elsewhere. For instance, it would make sense to require the inclusion of at least an economist and one geologist on the Board of the Petroleum Authority. It should be also disclosed to the public how the nominees meet these criteria. Furthermore, it is important to ensure that

nomination decisions are made in the best interest of the country by avoiding favoritism. One option is to give the Parliament the power to select candidates. The Parliament is a body consisting of democratically elected representatives of Ugandan society. As entrenched in the Constitution, some underrepresented groups such as women, the disabled and workers also have quotas in the Parliament. Hence, this is a good entity to nominate the board members of the Petroleum Authority.**Protect appointees' independence and impartiality by giving them security of tenure Section 21(2) of the Petroleum (Exploration, Development and Production) Act 2012** gives the Minister of Energy the ability to remove a member of the board of the Petroleum Authority, which undermines the independence of the Authority. The Act should have created a separate process to determine the termination of appointment, such as a special tribunal. For example, the justices of the High Court can be removed by the President but only upon recommendation of a special tribunal. Such a process would improve the security of tenure and independence of appointees under the new oil Law. The same protection can be found to safeguard the tenure of Auditor General, of the Inspector General and of the Deputy Inspector of Government, who may be removed from office by the President but only "on the recommendation of a special tribunal constituted by Parliament.

Give agencies broader investigation powers.

Broader enforcement powers would give agencies and ministries in charge of implementing oil regulations greater leeway in monitoring oil activities and investigating suspected violations of a license's conditions. Watchdog agencies should for their part have similar powers in order to investigate corruption allegations and prevent the misappropriation of funds. As a matter of fact, the Auditor General already has the power to carry out special audits, and investigations under section 22 of the National Audit Act, while the Inspectorate of Government Act gives the Inspectorate powers of investigation, search and access. The Leadership Code Act at section 3 also provides for such powers, while the AntiCorruption Act of 2009 gives the IGG and the Director of Public Prosecution

the power of investigation, of search and seizure, and to obtain information. These regulations should be used more often to investigate corruption allegations, and recommendations stemming from these automatically acted upon by relevant authorities. More specifically, the Attorney General should be required to either commence proceedings against individuals or companies implicated in such reports, or provide a detailed accounting of why it chooses not to go ahead with a formal indictment.

The Petroleum (Exploration, Development and Production) Act should have similarly given agencies that are in charge of enforcing oil regulations the power to conduct unannounced audits and inspections of oil industry actors to ensure that they are operating in compliance with all applicable laws. For this purpose, the Authority and other agencies should have been given the power to compel companies to produce copies of certain documents or reports in the hope of identifying violations quickly bef3ore any permanent damage is done.

Focus capacity building on key institutions. In many sectors, Uganda currently lacks the human capital to fulfill all necessary tasks. Moreover, the transition towards democracy has not yet reformed a civil service system based on individuals or single leaders rather than on organizational knowledge and procedures. Another concern is low pay, which creates incentives for the best, most knowledgeable staff to move to higher paying jobs in the private sector. As oil investment grows and oil companies increase their staff, there will be more incentives for educated Ugandans to leave for new, higher paying positions in oil development.

A wellfunctioning civil service should not be dependent on a single person, no matter what their status. Strong guidelines should be instituted, in addition to a code of conduct, to promote organizational efficiency. This includes; meritbased promotions regardless of tenure or connections to political leaders, increasing careerdevelopment opportunities, and increased emphasis on training at the lower levels of the bureaucracy to create a groundswell of human capital. Instead of

delaying oil development, it is essential that Government has the ability to conduct effective oversight now.

A COMPARATIVE ANALYSIS, FEATURES COMMON TO ALL MINING STATES INCLUDING PETRO STATES.

Oil producing and exporting States tend to bear a striking and broad resemblance to each other in State capacities and macro economic performance, despite differences in types of political regimes, cultures, geostrategic locations, and the like. Because the exploitation of oil coincides with the process of modern State building, petrostates have peculiar characteristics that shape them. The fact that opportunities for exceptional gain and loss arise from the possession of petroleum is unquestionable. As thus, some countries gain whereas others lose but the benchmark is the internal management mechanism in place for the management of the oil resource.

Dependence on minerals produces a bundle of characteristics that, when taken together, are unique to mining countries, petroStates inclusive. With the exception of depletability, most of these characteristics are not given, as many economic theories postulate. They are a product of prior choices, made mostly outside these countries, about how mining industries should be organized. These "natural" characteristics are shared by all petrostates, but they are present in an especially exaggerated form; thus they can be considered a special subset of mining states.

First mining states are economically dependent on a single resource. Oil exporters are differentiated from other mining states by the overwhelming acuteness of the dependence. For example in 1980, for oil exporters, the average ratio of oil exporters to total exporters was far higher (96.3% for surplus oil exporters and 82.5% for other major oil exporters) than the equivalent average ratio for nonoil primary commodity exporters (50.7%). Countries that are considered to be heavily dependent on minerals, such as the Democratic Republic of the Congo with its copper or Bolivia with its tin, do not reach the level of dependence of oil exporting countries. One result of this extreme dependence is often noted: petrostates are especially vulnerable to export earning instability, which in turn has

negative consequences for the rate of growth, levels of investment and inflation. Second, mining states depend on an industrial sector that is highly capital intensive and that is an enclave. While capitalintensive, large scale and technologically complex industrialization is common in many developing countries, its magnitude is of a different order with petroleum. Petroleum and coal head the list of manufacturing industries ranked according to the degree of capital intensity. This extreme capital intensity has two key effects. Oil exporters historically have led unusually high levels of foreign ownership or control (or both) of their main resource because oil exploration initially required capital and technology that they did not posses. At the same time, this industry is characterized by low employment generation and a skewed wage structure. As the industry's wage scale surpasses that of other domestic sectors, it exerts an upward pull on the rest of the economy. The resulting wage followership produces a labor aristocracy, on one hand and unemployment among the unskilled, on the other. In effect, oil led development results in a foreigncontrolled, high wage economy characterized by strong unions and unemployment.

Third, mining states rely on a primary commodity that is depletable. These states do not depend on agricultural cash crops like coffee or cotton, which can be replanted and reproduced year after year. Once minerals are processed and sold on the international market, stock is permanently and irreversibly depleted, which can be justified economically only by simultaneous investment that yields the highest possible rate of return. Fourth, mining countries and especially oil exporters are dependent on a resource capable of generating extraordinary rents. These rents are not 'natural'; they are derived from the unusual organization of the world petroleum market (for example monopoly rents), variability in the quality of fields or oil (for example economic rents) and/or petroleum's special status as a strategic resource. Oil is the most important internationally traded commodity as measured by volume and monetary value. The significance of its role leads to relatively inelastic demand, which, when combined with the small number and large size of resource owners, the high entry costs into the industry, and the difficulties inherent in energy substitution, produces extraordinary rents with a distinctive

character: they have almost nothing to do with the productive process of the domestic economy. In fact, there is no significant relationship between the level of oil production in an enclave and the performance of the local economy. Finally, in developing countries like Uganda, mineral rents accrue directly to the State. By virtue of custom, laws that grant subsoil rights to the State, prior choices, and, eventually, nationalistic ideology, export earnings from minerals are deposited into the national treasuries of developing countries. Therefore, all mineral States, including petroStates are rentier and distributive States. Their economic power and ultimately their political authority rest on their dual capacity to extract rents externally from the global environment and subsequently to distribute these revenues internally.

A COMPARISON WITH OTHER COUNTRIES. **Norway: The Story of Success**:

When it comes to oiland investing Norway is a classic example of a perfect story of success. The fact that Norway had a highly institutionalized apparatus and strongly entrenched routines prior to becoming an oil exporter provides an opportunity to demonstrate the advantages of a more highly institutionalized and less politicized administrative structure for handling bonanzas. While political and social upheavals in major oil producersVenezuela, Nigeria, Russia, the Persian Gulfdominate headlines, Norway since 1971 has quietly been pumping massive quantities of crude from the icy waters of the North Sea. Today, Norway is the world's thirdlargest oil exporter, behind only Saudi Arabia and Russia, and the seventhlargest oil producer. The Norwegians have proven that oil doesn't have to be an obstacle to stability and longterm growth. As I have already pointed out in the previous Chapter, Political Scientists, Social and Legal Scholars like to talk about the " 'curse' of oil." Over the past several decades, in many of the oil producing countries, there has been a sorry economic state of affairs that ensues when tribal kingdoms, authoritarian regimes, kleptocracies, and leftwing dictatorships get their hands on national oil revenues. Easy oil cash entrenches corrupt establishments, discourages sound longterm economic planning, and is

almost never channeled in ways that promote development. For Norway, this was not the path to follow. Uganda is on the verge of finding out whether it will succumb to the oil curse or defeat it. Norway offers an interesting model for the Ugandans to consider. Assuming commercial production ever begins, Uganda will decide how to use the nation's oil wealth to benefit its putative ownersthe povertystricken citizenry.

Less than 20 years after they started producing oil, the Norwegians realized their geological good luck would only be temporary. In 1990, the nation's Parliament set up the Petroleum Fund of Norway to function as a fiscal shock absorber. Run under the auspices of the country's central bank, the fund converts petrodollars into stocks and bonds. But instead of paying dividends, it uses revenues and appreciation to ensure the equitable distribution of wealth across generations.

Of course, the fund's history reveals some of the pitfalls of having socialists manage oodles of cash. The fund didn't start to invest in stocks until 1998, thus missing out on a big chunk of the boom. In 2001, it started a subfund to make ecofriendly investmentsgood social policy, dubious assetmanagement strategy. But the huge balances mean Norway can happily continue to be heavily socialist without confronting the problems that its Euroneighbors to the south faceunemployment, high inflation, and huge national debts. Yes, fiscal budget expenditures were a whopping 38.3 percent of gross domestic product in Norway last year. But the country still runs a surplus budget. Last year, percapita GDP was a healthy $51,755, and both unemployment and inflation are low.

In Norway, the sudden increase in oil prices has meant larger inflows to the fund and enhanced longterm welfare for its citizens. That's not how it goes down in other big oil producing countries. In Russia, the oil boom has enriched oligarchs and increased foreign currency reserves. But the quality of life in Russia continues to deteriorate. Saudi Arabia has been pumping far more oil than Norway and for a far longer time. But its oil revenues tend to flow into the bank accounts of the royal familynot into a segregated account to benefit the public at large. The Norwegian economy remains heavily dependent on oil (though much less than the Saudi economy): Petroleum industries account for about 17 percent of

Norwegian GDP and a hefty 45 percent of exports. But the rapid growth of the fund means Norway won't suffer massively if the oil market suddenly tanks or if production begins to dwindle.

Norway's ability to avoid the resourcecurse is attributed to the country's clear policies which were well implemented by the institutions that were put in place to manage its oil and gas activities.116 By the time the extraction of oil started in the early 1970s, Norway was not just a developed economy with per capita GDP of over US$10,000 (PPP); it was (and continues to be) was socially embedded. Second, Norway was a mature democracy. Norwegian politicians hardly posed any risk of wasting public resources on selfish political activities (such as bribing the electorate).

Third, Norway forged a tripartite social contract between capital, labour and state elites. This social contract, which is central to Scandinavian welfare capitalism, resulted in the institutionalization of equitable distribution of wealth as a societal norm. Norway's distributive justice was in turn made possible by national norms that protected citizens against the vagaries of free markets, or decommodification. Decommodification refers to 'the degree to which individuals, or families, can uphold a socially acceptable standard of living independently of market participation'. This system enabled Norway to avoid conflicts over distribution.

Fourth, Norway institutionalized the rule of law and developed a swift judicial system to detect, determine and deter theft of official resources. As a consequence, illegalities such as grabbing of collective wealth via corruption, theft or misreporting is relatively infrequent in Norway. Fifth, transparency in public affairs was emphasized, coupled with media scrutiny. This blocked illegal rentseeking and left open only the possibility of accessing resourcerevenues through legal channels (such as lobbying Parliament for tax relief, wage increases or subsidies). Seventh, Norway created a special Petroleum Fund and accumulated reserves abroad. These initiatives enabled Norway to avoid the negative expectations from oil abundance.

Norway also stands in a marked contrast to the other oil exporters in its ability to ward off the insidious rentier behavior that accompanied booms elsewhere. Its

governments could thus retain the historically acquired flexibility that permitted them to limit lockin and to engage in timely rather than postponed adjustments. Oil revenues were not dissipated through corruption and white collar projects. Although they were utilized to increase government borrowing rapidly, more than half of the external debt was used to develop the Petroleum sector and once the dangers of over borrowing were apparent, even Statoil was no longer permitted to seek credit in its own name. Unlike other exporters, Norway virtually halted borrowing as part of voluntary contraction efforts between 1978 and 1981. By 1983, when other oil exporters were sinking into a dangerous debt cycle, Norway's foreign debt had been largely paid. Perhaps most indicative of its different behavior, the Norwegian Government sought to protect the State's nonoil fiscal capacity. As corporate revenues from petroleum shot up, it resisted the strong temptation to permit oil revenues to replace its normal revenue base by lowering taxes. Unlike all other oil exporters, it managed to sustain its domestic tax base, although it did suffer some erosion. Taxes remained progressive, and they contributed to another unique outcome: petroleum revenues, which produced wider income disparities in most other exporters, contributed to a more equal distribution of income here. Rather than replace nonoil taxation, Norway put much of its recent bonuses into a 'Petroleum Fund', set up to store wealth for the next century when its oil starts to run out. Take together, these factors cushioned the adjustment necessary in the face of oscillating oil prices and generally protected Norwegians from the tremendous swings that citizens in other exporting countries experienced.
The case of Norway yields two significant and somewhat contradictory lessons. On one hand, strong preexisting institutions in both the state and the regime make a significant difference both for managing the entry into the petroleum industry and for handling subsequent booms. In Norway, where the State capacity was high, such institutions counteracted the temptation to accelerate development, defused potentially divisive political issues through the use of routine procedures, developed clear alternatives, corrected mistaken policy decisions, and controlled the spread of rent seeking behavior. On the other hand, the case of Norway is a powerful statement to the "overwhelmingness" of booms. Even a stable democracy that faced no immediate need to purchase the loyalty of its citizens and that was a blessed diversified economy and developed State was initially incapable of resisting the tremendous incentives to spend more than it should. Of course,

Uganda isn't directly analogous to Norway. And I'm sure most Ugandans would rather have a dividend cheque than see their oil wealth pile up in a vast investment pool. But Uganda has endured enough internal and external social, political and economic shocks in the past few decades. Maybe the nation needs a fiscal shock absorber more than a gift certificate.

Nigeria: What went wrong? I have explored for oil in Venezuela and …Kuwait", said a British engineer, "but I have never seen an oil rich town as impoverished as Oloibiri". (Oloibiri is a town in Port Harcourt, Nigeria where the country's first crude oil was pumped out). Nigeria has the largest population in SubSaharan Africa with 110 million people in 1995. It has a complex social and political history that has, for the most part, impacted adversely on the population and has worsened income distribution. The exploitation of the nation's oil resources, and the management of oil windfalls, have dominated the progress and decline of Nigeria's economy over the past two decades, and have significantly influenced evolution and perception of poverty. The economy is currently characterized by a large rural, mostly agricultural based, traditional sector, which comprises about twothirds of the poor, and by a smaller urban capital intensive sector, which has benefited most from the exploitation of the country's resources and from the provision of services that successive governments have provided. The first barrels of Nigerian crude oil destined for the World market departed from Port Harcourt on 17 February 1958. It was shipped to the Shellhaven refinery at the mouth of river Thames in the U.K. Within a few weeks of its arrival, Nigerian gasoline was fueling cars in and around London, the new symbols of postwar British prosperity. The Nigerian Oil industry had been born. When the first helicopters landed in Oloibiri in 1956, near St. Michael's Church, to the astonishment of local residents, few could have predicted what was to follow. A camp was quickly built for workers; prefabricated houses, electricity, water and a new road followed. ShellBP (as it then was) sunk seventeen more wells in Oloibiri and the field came to yield, during its lifetime, over twenty million barrels of crude oil before oil operations came to a close twenty years after its discovery. Misery, scorched earth and crapped wellheads are all that remain there is no running water, no electricity, no roads, and no functioning primary school; the creeks have been so heavily dredged, canalized and polluted that traditional rural livelihoods have been eviscerated.

Nigeria is the largest crude oil producer in Africa and the tenth largest producer in the world. Nigeria's economy depends heavily on the oil sector, as it accounts for 95% of export revenues, 76 % of government revenues, and about a third of GDP. Nigeria was one of the world's richest 50 countries in the early 1970s, but became one of the 25 poorest countries by the 21st century, mainly as a result of the poor management of its oil development. Nigeria is thus considered a classic example of the resource curse. One of the major reasons for this was institutional weaknesses. Although powers were separated among the executive, legislative and judicial branches of government, these institutions proved to be too weak to conduct effective checks on the executive and the decision made as to how to distribute resource rents.

In short, they were unable to prevent the government's poor policy choices, such as the dramatic increase in the size of public service, or its corrupt practices. Perhaps the most important case study and evidence of Nigeria's poor oil governance is found in its Niger Delta region. Given Nigeria's position as Africa's leading oil producer and exporter, with a partly explored huge gas potential, the 'oil war' in the Niger Delta, Nigeria's main source of oil and gas is of critical importance to Nigeria's economic growth and political stability. Since 2006, Petroviolence has for strategic, economic and political reasons brought the Niger Delta to the fore front of international energy and security concerns. It is therefore to unpack the complex drivers of the conflict. These show how the crisis is linked to Nigeria's poor oil and gas policies, internal contradictions and politics, as well as to the nature of the integration of the Niger Delta into the international political economy of oil in ways that have simultaneously enriched international oil companies and their partners national and local elites and contributed to the disempowerment and impoverishment of the local people, through direct dispossession, repression and the pollution of the air, lands and waters of the region. The Niger Delta is a vast coastal plain in the Southern coastal part of Nigeria, where one of West Africa's rivers empties into the Atlantic Ocean between the bights of Benin and Biafra, in the Gulf of Guinea. Estimated to cover about 75,000 sq kilometers, it is the largest wetland in Africa and one of the largest in the world, supporting a wide range of biodiversity. The swampy terrain and fragile ecology pose several challenges, including land scarcity and supporting a

high level population density. They also define the livelihoods of local people – as farmers, traders, fishermen, food processors and local manufacturers of items linked to the principle subsistence economies. The Niger Delta crisis has in the last decade attracted significant research attention and progressively expanding policy engagement. A lot of analysis has been carried out of the remote and immediate causes of the crisis and its recent escalation and equally many attempts at all levels government, international development agencies and other stakeholders to implement interventions designed to end the crisis and put the region on the path of international development. Yet the crisis remains intractable.

The Nigerian Government's failure to implement policies that resolve the resource control and ownership question and its increasingly violent character has been the most responsible factor for the oil crisis in the Niger Delta. The Niger Delta has endured a long history of economic exploitation. Since the early 1970s, it has produced several hundred billion dollars' worth of oil and gas with its net oil revenues alone to Nigeria exceeding 45 billion dollars in 2005, and yet of its peoples and communities remain poor and unemployed while a few oil companies and individuals (predominantly from outside the region) have amassed and continue to a mass stupendous wealth. 133 Over 40% of the region's working population has no connection with the oil and gas industry, with low wage/low productivity informal enterprises as its primary source of livelihood. 134 This situation has fostered a widespread sense of extreme relative deprivation. It is a significant factor in the growing resentment and increasingly militant demand for greater access and control over the oil resources of the region by it peoples and leaders. The increasing lack of response to this demand, and the widespread perception that it may never be peacefully met by government, seem to be increasingly fueling the violent insurgency within the Niger Delta. Lack of sound environmental protection policies to regulate oil activities has also been a reason for the Niger Delta's woes.

CONCLUSION. The factors identified throughout this research are interrelated. A lack of transparency can increase public discontent. The resulting pressure on policymakers to meet expectations can lead to spending on shortterm or politically expedient projects rather that to meet longterm needs, resulting in waste and

increased public discontent. The worstcase scenario for Uganda would be a downward spiral of popular confusion and unhappiness, a weakened economy, politically dominated management and deepening intergroup competition for a share of the take, particularly at a local level. It is a path that has been trodden by many oilproducing states, most notoriously perhaps Nigeria. Most Nigerians are significantly poorer today than they were at the start of the oil boom, despite the receipt of some $340 billion in revenues. Average incomes are less than onethird of what they were in 1980, and per capita GDP remains at about 1965. But Uganda has time on its side. It is unlikely that production will start before 2016, with full capacity not reached until 2020 or later. Though oil has already begun to influence politics and society, the stresses that production and revenue flow will bring with them will not be fully felt for a decade. The debate on oil must move beyond the politics of the present. Instead, lessons must be learned from those countries that have successfully managed natural resources, as well as those that have suffered as a result. Transparency matters if Uganda's social cohesion is going to be maintained. A wellinformed national conversation on how to balance spending with saving is vital to the health of Uganda's agricultural sector, which is key to a positive future. The need to protect technical advice from political influence is vital in Uganda, as it is for all governments. And a population that understands how revenues are being spent is more likely to work with government rather than against it, building a positive feedback mechanism between people and the state that can act as a bulwark against future abuses.

Developments in Uganda's oil and gas sector present a mixed picture. On the one hand, the government has developed a progressive National Oil and Gas Policy which states the government's intention to adhere to international best practice standards. On the other, the industry is born into a deteriorating governance environment, characterized by the consolidation of Uganda's *neopatrimonial regime*; increasing perceptions of corruption and highlevel state looting; and some early warning signs that the government's own commitments to good governance standards laid out in its oil and gas policy are not being implemented. Experience from other resource rich, governancepoor environments suggests that, without immediate intervention, this will not end well

CHAPTER

SIXTEEEN

CONCEPT OF NATURAL GAS.

INTRODUCTION

Natural gas is found in abundance in many regions of the world, in quantities that ensure energy sufficiency for human activities for 250 years or so, based on current estimates. In the global energy industry's turnover in 2011 natural gas participated in a proportion of about 21% ranking just after oil and coal, as the third largest energy source. In financial figures, that translates to hundreds of billions of U.S. dollars per year.[744]

Recently, global climate change and air quality have become increasingly important environmental concerns. Consequently, there has been a rise in collaborative international efforts to reduce the concentration of greenhouse gases and criteria pollutants. Greenhouse gases include carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2O), occurring naturally and as the result of human activity. In addition, criteria pollutants include emissions of nitrogen oxide, sulphur dioxide, carbon monoxide, and total unburned hydrocarbons.[745]

International and national governments are implementing more regulations on air emissions. Drilling contractors and opera-tors in all phases of O&G production can

[744] Georgios Deligeorgiou, 2014. Natural Gas as a Source of Energy, Harokopio University, Department of Geography, Athens 17671, Greece

[745] Emissions from oil and gas production operations [online] available at; https://petrowiki.spe.org/Emissions_from_oil_and_gas_production_operations (accessed on 7th July, 2021)

play an important role in environmental stewardship. This is accomplished by reporting carbon emissions from O&G operations, eliminating redundant emission, performing measurements, and leading the industry in efforts to reduce the release of these chemicals.[746]

Uganda, as one of the youngest countries in the production of Oil and Gas has to do its part in ensuring that the climate and environment are protected and that the production of gas does not have dire impacts on the wellbeing and sustainable enjoyment of a stable climate.

History and Background of Uganda's Natural Gas

Natural gas is actually a mixture of gases with a composition that varies and depends essentially on the deposit from which it was obtained. It is referred to as "dry", when all components other than methane have been removed from the mixture almost completely, and "wet", when there are other gases present in the mixture, along with methane. This distinction is important because it relates to the way the product is processed and transported and the original choice of the deposit to be mined. From the "wet" form of treatment we can also produce important gases such as propane, butane, etc. which are marketed for use in a variety of applications.

Natural gas was created millions of years ago through a similar process to other fossil fuels (oil, coal, etc.). After its creation it was either released into the atmosphere or trapped in pockets of impermeable rocks, creating underground deposits discovered in the modern era.

Historically, it is divided into gas coming from conventional and unconventional sources. The distinction relates to the ease with which it can be mined and is not related to its chemical properties. Unconventional sources are the deposits that were or still are being unexploited for economic reasons or because of inadequate technology, or because of the specific technical challenges for their extraction, or even because of the potential risks posed by mining on the environment. The past 4 decades the advancement of technology and the overall development of the gas

[746] Ibid

industry have allowed access to previously inaccessible deposits and increased the production and the expectations for future exploitation of impressively large deposits. The verified unconventional sources brought a significant change to the world map of Natural Gas stock. It should be noted that the stock assessment is a continuous and uninterrupted process which has the effect of amending sizes after each announcement of discovery of new exploitable deposit. In each case the potential of unconventional deposits is strongly demonstrated.

Huge gas deposits give a new perspective on the economy of many countries that up to now had not significant exploitable amounts of hydrocarbons and the energy they required came from third countries and from other national sources, such as nuclear power. Typical example of an attempt to reduce dependence on imported energy is Japan, which is a pioneer in developing technologies of exploiting methane hydrates. Countries such as Greece and Cyprus as well, also expect a significant improvement in their economies, based primarily on natural gas deposits in their Exclusive Economic Zones (EEZ).

Natural gas is found in abundance in many regions of the world, in quantities that ensure energy sufficiency for human activities, based on current estimations, for about 250 years.

Exploitation of localized deposits of natural gas from unconventional sources and the search of new, is an economic vision and a technological challenge, but raises serious environmental concerns and new geopolitical balances.

The combustion of natural gas is the cleanest compared with other fossil fuels, especially in CO2 emissions, but even these small emissions do not cease to contribute to creating the greenhouse effect.

The number of various uses of natural gas, the relatively low cost of its production and the continued expansion of pipeline networks and transportation of liquefied natural gas, coupled with estimates for increasing global energy needs are a cycle of selfreinforced actions that make gas an attractive energy source.

Natural gas is an important determinant of energy policy not only of many countries, especially the producers, but also of international organizations.

The advancement of technology in the energy sector may be able to bring revolution in the near future, by producing abundant, clean and economic power, which would marginalize the previously known sources. This will obviously cause conflict of powerful lobbies some of which favour the introduction of novelties and others to retain the status quo.

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4 decades the advancement of technology and the overall development of the gas industry have allowed access to previously inaccessible deposits and increased the production and the expectations for future exploitation of impressively large deposits. The verified unconventional sources brought a significant change to the world map of Natural Gas stock. It should be noted that the stock assessment is a continuous and uninterrupted process which has the effect of amending sizes after each announcement of discovery of new exploitable deposit. In each case the potential of unconventional deposits is strongly demonstrated.

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During Transportation of liquefied natural gas (LNG) When the pipeline construction is deemed unprofitable, gas is transported in liquid form with special ships or trains. Cooling dry gas at 2600 degrees Fahrenheit makes it liquefy at normal pressure and thus occupy a volume equal to 1/600 of the gaseous form.

The trade of LNG had a recession in 2012 after 30 years of continuous growth. Despite that, the increase in the last five years is 36%. This is due to increased demand from existing markets and new demand from emerging economies.

The prospect of rising demand for LNG is encouraging because Japan is gradually replacing nuclear power plants, new markets appear and technology that will allow LNG to be dynamically inserted in the transport sector is improving.

The LNG system, besides the means of transport, includes liquefaction and gasification stations. These facilities are of high cost and their construction, just like pipelines, requires multiannual contracts between the contracting countries. The liquefaction stations are also used for liquefying pipeline gas for storage and transfer to points where constructing a pipeline is considered uneconomical.

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Amid all circumstances, the most disturbing phenomenon is that of global warming and its effects. It is known that the planet is undergoing heating and cooling schedule for 100,000 years, called the "natural cycle of warming". Human activity and specific pollutants emitted into the atmosphere, mainly CO2, burden the natural evolution of the phenomenon and lead to increased climatic and environmental impacts.

Natural gas is by far “cleaner” than all the other fossil fuels (oil, coal) with significantly lower emissions of CO2 and other pollutants. However, natural gas does not cease to participate in the emission of gases that contribute to the "greenhouse effect".

A major environmental concern is the contamination of groundwater. Currently, data that indicates serious environmental impacts has not been formally notified, but the investigation continues.

In the field of mining, processing and transporting natural gas, environmental concerns derive from the effects of operations. In these areas natural gas lags behind carbon, but is less burdensome in relation to oil. The development of technology in every area of the gas cycle reduces the impact. Undoubtedly, there are effects which are often not due to the fuel itself but due to failure to comply with environmental protection, which should apply to an organized and well governed state.

Uganda, a third world country has just discovered oil and gas deposits. She has gone ahead to pass laws to govern its exploration, development and production. However, there is no law whatsoever concerning the management of gas emissions even when it is apparent that these issues might arise. How then does the climate and the environment at large sustain itself when the government makes not effort to?

Uganda will eventually have to consider this threat to its environment. This paper provides the key starting point to achieve this end.

I acknowledge the existence of the resource in the country and its potential contribution to the development of the economy and sustainability it can bring to different communities. However, there is need to streamline its usage and exploitation for purposes of saving and preserving our climate and environment given that the country has heavily relied on it for agriculture; its back bone. This therefore demands a balance between these antagonistic needs; The desire to profit from the gas production while saving and preserving the environment for the sustainable production in agriculture and other climaterelated industries.

Production of gas has happened for a very long time around the world. For most countries, it has been a source of livelihood and sustenance. However, this has not come at no cost at all. It has also been a longstanding threat to their climate and indeed it has had significant impact on the same.

Uganda heavily relies on its climate to sustain its population and its economy. No other sector of its economy has contributed more than agriculture and as such, the gas emissions in the long run pose a threat to the very heart of the country if they affect the climate.

This study proposes a means through which the future of the country is saved from the everpresent threat of these pollutions and longlasting effects on the environment and the climate.

The discovery of natural gas resources across the world came with a number of challenges and perhaps the greatest challenge of them all is the development of the resources. Natural gas resources, by their nature, are valuable natural resources that are embedded below the earth’s surface. The extraction and utilization of such

resources require massive operations more so because these resources are normally found hidden in the rocky underneath of the earth surface, be it dry land or sea. The people of Buliisa district and Uganda as a whole are awaiting with great anticipation the moment that natural gas starts flowing. This is predicted to occur in about 2022/23. Ugandans remain hopeful that their government will convert the vast oil and gas wealth into better living conditions for them, there is widespread disquiet and fear.

The attractions afforded by the benefits of natural gas have made countries blessed with these resources to risk and extract them. The allures include; income from the resources, what the income can afford for the producing country, the international respect and power it generates for the producing country, infrastructure development as well as employment in both the primary and secondary natural gas industry in the host country. Sometimes the interests of the power brokers and deal makers of the industry are paramount in determining the course and the rate of the natural gas development. The lead organisation in the industry is OPEC, which is a critical player in global natural gas development and trade.

The extraction of natural gas comes at a colossal cost. The process of extraction is lengthy, costly and tedious. It requires a lot of financial abilities as well as technical knowledge. It needs proper planning, a responsive legal and nonlegal framework, a comprehensive environmental auditing and a stable political atmosphere among others. Often times countries regulate and leave the other processes to private investors.

Relevant Theories

This book has been based on the theoretical theories of natural gas production which is dependent on economic growth and economic production functions. These include among others, the Hotelling theory and the Hubbert Production theory. The Hotelling theory developed in 1931 proposes that *natural gas production volume should move in response to natural gas price.*[747]The effect of other factors such as natural gas price, OPEC production and cost on natural gas

[747]Hotelling, H. (April 1931) The economics of exhaustible resource. Journal of Political Economy. 39 (2) pp. 137-175.

production are well developed under this theory. In a bid to control production, Hotelling theorizes to manipulate optimal price of an exhaustible resource in relation to its scarcity (production) and growth of interest rate. The theory states that the price of a depleting resource like conventional natural gas should rise over time at the same rate as interest rate because its value should increase as the reserves are exhausted. Hence the Harold Hotelling[748] theory has been used in this case of production of an exhaustible resource, which is natural gas in this instance.

The Hubbert production model theory which was first proposed by Marion King Hubbert M. King (1940)[749] stipulates that *the production curve is bellshaped and symmetrical*. In addition to understanding production behaviour, the production model is used with the intent to forecast future production.[750]The Hubbert (1940) and (1962) peak natural gas theory predicts that the regional gas production and world gas production follow a bellshaped curve. The theory predicts that the world natural gas production is presently in decline having reached and passed its peak, giving rise to various studies which aim to investigate and forecast production profiles and decline curves of regions and indeed the world. The Hubbert theory as a forecasting technique in modelling production output forecast production and warns that the linearized version of the Hubbert curve should not be applied to forecast the ultimate reserves until or unless the production peak has already

[748]Ibid

[749]Hubbert, M.K. (1940) "The theory of groundwater motion". Journal of Geology. **48** (8): 785–944; Hubbert M.K. (1962). Energy resources. Journal of Geology: **83** (5): 37-79.

[750]Bartlett, A.A. (2000) 'An Analysis of U.S. and World Oil Production Patterns Using Hubbert-Style Curves', Mathematical Geology, 32(1), pp. 1 – 17; Gallagher, B. (2011) 'Peak oil analyzed with a logistic function and idealized Hubbert curve', Energy *Policy*, 39(2), pp. 790-802; Jakobsson, K., Bentley, R., Söderbergh, B. and Aleklett, K. (2012) 'The end of cheap oil: Bottom-up economic and geologic modeling of aggregate oil production curves', *Energy Policy*, 41, pp. 860-870; Orbach, R.L. (2012) 'Chapter 1 - Energy Production: A Global Perspective', *Developments in Environmental Science*, 11, pp. 1-18; Saraiva, T.A., Szklo, A., Lucena, A.F.P. and Chavez-Rodriguez, M.F. (2014) 'Forecasting Brazil's crude oil production using a multi-Hubbert model variant', *Fuel*, 115, pp. 24-31; and Bardi, U. (2015) 'Mineral Resources, Limits to: The Case of Peak Oil', in Wright, J.D. (ed.) *International Encyclopedia of the Social & Behavioral Sciences (Second Edition).* Oxford: Elsevier, pp. 554-560.

occurred.[751]Following this, it can then be used to model depletion rates in relation to reserve constraints. The Hubbert production modelling theory on a country gives the position of OPEC production in relation to natural gas price and reserves. It states that OPEC production has been instrumental in regulating the global natural gas price market production and its behaviour,[752] and though its current level of control seems to be going through some changes; its collective influence on the global market remains significant.

Natural gas exploration and development being a major capital project, it is common to perform risk analysis at several stages of the development planning, so that risk items can be identified early and actions planned accordingly. Optimal production is controlled by a myriad of extraneous geologic, engineering and economic factors which are modelled using different techniques by stakeholders in the bid to maximally exploit the natural gas resource. Therefore, production volumes are modelled before and during extraction operations for project planning and revenue estimation purposes.

Authors have written about gas exploration thus;

The legal framework that governs the exploitation and development of natural gas together with the existing geopolitical aspects influence the appeal of a nation for investment in the industry. Sustainable resource management need a national plan that is both inclusive and detailed. All minerals and oil and gas in, on, or beneath any land or waterways in Uganda are vested in the government on behalf of the Ugandan people, according to Article 244 of the Republic of Uganda's 1995

[751]Hirsch, R. L. (2006). Peaking of World Oil Production and its mitigation. *AIChE Journal*. **52** (1): 2–8.

[752]Bandyopadhyay, K.R. (2008) 'OPEC's Price-Making Power', *Economic and Political Weekly*, 43(46), pp. 18-21; Filis, G., Degiannakis, S. and Floros, C. (2011) 'Dynamic correlation between stock market and oil prices: The case of oil-importing and oil-exporting countries', *International Review of Financial Analysis*, 20(3), pp. 152-164; and Hochman, G. and Zilberman, D. (2015) 'The political economy of OPEC', *Energy Economics*, 48, pp. 203-216.

Constitution (as amended).[753]The National Oil and Gas Policy of 2008 is the instrument that directs the industry in managing Uganda's oil and gas. The policy's objective is to enable the nation's oil and gas resources assist in early poverty eradication and longterm societal value creation. To put these policies into action, the petroleum (exploration, development, and production) Act 2013[754]and the petroleum (refining, conversion, transmission, and midstream storage) Act 2013,[755]as well as the respective guidelines, were enacted.

Although there is significant literature on legal framework for natural gas development, there is minimal in the area of natural gas exploration, production and development in the local context. Even the literature present may not easily be intelligible due to the novelty of its substance and in some cases have research gaps on legal aspects on compliance standards which need to be filled. Nevertheless, the following is noted:[756]

Lanzillo[757] posits that much like the oil industry in Brazil, the gas industry and its regulation have undergone a number of transformations that accompanied the changes in the institutional environment and its economic, political and social aspects. However, the point that has separated oil and natural gas regulation in Brazil over the years lies in the role given to these energy sources. Indeed, regulation of the oil industry in Brazil deserves greater attention. The history of regulation in the sector, as a rule, places natural gas in the sphere of oil regulation. Thus, there was no distinction between oil and natural gas regulation, the latter

[753]Articles 244 (1) and (2) of the Constitution of Uganda 1995.
[754]Petroleum (exploration, Development and production) Act 2013
[755]The petroleum (Refining, Conversion, Transmission and midstream storage) Act 2013
[756]Notwithstanding the fact that many pieces of literature have been written in the field of oil and gas law and economics, most of the writings are not domestic. Hence their information however accurate cannot fit in the context of Uganda without modification. Additionally, most of the writings are based on highly developed technologies and advanced democratic politico-economic dispensations which don't exist in Uganda, something which creates the need to review this literature, identify the gaps and advise on the relevance of that literature *mutatis mutandis.*
[757]Lanzillo A.S. S. (2015), *Regulation of the Gas Industry, Yanko Marcius de Alencar Xavier (ed) Energy Law in Brazil- Oil, Gas and Biofuels.pp 105-130*

being absorbed into the principles and regulations of the former. Therefore, it can be said that natural gas regulation was an accessory, not dominant in this scenario. From the legal viewpoint, the prevalence of oil over natural gas persisted in both Federal Law No. 2.004/1953 (now revoked) and Federal Law No. 9.478/1997 (currently in force, henceforth called the Oil Law here). There are no specific provisions or chapters in either law regarding natural gas or even with respect to the gas industry.

Natural gas was treated as a subproduct of the oil industry. The change in the regulatory profile of the Brazilian gas industry began with the change in the importance of this resource. During the 1990s, the increase in natural gas reserves and exploration led to a series of measures aimed at expanding its participation in the Brazilian economy. Among these initiatives was the construction of the Brazil–Bolivia Pipeline (which allowed an increase in the amount of gas available to the Brazilian market), as well as the development of a series of activities such as the use of natural gas in a number of industrial sectors and its use as automotive fuel. However, as mentioned, the growth and importance of natural gas was not accompanied at the same pace by guidelines that contemplated the specificities of this industry. In contrast to the oil industry, where links in the chain are not strictly integrated and close coordination between exploration/production and other stages of the chain is not needed to deliver the product to the final consumer, the natural gas industry does not enjoy the same flexibility since greater effort is required to coordinate the links in the productive chain, thereby causing inflexibility in the delivery of its products.

Lanzillo[758] further argues that given the lack of specific dispositions, the Brazilian regulatory authority (National Oil, Natural Gas and Biofuels AgencyANP) attempted to fill this “void” by arbitrating disputes between transporters and carriers and providing solutions through regulatory instruments compatible with the natural gas sector. However, from a legal perspective, the ANP initiative to regulate free access without legal relief was seen as problematic since the principle of legality in Brazil means there is an understanding that the regulatory agencies

[758] Ibid

cannot act with only the general task of regulating the sector. The law must specify that the regulatory authority has this power, which was not the case here. For this reason, the nonexistence of regulations in the natural gas industry in the Oil Law caused legal uncertainty and an inauspicious environment for investment. These aspects of insecurity and uncertainty triggered a debate among different market agents, politicians and members of civil society, regarding the need for a specific regulation, whose mission would be to adapt the regulatory instrument to the gas sector, resulting in greater competition and, in turn, more companies for this market.[759]

Lanzillo[760] concludes that for the natural gas industry in Brazil, the Gas Law was an important step in creating a regulatory framework that reflected not only what was theoretically believed or what other countries applied regarding gas regulation but also the reality in Brazil, where significant investments are required given the existing infrastructure. The new framework should result in equilibrium between competition and protection of investment in order to achieve the development expected for the sector.

Philipsek et al.[761]assert that the regulation of oil and natural gas (hereafter 'oil and gas' or 'petroleum') is an increasingly important feature of constitutional design. In fact, the unprecedented constitutional transitions witnessed in the Middle East and North Africa (MENA) region over the past decade have brought to the fore the regulation of oil and gas resources at the constitutional level. Starting in Iraq and spreading to other MENA nations following the Arab Spring, many countries in the region have entrenched constitutional principles and rules to govern aspects of petroleum ownership, management and revenue. The economic importance of oil and gas resources in many MENA nations, coupled with the fact that revenue from these resources has historically been prone to high levels of corruption, has rendered the regulation of oil and gas in these new constitutions an almost

[759]Op.Cit.

[760]Lanzillo A.S.S. (2015), *Regulation of the Gas Industry, Yanko Marcius de Alencar Xavier (ed) Energy Law in Brazil- Oil, Gas and Biofuels,* p.127

[761]Philipsek S; SathanapallyV, Badat A.; SchultzK. (2014), Center for Constitutional Transitions, International Institute for Democracy and Electoral Assistance and the United Nations Development Project, Oil and Natural Gas: Constitutional Frameworks for the Arab States Region, p.15

foregone conclusion. That to be sure, the success (or lack of success) of a given country's industry depends on a variety of both constitutional and nonconstitutional factors, including the details of a country's economy, its power structure and the underlying legislative and regulatory framework governing the oil and gas industry[762]. Context matters a great deal, and it should not be expected that a constitution can solve all problems.

Philipsek and others observe that countries that are rich in oil and gas resources are often described in the literature as suffering from the 'resource curse' or 'oil curse'. Despite an abundance of natural resources, many oil and gasrich countries face social, economic, political and interregional challenges. These problems in turn hamper the effective exploitation of petroleum resources, which ultimately prevents equitable economic growth. Hence, they opine that while a constitution will not be able to overcome or prevent all the challenges of the resource curse, it can establish mechanisms that may limit their impact. A constitution can, for example, set out clearly and unambiguously how authority for managing oil and gas resources is to be shared between the central government and subnational units, establish mechanisms to offset uneven regional development by providing for an equitable revenuesharing mechanism, and minimize the risk of political instability by providing mechanisms to promote transparency and prevent corruption.[763]

Philipsek et al.,[764] illustrate that Algeria is the largest natural gas producer on the African continent and is regularly cited as one of the top three oil producers on the continent. However, despite an abundance of oil and gas wealth in Algeria, resource production has, in recent years, decreased for a variety of reasons, including the lack of infrastructure, security concerns, corruption scandals and laws that are unfavourable to IOCs. Algeria is a unitary state. Article 17 of the Constitution of Algeria, 1968, prescribes that public property, which encompasses

[762] Ibid
[763]Op.Cit.
[764]Philipsek S., Sathanapally V., Badat A.,Schultz K. (2014), Center for Constitutional Transitions, International Institute for Democracy and Electoral Assistance and the United Nations Development Project, Oil and Natural Gas: Constitutional Frameworks for the Arab States Region, p.74

the subsoil, mines and sources of natural energy, 'shall be an asset of the national community'. The main oil and gas law – the Hydrocarbon Act (Law No. 0507) – does, however, vest ownership of all hydrocarbon deposits in the state. The minister of energy and mines is the state entity predominantly responsible for the hydrocarbon sector. The Hydrocarbon Act created two independent regulatory organizations. First, L'Autorité de Régulation des Hydrocarbures (ARH) is the national agency vested with the power to implement and enforce compliance with regulations established in the Hydrocarbon Act.261. Second, L'Agence Nationale pour la Valorisation des Ressources en Hydrocarbures (ALNAFT) is the national agency responsible for developing and promoting the oil and gas resources of the country.

Philipsek and others conclude that given that the power to manage oil and gas resources is usually a contentious issue in petroleumrich countries, there are compelling reasons to entrench the main principles of a country's oil and gas management regime in the text of a constitution.[765] They are persuaded those constitutional amendments are usually herculean tasks, which when bolstered with a regulatory framework would provide extra security to the sector stakeholders. It would also assist to enforce ethical behavior of both governments and nongovernment institutions to allow for good governance in the sector.

On her part, Mitrova[766] reveals that probable gas resources of the Russian Federation are estimated at 164.2 tcm, including 63.8 tcm of the resources at the continental shelf. Further that, according to the Ministry of Natural Resources, as of January 1, 2012, the country's extractable conventional gas resources amounted to 48.8 tcm of ABC1 gas and 19.6 tcm of C2 gas (Russian reserve classification), including those of the continental shelf that amount to 8 tcm. The significant part of these reserves is concentrated in the NadymPurTaz region in the YamaloNenets Autonomous District, the center of Russia's gas production. The explored resources there represent 40% of the country's total, and most of them are in large and shallow deposits, which are convenient to tap (Cenomanian gas). This makes

[765] Ibid
[766]Mitrova T., (2014). The Geopolitics of Russian Natural Gas, p.19

production much easier. The rest of the YamaloNenets Autonomous District is also rich in natural gas, containing twothirds of Russia's known resources of free gas.
Mitrova[767] submits that the legal framework with respect to the use of subsoil resources in Russia is established by the Subsoil Law. This law places significant limitations on granting licenses for subsoil use with respect to areas of subsoil considered to be of "federal significance," i.e., containing natural gas reserves of 50 bcm or more and those located in internal waters, territorial seas, or on the continental shelf of the Russian Federation. For these areas, a license may be granted only to a Russian legal entity. Upon holding an auction/tender for the right to use such an area of subsoil, the government may also place restrictions on the participation of Russian legal entities if they are owned by foreign investors in whole or in part. For areas of subsoil located entirely or partly on the continental shelf, a license may be granted only to a Russian legal entity with no less than five years' experience in working on the continental shelf and in which the Russian Federation directly or indirectly holds more than 50% of shares. In practice, this means that these licenses are granted only to stateowned oil and gas companies (such as Gazprom and Rosneft) or, in some cases, to joint ventures with these companies (provided that the Russian Federation retains more than 50% of shares in the venture). Not only upstream investments but also all foreign capital investments in the gas sector (in exploration, production, transmission, wholesale supply, and export) are included on the list of business activities "which have strategic value for the defense of the state and national security support." This regulation de facto requires the president's personal permission for any deal involving foreign partners. It effectively restricts international cooperation in this sphere to megaprojects with statecontrolled companies.
According toAkinsola [768] Nigeria has not had any separate/specific licensing procedure or organizational framework for the exploitation and production of natural/associated gas reserves in the country. The exploration and exploitation of

[767] Ibid
[768]Akinsola A.O. (2017). A comparative study of the Legal framework governing oil and gas exploration and exploitation in Nigeria, Thesis submitted in fulfilment of the degree of Doctor of Laws in Public Law and Legal Philosophy at the North-West University, p.127

gas were conducted under an Oil Prospecting Licence (OPL) and an Oil Mining Lease (OML) under the Petroleum Act and its subsidiary legislations (as amended). He further argues that the National Oil and Gas Policy basically provides general guidelines for the development of the new oil and gas industry, which guidelines must be transformed into a more practical and concrete legal and institutional framework to effectively transform the oil and gas industry as envisaged by the policy.[769]

Akinsola[770] concludes that in Nigeria, most of the laws (especially the Petroleum Act) are outdated and could not cope with the demands of the modernday petroleum industry. He affirms that presently, more oil and gas extraction take place in the deep sea offshore, which means Nigeria needs to update her laws to effectively cope with the new developments in the industry. In the light of the inadequacy of the laws coping with modernday developments in the oil and gas sector, the Nigerian government in the year 2000 set up the Law Reform Commission. The Commission submitted its report in the year 2004. The government in 2007 set up the Law Report Implementation Committee to consider the Report. The Committee's work has culminated in the present Petroleum Industry Bill (PIB) and a subset of the PIB called the Petroleum Industry Governance Bill.

According to Olujobi,[771] Nigeria is endowed with enormous gas reserves of about 159 trillion cubic feet of natural gas, and it is ranked one of the top ten countries provided with natural gas in the world. An approximately 2.5 billion cubic feet of gas is declared as being flamed by the numerous oil facilities in Nigeria. Gas flaring is the disposition of natural gas or associated gas that comes with crude oil during oil exploitation and exploration activities in the upstream petroleum sector.

[769]Ibid, p.139
[770]Op.Cit,p137
[771]Olujobi O.J. (2020). Analysis of the Legal Framework Governing Gas Flaring in Nigeria's Upstream Petroleum Sector and the Need for Overhauling,2020 p.2,3

Olujobi[772]opines that gas flaring is an operational waste of energy resources in the petroleum sector that encourages greenhouse gas emissions. This is contrary to the 1992 United Nations Convention on Climate Change and the 1997 Kyoto Protocol, which requires that governments reduce greenhouse gas emissions in the oil sector. Gas flaring occurs in the refineries, chemical plants, oil rigs, and landfills by burning off the flammable gas. It also occurs when oil companies burn off the extra gas that escapes due to oil drilling and other oilrelated activities in the sector. Studies have shown that in relatively advanced petroleum jurisdictions like the United States, petroleum companies process natural gas or reinject the same into the field, and only 1% of the gas is flared, unlike in Nigeria where over 60% of the associated gas is flared daily. This could have generated billions of dollars to the Federal Government's treasury through the processing, distribution, and use of such gas as cooking or industrial gas. This gas could also be used to generate electricity for the populace to end the incessant power outages, as the nation is currently experiencing persistent inadequate power supply and declining oil revenues due to the global oil price slump. Owing to this, among other reasons, Nigeria is rated the seventh highest gas flaring nation globally by the World Bank's Global Gas Flaring Reduction Partnership. Gas flaring is an international concern and major source of air pollution with deleterious effects on climate and human health, which has prompted various studies which revealed that approximately 150 billion cubic meters or 5.3 trillion cubic feet of natural gas are burnt yearly with 400 million tons of emissions discharged annually. In Nigeria, nearly 800 million standard cubic feet (mmscf) of gas is flared regularly in 144 gas flare locations. Additionally, the existing legal framework on gas flaring in Nigeria has remained ineffective due to poor enforcement and insignificant monetary penalties of10 per thousand standard cubic feet imposed on defaulters, and this has given room for noncompliance and inefficiency of the law in combating gas flaring. One report has shown that the Federal Government of Nigeria loses approximately $1 billion worth of revenues to gas flaring every year due to the lack of adequate infrastructure to commercialize flared gas in the sector. In

[772] ibid

addition to the need to regulate gas flaring, there is a need to protect the environment from degradation, especially acute damage to the ecosystem as well as human health.

Olujobi[773] recognizes that gas flaring in Nigeria is basically due to the practice of gas flaring by oil companies who consider gas development unprofitable in the absence of a legal framework on infrastructure development, pricing among others.

According to Dong et al.,[774] concerns over carbon emissions have made the Chinese government become interested in developing natural gas, which is regarded as a clean, efficient, and lowcarbon energy source. Natural gas has been broadly introduced for heating, cooking, transportation, and power generation in China. The Chinese natural gas industry was developed relatively late, although it has expanded rapidly in recent decades. In 2013, domestic gas output in China reached 112.9 billion cubic meters (bcm), making China the sixth largest gas producer in the world. In the same year, domestic gas consumption reached 163.1 bcm, with an annual growth rate of 15.4 percent, which has made China the fourth largest global natural gas consumer after the USA, Russia, and Iran. According to the International Energy Agency, Chinese natural gas consumption will reach 240 bcm in 2015, and later 600 bcm in 2035, equivalent to that of all Europe.[775]

Dong et al[776] observe that environmental regulations and security emergency management for the gas industry have not been improved in China. The rapid growth of the gas industry has been coupled with substandard management and ecological concerns in recent years. For production and transportation of gas, there

[773] Op.Cit.
[774]Dong X., Guo J., Höök M. and Guanglin P. (2015). Sustainability Assessment of the Natural Gas Industry in China Using Principal Component Analysis (http://www.mdpi.com/journal/sustainability), p.6103
[775] Ibid
[776]Dong X., Guo J., Höök M. and Guanglin P. (2015). Sustainability Assessment of the Natural Gas Industry in China Using Principal Component Analysis (http://www.mdpi.com/journal/sustainability), p.6103

has been serious damage done to the environment due to legal deficiency. Sustainable development of natural gas policies is defined as the importance of exterior policies for industry development. Policies and regulations are important for creating a good development environment for the entire gas industry. Environmental regulations affect innovation, consumption patterns and competitive strategies of hydrocarbon companies. Assessment factors include preferential policies, financial subsidies, administrative power; diplomacy promotion, market concentration ratio, market liquidity, and construction of security emergency systems.[777]

According to OlokaOnyango, [778]"possession" of oil and gas fields is connected to and has an influence on the management and administration of oil resources, by whom, and on whose behalf. Recognizing ownership therefore gives critical details on who owns the resources and who stands to profit from them. Ownership and control of minerals and petroleum (including natural gas) in, on or under any land or waters in the country is vested in the Government of Uganda by Articles 244 (1) and (2) of the 1995 Constitution of the Republic of Uganda.[779]The Petroleum (Exploration, Development and Production) Act, 2013 (the "Upstream Law") reiterates this position.

He believes that Ugandans are the country's greatest and most significant stakeholders in the development of oil and gas. As a result, the question becomes how can the people guarantee that their government, as the resource's administrator, follows the rules in managing this limited oil and gas resource for their benefit? At this point, information availability becomes vital, which is a problem in Uganda.

[777] Op.Cit.

[778]Oloka-Onyango J. (2018): Courting the Oil Curse or Playing by the Rules? An Analysis of the Legal and Regulatory Framework Governing Oil in Uganda, Centre for Research on Peace and Development (CRPD). CRPD Working Paper No. 58

[778] Global Witness, 2012 (2012), "Uganda's Petroleum Legislation: Safeguarding the Sector, p. 8

[779] Articles 244 (1) and (2) of the Constitution of Uganda 1995.

OlokaOnyango[780] observed that the constitution empowers parliament to make laws regulating the exploration and exploitation of minerals and natural gas, the management of accruing revenues, payment of indemnities, and the conditions for the restoration of derelict lands. This mandate together with the Petroleum (Exploration and Production) Act, Chapter 150 of the Laws of Uganda, 2000 and the Petroleum (Exploration and Production) (Conduct of Exploration Operations) Regulations, 1993 provide the legal and regulatory framework under which the Ministry of Energy and Mineral Development through the Petroleum Exploration and Production Department (PEPD), has promoted and regulated the exploration of natural gas in the country. This exploration effort has led to the discovery of commercial quantities of natural gas and petroleum in the Albertine Graben an area which runs along the entire western border of the country.

OlokaOnyango[781] asserts that access to information is an issue in Uganda. In the case of Uganda, all oil resources are owned by the government, which must control and utilize them in a fiduciary capacity for the benefit of the people. This fiduciary structure naturally imposes the need for openness and responsibility on the side of the government, as well as access to information so that the peopleas the primary benefactors of the resourcescan accurately evaluate the same government's performance and hold it responsible. In simple terms, availability of information strengthens the ownership as defined by law.

Every citizen of Uganda has the right to access information held by the government under Article 41 of the 1995 Constitution, unless the revelation of such information would jeopardize national security or infringe on the rights of others. The Access to Information (A2I) Act of 2005 was enacted on this premise. The Act was also created to encourage a government that is efficient, effective,

[780] Oloka-Onyango J. (2018): Courting the Oil Curse or Playing by the Rules? An Analysis of the Legal and Regulatory Framework Governing Oil in Uganda, Centre for Research on Peace and Development (CRPD). CRPD Working Paper No. 58
[781] Ibid

transparent, and responsible, as well as to allow citizens to effectively analyze and contribute to government actions that affect them.[782]

The third guiding concept of the NOGP, according to ASF, is transparency and accountability, which involves openness and access to information.[783]This data allows stakeholders to analyze how their rights are being impacted. The NOGP aims to encourage high levels of openness and accountability in oil and gas licensure, contracting, discovery, development, and production activities, as well as earnings handling. The public has access to information relating to petroleum activities under both the upstream and midstream acts, like the declaration of new zones for oil exploration, the publicization of application notices and tendering processes,[784]and availability of information/reports from the Petroleum Fund and the Petroleum Revenue Investment Reserve (PRIR).

The Minister must submit to parliament the expected revenues and expenditures of the Petroleum Fund for each financial year, according to Section 61 of the PFMA. One big complaint about this clause is that the Minister is not required to verify that such payments are dissected in line with EITI criteria, which include payment type, origin, and source. Because the national budget acknowledges just one single figure from the oil and gas industry, it is hard to track corporate payments with government receipts.[785]

On payment of a stipulated price, the Minister may disclose information of all contracts and licenses or authorized production development plans available to the public under Section 51 of the Upstream Act. However, the inclusion of the term "may" rather than "must" suggests that access to such information is made available at the Minister's prerogative, who may choose to reveal just certain facts

[782] Section 3 of the A2I Act, 2005.
[783] Avocats Sans Frontières (ASF) (2015). Business, Human Rights and Uganda's Oil and Gas Industry: A Briefing of Existing Gaps in theLegal and Policy Framework
[784] Sections 52 and 54 of the Upstream Act.
[785] Avocats Sans Frontieres (2015), *Business, Human rights and Uganda's oil and gas industry: A Briefing of Existing Gaps in the Legal and Policy Framework*, Kampala: ASF. pp. 7

while concealing others. Section 153 goes on to say that information in a licensee's report can't be shared with anybody who isn't a Minister or a public servant unless the licensee gives his or her approval. Government personnel are even required to take an oath of secrecy, which carries severe penalties if broken. While the government should follow its pledge to join the EITI and make it a policy to post all contracts on the ministry's website, international oil corporations must also publicly indicate their readiness to provide the information they have.[786] This would boost public confidence in government while also increasing openness and accountability in Uganda's oil and gas industry.

Even when such information is available, ensuring that Ugandansthe majority of whom are uneducated or only speak elementary Englishare able to participate in its spread and discussion remains a difficulty.[787] Furthermore, the processes of accessing information are tedious and can be expensive. Finally, the culture of government secrecy over state affairs remains deeply entrenched, to the extent that even the courts of law have been shy to enforce provisions that would compel the government to divulge information on the agreements made in the oil sector.The following sections of Uganda's exploration, production, and development framework can be examined: (1) general licensing and supervision of oil exploitation operations, 2) National Oil Companies, and (3) the problem of local content. The National Oil and Gas Policy (NOGP) of 2008 was created to guarantee that the nation's oil and gas wealth contributes to early poverty eradication and longterm societal benefit. The immediate goal of the NOGP is to ensure efficacy in licensing areas having the ability to produce oil and gas in the country. The strategy calls for progressive licensing rather than blanket licensing; clear and public tendering; thorough research on firms seeking licenses; and certification of oil companies to prevent the unwanted condition of a monopoly.

Conclusion

[786] Avocats Sans Frontieres (2015), *Business, Human rights and Uganda's oil and gas industry: A Briefing of Existing Gaps in the Legal and Policy Framework*, Kampala: ASF. pp. 7
[787] International Alert (2011), "Oil and Gas Laws in Uganda: A legislators' Guide," Oil Discussion Paper No.1 May, pp. 21.

The available literature points to the need to have in place both legal and nonlegal frameworks governing the development of natural gas to attract investment in the sector that requires heavy capitalisation. Additionally, sustainable resource management requires an inclusive and comprehensive national strategy. Hydrocarbons contribute greatly to a country's wealth when developed. However, such countries are prone to endemic economic problems, conflict, bad governance, which often breeds insurmountable levels of corruption and failure of government accountability for the revenues obtained from development of the resources. The situation is exacerbated by a lack, inadequacy or obsolesce of the legal and nonlegal framework to govern exploitation of the resource, regulate the industry or guide disbursement of revenues.

Review of the law

This section examines the several laws that Uganda has enacted to govern and regulate the oil and gas industry. The republic of Uganda's 1995 Constitution confers ownership and management of natural resources in the government on behalf of the people.[788] As a result, the Ugandan government owns all natural resources, such as minerals and oil and gas, on behalf of all the Ugandan people. Article 77(1) of the 1995 Constitution of Uganda establishes the parliament of Uganda, vesting parliament with powers to make laws on any matter for the peace, order, development and good governance of Uganda.

The Ugandan oil sector is primarily regulated by the 1995 Ugandan Constitution, which, among other things, mandates the government to guarantee that resources be utilised for the benefit of all Ugandans. The Ugandan Parliament is also mandated by Article 244(2) of the Constitution to pass legislation governing the exploitation of petroleum (oil and gas) and minerals, as well as the division of revenues originating from petroleum production and other associated activities. So, Uganda's oil and gas industry is now governed by a number of laws, rules, and regulations. The focus of government has since been on developing new legislation for implementing the NOGP across different areas of policy by creating new and

[788] Article 244 of the 1995 Constitution of Uganda

adding to existing legal frameworks. The laws that currently exist specifically to regulate both upstream and downstream oil and gas activities in Uganda include the NOGP[789]; the OGRMP[790]; the Petroleum Act Upstream[791]; the Petroleum Act Midstream[792]; and the PFMA[793] among others.[794]

Oil and gas management cuts across policy areas of taxation and revenue management, government accountability, corporate regulation, environment, land security, etc.[795] so it is important to recognise that there are other existing laws relevant to the overall framework for managing the new sector. In addition to the Constitution itself, the oil and gas management laws are accompanied by subsidiary regulations or statutory instruments, such as: Land Act[796]; Access to Information Act[797]; National Environment Act[798]; Investment Code Act[799]; Penal Code Act[800]; Income Tax Act[801]; Wildlife Act[802]; National Forestry and Tree Planting Act[803]; Public Health Act[804]; Water Act[805]; and Public Procurement and Disposal of Assets Act[806] among others.[807]

[789]National Oil and Gas Policy (NOGP), 2008.
[790]Oil and Gas Revenue Management Policy (OGRMP), 2012.
[791]Petroleum (Exploration, Development and Production) Act, 2013 (the 'Upstream Act').
[792]Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013 (the 'Midstream Act').
[793]Public Finance Management Act (PFMA) of 2015
[794] See list of tables on page x.
[795] Avocats Sans Frontières (ASF) (July 2015): Business, Human Rights and Uganda's Oil and Gas Industry: A Briefing of Existing Gaps in the Legal and Policy Framework.
[796]Land Act, 2010 Cap 227 (as amended)
[797]Access to Information Act 6 of 2005
[798]National Environment Act, 2019 cap 153
[799]Investment Code Act, 2019 cap 92
[800]Penal Code Act, 2010 cap 120
[801]Income Tax Act, 2021 (as amended)
[802]Wildlife Act, 2019 cap 200 (as amended)
[803]National Forestry and Tree Planting Act, 2003
[804]Public Health Act, 2019 cap 281
[805]Water Act,1997 cap 152
[806]Public Procurement and Disposal of Assets Act 2003.
[807] See list of tables on page x.

The national oil and gas policy (NOGP) is the principal framework that directs the management of Uganda's oil resources within the constitutional framework.[808]The national oil and gas policy is the principal framework that directs the management of Uganda's oil resources within the constitutional setting (NOGP). NOGP acknowledges that in order to reach the desired goal of using the resource to obliterate poverty and generate durable worth for Ugandans, it must first focus on the 'development of institutions, including regulations and labour essential for efficient management and control of the subsector.'

According to the 2008 National Oil and Gas Policy,[809] the specific role of parliament in Uganda's petroleum sector is: to enact petroleum legislation; to enact the proposed legislation for the management of petroleum revenues; and to monitor performance in the petroleum sector through policy statements and annual budgets.[810] Many of the difficulties connected to natural wealth are clearly acknowledged in the 2008 National Oil and Gas Policy (NOGP), including the requirement to alleviate the possibility of adverse economic and fiscal effects that frequently result from an abrupt upsurge of earnings in the industry sector.[811]With the goal of converting scarce oil riches into sustainable development benefits, the NOGP defines globally accepted procedures for mitigating these consequences. It also emphasizes the necessity for a longterm national plan to maximize benefits to Ugandans along the industry's "value chain" in order to achieve optimal outcomes from oil and gas production.

Given the technical issues implied in the aspects of policymaking relevant to the oil sector, and how new this debate is in Uganda, legislators face a further challenge in developing the necessary expertise as quickly as possible to achieve

[808] Ministry of Energy and Mineral Development (Feb 2008): National Oil and Gas Policy for Uganda: The Policy Goal is to Use the Country's Oil and Gas Resources to contribute to Early Achievement of Poverty Eradication and Create Lasting Value to Society; Ministry of Energy and Mineral Development (October 2019): Draft National Energy Policy.

[809] Available at http://conserveuganda.files.wordpress.com/2010/06/national-oil-and-gas-policy-for-uganda.pdf

[810] Chapter seven spells out the roles of various institutions including parliament.

[811] Available at http://conserveuganda.files.wordpress.com/2010/06/national-oil-and-gas-policy-for-uganda.pdf

meaningful oversight.[812] In the case where the ruling party has a large majority in the house, parliamentarians may struggle to exercise an independent voice where parliamentary and constituents' perspectives differ from that of the executive. At times, parliamentarians may find themselves excluded from the details of contracts between the government and oil companies, as a result of confidentiality clauses – or misunderstandings about these, as has been the case with Uganda's Production Sharing Agreements (PSAs) over the past few years. The NOGP suggested the formation of three entities: 1) the Petroleum Authority of Uganda to manage administrative responsibilities; 2) the National Oil Company to oversee the state's economic interest; and 3) the Directorate of Petroleum to counsel on policy concerns and resource management. The Petroleum (Exploration, Development, and Production) Act of 2013 established these.

The Constitution of the Republic of Uganda embodies the aforementioned principles, since it lays significant duty on the Parliament to provide supervision in the management and exploitation of resources.[813] As a result, the Ugandan Parliament is the supreme institution charged with enacting legislation governing the management and exploitation of the country's minerals and natural resources, such as oil and gas, as well as the sharing of incomes derived from petroleum exploitation and other related activities.

Uganda's Parliament has passed legislation to govern oil activities in the country. Nevertheless, the majority of laws approved by Parliament consolidate power in the hands of the executive (the Minister of Energy and Mineral Development), which has ramifications for ensuring openness and transparency in the oil and gas sector. This is primarily due to the leadership structure, which includes Cabinet Ministers who are Members of Parliament chosen from the party in power.[814]In

[812] In a survey, concerns were raised about the capacity of legislators to understand and contribute to extractive sector and management, in part due to educational qualification and in part due to high turnover of representatives.

[813]Section 79 of the Constitution provides that 'subject to the provisions of this Constitution, Parliament shall have power to make laws on any matter for the peace, order, development and good governance of Uganda'.

[814]World Bank Institute (2012), 'Parliamentary Oversight of the Extractives Industries Sector'.

such a circumstance, when the party in power enjoys an overwhelming majority, Parliament will lack a solid foundation for developing independent skills.[815]

Unreleased information on the government's handling of Uganda's oil and gas industry is jeopardizing the legitimacy and effectiveness of governance systems and institutions. Information on oil and gas operations is difficult to come by in Uganda. The productionsharing agreements (PSAs), for example, are still inaccessible to the general public. This might be owing to the fact that various statutes/laws take opposing stances on citizens' right to obtain information. For example, section 151 of the Petroleum Act, which governs public access to information on petroleum activities, is lacking. Whilst the provision states that the Minister may release information to the public about deals signed, it does not specify how much information about the contracts should be disclosed; are the specifics about the participants or all of the sections in discussion? The lack of openness has led to unfavorable views and concerns about whether the PSAs were properly brokered to benefit Ugandans.[816]

Despite the fact that Uganda's oil sector runs outside of settlements, destruction of the natural environment of the Lake Albert area has become a concern because of inadequate environmental governance.[817] Oil corporations, for the most part, selfregulate.[818]The National Environment Management Authority of Uganda is lacks funds, staffed, and political authority. Although environmental impact studies have been undertaken,[819]there are minimal waste management standards.

[815]World Bank Institute (2012), 'Parliamentary Oversight of the Extractives Industries Sector'.

[816]The Black Monday protestors used these restrictions as one of the justifications for protesting against corruption in government (see www.monitor.co.ug: 3 December 2012: *'*Ant i - corruption Activities Call for Black Money Protests*'*).

[817]Patey, L. (2015), 'Oil in Uganda: Hard Bargaining and Complex Politics in East Africa', *OIES Working Paper* 660.

[818] Avocats Sans Frontières (ASF) (July 2015): Business, Human Rights and Uganda's Oil and Gas Industry: A Briefing of Existing Gaps in the Legal and Policy Framework

[819] International Alert (May 2011): Oil and Gas Laws in Uganda: A Legislators' Guide. Oil Discussion paper No.1.

LEGAL AND NONLEGAL FRAMEWORK ANALYSIS

Introduction

The legal regime governing the natural gas sector in Uganda is constituted by locally tailored policy[820] and legislative compliance requirements.[821] The major policy and legislation are the National Oil and Gas Policy[822] and the Petroleum Acts.[823] It is under these that subsequent sectoral policy and legislation have developed. Legislation covered in this chapter includes the 1995 Constitution, major oil and gas laws and other existing laws relevant to the overall framework for managing and developing the natural gas sector.

Compliance with these policy and legislative aspirations and standards will enable Uganda develop a sound and sustainable natural gas sector. This chapter is organized into two sections. The first section discusses the legal and institutional framework in Uganda under the legal instruments' framework for natural gas, and the second section discusses the nonlegal framework for natural gas development in Uganda.

Legal and Institutional Analysis

The regulatory framework in Uganda is headed by the Constitution. From the Constitution, the subsequent laws as made by the parliament and the relevant minister follows. After this is the contracts that bind the IOCs, the government and the NOC. Then the public finance Institution and lastly International Law.

[820]It is not our intention to delve at great length in issues of policy generally. However, the readers may be referred to additional readings in this regard. For example, they may wish to look at: George W.K. L. Kasozi, (2009): *Human Rights and Public Policy: A Holistic Analysis of the Right to Life in Uganda; UCU* Law Review 2009, Vol. 01 No 2, 2009, p. 33 – 86.

[821] Monday, J. (2014). Oil and gas exploration and environmental protection in Uganda: An appraisal of the policy and legal framework. Unpublished Master's Thesis, Makerere University Kampala, Uganda. URI: http://hdl.handle.net/10570/5862

[822] National Oil and Gas Policy, 2008.

[823] Petroleum (Exploration, Development and Production) Act, 2013; Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013; and Petroleum (Refining, Gas Processing and Conversion, Transportation and Storage) Bill, No. 2 of 2012.

The Constitution of the Republic of Uganda, 1995, as amended.

The constitution is the ultimate law of the land.[824] There is no law greater than it and therefore it stands supreme to all other laws that govern Oil and Gas in Uganda. All the other laws that govern the OGM sector must relate and agree with the provisions of the Constitution or else they become null and void to the extent of their inconsistency.

The foundation for effective resource management and administration of Uganda's oil and gas is the Constitution, which provides for the protection of natural resources, including water, wetlands, minerals, oil, fauna and flora, on behalf of the people of Uganda.[825]

In 2005 the Constitution was amended to the effect that control of all minerals and petroleum in or under any land or waters in Uganda is vested 'in government on behalf of the republic of Uganda'. [826] Even with this new amendment, the Constitution still reechoes the public trust doctrine, whereby natural resources are held by the government in trust for its people; or, in other words, envisaging people as the principals appointing the government to manage resources on their behalf. This relationship obliges the government to account to its people as principals/owners, ensuring they participate in the management of their affairs either by themselves or through elected representatives.

The Constitution gives parliament a mandate to pass laws for regulating the exploitation of minerals and petroleum; the sharing of royalties arising from oil exploitation; the conditions for payment of indemnities arising out of exploitation of petroleum and minerals; and the restoration of derelict lands.[827] Article 79 in general that parliament shall have the power to make laws on any matter for inter alia, development and good governance.

[824] Article 2 of the Constitution of the Republic of Uganda, 1995, as amended.
[825] Objective no. 13 of National Objectives and Directive Principles of State Policy.
[826] Article 244 of the Constitution of the Republic of Uganda, 1995, as amended
[827] Ibid.

Statutory laws

The Petroleum (Exploration, Development and Production) Act, 2013.

This is an Act of Parliament that was enacted in full exercise of Article 79. It is an Act to give effect to Article 244 of the Constitution; to regulate petroleum exploration, development and production; to establish the Petroleum Authority of Uganda; to provide for the establishment of the National Oil Company; to regulate the licensing and participation of commercial entities in petroleum activities; to provide for an open, transparent and competitive process of licensing; to create a conducive environment for the promotion of exploration, development and production of Uganda's petroleum potential; to provide for efficient and safe petroleum activities; to provide for the cessation of petroleum activities and decommissioning infrastructure; to provide for the payment arising from petroleum activities; and to provide for the conditions for the restoration of derelict lands.[828]

The Act covers matters to do with institutions that deal with oil and gas like the minister [829], the Petroleum Authority of Uganda [830], and the National Oil Company[831] (NOC). The Act also provides for the procedure and requirements for licensing [832] to include reconnaissance permits, petroleum exploration licences, petroleum production licences, and provisions relating to approvals and the drilling and designation of wells.

The Act further provides for the framework that governs the development and production of petroleum.[833] This includes the procedure of development and what must be taken into account at every stage. For instance, a production permit, prior to starting of production, and a certificate of testing upon testing of petroleum.

The Act also lays out an important aspect of the OGM which is decommissioning. [834] The IOC or any other licensee is required to have a

[828] See the long title of the Act
[829] Section 8 of the Petroleum (Exploration, Development and Production) Act, 2013
[830] Section 9-41, ibid.
[831] Section 42-46, ibid.
[832] Part IV, ibid
[833] Part V, ibid
[834] Section 112, ibid.

decommissioning plan submitted prior to the start of their exploration and production. The Act also provides for termination of use, removal and sale of property and liability for damages for disposal of decommissioned facility.

It is important to note that the Act recognises the input of the community. Under Part VIII of the Act, the law provides for State participation and National Content. This postulates the need to have the communities involved more in decision making since the drilling processes affect these communities more than any one else. It dictates that supplies analogous to the work must be sourced from the local community and the required labour as well, except where the community lacks such.[835] The IOC or licensee is under obligation to train the local communities in the skill so as to equip local labour with the expertise.[836]

The Act also takes into account the environment and the threat of pollution.[837] The nature of the EI is that its production can be environmentally catastrophic unless guarded and well carried out. The Act speaks strongly against damage arising from pollution, and imputes liability of such upon the licensee.[838] This remedy once sought and successfully recovered is then given to the communities that have been affected by the pollution.

The Act also gives effect to Article 26 of the Constitution which provides for the right of all citizens to own property. Part XI of the Act provides for surface rights and severs the surface rights from the subsurface rights. It also provides for compensation in case either right has been violated by the licensee.[839]

The Act also recognises the effect of such activities on the health of both the workers in the mining sites and the communities that live around the areas with OGM.[840] The Act dictates on safety precautions that must be adhered to, and the general requirements for emergency preparedness and creation of safety zones.

[835] Section 125, ibid.
[836] Sections 126, 127, ibid.
[837] Part X of the Act
[838] Section 129-132, ibid
[839] Section 139, ibid
[840] Part XII, ibid

The Act also provides for the possibility of a commission of inquiry to investigate health threats should they be claimed by workers.[841]

The Act also recognises the need to keep records. Information and documentation of the procedures and progress of the licensee must be kept and made available for the public.[842]

The Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013

This Act was also enacted to give effect to Article 244 of the Constitution. it was promulgated to regulate, manage, coordinate and monitor midstream operations; to enable the construction, placement and ownership of facilities; to provide for third party access to facilities; to regulate tariffs for facilities; to provide for an open, transparent and competitive process for licensing by the minister; to provide for additional and particular health, safety and environment regulations not sufficiently regulated in other laws; and to provide for cessation of midstream operations under the Act and decommissioning of facilities.[843]

The Act covers areas similar to the Petroleum (Exploration, Development and Production) Act that is to say institutional arrangements [844], licensing [845], decommissioning [846], state participation and national content [847], liability for damage due to pollution [848], health and safety [849], and information and documentation[850].

The Act however also covers other areas not similar to the abovementioned. The Act puts restrictions on flaring and venting under Section 38. It also provides for acquisition and pricing of petroleum commodities and products[851].

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[841] Section 147, ibid
[842] Part XIII, ibid
[843] See the long title of the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013
[844] Part II, ibid
[845] Part III, ibid
[846] Part VI, ibid
[847] Part VII, ibid
[848] Part IX, ibid
[849] Part X, ibid
[850] Part XI, ibid
[851] Part V, ibid.

The Petroleum Supply Act, 2003

This Act was enacted before the Constitution was amended to provide for the current stand on Minerals. It was however enacted to provide for the supervision and monitoring the importation, exportation, transportation, processing, supply, storage, distribution and marketing of petroleum products; to provide for the establishment of the Minister responsible for the petroleum sector as the regulatory authority, to provide for the licensing and control of activities and installations, for the safety and protection of public health and the environment in petroleum supply operations and installations; and to encourage and protect fair competition in the petroleum supply market.

The Act establishes the technical petroleum committee[852] and enunciates their functions[853]. It provides for petroleum construction permits and petroleum operating licenses and the procedure followed in acquiring them and requirements before acquiring the same.[854]

The Act also lays down the obligations of the holders of permits and licences which are maintenance of records and furnishing information, inspection and minimum working stock requirements.[855]

The Act also strongly calls for protection of public safety and the environment. It requires the adoption and adaptation of international standards and specifications, carrying out of environmental impact assessments and submitting of an emergency petroleum supply plan.[856]

The Petroleum (Exploration, Development and Production) Regulations, 2016

This is a secondary legislation not passed by the parliament but by the Minister for Petroleum and Mineral Development. It was therefore in the exercise of the powers conferred upon the Minister by Section 183 of the Main Act.

The regulations generally add details to the provisions of the Act in matters already mentioned. It however provides for the opening of new areas for petroleum

[852] Section 8 of the Petroleum Supply Act, 2003
[853] Section 13, ibid
[854] Part IV of the Act
[855] Sections 24-26, ibid
[856] Sections 32-34, ibid

activities and therefore the carrying out of impact assessments relating to the opening of the same[857].

The Petroleum (Exploration and Production) (Conduct Of Exploration Operations) Regulation, 1993

These regulations were passed way before the discovery of Oil and the amendment of the Constitution to provide for the current standing of the law on minerals. It can therefore be argued that this Act was promulgated to guide the explorers in a quest to establish if Uganda had Oil and Gas deposits.

The regulations provide for the starting operations to discovering Oil and Gas. They provide for geological and geophysical operations; the need to notify the government of the intention to commence operations; seismic surveys; and the different reports expected from the same.[858]

The Regulations further lay out the process that must be fulfilled to undertake drilling, operations offshore, use of explosives, the prevention and control of pollution, health, and safety (considered separately).

Contracts

These are agreements that Uganda has entered into with different IOCs and other companies for purposes of Oil and Gas exploration and production. The actual contracts are not readily available for the citizens for reasons of confidentiality; however, Uganda has model Contracts that are relied upon while agreeing with different IOCs.

Model Production Sharing Agreement for Petroleum Exploration, Development and Production or Petroleum Development and Production in The Republic of Uganda.

This is a model designed to guide the Ugandan government in entering into oil exploration, development and production contracts. It is comprised of 34 Articles which lay our obligations between the different parties.

The model provides for how participating interests are to be shared between the parties; the responsibilities and grant of rights; the requirement of exploration

[857] Regulation 4-7 of the Petroleum (Exploration, Development And Production) Regulations, 2016
[858] Part II of the Petroleum (Exploration And Production) (Conduct Of Exploration Operations) Regulation, 1993

work programmes; budgeting; the aspect of discovery, development and production; keeping of records, writing reports and keeping data; the aspect of bonuses paid to government; royalties to government; participation of the State in the OGM; recovery of cost; production sharing; the aspect of taxation; valuation and measurement of petroleum; transportation of Oil by pipeline; marketing and lifting; domestic requirements; the aspect of natural gas; training of local expertise, research and employment of locals; title to assets; foreign exchange control; assignment of participating interests; the aspect of prevention of danger to person, property or environment; dispute resolution; force majeure; annual acreage rentals; termination of contracts; accounting and audits; notice; the laws applicable to the contract; the representation of the entire agreement and its amendment; waiver clauses; and the concept of confidentiality.

All these provisions will be tailored to suit each agreement concluded by the government of Uganda with other entities for the exploration, development and production of oil and gas.

In particular, Article 18 of the PSA provides for Natural gas. It provides thus;

18.1 The Licensee shall have the right to use Associated Natural Gas for Petroleum Activities, including, but not limited to, reinjection for pressure maintenance, and improving the recovery of Petroleum, power generation and recycling operations.

18.2 In the event of a NonAssociated Natural Gas Discovery, the Licensee shall diligently engage in discussions with the Government with a view to determining whether the appraisal and exploitation of said Discovery of NonAssociated Natural Gas have a potentially commercial nature.

18.3 If, after the abovementioned discussions, the Licensee considers that the NonAssociated Natural Gas Discovery merits appraisal, it shall undertake an appraisal work programmer with respect to such Discovery in accordance with section 66 (2) of the Act and Article 6.

18.4 For purposes of assessing the commerciality of the NonAssociated Natural Gas Discovery, the Licensee shall have the right, if it so requests at least two (2) months prior to the expiry of the second renewal of the Exploration Period to be

granted the extension of the Exploration Period with respect to the Appraisal Area related to said Discovery, for a term of two (2) years starting from the expiry of the second renewal of the Exploration Period.

18.5 In addition, the Parties shall jointly assess the possible outlets for the Natural Gas from the Discovery in question, both on the local market and for export, together with the necessary means for its marketing, and they shall consider the possibility of a joint marketing of their shares of production in the event the Natural Gas Discovery would not otherwise be commercially exploitable.

18.6 Following completion of appraisal work, in the event that the Parties jointly decide that the exploitation of a Discovery is justified to supply the local market, or to develop and produce that Natural Gas for export, the Licensee shall submit to the Minister, prior to the expiry of the abovementioned two (2) years' period, a Field Development Plan in accordance with the provisions of Section 71 (3) of the Act, Regulations and this Agreement.

18.7 The Licensee shall then proceed with the Development and Production of that Natural Gas in accordance with the approved Field Development Plan and the provisions of this Agreement applicable to Crude Oil shall apply, mutatis mutandis, to Natural Gas, unless otherwise specifically provided in this Agreement.

18.8 If the Licensee considers that the NonAssociated Natural Gas Discovery does not merit appraisal, the Minister may in accordance with the Act require the Licensee to relinquish its rights on the area encompassing said Discovery.

18.9 In the same manner, if the Licensee, after completion of appraisal work, considers that the NonAssociated Natural Gas Discovery is not commercial, the Minister may, with a three (3) months' prior notice, require the Licensee to relinquish its rights on the Appraisal Area related to said Discovery.

18.10 In both cases, the Licensee shall forfeit its rights on all Petroleum which could be produced from said Discovery, and the Minister may then carry out, or cause to be carried out, all the appraisal, development, production, treatment, transportation and marketing work relating to that Discovery, without any

compensation to the Licensee, provided, however, that said work shall not cause prejudice to the performance of the Petroleum Activities by the Licensee.

18.11 Associated Natural Gas which is not used in Petroleum Activities, and the processing and utilisation of which, the Parties agree is not economical, shall be returned to the subsurface structure, or may be flared subject to the Act. In the event that the Licensee chooses to process and sell Associated Natural Gas, the Licensee shall notify the Government of the same and upon such notification, the Government and the Licensee shall, as soon as practicable thereafter and subject to the Act meet with a view to reaching an agreement on the processing and sale of such gas. In the event Licensee chooses not to process and sell Associated Natural Gas, the Government may elect to offtake at the outlet flange of the gasoil separator and use such Associated Gas which is not required for Petroleum activities. There shall be no charge to the Government for such Associated Natural Gas, provided that the cost to gather, process and utilize such Associated Natural Gas shall be for the account of the Government.

18.12 The Licensee shall have the right to extract Natural Gas liquids and condensate for disposition under the terms relating to Crude Oil.

18.13 The value to be attributed to Natural Gas shall be determined as follows:

18.13.1 Gas which is used as per paragraph 18.1 or flared with the approval of the Government and subject to the Provisions of the Act or re injected or taken by Government pursuant paragraph 18.11 shall be ascribed a zero value;

18.13.2 For arm's length sales to third parties, be equal to the net realised price obtained for such Natural Gas at the Delivery Point;

18.13.3 For sales other than at arm's length sales to third parties, be determined by agreement between the Government and Licensee, provided, however, that such price or value shall reflect the following:

(a) the quantity and quality of the Natural Gas;

(b) the price at which arm's length sales of Natural Gas from other sources in Uganda, if any, are then being made;

(c) the price at which arm's length sales to third parties, if any, of Natural Gas imported into Uganda are being made;
(d) the purpose for which the Natural Gas is to be used; and
(e) the international market price of competing or alternative fuels or feedstock.
18.13.4 Arm's length sales to third party shall not include sales to Affiliated Companies of the Licensee or to the Government, any Ugandan public authority or any other entity controlled directly or indirectly by the Government.

This is the only provision that specifically discusses natural gas in the laws of Uganda. Particular attention needs to be paid to Article 18.7 of the PSA which provides that the laws governing Oil exploration, development and production operate similarly to gas production.

However, whereas oil has oil spills, gas has emissions and the two are different in one way or another. They both affect the environment but in quite separate modes which means their way of combatting is also different. This is not envisioned by the laws.

Public Finance Institution.

International Financial Institutions (IFIs) are international financial organizations which multiple nations founded. They are subject to international law instead of the laws of any one single country. The IFIs are usually owned by national governments of the founding members.[859] Examples of IFIs around the globe are; European Investment Bank, African Development Bank, Asian Development Bank, Caribbean Development Bank, InterAmerican Development Bank, World Bank, International Monetary Fund, to mention but a few.

In many parts of the world, IFIs play a major role in the social and economic development programs of nations with developing or transitional economies. This role includes advising on development projects, funding them and assisting in their implementation.[860] For instance, the purpose of the establishment of the World

[859] Thomas Herold, *What are International Financial Institutions (IFI)?*, available at https://www.financial-dictionary.info/terms/international-financial-institutions-ifi/

[860] https://www.tradecommissioner.gc.ca/development-developpement/mdb-overview-bmd-apercu.aspx?lang=eng

Bank and IMF in 1944 by the Bretton Woods Agreement was to improve the standards of living in their respective member nations.

In the extraction of Oil and Gas, whether offshore or onshore, the area within which this extraction happens stands a highprofile risk of environmental degradation and local community destabilisation if there are no adequate, proper and targeted measures to avert such risks. These processes of extraction are undertaken using the fund of these IFIs and in ensuring that these risks do not occur, a tripartite agreement between the National Oil Companies or the government, the International Oil Company (which carries out extraction using the fund from the IFIs) and the local community is entered. These agreements are the safeguard to insure against the risks that escort OGM.

It then follows that before the IFIs can fund the works of OICs, they require that certain performance standards be met and guaranteed in the Production Sharing Agreements (PSAs) that they conclude with the respective countries. These performance standards are an international benchmark for identifying and managing environmental and social risk and have been adopted by many organizations as a key component of their environmental and social risk management.[861]

It is important to note that these procedural or performance standards are not enlisted in a single document like constitutions of different countries. This is the case because of two reasons; firstly, the standards are guided by the risks of the OGM and therefore cannot be formed without the imperative risks in mind. For example, there are standards expected for resettlement of people, stakeholder engagements for Free, Prior and Informed Consent (FPIC), performance standards on land acquisition, EHS Guidelines and the list goes on.

Secondly, different IFIs require different standards and as such, they differ in the threshold that they require of the IOCs before they can dispatch their funds to the

[861] https://firstforsustainability.org/risk-management/implementing-ifc-environmental-andsocialrequirements/establish-and-maintain-an-esms/ifc-environmental-and-social-performance-requirements/ifc-performance-standards/#:~:text=The%20IFC%20Performance%20Standards%20are,environmental%20and%20social%20risk%20management.

latter. For example, there are land acquisition standards set by the IFC, different from the ones set by the African Bank, standards set by the International Standard Organisation (ISO), the Extractive Industry Transparency Initiative standards, and then the International Council on Mining and Metals (ICMM). All these bodies have their own selfcontained standards and their adherence is a requirement by countries or OICs that subscribe to them.

Additionally, as earlier stated, these IFIs and IOCs are governed by International Law to the extent of the environmental and local community issues. Many International Conventions like the UDHR, ICCPR, ICESCR, ILO, the UN Voluntary Principles on Human and Security Rights, the law of the sea Convention etc. and even regional instruments like the African Charter and its 2003 Protocol, also provide standards that must be fulfilled by the IOCs in the OGM.

The IFIs E&S performance standards define the IFIs clients' responsibilities for managing environmental and social risks. This sustainability framework advises the steps that must be taken to ensure that the environment and local communities at large are able to sustainably coexist with the OGM without significant disruption.

The 2012 edition of IFC's E&S sustainability framework lists eight (8) policies and standards which guide all IOCs under IFC effective 1st January 2012.[862] Performance Standard 1 establishes the importance of (i) integrated assessment to identify the environmental and social impacts, risks, and opportunities of projects; (ii) effective community engagement through disclosure of projectrelated information and consultation with local communities on matters that directly affect them; and (iii) the IOCs management of environmental and social performance throughout the life of the project.

Performance Standard 2 up to 8 establish objectives and requirements to avoid, minimize, and where residual impacts remain, to compensate/offset for risks and impacts to workers, affected communities, and the environment. These standards

[862]https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/Sustainability-At-IFC/Policies-Standards/Performance-Standards/

have therefore been used in this paper to discuss the E&S performance standards given by public and private IFIs to IOCs.

International Law

International law recognises the State's sovereignty over its natural resources under the 1958 Convention of the Continental Shelf, which was later carried over to the UN General Assembly (GA) Resolution 1803 on Permanent Sovereignty over Natural Resources in 1962.To further emphasise that a host country fully owns and controls petroleum resources under its jurisdiction, a further UN Resolution 3281 (XXIX), Charter of Economic Rights and Duties of States is adopted by the UN GA in 1974. Acknowledgement of permanent sovereignty meant that the host states could nationalise or expropriate foreign company assets. However, they could only do so for reasons of public utility, security or national interests and if compensated in accordance with the host state's laws and international law. A more elaborate and modern version of this rule is contained in the Energy Charter Treaty (ECT), signed in 1994 between the then newly emerging former Soviet Union states of resource rich Central Asia and Europe, as well as Japan, Russia and Turkey.

Article 18 of the ECT also recognises permanent sovereignty over natural resources but reiterates the standard tests for expropriation: it is only allowed when it is undertaken for the purpose of the public interest; it is not discriminatory; it adheres to due process of law and it is accompanied by prompt, adequate and effective compensation. The ECT also has a comprehensive investment protection chapter (Part III of the Treaty) which has become the standard of investment treatment in many successive Bilateral Investment Treaties (BITs).

The ECT's executive body, the Energy Charter Secretariat, produced a model intergovernmental and hostgovernment crossborder pipeline agreement for natural gas which has been the basis of a few pipeline agreements in Central Asia, such as BakuAktau pipeline agreement. With regards to offshore exploration and laying of subsea pipelines, the UN Convention on the Law of the Sea Treaty provides fundamental rules and international rules, including rules on obligations for the removal and disposal of offshore.

On the other hand, the significance of maritime boundaries in current international relations has grown with the expansion of national limits of maritime jurisdiction in the last 50 or 60 years. This is because, in the present, an acre of sea may be worth more than an acre of barren land, especially if there is oil or gas on the subsoil or on the seabed. Therefore boundarymaking is now a major task for coastal States and relatively few of them have a full set of maritime boundaries.[863] Currently 180 boundaries have been agreed upon, which is far less than the 400 boundaries that potentially exist, according to geographers. The reasons are that countries tend not to see boundarymaking as a priority, in the absence of any incidents or natural resources. Furthermore, developing countries often do not have ready access to the required technical advice from hydrographers. Some of them have nevertheless negotiated boundaries e.g. because of encouragement by the oil industry.[864]

Chatham House in a meeting of the International Law Discussion Group at Chatham House on 14th February, 2006, identified two possible causes of the maritime boundary disputes to include; disputed sovereignty over land and; overlapping entitlements to maritime rights and jurisdiction. On the former, it noted that two countries can claim the same island[865] or the same area of mainland.[866] To resolve this issue, the relevant rules of international law include those on the acquisition of sovereignty; they look to human activity (occupation and administration) of the territory.

On the latter, it noted that there can be overlapping claims between adjacent or opposite States for 12 mile territorial seas, 200 mile EEZs, and continental shelves, which may extend beyond 200 miles. Given the extension of rights to a 200 mile limit, overlaps are now more common than they used to be. To resolve issues of

[863]Chatham House. 2006. "Methods of resolving maritime boundary disputes", available at; https://www.chathamhouse.org/sites/default/files/public/Research/International%20Law/ilp140206.doc (accessed on 08th July, 2021)

[864] Ibid.

[865] See Eritrea v Yemen, *Award on Territorial Sovereignty and Scope of the Dispute*, (1998) XXII RIAA 211, PCA.

[866] See ICJ reports, *Case Concerning the Land and Maritime Boundary between Cameroon and Nigeria (Cameroon V. Nigeria: Equatorial Guinea intervening)*, Judgment Of 10 October 2002.

overlapping claims, the relevant rules of international law are those on the delimitation of maritime boundaries. These rules can be found in the UN Convention on the Law of the Sea (UNCLOS), state practice and jurisprudence.

Article 33 of the UN Charter provides for the peaceful settlement of disputes by means of the parties' own choice. These means always include negotiation. If negotiations are not successful, recourse may be had to conciliation, good offices (e.g. of the UN Secretary General), arbitration (ad hoc or according to annex VII UNCLOS or judicial settlement (ICJ/ITLOS)).[867]

Methods of settling differences and disputes about overlapping entitlements include resolving any sovereignty differences, the establishment of a complete boundary, a partial boundary or a joint area, or combining some of those methods. Maritime boundaries are to be established by agreement in accordance with international law. Disputes and differences about sovereignty will be resolved by examining which State has more activity on the disputed territory.[868]

The International Court of Justice (ICJ) is the principle judicial organ of the United Nations; a body comprising of 193 member states.[869] It is therefore tasked with settling disputes that might arise between these countries using international law and other sources as determined by the law.[870] The most international convention that the ICJ has evoked is the United Nations Convention on the Law of the Sea (UNCLOS).[871]

The major criticism of the UNCLOS has been that Articles 74(3) and 83(3) of the Convention; the only provisions that deal directly with the duties of States 'pending agreement' on delimitation, do not contain any express rules against the prohibition of any particular oil and gas activities in the disputed area. Instead, they impose an openended obligation on States to refrain from any acts that would 'jeopardize or hamper' the final delimitation agreement. Yet, the question about

[867] Supra note 55
[868] Ibid
[869] Article 92 of the Charter of the United Nations, 1945
[870] Article 38 of the Statute of the International Court of Justice
[871] United Nations Convention on the Law of the Sea (adopted 10 December 1982, entered into force 16 November 1994) 1833 UNTS 3.

what kind of economic activities would have the effect of jeopardising or hampering the final delimitation agreement remains critically unanswered.[872]
Previously, petroleum operations in disputed areas attracted an international obligation to refrain from undertaking any acts related to drilling of wells, establishment of installations and appropriation of petroleum.[873] This obligation seems to derive from conventional law, such as UNCLOS, and is also said to be reflected in customary international law as a general obligation of 'mutual restraint'. On the other hand, seismic exploration surveys have traditionally been considered as being 'legally permissible', even when conducted without the other interested parties' consent. The reason offered for the above distinction is that, whereas the former acts can have a permanent physical impact on the marine environment of the disputed area, seismic surveys, due to their transitory character, cannot have such effect.

Analysis of Legal Instruments for natural gas development

Together with geographical and political considerations, the legislative framework that reflects the fiscal system under which oil and gas firms operate will make a country more or less appealing for investment. Sustainable resource management necessitates a multifaceted national plan. All minerals and natural gas in, on, or beneath any land or waterways in Uganda are vested in the government on behalf of the Ugandan people, according to Article 244 of the Republic of Uganda's 1995 Constitution (as amended).[874]

The National Oil and Gas Policy of 2008 is the primary legally enforceable document regulating Uganda's natural gas resources management. The policy's objective is to harness the state's oil and gas wealth to help end poverty and add longterm value to society. To put these laws into action, the petroleum (discovery,

[872]Yiallourides C. "Oil and Gas Development in Disputed Waters Under UNCLOS", available at; https://core.ac.uk/download/pdf/82962947.pdf (accessed on 15th May, 2021)
[873]Lagoni R. 1984. "*Interim Measures Pending Maritime Delimitation Agreements*", UCL Journal of Law and Jurisprudence, AJIL 345.
[874] Articles 244 (1) and (2) of the Constitution of Uganda 1995.

development, and production) Act 2013[875]and the petroleum (refining, conversion, transmission, and midstream storage) Act 2013, as well as regulations, were enacted.

The Petroleum (including oil and gas) Fund is established under the Oil and Gas Revenue Management Policy of 2012 and the Public Management Act of 2015. The Income Tax (Amendment) Act, 2019, the Tax Procedures Code (Amendment) Act, 2019, the Value Added Tax (Amendment) Act, 2019, the Excise Duty (Amendment) Act, 2019, the East African Excise Management Act (Amendment) Act, 2012, and the Public Finance Management Act, 2015 are among the other laws passed. Every one of these standards and procedures are meant to ensure that the oil and gas industry is effectively governed in terms of attracting new investors and increasing earnings in the sector.

The Government of Uganda has enacted several laws related to the country's natural gas sectorlegislation that lays the foundation for Uganda's national natural gas development program. The laws further define and regulate the relationship between the government and the various gas companies currently operating in Uganda, while affecting the relationships between specific interest groups, from landowners and cultural representatives in the natural gas producing areas to members of the private sector. This section now discusses the various legal instruments that currently shape the contours of the natural gas sector.

The 1995 Constitution of the Republic of Uganda (as amended)

Ownership and control of minerals and petroleum (including natural gas) in, on or under any land or waters in the country is vested in the Government of Uganda by Articles 244 (1) and (2) of the 1995 Constitution of the Republic of Uganda.[876]The Petroleum (Exploration, Development and Production) Act, 2013 (the "Upstream Law") reiterates this position.

[875]Petroleum (exploration, Development and production) Act 2013
[876] Articles 244 (1) and (2) of the Constitution of Uganda 1995.

The Constitution empowers parliament to make laws regulating the exploration and exploitation of minerals and natural gas, the management of accruing revenues, payment of indemnities, and the conditions for the restoration of derelict lands. This mandate together with the Petroleum (Exploration and Production) Act, Chapter 150 of the Laws of Uganda, 2000 and the Petroleum (Exploration and Production) (Conduct of Exploration Operations) Regulations, 1993 provide the legal and regulatory framework under which the Ministry of Energy and Mineral Development through the Petroleum Exploration and Production Department (PEPD), has promoted and regulated the exploration of natural gas in the country. This exploration effort has led to the discovery of commercial quantities of natural gas and petroleum in the Albertine Graben an area which runs along the entire western border of the country.

As a result, Ugandans are the biggest and most influential stakeholders in the nation's oil and gas resource development. As a result, the question becomes how the people can verify that their government, as the resource's administrator, plays by the rules in handling this limited natural oil and gas resource for their advantage. At this point, availability of information has now become vital, and that's a problem in Uganda.

Access to Information (A2I) Act, 2005

Every citizen of Uganda has the right to be availed with information held by the government under Article 41 of the 1995 Constitution, unless the revelation of such information would jeopardize national security or infringe on the rights of others. The Access to Information (A2I) Act of 2005 was enacted on this premise. The Act was also created to encourage a government that is efficient, effective, transparent, and responsible, as well as to allow citizens to effectively analyze and contribute to government actions that impact them.[877]

[877] Section 3 of the A2I Act, 2005

In Uganda, all oil and gas wealth is owned by the government, which must administer and harness them in a trustee capacity for the advantage of the citizens. This trustee relationship automatically demands government openness and accountability, as well as dissemination of information so that the people, as the primary owners of the resources, may accurately assess the government's effectiveness and hold it answerable. In plain terms , access to knowledge improves the ownership structure as defined in the constitution.

Income Tax Act 1997 (Cap 340) as amended

Natural gas operations are taxable under the Income Tax Act (the "Act") that was passed in 1997 and is amended as and when the need arises under Part IXA. The Income Tax Act provides for the taxation of natural gas operations. In the taxation of gas operations, the Act allows for deduction of cost and allowable deductible expenditures. The contractors and licensee are thereafter subject to payment of 30% as corporate income tax.

The Act is elaborate on the taxation of the gas companies, in the case of a transfer of interest to another party. It provides for accounting principles that apply in the taxation of contractors and transnational shared gas resources. It further provides for schedules within which to file returns and failure to do so within the given schedule, or the filing of inaccurate returns, is an offence punishable by the payment of a substantial fine.

The Act generally accords exemptions of 6% on local supply of goods and services. Other tax laws that govern gas operations include the following: Value Added Tax Act 1996 (Cap 349) (as amended 2005) for supplies to gas companies are deemed paid, with no VAT payments; the East African Community Customs Management Act 2004 which provides for exemptions for imports for direct use in natural gas under the 5th Schedule; the Excise Duty Act 2014; the Tax Appeals Tribunal Act; the Stamps Duty Act, 2014; and the Tax Procedure Code Act.

The Income Tax Act (ITA) commenced in 1997 with the aim of consolidating and amending the law relating to income tax and for other connected purposes. Section 4 imposes income tax, under subsections (1) (3)[878] and Section 81 allows for foreign tax credits in subsections (1) (3). (4).[879] This Act has an impact on the influx of foreign direct investment (FDI) and commerce in the country, as well as the industry's productivity. This is demonstrated in the case of Kinyara Sugar Works Ltd vs. Commissioner General, URA.[880]

National Oil and Gas Policy (NOGP), 2008

In February 2008 Uganda's Ministry of Energy and Mineral Development (MEMD) published the National Oil and Gas Policy (NOGP), which explicitly recognises many of the challenges associated with naturalresource wealth, including the need to mitigate the potential for negative economic and fiscal impacts that often stem from a sudden influx of revenue in the extractive industry sector. [881] The NOGP outlines internationally recognised mechanisms for managing such impacts, with the aim of turning finite natural gas wealth into sustainable development outcomes. It also highlights the need for a longterm national strategy to ensure optimal impacts from natural gas exploitation by maximising benefits to Ugandans along the industry "value chain."

The overarching goal of the policy is that natural gas development in Uganda will 'contribute to early achievement of poverty eradication and create lasting value to society'. In particular, the NOGP concurs with the emerging global consensus on

[878] Income Tax Act 1997 (Cap 340): Section 4, Sub-sections (1) -(3).

[879] Income tax Act 1997 (cap 340): Section 81, Sub-section (1)-(4)

[880] Kinyara Sugar Ltd vs Commissioner General Uganda Revenue Authority (H.C.C.S NO 73 OF 2011) [2012] UGCOMMC 114 (31 August 2012). Kinyara Sugar Works Ltd is a limited liability Company incorporated in Uganda and filed this suit against the Commissioner General, Uganda Revenue Authority for a declaration that it is entitled to tax exemption incentives under section 21 (z) of the Income Tax Act as amended by the Income Tax (Amendment) (No. 2) Act 19 of 2008 for income derived by it from its new plant and machinery procured to enhance its sugar cane processing capacity from 2200 tons of cane sugar per day to 3500 tons of cane sugar per day.

[881] Available at http://conserveuganda.files.wordpress.com/2010/06/national-oil-and-gas-policy-for-uganda.pdf.

the critical importance of transparency in handling all aspects of naturalresource management, with transparency and accountability towards stakeholders enshrined as a guiding principle in Uganda's future governance framework.[882]
The NOGP is a very important document and sets a high standard for the future governance of natural gas in Uganda. It is, however, more a set of principles than a detailed governance guide. The focus of government has since been on developing new legislation implementing the NOGP across different areas of policy by creating new and adding to existing legal frameworks.

The NOGP's third guiding principle is transparency and accountability, and that includes openness and dissemination of information. Stakeholders can use this information to evaluate how their rights are being impacted. The NOGP helps to boost high levels of transparency and accountability in oil and gas authorization, purchasing, discovery, growth, and processing activities, as well as earnings management. Citizens' access to information about oil and gas operations are granted by the upstream and midstream acts, like the declaration of new zones for natural oil and gas discovery, the disclosure of application notices and tendering procedures, [883]and direct disclosure of information/reports from the Petroleum (Natural Gas) Fund and the Petroleum Revenue Investment Reserve (PRIR).[884]

Mining Act 2003 (Cap 148)

Legislation to overturn and substitute the Mining Act, Cap. 148, with new mining and mineral development laws that adheres to and brings purpose to the pertinent statutes of the Constitution; to confer the government with possession and regulation of all mineral deposits in Uganda; and also to enable the issuance of licenses; and to cater for other related issues. Royalties are dealt with under Section 98.[885] This section dictates royalty sharing and, as a result, influences government tax incentive actions, which influence FDI in the nation.

[882] NOGP, section 5.1.3.
[883] Sections 52 and 54 of the Upstream Act.
[884] Sections 57-75 of the PFMA
[885] Mining Act 2003 (Cap. 148) Section 98 (1) – (4).

The Petroleum Acts 2013

The laws that currently exist specifically to regulate upstream, midstream and downstream petroleum activities in Uganda are the Petroleum Acts 2013.[886] These laws are accompanied by subsidiary regulations or statutory instruments.[887]
Natural gas management cuts across policy areas of taxation and revenue management, government accountability, corporate regulation, environment, land security, etc., so it is important to recognise that there are other existing laws relevant to the overall framework for managing the new sector. In addition to the Constitution itself, these include: Land Act, 1998; Access to Information Act, 2005; National Environment Act, chapter 153; Investment Code Act, chapter 92; Penal Code Act, chapter 120; Income Tax Act, 2002; Wildlife Act, chapter 200; National Forestry and Tree Planting Act, 2003; Public Health Act, chapter 281; Water Act, chapter 152; and Public Procurement and Disposal of Assets Act. Following publication of the NOGP in 2008, and in order to update and amend the law regulating oil activities in Uganda, the Petroleum (Exploration, Development, Production and Value Addition Bill (the Bill) was passed in 2013.

Licensure is also controlled by the Petroleum Acts of 2013. The regulation and involvement of commercial companies in oil and gas operations, is provided for by the Upstream Act with the goal of ensuring an open, transparent, and competitive licensing process. Oil and gas operations are unlawful in Uganda without an authorized license, permission, or sanction under Section 5 of the Act. Whoever

[886] Petroleum (Exploration, Development and Production) Act, 2013; Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013; and Petroleum (Refining, Gas Processing and Conversion, Transportation and Storage) Bill, No. 2 of 2012.
[887] Petroleum (Exploration, Development and Production) Regulations 2015; Petroleum (Exploration, Development and Production) (Health, Safety and Environment) Regulations 2015; Petroleum (Exploration, Development and Production) (National Content) Regulations 2015; Petroleum (Exploration, Development and Production) (Metering) Regulations 2015; Petroleum (Refining, Conversion, Transmission and Midstream Storage) Regulations 2015; Statutory Instrument No. 1501; Petroleum (Exploration and Production) (Conduct of Exploration Operations) Regulations; Statutory Instrument 1491; Petroleum (Spirit) (Licensing, Testing and Possession) Rules; and Statutory Instrument 1496, the Petroleum (Spirit) (Marking) (Approval of Marker and Prescription of Fees) Notice.

violates the rule is guilty of a crime and faces a punishment of up to 100,000 currency points or a limit of ten years in jail, or both, if proved guilty.[888]The utmost penalty for a corporation entity is 1,000,000 currency points.[889] The government is granted authority to engage into contracts with anybody about oil and gas operations by Section 6 , such as awarding or continuing a license. The Minister has the authority to grant and cancel licenses, make oil and gas directives, and broker and ratify oil and gas agreements, among other things, under Section 8 of the Act.

The Minister is also responsible for developing a model production sharing agreement, as well as any other model agreement that must be authorized by Parliament. This model will be used to guide future agreements after it has been authorized. Failure to report model production sharing agreements to Parliament does not result in any punishments under the Act. As a result, the government has regularly refused to make these agreements public, infringing on the constitutional right to information and thus nullifying the clause.[890]Furthermore, an effort to get publication of the details of these contracts was declined by a Magistrate's court, apparently because the petitioners were unable to demonstrate that the social interest exceeded the risk to third parties, namely the government and the oil corporations.[891]

The Minister must declare areas available for tendering for an oil and gas industry exploration licence with Cabinet approval according to Section 52 of the Upstream Act. The notification must appear in the official Gazette as well as national and international publications.[892]In accordance to the notifications, anybody wishing to engage in oil and gas exploration must submit a written application to the Minister.

[888]Currency point is equivalent to UGX. 20,000. As at the time of writing, US$1 is equivalent to UGX. 3,440.
[889] Sections 5(2)(a) and (b.
[890] Avocats Sans Frontieres (2015), *Business, Human rights and Uganda's oil and gas industry: A Briefing of Existing Gaps in the Legal and Policy Framework*, Kampala: ASF, p. 10.
[891] See *Charles Mwanguhya Mpagi and Izama Angelo v. Attorney General*, Misc. Cause No.751 of 2009. For a critique of the case see Oloka-Onyango (2015): 27-28.
[892] Section 53.

The Minister will compel an applicant to organize for the delivery of a bond or other form of security, as well as to obtain the required insurance policies, to safeguard against damages that may emerge as a consequence of operations carried out under the oil and gas exploration license.[893]The license may be issued by the Minister after discussions with the petroleum authority and with Parliament's consent subject to the Minister's restrictions according to Section 58. Except specifically stated, the length of such license shall be valid for a maximum of two years from the date of award, however the license can be reissued for a further two years upon application.[894]This license is valid for a period of time and grants the licensee the ability to explore for oil and gas and conduct oil & gas exploration operations. Although drilling is a highly risky operation with considerable hazards, there is currently no strategy in place for corporations seeking for reconnaissance permits and oil and gas production licenses to prevent socioenvironmental degradation.[895]

The bearer of an oil and gas exploration license who has located oil and gas in his or her exploration zone has been granted the sole right to apply for the issuance of a production license by Section 69 of the Act. Any one , even without a natural gas exploration license in the exploration zone else may apply. [896] The Minister receives applications for a license in the way specified by the guidelines, and should be followed by a report on the oil and gas well and a field development plan, as required by section 71. This plan should include information such as: propositions for well development and production; projected production accounts; projected expenditures; safety precautions to be implemented during oil and gas production; the applicants' proposals for workforce development of nationals; and the applicants' propositions for purchase of products and services from Uganda.

[893] Section 56(8)(a)(b).
[894] Section 61.
[895] Minio-Paluello, M. (2012) “The Ugandan Upstream Oil Law: A Search in Vain for Accountability and Democracy Oversight,” Platform Briefing Paper, p. 4.
[896] Section 69(4).

The Minister will issue the natural gas production license based on the applicants' technical competence, capability, expertise, and financial power, as well as their understanding of the oil and gas resource.[897]Section 75 provides that the Minister may award a production license following agreement with the Authority and endorsement by Cabinet in any way the Minister deems appropriate.A natural gas production license is valid for no more than 20 years and can be renewed for yet another period subject to the Minister's approval.[898]Once granted, such a license confers on the licensee exclusive rights to carry on natural gas activities and to sell or otherwise dispose of the licensee's share of natural gas recovered in accordance with the field development plan. Under section 87, a license cannot be transferred without the written consent of the Minister in consultation with the Authority and may be cancelled or suspended under section 90 where a licensee is in default because of violations of Ugandan law. In this a scenario, the Minister may proceed to do so after conferring with the Authority and receiving Cabinet permission through formal notification served on the licensee.

In general, the Act provides the Minister much too much latitude in issuing licenses and their terms and condition.[899]Considering such authority, there is a risk that one license may differ in content from another if there is no clearly specified model license. Such dangers conjure up a motivation for firms to aggressively bargain and manipulate the Minister in order to get preferential deals for themselves and, perhaps, to undermine accountability and socioenvironmental safeguards.[900]The broad ministerial authority also raise the risk of a consolidation of political (and economic) power, which is typical in oilrich countries where corruption is unchallenged, with the tendency to encourage graft due to a lack of

[897] Section 73).
[898] Sections 77 and 80.
[899] Oloka-Onyango J. (December 2018): Courting the Oil Curse or Playing by the Rules? An Analysis of the Legal and Regulatory Framework Governing Oil in Uganda, Centre for Research on Peace and Development (CRPD). CRPD Working Paper No. 58
[900] Global Witness, 2012 (2012), "Uganda's Petroleum Legislation: Safeguarding the Sector, p. 8

checks and balances.[901]

The Midstream Act, which governs midstream activities such as refinement, conversion, transportation, and storing of oil and gas products, contains licensure measures that are comparable to those found in the Upstream Act.[902] Operating without a license could land a culprit a punishment of up to 100,000 currency points or a jail sentence for up to ten years, and a penalty of up to 200,000 currency points for a corporation.[903] The requirements and processes for seeking granting, and revoking licenses are identical to those in the Upstream Act.

Value Added Tax Act 1996 (Cap 349) (as amended 2005)

Uganda passed the Value Added Tax Act 1996 (VAT) in 1996, and it was modified in July 2005. VAT took the role of sales tax and the commercial transaction levy (CTL). Section 5 of the VAT Act of 1996 specifies who is required to pay tax. While Section 6 of the VAT Act 1996 describes a taxable person as: (1) an individual registered under Section 7 is a taxable person immediately registration takes effect; and (2) a individual who is not registered but is mandated to register is a taxable person immediately the tax period begins after the period in which the obligation to register emerged.

The Taxable value of taxable supply is stated in Section 21 of the VAT Act 1996.[904] A taxable supply is specified by the VAT Act of 1996, and has an impact on the taxable amount and taxes levied, as well as the tax incentive action. The Taxable Value of an Import of Goods is stated in Section 23 of the VAT Act 1996 as: The taxable value of goods imported is the total of (a) the price of the goods as determined for import taxes reasons under import laws; (b) the size of import taxes, excise tax, or whatever fiscal cost other than tariff charged on those items; and (c) the value of every services that section 12(3) relates to; not included in the

[901] Gary, Ian, & Terry L. Karl (2003), *Bottom of the Barrel: Africa's Oil Boom and the Poor*, Catholic Relief Services (CRS), p. 24.
[902] Section 2 of the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013.
[903] Section 9(1) and (2).
[904] VAT Act 1996 (Cap 349): Person Liable to pay tax, Section 5.

import value. This has an impact on the nation's FDI capital flows. Taxable Supply is defined in Section 18 of the VAT Act of 1996.[905]As a result, the VAT Act of 1996 pertains to tax exemptions as a means of attracting international companies to participate in Uganda's oil and gas industry.

Excise Management Act 1970 (Cap 335) as amended 2003

The excise levies are governed by the Exercise Management Act (1970). Excise taxes are paid on petroleum and other commodities manufactured or imported into Uganda. The Excise Management Act of 1970 defines this in Section 39.[906]This has an impact on the country's supply of petroleum products as well as the influx of FDI. Finally, it has an impact on tax incentive selections.

Tax Procedures Code Act, 2014 Act 14

A code to govern the enforcement of specified tax legislation in Uganda is established by the Tax Procedures Code Act of 2004, as well as to unify and streamline tax processes within current legislation. The various forms of tax assessments are outlined in Sections 20–23, whereas Sections 27–29 outline tax collecting mechanisms.[907]Every one of these sections have an impact on foreign direct investment (FDI) in the nation.

Local Government Act (Cap 243)

Section 80 of the Local Government Act 1997 Cap 243 (as amended) empowers LGs to impose, cost, and collect surcharges and taxes such as: Local Service Tax; Local Government (LG) Hotel Tax; Property duties and ground fees such as premium, building plan approval fees, land fees, and so on; Rental income; Business licences; User charges (including market dues and parking charges), user fees and licenses; Electricity production royalties, mineral extraction and discovery royalties, and protected areas royalties. Every one of these fees and duties have an impact on investment choice and, as a result, the entry of FDI into the nation.

[905] VAT Act 1996 (Cap 349): Section 18, Sub-sections (1)-(3).
[906] Excise Management Act 1970 Cap 335 as amended 2003: Section 39.
[907]URA. (2016). Tax Policy Changes FY 2016/2017.

Furthermore, Section 77 (1) enables LGs to develop, adopt, and carry out their budgets and programs, as well as collect and spend income. Investors will invest in a region that is controlled by the local government, and these budget and programs will have an impact on investment choices. Firms situated beyond Kampala, Entebbe, Namanve, Jinja, and Njeru, for example, are eligible for a 75% first capital allowance on equipment and machinery, whilst others based in these regions are eligible for a 50% initial capital allowance.[908]

Trade Licensing Act 1969 (Cap 101)

The declaration of business regions and commercial centres, the disclosure of selected goods, and the prohibition of noncitizens from dealing in specific regions and goods is provided for in the Trade Licensing Act of 1969. Sections 3 and 4 define offenses and punishments. This Trade Licensing Act of 1969 has an impact on business sectors, goods, and prohibitions on noncitizen trade in specific categories of goods, as well as its impact on FDI inflows into the nation.

Public Finance Management Act, 2015

The Sharing of Earnings from Oil and Gas Royalties according to Section 75(1), is as follows: "Government shall retain ninety four percent of the revenue from royalties arising from petroleum production and the remaining four percent shall be shared among the local governments located within the petroleum exploration areas of Uganda." This affects the share of money earned by the nation from oil and gas operations, which impacts governmental policy on tax relief.

Exchange Control Act 1951, Cap. 151

This is the legislation that bestows authority and enforces charges and prohibitions on gold, cash, remittances, securities, and liabilities, as well as the importation, exportation, transfer, and settlement of property, and for related purposes. This has an impact on the flow of FDI and business.

[908]United Nations (2000): Tax Incentives and Foreign Direct Investment: A global Survey. United Nations Conference on Trade and Development- Geneva. ASIT Advisory Studies No. 16, UNCTAD/ITE/IPC/Misc.3 p. 61-62.

Foreign Exchange Act, 2004.

This is legislation that modifies and streamlines Uganda's foreign exchange legislation; to allow for exchange of foreign currencies in Uganda, as well as the facilitation of worldwide transactions and exchanges of foreign currency; and to provide for other connected and subsidiary concerns. This has an impact on the flow of FDI and commerce.

Foreign Investments (Protection) Act, 1964 Cap. 518 (as amended)

Chapter 518 Foreign Investments Protection Act 1964 commenced December, 1964. It is a piece of legislation enacted by Parliament to provide security to certain authorized foreign investments as well as issues related to them. For the smooth flow of commerce and FDI, this Act protects foreign investments.

Investment Code Act 2019 Cap 92 (as amended)

This legislation amends, revitalizes, and substitutes the Investment Code Act of 1991 in order to bring it into compliance with the Constitution; to enable the registration of investors and investment licensure; and to establish the Authority as a onestop place for investment and investor collaboration, endorsement, guidance, surveilling, and assessment, among many others. This legislation creates a code to make measures in the legislation pertaining to domestic and international investments in Uganda by improving investment conditions, creating the Uganda Investment Authority, and allowing other applicable issues. Article 12 explains how to qualify for rewards.[909]

This Law is related to the research because it establishes incentive qualifications (article 12) and defines the Uganda Investment Authority, which was formed under that Law, as well as the Authority's objectives. It allows for the registration of investors and investment permissions, and also renders the Authority a onestop destination for investment and investor administration, endorsement, assistance, supervision, and evaluation. Total Uganda Limited versus Uganda Revenue

[909]Investment Code Act 2019 Cap 92, Article 12.

Authority in Civil Appeal No. 6 of 2001 is a prime illustration (Arising out of Tax Appeals Tribunal Case No. 2 of 2001). The primary issue addressed by this case was whether a bearer of an incentive certificate granted under the Investment Code (No. 1 of 1991) may keep benefiting from tax exemption it offers after the Income Tax Act 1997 revoked such concessions.[910]

Finance Act 2003 Cap 185 (as amended)

This is legislation modifies certain customs duties, to carter for border tax treatment of importss from the Common Market for Eastern and Southern Africa (COMESA), to enable the remission of country's outstanding balance of taxes, to overturn levies imposed for the sale of hydrocarbon potential information, to modify specific tax legislation, to reconsider the nontax earnings in numerous legislation, and to enable the remission of state outstanding balance of taxes. The day of approval was October 19, 2014. This law affects taxes directly and has an impact on FDI inflows into the nation.

AntiCorruption Act, 2009 (Act No. 6 of 2009)

The AntiCorruption Act of 2009 is a law that aims to effectively combat fraud in both the government and nongovernmental industries. It overturns and substitutes the Prevention of Corruption Act and, as a result, modifies the Penal Code Act and the Leadership Code Act, among other things. Corruption has a detrimental impact on FDI inflows and has a negative impact on incentive selection.

General Agreement on Tariffs and Trade (GATT)

The Agreement on TradeRelated Investment Measures (TRIMs) forbids the implementation of any investment action that is incompatible with GATT Articles III (national treatment of imported products) and XI (prohibition of quantitative limitations on imports or exports). An Demonstrative Listing, which is attached to the Agreement, provides instances of practices that violate GATT Articles III.4

[910]Total Uganda Ltd vs Uganda Revenue Authority (Civil Appeal No.6 Of 2001) [2001] UGCOMMC 5 (31 October 2001);

and XI.1. These mostly include localcontent restrictions, tradebalancing requirements, and exportrestricting policies. These sorts of actions are forbidden under the TRIMs Agreement perhaps not if they are imposed as a consequence of required legislative obligations, and more so if they are imposed as a prerequisite to receiving a benefit. Member States have been permitted to keep informed TRIMs for five years for third world country members and seven years for least rich nation members under the terms of the Agreement's transition clauses.

The Agreement on Subsidies and Countervailing Measures (ASCM) forbids incentives that are dependent, in law or in reality, on export performance or the choice of indigenous over foreign goods by encompassing "government revenue that is otherwise due, is foregone or not collected (e.g., fiscal incentives such as tax credits)". The Agreement creates another section of implementable incentives that have a negative impact on the desires of many other Participants when they bring harm to another Member's local production, negate or impede the advantages enjoyed by another Member, or trigger severe bias towards another Member's desire. The Agreement as well defines nonimplementable incentives with a limit, such as support to firms for research & development efforts of up to 75% of the expenses of research activities or 50% of the expenses of precompetitive development action, incase this support is restricted solely to staff, equipment, machinery, buildings, and consultancies. These GATT contracts, for instance, prevent incentives that are contingent, either legally or in practice, on export performance and impact the utilization of incentives and FDI inflows into the nation.

Tax Appeals Tribunal Act, 1998 Cap 345

In accordance with Article 152(3) of the Ugandan Constitution, this Law introduced tax appeals tribunals. No member of a tribunal may be an officer of the Uganda Revenue Authority or a government employee, according to Section (5) of

the Tax Appeals Tribunal Act, Cap. 345. This Act establishes a tribunal to hear tax complaints.[911]

Analysis of Institutional Establishments for natural gas development

This section analyses the institutional establishments for natural gas development in Uganda. The analysis begins with the apex establishment, the Parliament of Uganda.

The Parliament of Uganda

Article 77(1) of the 1995 Constitution of Uganda (the Constitution) establishes the parliament of Uganda, vesting parliament with powers to make laws on any matter for the peace, order, development and good governance of Uganda. Article 79 goes on to specify the following duties: (a) Protect the Constitution and promote the democratic governance of Uganda; (b) Give legislative sanction to taxation and acquisition of loans, in order to finance the work of government; and (c) Scrutinise government policy and administration, and approve presidential nominations for ministers, judges, ambassadors and other positions specified in the Constitution. Legislators are further tasked to represent constituent interests under Article 38(1) of the Constitution which provides that 'every Ugandan citizen has the right to participate in the affairs of government, individually or through his or her representative in accordance with the law'. In the oil and gas industry, parliament is responsible for passing petroleum laws, passing laws for the administration of petroleum earnings, and assessing effectiveness through policy statements and yearly budgets.

[911]For example, Uganda Revenue Authority vs Rabbo Enterprises (U) Ltd & Anor (Civil Appeal No. 12 of 2004) [2017]. The Supreme Court had ruled that the Tax Appeals Tribunal (TAT) has original jurisdiction to hear tax disputesand the High Court only has appellate jurisdiction. Until now, the long-established position was that the High Court and the TAT had concurrent jurisdiction and a litigant had discretion to lodge an application. This was the appeal, Uganda Revenue Authority vs Rabbo Enterprises (U) Ltd & Anor (Civil Appeal No. 12 of. 2004) [2017] UGSC 20 (10 July 2017).

The Constitution of the Republic of Uganda empowers the Parliament of the Republic of Uganda to levy taxes. Also it is in charge of enacting capital investment regulations and authorizing offshore funding. The Parliament examines, evaluates, and advises on development issues through committees. Budget, National Economy, and Finance, Planning, and Economic Development are the parliamentary committees in charge of tax and development matters. The MFPED and URA are governed, supervised, and assessed by the Committee on Finance, Planning, and Economic Development (CFPED). The legislation that the CFPED is particularly interested in are those that deal with income generation and related agencies.

Government Ministries and Agencies

The importance of various government entities in facilitating the ideal realization of oil and gas projects is highlighted in this National Oil Policy. Ministries in charge of oil and gas policy, as well as operational/management entities in charge of administration and supervision, are among the government's stakeholders. The policy acknowledges that parent ministries are in charge of directing and supervising the activities of the operational/managerial entities that report to them.

According to Karl [912] oilproducing countries possess minimal enthusiasm in establishing strong structures since stronger structures require greater accountability. This has also been asserted that poor structures are to blame for the lack of progress and development in many of the world's oilrich countries. Uganda's experience demonstrates that efforts have been made to establish effective structures to govern the oil business. Uganda is unquestionably at a fork in the road, and the manner in which administers its oil riches will have a significant influence on the country's future. Uganda must improve its oil systems of governance and become more open and responsible in the manner it handles its

[912]Karl, T.L. (1997), *The Paradox of Plenty: Oil Booms and Petro-States*. Berkeley, California: Universityof California Press.

burgeoning oil industry if it is to fully exploit its oil wealth and become one of Africa's oil great successes.

Ministry of Finance, Planning and Economic Development (MFPED)

The Ministry of Finance, Planning, and Economic Development (MFPED) is in charge of developing policies intended to increase internal income while also encouraging big investments, spending, and savings. Policy development, on the other hand, is restricted to a few technical experts, neglecting other stakeholders like civil society and taxpayers. Yearly budget speeches lay forth broad tax policy goals, which are then filled out through laws.

Ministry of Trade, Industry and Cooperatives

The Ministry of Commerce, Industry, and Cooperatives is tasked with developing and revising suitable policies, laws, rules, and standards for the longterm growth of trade in the petroleum industry.

Petroleum Authority of Uganda (PAU) – The Regulator

The Petroleum Authority of Uganda is one of the major agencies established to oversee Uganda's petroleum industry (PAU). The formation of PAU is allowed under Section 9 of the Petroleum Act. The Authority was created in 2015 as a separate legal entity with the primary responsibilities outlined in Section 9 of the Act. The Petroleum Authority of Uganda, established through the Petroleum Development Act, is a major form of national safety. The Petroleum Acts provide for this organization to have political autonomy when it comes to supervising oil and gas discovery, processing, and production. The Minister of Energy and Mineral Development gives directions to the authority on government policy under the Laws. As an autonomous entity, the authority is then required to implement these policies. The minister also has the authority to nominate members of the board for a fouryear term with Parliament's consent, and to dismiss members because of "incompetence."

The purpose of this authority is to govern the many participants in the subsector. This governing body's particular responsibilities include: supervising and controlling oil and gas activities, particularly resource estimation and measurement of produced oil and gas; drafting and enforcing rules; and tracking license spending.

Uganda National Oil Company (UNOC) The Business Arm of Government

In addition to policy and regulation, Uganda's government established a body to manage the country's economic interests in the industry, e.g., state participation in the licences and marketing the country’s share of natural gas production received in kind. Although this entity will become more relevant when production begins, the period before production shall be used to build its capacity so that it is able to play its role when production starts. The specific roles of UNOC shall include: (a) Managing the business aspects of state participation(b) Developing in depth expertise in the oil and gas industry and (c) Optimising value to its shareholders among others.

Section 42 of the Petroleum Act of 2013 also creates a National Oil Company, which is responsible for overseeing the government's business aspirations and administering the business parts of the government's oil engagement. The National Oil Company (UNOC) will largely oversee Government economic and commercial affairs, as well as involvement in the Petroleum industry, according to Section 43 of the Act.

The second organization established by the Petroleum Laws is the National Oil Company, which is responsible for advancing the government's commercial oil ambitions. The Act does not specify how stockholders will be chosen or how public' desires would be reflected in policy formulation. If the National Oil Company becomes a private corporation, it will solely be accountable to its

stockholders.[913] Another source of worry is that the Ministry of Energy and Mineral Development, which has the jurisdiction to provide directions to the National Oil Company on how its administration obligations will be carried out and to establish confidentiality standards. As a result of the law's ambiguity, critics claim that misuse and corruption are possible. Making the National Oil Business a public company is one way to ensure that governmental interests are met.[914]When accountability systems show a track history of operating in the national good, the National Oil Company might be privatized.[915]

The Uganda Revenue Authority (URA)

The Uganda Revenue Authority (URA) Act of 1991 founded the URA as a central institution responsible for estimating and gathering specified income for the government, as well as administering and implementing taxrelated legislation. The legislation establishes the URA as a legal entity with eternal continuity, a common seal, and the right to sue and be sued in its own name. The Law also grants URA the authority to take loans, purchase and dispose of assets, and do anything else that a corporation can do legally.

The revenue administration structure in Uganda is shared by the national government and the local government. The Uganda Revenue Authority (URA), which was formed by the URA Act 1991, administers the national government's tax system (Cap 1996). It is the principal agency in charge of estimating and amassing specific tax income. The URA is responsible for locating, notifying, and evaluating taxpayers. The Minister of Finance, Planning, and Economic Development selects a CommissionerGeneral to lead the URA. Whereas the URA

[913]Mawejje, J., & Bategeka, L. (2013, September). *Accelerating growth and maintaining intergenerational equity using oil resources in Uganda* (No. 111). Kampala: Makerere University, Economic Policy Research Centre.
[914] Eller, S., Baker, J., Hartley, P., & Medlock III, K. (2011): Empirical evidence on the operational efficiency of national oil companies. *Empirical Economics, 40*(3), 623-643.
[915] Magelahpeter. (2012, November 5). Why a government corporation and not private company should be in charge of Uganda's interests in the petroleum sector. *Legal and Policy Review* Retrieved from http://lawuganda.wordpress.com.

is a semiautonomous entity, it is treated as an unit within the Ministry of Finance, Planning, and Economic Development (MFPED) for budgetary reasons and is bound to the similar financial regulations and standards as other ministries.[916]And it plays a major responsibility in levying and recovering FDI income.

Uganda Investment Authority (UIA)

The Uganda Investment Authority (UIA) is a governmentowned quasiautonomous investment development and assistance agency in Uganda. The Ugandan Parliament established the UIA in 1991. The Investment Code of 1991 established the Uganda Investment Authority (UIA) (amended in 2019). The Uganda Investment Authority (UIA) is a regulatory body tasked with launching and promoting measures to boost investment in Uganda, as well as guiding the government on suitable policies for investment stimulation and development. The UIA's mission has to be transformed due to the altering investment climate and government interests. The UIA's purpose is to encourage and assist capital ventures while also lobbying for a strong business climate.[917]Through financing and facilities building, the UIA collaborates with the state and the private sector to support Uganda's economic progress.[918] The Uganda Investment Authority (UIA) was moved from the Finance Ministry to the Uganda Ministry of Trade and Industry in 2016.[919]

The Uganda Investment Authority (UIA) has attracted foreign investment, produced employment for Ugandans, promoted modern technology into the country, and generated taxable income. Uganda's figure of approved investments increased by 9.8% in the fiscal year 2016/17, from US $ 1.522 billion in 2015/16 to US $ 1.67 billion in 2016/17. China provided the most FDI approved investments in Uganda, representing 31.9 percent of the all the authorized

[916] SEATINI, TJNA & Oxfam. (2016). Fair Tax Monitor: Uganda.
[917]Profile of Uganda Investment Authority". Comesaria.org. Retrieved 29 May 2019.
[918]UIA (15 May 2013): "Reasons to Invest in Uganda". *Kampala: Uganda Investment Authority (UIA)*. Retrieved 29 May 2019.
[919]Ladu, I. Musa (2 May 2016): "Trade ministry takes over investment authority". Daily Monitor. *Kampala*. Retrieved 4 May 2019.

investments in 2016/17, while India came in second with US $ 162.8 million, representing 15.5 percent of all authorised investments in 2016/17.[920]

NonLegal Analysis

The nonlegal elements of oil and gas resource exploitation in Uganda's oil and gas sector are examined in this section. Management and fiscal efficiency, fraud control and fiscal productivity, accountability and fiscal success, transparency and budgetary achievement, tax collection and fiscal performance, and petroleum & energy taxes and fiscal productivity are all important in this respect.

LEADERSHIP AND NATURAL GAS DEVELOPMENT

It is widely accepted[921]that the extractive industries (EI) in poor countries have the ability and power to help the world achieve its development goals and alleviate poverty. However, several governments that rely heavily on income from extractive sectors are unable to appropriately administer their resources for development objectives. Experimentation and research[922]have demonstrated that strong administration and its associated attributes like as openness and accountability are necessary and play an important influence in a government's utilization of EI money. Good governance is a prerequisite for attaining sustainable development and is also critical for administering and sharing a country 's natural wealth.

Numerous efforts[923]have been launched throughout the world to solve the problem of EI administration and transparency. Extractive Industry Transparency Initiative (EITI), a global standard that guarantees transparency of natural resource income, [924] Revenue Watch Institute, [925] Oxfam Transparency International, [926]

[920] World Investment Reports for 2015-2017, by UNCTAD.
[921]Global Witness, (July 11, 2013), http://www.globalwitness.org.
[922]Jesumiseun O. A. (2013): LL.M. Thesis in partial fulfillment of the requirements for the Master of Laws degree in Rule of Law for Development; Loyola University Chicago, School of Law; (PROLAW); July 2013, JFRC
[923] For example: Extractive Industry Transparency Initiative (EITI).
[924] EITI, (July 11, 2013), http://eiti.org/eiti.
[925] Revenue Watch, (July 11, 2013), http://www.revenuewatch.org

Global Witness,[927] Global Reporting Initiative,[928] Alliance for Responsible Mining,[929] Natural Resource Charter,[930] and Transparency and Accountability Initiative are kinds of such efforts.[931]

However, it seems that the growth issues confronting the majority of resourcerich nations are getting worse by the day. Uganda, for example, although having a large reserve of mineral wealth, particularly in petroleum, and collecting billions in revenue from the extractive sectors, has not progressed in terms of human development. Nigeria has consistently ranked at the base of the world's human development index ratings, with the bulk of its inhabitants surviving on less than $1.25 per day.[932]As a result, the nation's state of human development warrants severe worry and immediate effort to solve the problem.

Despite the fact that the Ugandan government is cognizant of the country 's development difficulties and has attempted to implement a variety of econo3mic policies and poverty reduction initiatives, they look to have produced little or no success; because of the absence of effective governance in the EI, fraud, a lack of transparency, and a lack of accountability exist. The government has also taken steps to improve transparency in the country's natural resource handling, as seen by the nation's courageous decision to join the EITI principles in 2019.[933]Since being a member of the initiative, the government has made some progress in terms of transparency. However, much work has to be undertaken in order to accomplish significant human growth with the resources available. And besides, citizens are

[926] Oxfam, (July 11, 2013), http://www.oxfam.org.
[927] Global Witness, (July 11, 2013), http://www.globalwitness.org.
[928] Global Reporting, (July 11, 2013), https://www.globalreporting.org.
[929] Community Mining, (July 11, 2013), http://communitymining.org.
[930] Nature Resource Charter, (July 11, 2013), http://naturalresourcecharter.org.
[931]Transparency Initiative, (July 11, 2013), http://www.transparency-initiative.org.
[932] Poverty line of $1.25 dollars per day was mentioned in the report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda titled: A new global partnership: Eradicate poverty and transform Economies through sustainable Development.
[933] Njiraini M, (2019). Uganda joins Extractive Industries Transparency Initiative to enhance transparency in oil deals. The East African (Kenya), Published on: 11 March 2019.

the legitimate owners of their country's resources, and therefore ought to be able to benefit from them.[934]

Certain critical criteria may be considered to assess the quality of governance. For example, the World Bank created a set of metrics to assess a country's governance. Eliminating corruption, accountability, transparency, the efficacy of government, stability and the lack of violence, law and order, and regulation control are some of the indicators. However, for the context of this research, the main concepts that will be examined are transparency, accountability, and corruption control.

Control of corruption and natural gas development

Fraud and misuse of resource earnings are only two of the nonlegal consequences of oil and gas development that must be addressed. For the sake of this discourse, corruption shall be defined as "the misuse of entrusted power for private benefit," as defined by Transparency International. This covers any unlawful and intentional manipulation of conditions that results in personal profit from state money.

As per Global Witness,[935]Uganda's recent history of deteriorating management standards, highlevel fraud and favoritism, and "the continuity of corruption cases encircling the misuse of public and donor funds in the past ten years" raises fears about the perspective about good governance of oil wealth. [936]Uganda loses US$ 286 million each year due to corruption, according to the World Bank. Bribery, embezzlement, and graft may be found at all levels of government, from the most local to the highest administrative posts. [937] In 2012, for example, the Prime Minister's Office was implicated in embezzling US$ 12.7 million in international

[934] 'It is ten years since the first EITI Conference, where leaders from governments, extractive companies and civil society came together and agreed the EITI Principles. They agreed that since a country's natural resources belong to all of its citizens, all citizens should be able to see benefits from them', (July 11, 2013, 10.30am), http://eiti.org/files/EITI-progress-report-2013.pdf.

[935]Global Witness (2010), 'Donor Engagement in Uganda's Oil and Gas Sector: An Agenda for Action'. Retrieved from: https://www.globalwitness.org/documents/uganda_final_low. p.16

[936] Ibid

[937] World Bank worldwide governance indicators, (2012). See World Governance Indicators. Available at:
http://info.worldbank.org/governance/wgi/index.aspx#home.

aid meant for reconstruction projects in wartorn Northern Uganda.[938]Regrettably, this sort of incident has occurred often in the country's current times, causing citizens to mistakenly think that government leaders are acting with impunity.

Notwithstanding the nation's long tradition of corruption, the government has failed to set appropriate protections in position to avoid corruption in Uganda's petroleum industry. Despite worldwide recommended practice recommendations encouraging more transparency and accountability in the extractive sectors, the government has continued to operate in stealth, holding vital information regarding petroleum industry advances secret from the citizenry. This obscurity raises the severe danger that petroleum profits would be squandered or fraudulently redirected rather than invested on public services.

Although petroleum production has yet to begin in Uganda, there is clearly enough indication of mishandling of preproduction earnings. In 2011, Uganda's government agreed to a US$ 740 million advance on the procurement of six fighter planes with a Russian arms supplier. The Governor of the Bank of Uganda, speaking to Members of Parliament, stated he agreed to the upfront fee on the condition that it would be returned with future oil income.[939]In January 2017, 42 government officials were awarded US$ 1.6 million as a remuneration for their participation in the collection of Shs 1.5 trillion in unpaid capital gains tax from Heritage Oil and Gas.[940] The 'presidential handshake' controversy exposed a worrisome contempt for the rules stated in the petroleum portion of the Public Finance Management Act, 2015, which control payments from the Petroleum Fund. These events, along with public' persistent lack of access to information, indicate that Uganda's oil sector is growing with little transparency or accountability. The Public simply does not have access to the information they

[938]Reuters, 2012.

[939]Mugerwa, Y. (2015), 'MPs Want Mutebile, Minister Sacked', *Daily Monitor*. Retrieved from: http://www.monitor.co.ug/News/National/MPs-want-Mutebile--ministersacked/-/688334/2722692/-/bttrno/index.html..

[940]Heritage Oil & Gas Ltd Vs Uganda Revenue Authority (Civil Appeal No 14 Of 2011) ((Civil Appeal No 14 of 2011)) [2011] UGCOMMC 97 (12 September 2011). The ruling was in respect of an application challenging an income tax assessment of US$ 404,925,000 against the applicant by the respondent.

need to hold government officials accountable. Pursuant to the requirements assessment conducted as part of the formulation of The National Communication Strategy for Oil and Gas, there is a welldocumented communication barrier between the government and the general populace about the growth of the petroleum industry.[941] As per Ross,[942] the governmentcitizen relationship might disintegrate in the process of mineral production if citizens do not make consistent and persistent claims, and the government could grow progressively depressed. Unless this is avoided by providing citizens with more access to information on petroleum industry advances, the industry will continue to function in obscurity, away from public criticism.

In Uganda, like in any country, there are several dangers in guaranteeing transparency and accountability in the growing extractive sectors. In the oil and gas revenue chain, these dangers can be split into horizontal (business to government) and vertical (intragovernment) corruption possibilities. Horizontal risks are defined as illegal decreases in the income given to the government, whereas vertical risks are defined as illegal diversions of petroleum income that has already been delivered to the government. To put it another way, these dangers may be thought of as two independent but connected problems.did the government collect what it was due, and did the funds given to the government benefit public? This conception is centered on the conventional petroleum revenue chain, which has been simulated in this case according to Uganda's Public Finance Management Act, 2015. Oil and gas is a national resource, according to the constitution, that must be handled by the government in the interest of the people. As a result, the government acts as an administrator, overseeing mineral resource production on behalf of public who are the real owners and stakeholders.

In the petroleum revenue chain, ‘corruption' might be conceived of as income leakages or occasions when income disappears. Weakness in the revenue chain can

[941]Republic of Uganda (2013), *Draft Report on the Investigation into the Oil and Gas Sector by the Parliamentary*
Ad Hoc Committee in Respect of the Regularization of the Oil Sector and Other Matters Incidental Thereto. Retrieved from: https://www.parliament.go.ug. p.13

[942]Ross, M. (2001), ‘Does Oil Hinder Democracy?’, *World Politics*, 53(3), 326–361. Retrieved from http://www.jstor.org/stable/25054153.

lead to revenue leakage if exploited to shift public funds to the individuals without approval. This should encompass funds that were never legally placed in the public realm but should have been.As a result of these legislative obligations for transparency, accountability, and oversight across the revenue chain, good governance standards mandate that oil income management systems be shielded and safeguarded against this type of unilateral leakage.

Leaks between the government and oil corporations can occur before to and amid production in the oil and gas industry, including during contract talks, corporate tax planning and tax base erosion, CEO control, and institutional misuse of money (lacking oversight and accountability). In Uganda, efforts are being made to combat corruption in the oil sector include:

1. Anticorruption Framework in Uganda

The AntiCorruption Court, the Inspectorate of Government, the Auditor General, the Directorate of Public Prosecutions, and other associated agencies are among the government bodies and entities responsible with combating and punishing corruption in Uganda. Unfortunately, owing to a deficit of ability, these bodies frequently struggle to carry out their crucial responsibilities, raising concerns about if they'll be able to provide the required supervision to avoid petroleum industry corruption.

Transparency International Uganda published an analysis in 2015 that looked at the causes for major institutions malfunctioning. The research looked at the specific reasons for the relevant agencies, such as the AntiCorruption Division of the High Court, the Directorate of Public Prosecutions, and other associated government entities, persisting failure to indict highlevel corruption. Whereas the research identifies a number of technical barriers to corruption prosecution, most of these difficulties stem from a lack of political determination to properly institutionalize and empower these corruptionfocused investigative entities. Furthermore, ‘it is contradictory that the government pledges to the resourceintensive development of anticorruption agencies and laws while concurrently paralyzing these bodies.' Issues like these are closely linked to Uganda's capacity to combat corruption in the country's expanding oil sector.

2. Legislation and attempts to stop the leaks

Uganda's government has enacted many sections of laws to control oil and gas discovery, processing, and production. The Petroleum (Exploration, Development, and Production) Act of 2013 and the Public Finance Management Act of 2015 are the utmost crucial to the issue of corruption. These laws specify how firms will be awarded mining rights and how the government would handle funds from the oil and gas industry, tackling both horizontal and vertical corruption issues. The Law creates a threetiered framework for oil and gas industry administration, with a petroleum directorate, a petroleum authority, and a national oil company each serving a function. The petroleum directorate is in charge of the energy sector, which is led by the Minister of Energy. The petroleum authority is in charge of offering autonomous control of the industry, whereas the NOC is in charge of administering the state 's economic interests in petroleum.

Oil and gas funds will be deposited into a petroleum investment reserve in addition to being remitted to the Consolidated Fund.[943]The investment reserve has a variety of objectives, with one of the most significant being to assist ensure macroeconomic equilibrium throughout the oil and gas drilling process by broadening the petroleum income portfolio. However, in contrast to the Petroleum Fund, the rules for ensuring prudent administration of the investment reserve are rather lax. The rules for transparency and dissemination of information about the petroleum income investment reserve, in particular, are generally deficient.[944]If the oil and gas income investment reserve's operations are not brought to light, the account could become a war chest for corruption, since oil and gas funds might easily be deposited in overseas investments and offshore bank accounts linked to strategically connected individuals. Because national assets have been connected to fraud in a multitude of countries across the whole of the world, any national asset formed in Uganda must be handled honestly, with strict investment regulations and sufficient supervision processes.[945]

[943]Public Finance Management Act, (2015), p.66
[944]Public Finance Management Act, (2015), p.76
[945]Bauer R, Busch T. and Marc Orlitzky (2015): Sustainable Development and Financial Markets: Old Paths and New Avenues

3. Nongovernmental efforts to promote good governance

In addition to government initiatives, civil society organizations, bilateral donors, and other partners have joined forces to combat rampant corruption in Uganda's oil and gas industry. From the finding of oil and gas, a powerful alliance of domestic and international civil society groups has continuously pushed government to guarantee that a robust governance framework for oil and gas industry administration is set up. In 2010, civil society organizations evaluated the nation's very first disclosed productionsharing contracts, offering harsh insights to the government on several of the original contracts' inadequacies.[946] Global Witness released two existing production sharing agreements (PSAs) in 2014, offering an extensive analysis of the contracts' environmental, social, and economic components to advise the government on how to better future deals to obtain the biggest and best 'deal.'[947]

The foreign donor community also exerts demand on Uganda's government to establish robust transparency and accountability measures in the extractive sectors. From 2009, the Government of Norway has offered formal support to the Government of Uganda in the technical and institution building of the country's budding oil and gas industry under the bilateral NORAD Oil for Development Programme. The NORAD assistance seeks to guarantee government accountability in the administration of the oil and gas industry by setting up a strong policy, legitimate, and legislative structure "for handling the oil and gas industry in a financially, socially, and ecologically responsible way," according to the partnership's stated outcomes.'[948]

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p. 60

[946]Civil Society Coalition on Oil and Gas in Uganda (2010), 'Contracts Curse: Uganda's Oil Agreements
Put Profits before People'. Retrieved from: http://www.acode-u.org/documents/oildocs/CSCO_oilcurse.pdf..

[947]Global Witness (2014), *A Good Deal Better? Uganda's Secret Oil Contracts Explained*. London: Global Witness
Limited. Retrieved from: https://www.globalwitness.org/en/reports/good-deal-better/.

[948]Ministry of Energy and Mineral Development (2015), *Strengthening the Management of the Oil and Gas Sector in Uganda: Phase II – 2015–2018*. Retrieved from: https://www.norad.no/contentassets/36585925a4814255bd1916fe9a4248b2/programme-document.pdf. p.22

The Oil and Gas Revenue Management Policy, for example,[949] pledges the Ugandan government to adhering to the Extractive Sectors Transparency Program (EITI), a global program that supports effective management in the global extractive industries through financial transparency. Corporations declare their contributions to governments, and governments publicize their pay slips from companies, allowing for verification of the declarations and the detection of any disparity or "missing cash" between. Notwithstanding this claim, the government has been hesitant to put this pledge into action. However, the government officially stated its desire to join the EITI in 2019. It is too soon to know whether this aim will be followed or if it is only hyperbole.

Accountability and natural gas development

Any government that wants to expand its oil and gas industry must be accountable to its people. According to a statement by UN Human Rights Office:

Governance is not just about ensuring that a country's administration functions smoothly. It is also about how people can review what those in power do and how they can hold the powerful to account if something goes wrong. Accountability is the core of governance. If there is no accountability, governance is an empty concept,[950]

Accordingly, unless public officials can be held accountable, critical benefits associated with good governance such as social justice, poverty reduction, and development will remain elusive. The nation's leaders must be forced to be accountable to the electorate and the nation.[951] It is well known that revenues from the natural gas industry and other natural resources in form of taxes, royalties, signature bonuses, and other payments are important engines for economic growth and social development in developing countries. However, lack of accountability and transparency in these revenues can exacerbate poor

[949]Oil and Gas Revenue Management Policy (2012), p.37

[950]Kran (2015): The Director of the Research and Right to Development Division of the UN Human Rights Office, http://www.ohchr.org/EN/NewsEvents/Pages/GlobalDevelopmentPost 2015.aspx

[951]Malena and McNeil, (2010); Democracy, Governance, Legislative Challenges and Impediments in Nigeria

governance and lead to corruption, conflict, and abject poverty. This is essentially what happened to Nigeria,[952] a developing country that is rich in natural gas resources. Where accountability is low or poor, corruption is inevitable and most able to thrive. Increasing transparency and informed knowledge about revenues received from EI will empower citizens and institutions to hold governments accountable and to demand that government spends revenue exclusively for sustainable developmental purposes.

Accountability is especially tough to develop in a country where the president and his party, the National Resistance Movement (NRM), have such total command over policymaking. No corresponding financial laws in all the other nations, according to the ruling party, refer the parliament as frequently as the Ugandan laws do. The legislation grant parliament broad authority over the spending of public monies, including the ability to oversee and supervise it. For example, without parliamentary permission, the Bank of Uganda no longer has the authority to facilitate any transaction for the government or to provide any loan to the government.The problem with the government 's viewpoint is that supervision necessitates information transparency, yet the government says that oil firms require secrecy as a condition of doing business in Uganda. Despite the apparent conflict between this obligation and the rules of the Access to Information Act, the Petroleum Acts prohibit the National Petroleum Authority from revealing information regarding oil firm activities.[953] The problem of oil corporations' secrecy may be vulnerable to modification from two quarters beyond Uganda. The DoddFrank Wall Street Reform and Consumer Protection Act, enacted by the United States Congress in 2010, requires all extractive companies listed on American stock exchanges and submitting yearly basis reports with the United States Securities and Exchange Commission to reveal all money paid to

[952]World Bank, available at http://info.worldbank.org/governance/wgi/pdf/c161.pdf

[953]Civil Society Coalition on Oil and Gas (CSCO). (2012). Uganda: CSCO memorandum on the Public Finance Bill. *The Independent.* Retrieved from http://www.independent.co.ug; and Human Rights Network-Uganda. (2012). *Key concerns in the Petroleum (Exploration, Development and Production) Bill.* Retrieved from Human Rights Network-Uganda website: http://www.hurinet.or.ug.

international government bodies for commercial development of oil.[954]Total and CNOOC, which have heavily invested in Ugandan oil exploration, will be required to file yearly reports in the United States and will be liable to the current transparency regulations.

Human development could be realized if the government is more accountable to the citizens and the EI earnings and rewards are optimized, welladministered, and equally shared, or invested especially for longterm development goals such as healthcare, education, infrastructure, and employment.

Transparency and natural gas development

The International Monetary Fund (IMF) has defined transparency as "openness, honesty and accountability in public and private transactions." [955] Resource transparency is said to be the application of transparency to the management of resource wealth. It implies the public disclosure of necessary, reliable and accessible information about all the activities and processes involved in the natural resource wealth management chain from discovery and exploitation, to the revenue collection and expenditure.[956]

Natural gas resource wealth is easily susceptible to rentseeking and corruption due to high level secrecy within the industry and high dependency on natural resource wealth as government revenue for most resourcerich nations. This is mostly due to the knowledge imbalance that exists between the public and the few persons charged with administering petroleum riches. As a result, resource transparency increases the access of information to stakeholders, enabling them to seek transparency, equitable distribution, and ethical use of resource income.[957]

[954]Veit, Peter, G. Carole Excell & Alisa Zomer (2011), Avoiding the Resource Curse: Spotlight on Oil in Uganda, Washington DC: World Resources Institute, p. 2. https://www.wri.org/sites/default/files/avoiding_the_resource_curse.pdf

[955] International Monetary Fund.

[956]Uchenna-Uzoigwe, G. M. (2008): 'Exploring Multi-Stakeholder Initiatives for Natural Resource Governance the Example of the Nigerian Extractive Industries Transparency Initiatives (NEITI).' A Thesis submitted to the University of Birmingham for the Degree of Doctor of Philosophy (September, 2011).

[957]Ibid

The Extractive Industries Transparency Initiative (EITI), which is a worldwide benchmark for creating transparency in the extractives industry, is a part of the DoddFrank legislation. The moment a government signs the EITI, it commits to publish reports on the money raised from extractive corporations. In return, the businesses disclose their own accounts of government payments. After then, the reports are verified and validated, and the outcomes are revealed to the public.[958]In 2008, Uganda's government pledged to enter the EITI. The government, on the other hand, has yet to initiate any formal steps to start the application process. To become an EITI signatory will improve public transparency, allowing the Ugandan government to be held accountable for resource sector fiscal administration.[959]Transparency would also help Uganda's commercial progress lure future investments.[960]

Revenue collection and natural gas development

The 2008 National Oil and Gas Policy mandates the establishment of a framework to help in the longterm management of natural gas earnings. This policy explains how the projected income would be handled and incorporated into current government processes, with the goal of reducing the overall economic effect of these funds. The policy establishes the greatest levels of openness and accountability in the administration of oil and gas earnings, as well as the necessary institutional and governance frameworks. The strategy establishes a system for sharing royalty earnings with local governments within the oilproducing region in order to foster harmony and social cohesion.

The oil and gas industry is projected to create a large number of distinct sources of

[958] Ngabiirwe, W., & Allen, E. (2011). *The extractive industries transparency initiative* (No. 12).
[959] Corrigan, C. (2014). Breaking the resource curse: Transparency in the natural resource sector and the extractive industries transparency initiative. *Resources Policy, 40*, 17-30.
[960] Seyoum, B., & Manyak, T. (2009). The impact of public and private transparency on foreign direct investment in developing countries. *Critical Perspectives on International Business, 5*(3), 187-206.

income, all of which will generate money for the government.[961]To guarantee openness and accountability, the collection of these funds must be structured. All earnings will be collected and placed in a separate petroleum fund that will be formed at the Bank of Uganda. This will include money from income tax and royalties, as well as proceeds from the sale of the government's share (marketed by the National Oil and Gas Company) of oil mined. Royalties are payments made for the extraction of resources that are dependent on the amount or price of the resource produced. Oil firms will pay a royalty on gross oil production under the provisions of the PSAs and the Income Tax Act of 1997 (ITA), at a rate that fluctuates with the rate of production (the rate ranges between 8 percent and 18 percent).[962]

Taxation of Gas and natural gas development

On their split of profit oil, oil and gas firms will be liable to the regular personal and company taxes, as stipulated by the applicable tax legislation. Windfall profits, resource rent, and environmental taxes are some of the other fees. Furthermore, as the sector grows, operations even farther down the value chain will be levied as well.[963]These operations include refining operations and gas and oil product sales.

Tax measures applicable to oil and gas firms should be included in appropriate tax law instead of in mining and oil and gas agreements for fiscal performance. Whereas the newest model PSA relates to the ITA's tax rules, tax provisions have also been included in recently completed mining agreements. If tax terms are brokered on a circumstance basis, the government faces a threat because the licensee or company is more likely to get better information about the worth of a resource and is also more talented at bargaining. Another difficulty with casebycase agreements is that tax provisions will vary based on the dialogues. The

[961] Oil and Gas Revenue Management Policy (2012). Ministry of Finance, Planning and Economic Development, February 2012.
[962] Petroleum Royalty Scale from Draft Model PSA of 2015 as in IMF, Uganda Country Report No.17/367, December 2017, p. 22.
[963] Oil and Gas Revenue Management Policy (2012). Ministry of Finance, Planning and Economic Development, February 2012.

Uganda Revenue Authority would have to implement several tax systems, which will add to its administrative load.

Conclusion

The legislative structure encapsulating the fiscal system within which Uganda's oil and gas production is taking place has been addressed. Sustainable resource administration necessitates a multifaceted national plan. According to Article 244 of the Republic of Uganda's constitution (as modified), all resources and oil and gas in, on, or beneath any land or waters in Uganda are conferred with in government on behalf of the citizens of Uganda. The National Oil and Gas Policy is the principal policy that guides the administration of Uganda's oil and gas within the constitutional setting (NOGP). Given the overriding purpose of utilizing the resource to alleviate poverty and provide longterm value to Citizens, NOGP acknowledges that the establishment of structures, including legislation and personnel, essential for efficient administration and control of the subsector, should be a central objective. The petroleum fund for oil and gas production was established under the oil and gas Revenue Management Policy of 2012 and the Public Management Act of 2015.

Oil and gas production has a number of nonlegal considerations. These include problems that come with managing large amounts of money from mineral wealth. These issues are mostly macroeconomic, fiscal, and governancerelated. Countries that have utilized natural resource income to develop their communities have followed best business practices in oil and gas revenue administration all across the world. Six elements of gas and oil production have been explored under the subjects of management, corruption control, accountability, transparency, revenue collection, and oil and gas taxes. When dealing with these issues, Uganda must adhere to some essential standards, such as the Extractive Industry Transparency Initiative (EITI), an international benchmark that promotes transparency of earnings from mineral wealth. Despite anticorruption laws in place, Uganda continues to confront the difficulties of corruption, that may be described as "the misuse of entrusted authority for personal benefits" according to Transparency International. Like corruption, accountability is particularly difficult to achieve in a

country where the president and his supporters so completely dominate the policy making process. Natural resource wealth is easily susceptible to rentseeking and corruption due to high level secrecy within the industry and high dependency on natural resource wealth as government revenue for most resourcerich nations. This occurs mostly because of information asymmetry that exists between the people and the few individuals saddled with the responsibility to manage natural resource wealth. As a result, resource transparency increases the access to information to stakeholders, enabling them to seek accountability, equitable distribution, and ethical use of resource money.

This section analyses the institutional establishments for natural gas development in Uganda. The analysis begins with the apex establishment, the Parliament of Uganda.

The Parliament of Uganda

Article 77(1) of the 1995 Constitution of Uganda (the Constitution) establishes the parliament of Uganda, vesting parliament with powers to make laws on any matter for the peace, order, development and good governance of Uganda. Article 79 goes on to specify the following duties: (a) Protect the Constitution and promote the democratic governance of Uganda; (b) Give legislative sanction to taxation and acquisition of loans, in order to finance the work of government; and (c) Scrutinise government policy and administration, and approve presidential nominations for ministers, judges, ambassadors and other positions specified in the Constitution. Legislators are further tasked to represent constituent interests under Article 38(1) of the Constitution which provides that ‘every Ugandan citizen has the right to participate in the affairs of government, individually or through his or her representative in accordance with the law’. In the oil and gas industry, parliament is responsible for passing petroleum laws, passing laws for the administration of petroleum earnings, and assessing effectiveness through policy statements and yearly budgets.

The Constitution of the Republic of Uganda empowers the Parliament of the Republic of Uganda to levy taxes. Also it is in charge of enacting capital investment regulations and authorizing offshore funding. The Parliament examines, evaluates, and advises on development issues through committees. Budget, National Economy, and Finance, Planning, and Economic Development are the parliamentary committees in charge of tax and development matters. The MFPED and URA are governed, supervised, and assessed by the Committee on Finance, Planning, and Economic Development (CFPED). The legislation that the CFPED is particularly interested in are those that deal with income generation and related agencies.

Government Ministries and Agencies

The importance of various government entities in facilitating the ideal realization of oil and gas projects is highlighted in this National Oil Policy. Ministries in charge of oil and gas policy, as well as operational/management entities in charge of administration and supervision, are among the government's stakeholders. The policy acknowledges that parent ministries are in charge of directing and supervising the activities of the operational/managerial entities that report to them. According to Karl [964] oilproducing countries possess minimal enthusiasm in establishing strong structures since stronger structures require greater accountability. This has also been asserted that poor structures are to blame for the lack of progress and development in many of the world's oilrich countries. Uganda's experience demonstrates that efforts have been made to establish effective structures to govern the oil business. Uganda is unquestionably at a fork in the road, and the manner in which administers its oil riches will have a significant influence on the country's future. Uganda must improve its oil systems of governance and become more open and responsible in the manner it handles its burgeoning oil industry if it is to fully exploit its oil wealth and become one of Africa's oil great successes.

[964]Karl, T.L. (1997), *The Paradox of Plenty: Oil Booms and Petro-States*. Berkeley, California: Universityof California Press.

Ministry of Finance, Planning and Economic Development (MFPED)

The Ministry of Finance, Planning, and Economic Development (MFPED) is in charge of developing policies intended to increase internal income while also encouraging big investments, spending, and savings. Policy development, on the other hand, is restricted to a few technical experts, neglecting other stakeholders like civil society and taxpayers. Yearly budget speeches lay forth broad tax policy goals, which are then filled out through laws.

Ministry of Trade, Industry and Cooperatives

The Ministry of Commerce, Industry, and Cooperatives is tasked with developing and revising suitable policies, laws, rules, and standards for the longterm growth of trade in the petroleum industry.

Petroleum Authority of Uganda (PAU) – The Regulator

The Petroleum Authority of Uganda is one of the major agencies established to oversee Uganda's petroleum industry (PAU). The formation of PAU is allowed under Section 9 of the Petroleum Act. The Authority was created in 2015 as a separate legal entity with the primary responsibilities outlined in Section 9 of the Act. The Petroleum Authority of Uganda, established through the Petroleum Development Act, is a major form of national safety. The Petroleum Acts provide for this organization to have political autonomy when it comes to supervising oil and gas discovery, processing, and production. The Minister of Energy and Mineral Development gives directions to the authority on government policy under the Laws. As an autonomous entity, the authority is then required to implement these policies. The minister also has the authority to nominate members of the board for a fouryear term with Parliament's consent, and to dismiss members because of "incompetence."

The purpose of this authority is to govern the many participants in the subsector. This governing body's particular responsibilities include: supervising and controlling oil and gas activities, particularly resource estimation and measurement of produced oil and gas; drafting and enforcing rules; and tracking license spending.

Uganda National Oil Company (UNOC) The Business Arm of Government

In addition to policy and regulation, Uganda's government established a body to manage the country's economic interests in the industry, e.g., state participation in the licences and marketing the country’s share of natural gas production received in kind. Although this entity will become more relevant when production begins, the period before production shall be used to build its capacity so that it is able to play its role when production starts. The specific roles of UNOC shall include: (a) Managing the business aspects of state participation(b) Developing in depth expertise in the oil and gas industry and (c) Optimising value to its shareholders among others.

Section 42 of the Petroleum Act of 2013 also creates a National Oil Company, which is responsible for overseeing the government's business aspirations and administering the business parts of the government's oil engagement. The National Oil Company (UNOC) will largely oversee Government economic and commercial affairs, as well as involvement in the Petroleum industry, according to Section 43 of the Act.

The second organization established by the Petroleum Laws is the National Oil Company, which is responsible for advancing the government's commercial oil ambitions. The Act does not specify how stockholders will be chosen or how public' desires would be reflected in policy formulation. If the National Oil Company becomes a private corporation, it will solely be accountable to its

stockholders.[965] Another source of worry is that the Ministry of Energy and Mineral Development, which has the jurisdiction to provide directions to the National Oil Company on how its administration obligations will be carried out and to establish confidentiality standards. As a result of the law's ambiguity, critics claim that misuse and corruption are possible. Making the National Oil Business a public company is one way to ensure that governmental interests are met.[966]When accountability systems show a track history of operating in the national good, the National Oil Company might be privatized.[967]

The Uganda Revenue Authority (URA)

The Uganda Revenue Authority (URA) Act of 1991 founded the URA as a central institution responsible for estimating and gathering specified income for the government, as well as administering and implementing taxrelated legislation. The legislation establishes the URA as a legal entity with eternal continuity, a common seal, and the right to sue and be sued in its own name. The Law also grants URA the authority to take loans, purchase and dispose of assets, and do anything else that a corporation can do legally.

The revenue administration structure in Uganda is shared by the national government and the local government. The Uganda Revenue Authority (URA), which was formed by the URA Act 1991, administers the national government's tax system (Cap 1996). It is the principal agency in charge of estimating and amassing specific tax income. The URA is responsible for locating, notifying, and evaluating taxpayers. The Minister of Finance, Planning, and Economic Development selects a CommissionerGeneral to lead the URA. Whereas the URA

[965]Mawejje, J., & Bategeka, L. (2013, September). *Accelerating growth and maintaining intergenerational equity using oil resources in Uganda* (No. 111). Kampala: Makerere University, Economic Policy Research Centre.
[966] Eller, S., Baker, J., Hartley, P., & Medlock III, K. (2011): Empirical evidence on the operational efficiency of national oil companies. *Empirical Economics, 40*(3), 623-643.
[967] Magelahpeter. (2012, November 5). Why a government corporation and not private company should be in charge of Uganda's interests in the petroleum sector. *Legal and Policy Review* Retrieved from http://lawuganda.wordpress.com.

is a semiautonomous entity, it is treated as an unit within the Ministry of Finance, Planning, and Economic Development (MFPED) for budgetary reasons and is bound to the similar financial regulations and standards as other ministries.[968]And it plays a major responsibility in levying and recovering FDI income.

Uganda Investment Authority (UIA)

The Uganda Investment Authority (UIA) is a governmentowned quasiautonomous investment development and assistance agency in Uganda. The Ugandan Parliament established the UIA in 1991. The Investment Code of 1991 established the Uganda Investment Authority (UIA) (amended in 2019). The Uganda Investment Authority (UIA) is a regulatory body tasked with launching and promoting measures to boost investment in Uganda, as well as guiding the government on suitable policies for investment stimulation and development. The UIA's mission has to be transformed due to the altering investment climate and government interests. The UIA's purpose is to encourage and assist capital ventures while also lobbying for a strong business climate.[969]Through financing and facilities building, the UIA collaborates with the state and the private sector to support Uganda's economic progress.[970] The Uganda Investment Authority (UIA) was moved from the Finance Ministry to the Uganda Ministry of Trade and Industry in 2016.[971]

The Uganda Investment Authority (UIA) has attracted foreign investment, produced employment for Ugandans, promoted modern technology into the country, and generated taxable income. Uganda's figure of approved investments increased by 9.8% in the fiscal year 2016/17, from US $ 1.522 billion in 2015/16 to US $ 1.67 billion in 2016/17. China provided the most FDI approved investments in Uganda, representing 31.9 percent of the all the authorized

[968] SEATINI, TJNA & Oxfam. (2016). Fair Tax Monitor: Uganda.
[969]Profile of Uganda Investment Authority". Comesaria.org. Retrieved 29 May 2019.
[970]UIA (15 May 2013): "Reasons to Invest in Uganda". *Kampala: Uganda Investment Authority (UIA)*. Retrieved 29 May 2019.
[971]Ladu, I. Musa (2 May 2016): "Trade ministry takes over investment authority". Daily Monitor. *Kampala*. Retrieved 4 May 2019.

investments in 2016/17, while India came in second with US $ 162.8 million, representing 15.5 percent of all authorised investments in 2016/17.[972]

The nonlegal elements of oil and gas resource exploitation in Uganda's oil and gas sector are examined in this section. Management and fiscal efficiency, fraud control and fiscal productivity, accountability and fiscal success, transparency and budgetary achievement, tax collection and fiscal performance, and petroleum & energy taxes and fiscal productivity are all important in this respect.

Revenue collection and natural gas development

The 2008 National Oil and Gas Policy mandates the establishment of a framework to help in the longterm management of natural gas earnings. This policy explains how the projected income would be handled and incorporated into current government processes, with the goal of reducing the overall economic effect of these funds. The policy establishes the greatest levels of openness and accountability in the administration of oil and gas earnings, as well as the necessary institutional and governance frameworks. The strategy establishes a system for sharing royalty earnings with local governments within the oilproducing region in order to foster harmony and social cohesion.

The oil and gas industry is projected to create a large number of distinct sources of income, all of which will generate money for the government.[973]To guarantee openness and accountability, the collection of these funds must be structured. All earnings will be collected and placed in a separate petroleum fund that will be formed at the Bank of Uganda. This will include money from income tax and royalties, as well as proceeds from the sale of the government's share (marketed by the National Oil and Gas Company) of oil mined. Royalties are payments made for

[972] World Investment Reports for 2015-2017, by UNCTAD.
[973] Oil and Gas Revenue Management Policy (2012). Ministry of Finance, Planning and Economic Development, February 2012.

the extraction of resources that are dependent on the amount or price of the resource produced. Oil firms will pay a royalty on gross oil production under the provisions of the PSAs and the Income Tax Act of 1997 (ITA), at a rate that fluctuates with the rate of production (the rate ranges between 8 percent and 18 percent).[974]

Taxation of Gas and natural gas development

On their split of profit oil, oil and gas firms will be liable to the regular personal and company taxes, as stipulated by the applicable tax legislation. Windfall profits, resource rent, and environmental taxes are some of the other fees. Furthermore, as the sector grows, operations even farther down the value chain will be levied as well.[975]These operations include refining operations and gas and oil product sales. Tax measures applicable to oil and gas firms should be included in appropriate tax law instead of in mining and oil and gas agreements for fiscal performance. Whereas the newest model PSA relates to the ITA's tax rules, tax provisions have also been included in recently completed mining agreements. If tax terms are brokered on a circumstance basis, the government faces a threat because the licensee or company is more likely to get better information about the worth of a resource and is also more talented at bargaining. Another difficulty with casebycase agreements is that tax provisions will vary based on the dialogues. The Uganda Revenue Authority would have to implement several tax systems, which will add to its administrative load.

The legislative structure encapsulating the fiscal system within which Uganda's oil and gas production is taking place has been addressed. Sustainable resource administration necessitates a multifaceted national plan. According to Article 244 of the Republic of Uganda's constitution (as modified), all resources and oil and gas in, on, or beneath any land or waters in Uganda are conferred with in

[974] Petroleum Royalty Scale from Draft Model PSA of 2015 as in IMF, Uganda Country Report No.17/367, December 2017, p. 22.
[975] Oil and Gas Revenue Management Policy (2012). Ministry of Finance, Planning and Economic Development, February 2012.

government on behalf of the citizens of Uganda. The National Oil and Gas Policy is the principal policy that guides the administration of Uganda's oil and gas within the constitutional setting (NOGP). Given the overriding purpose of utilizing the resource to alleviate poverty and provide longterm value to Citizens, NOGP acknowledges that the establishment of structures, including legislation and personnel, essential for efficient administration and control of the subsector, should be a central objective. The petroleum fund for oil and gas production was established under the oil and gas Revenue Management Policy of 2012 and the Public Management Act of 2015.

Oil and gas production has a number of nonlegal considerations. These include problems that come with managing large amounts of money from mineral wealth. These issues are mostly macroeconomic, fiscal, and governancerelated. Countries that have utilized natural resource income to develop their communities have followed best business practices in oil and gas revenue administration all across the world. Six elements of gas and oil production have been explored under the subjects of management, corruption control, accountability, transparency, revenue collection, and oil and gas taxes.When dealing with these issues, Uganda must adhere to some essential standards, such as the Extractive Industry Transparency Initiative (EITI), an international benchmark that promotes transparency of earnings from mineral wealth. Despite anticorruption laws in place, Uganda continues to confront the difficulties of corruption, that may be described as "the misuse of entrusted authority for personal benefits" according to Transparency International. Like corruption, accountability is particularly difficult to achieve in a country where the president and his supporters so completely dominate the policy making process. Natural resource wealth is easily susceptible to rentseeking and corruption due to high level secrecy within the industry and high dependency on natural resource wealth as government revenue for most resourcerich nations. This occurs mostly because of information asymmetry that exists between the people and the few individuals saddled with the responsibility to manage natural resource wealth. As a result, resource transparency increases the access to information to stakeholders, enabling them to seek accountability, equitable distribution, and

ethical use of resource money.

COMPARATIVE ANALYSIS WITH OTHER JURISDICTIONS

This section has examined a number of different African jurisdictions. Algeria, Namibia, Libya, and Ghana have all been compared in this chapter. These countries have each had their own success stories, which Uganda will undoubtedly learn from as it pursues natural gas development.

Legal and Institutional Framework in Algeria

Algeria is Africa's biggest country per area (2,381,741km2). The length from the Mediterranean shore to the Hoggar massif is around 2,000 kilometers, while the distance from In Amenas in the east to Tindouf in the west is about 1,800 kilometers.

The Algerian mineral region spans 1.6 million km2 of sedimentary basins and is mostly untapped. This is particularly valid in the north and off the coast of Algeria, where there is a huge chance for fresh findings due to the considerable possibilities. According to current projections, existing resources for oil were projected to be 12.2 billion barrels and 4.3 trillion m3 for gas at the end of 2019.Algeria is ranked third on the African continent for oil resources, behind Libya and Nigeria, and comes in second for petroleum reserves, after Nigeria. Furthermore, the Algerian mining zone contains large nonconventional deposits, including as tight and shale formations. As per the findings of numerous geochemical modeling research, the magnitude of these reserves is between 2,650 and 10,500 trillion cubic feet (Tcf).

The Silurian Tannezuft Shale and the Devonian Frasnian Shale are two major shale gas and shale oil formations in Algeria's petroleum basins. There are approximately 3,419 Tcf of risked shale gas inplace in seven of these shale gas and shale oil fields, with 707 Tcf of risked, technically recoverable shale gas. Furthermore, six of these basins have a total of 121 billion barrels of risked shale

oil and condensate in place, with 5.7 billion barrels of risked, technically recoverable shale oil.[976]

The first large hydrocarbon finding in Algeria were made during the colonial period, in the 1950s. The discovery of the two biggest reserves ever found in Algeria, in gas in Hassi R'mel and oil in Hassi Messaoud, occurred in 1956.

Algeria established its preferred intervention tool in all areas of the oil industry, Sonatrach, as early as 1963, the year after independence. There are also three intercontinental pipelines carrying gas to Europe: one linking Algeria to Italy via Tunisia, another to Spain via Morocco, and a third via an underwater network known as Medgaz.[977]

Legal and Regulatory Framework in Algeria

The legal framework regulating multinational firms' oil operations in Algeria was previously limited to a lease regime imposed by colonial masters. Following the nationalization of hydrocarbons by Algerian governments in 1971, the legal system was changed to permit Sonatrach, that was the unique bearer of drilling rights at the period, to undertake oil operations while also establishing the structure under which multinational corporations' operations in the area of discovering and exploiting liquid hydrocarbons are conducted. In specifically, a collaboration with Sonatrach is formed; Sonatrach has a majority stake of at least 51%; and the function of operator is delegated to Sonatrach, which may transfer it to a multinational during the exploratory phase, with the partner bearing all risks.

Law 8614

This legal structure was updated as Law No. 8614 on August 19, 1986 (hereafter Law 8614), which established two new types of partnerships: the production sharing contract (PSC) and the risk service contract (the RSC). In 1991, Law 8614 was updated to permit international counterparts to take advantage of benefits such as (1) using international arbitration to resolve differences with Sonatrach over the partnership agreement (conflicts between Sonatrach and the Algerian State

[976] Ibid
[977] Ibid

continue to be subject to Algerian jurisdiction); and (2) participating in the development of gas discoveries.

Law No. 0507

Through Law No. 0507 of 28th April 2005 relating to hydrocarbons, as amended by Law No. 1301 of 20th February 2013, a new organisational structure concerning investments in all industries of the hydrocarbons chain, and more particularly in the discovery and exploitation of hydrocarbons, was put in place in 2005. (hereinafter Law 0507). For the upstream activities, the most significant changes were: the monopoly on oil activities was withdrawn from Sonatrach and entrusted to an institution named Alnaft; oil activities can only be carried out on the basis of an agreement entered into with Alnaft, either by Sonatrach on its own, or by Sonatrach with one or more partner or partners national or foreign for exploration or exploitation; Sonatrach's stake in the contract must be at least 51%; Sonatrach has lost its regulatory powers and retains only its role as an operator, with unique privileges and duties in contrast to other operators, due to its position as a national enterprise.

Even though Law 0507 expressly repeals Law 8614, it is important to underline that any partnership agreements entered into under Law 8614 (mostly PSCs) remain subject to the latter. However, insofar as Law 0507 obliged Sonatrach to transfer all mining titles issued under Law 8614 to Alnaft, a parallel agreement was entered into between Alnaft and Sonatrach to allow the latter to continue its activity in the context of the partnership agreement with its foreign partners.

Law 1913 or the New Law

Following the dismal performance of Law 0507, Law No. 1913 pertaining with hydrocarbon operations (hence Law 1913 or the New Law) was enacted on December 11, 2019 with the goal of enhancing the appeal of the nationwide mining sector with an emphasis on exploratory activities. Besides the sections pertaining to the two institutions and the windfall tax, Law 0507 is completely repealed.

All upstream agreements negotiated under Laws 8614 and 0507 in effect at the time of the issuance of Law 1913, however, remain in effect in line with their terms of service until they lapse and cannot be prolonged or reissued. Law 1913 authorizes Sonatrach to enter into three categories of hydrocarbon agreements. All of these contracts operated under the previous legislation, with the PSC being the most widely utilized thus far. Furthermore, the New Law allows for more leeway in negotiating the terms and circumstances of these agreements.

New domestic oil and gas legislation

Law 1913 does not distinguish between conventional and nonconventional hydrocarbons contrary to the former Law 0507. Like under Law 0507, according to the New Law the Algerian state grants Alnaft the right to exploit the mining domain; therefore, Alnaft remains the holder of the mining titles, with exploration and production activities being carried out: by Sonatrach alone according to a concession deed granted by Alnaft, which set out the rights and obligations of Sonatrach (concession deed); or by Sonatrach, with one or several international oil companies (IOCs), according to an administrative deed granted by Alnaft (attribution deed) which set out: the perimeter of the concession; the designation of the parties; the research plan; approvals of the development plan; conditions of assignment rights and change of control; and other relevant issues.

Treaties

The New York Convention for the Recognition and Enforcement of Foreign Arbitral Awards is upheld by Algeria (New York 1958). The Democratic and Popular Republic of Algeria has stated that it will apply the Convention on a reciprocal basis, recognizing and enforcing only arbitral awards made in another contracting state's territory, and only when such sentences have been pronounced on disputes arising out of legal relations. To date, Algeria has ratified 40 bilateral conventions on the promotion and the protection of investments and 34 bilateral conventions with a view to avoiding double taxation and to prevent tax evasion in the area of income and capital tax.

Institutional Framework in Algeria

In Algeria, the two regulatory institutions established by Law 0507 remain in place:

The minister in charge of hydrocarbons under the New Law, the minister is in responsibility of issuing mining titles, approving hydrocarbons contracts and amending them, and issuing exploitation authorizations.

Alnaft is in charge of the development and administration of the hydrocarbons mining industry; among its responsibilities is assessing an entity's competence to conduct exploratory operations and issuing prospecting permits or hydrocarbons exploration.

The state delegated prospecting, exploration, and exploitation of hydrocarbons activities to Alnaft, which delegated: (1) prospecting activity to any oil company through the issuance of a prospecting authorisation for a term of two years, renewable once, for up to two years; and (2) exploration or exploitation activities on the basis of a concess. In theory, IOCs are chosen as parties to a hydrocarbon contract through a fair bid process. On consulting with Alnaft, which provides an attribution deed for this reason, Sonatrach can complete a hydrocarbon contract through direct consultation under the New Legislation.

The Hydrocarbon Regulation Authority (ARH) is in responsible for enforcing: conformance with technical laws regulating hydrocarbon discovery and drilling for oil activities; rigorous implementation of the doctrine of unlimited access to transportation facilities by private entities; and adherence with laws governing cleanliness, manufacturing and ecological security, as well as the avoidance and control of pollution.

Legal and Institutional Framework in Namibia

The Republic of Namibia is also known as the Land of the Brave, and is a largely unexplored frontier that has recently attracted interest from major and mediumsized oil companies. To date, 24 explorations and appraisal wells have

been drilled offshore Namibia, 18 of which are exploration wells and six are appraisal wells within the Kudu Gas Field.[978]

The only commercial discovery in Namibia is the Kudu Gas Field, which was discovered in 1974 by a joint venture comprising Chevron Oil, Regent Petroleum and SOEKOR (Pty) Ltd. It lies approximately 170 km west of Orangemund, offshore Namibia, in a water depth of 170 metres. The field's proven natural gas reserves are estimated at 1.3 trillion cubic feet and possible reserves at 9 trillion cubic feet. The upstream partners in the Kudu Gas Field, Block 2814A are the National Petroleum Corporation of Namibia (NAMCOR) with 44% and BW Offshore with 56% as the operator. The initial development plan for the field was a gastopower project, with Namibia Power Corporation (NAMPOWER) as the downstream partner. The gas produced from the Kudu Gas Field was to be transported through a 170 km pipeline to a power station, which was supposed to be built approximately 25 km north of Orangemund in the southern part of Namibia. However, the initial development plan failed due to the nonfulfilment of some conditions in the Project Development Plan (PDA) signed by the upstream partners and the downstream partner. In terms of the Project Schedule set out in the Annexures of said PDA, the Government of the Republic of Namibia was supposed to provide the required project support, including economic stabilisation provisions and financial guarantees.

However, in November 2018 and January 2019, the government of the Republic of Namibia made it clear that it was not going to provide the required support in terms of the PDA. As a result, the downstream partner, NAMPOWER, indicated that it would withdraw from the PDA and not continue to be part of the Kudu Gas Project. This means that the upstream partners will have to come up with another development plan that does not require any support from the Government of

[978]Energy: Oil & Gas 2020: Namibia, Last *Updated August 10th, 2020.*

Namibia. It is believed that the upstream partners are currently engaged in working out a new development plan for the project.

Legal Framework in Namibia

The legal framework governing the exploration for, development and production of oil and gas in Namibia is set out in the Petroleum (Exploration and Production) Act, 1991 (the "Petroleum Act"), the Petroleum (Taxation) Act, 1991 (both as amended principally by the Petroleum laws Amendment Act, 1998) and the Model Petroleum Agreement 1998. The economic and fiscal aspects of the terms contained in these legal instruments are outlined under the Summary of Economic and Fiscal terms. The other terms include:

Licenses: The Petroleum Act provides for three types of licenses: reconnaissance licenses; exploration licenses; and production licenses. Reconnaissance, exploration or production operations can be conducted in Namibia only under the authority of an appropriate license issued under the Petroleum Act. Applications for these licenses have to conform to the requirements of the Act. The Minister, in granting a license, does so subject to conditions. Such conditions are in practice contained in the Model Petroleum Agreement as regards an exploration and production license. There are also a few mandatory statutory conditions, which are set out in section 14 of the Petroleum Act. These relate to the licensee giving preference to qualified Namibian citizens in its recruitment of employees etc.

Model Petroleum Agreement: The Minister is required by section 13 of the Petroleum Act to enter into a petroleum agreement with an applicant for a petroleum exploration license before he/she grants such license. In order to facilitate the discharge of this statutory obligation, the Government has prepared and published a Model Petroleum Agreement to serve as a basis of negotiation with applicants for exploration licenses. This Model is a concession type agreement and its clauses draw from international petroleum industry practice and holds no surprises for international petroleum companies.

Decommissioning Regime: The Petroleum laws Amendment Act, 1998 sets out provisions regulating the decommissioning of facilities used in petroleum exploration and production operations in Namibia. These provisions provide that the holder of a production license is under an obligation to establish a trust fund after 50% of the estimated recoverable reserves of the relevant production area has been produced. After this, the holder is obliged to make annual payments into the trust fund in accordance with a specified formula to be based on the unit of production method. The money accumulated in the fund is to be used to finance, ultimately, the decommissioning of the petroleum installations, which were used to produce petroleum from the field in question.

Upstream Legal Framework

The Petroleum (Exploration & Production) Act of 1991 was amended and consolidate all current amendments into a single document. The Petroleum Taxation Act of 1991 was also amended. There are intended amendments to the Petroleum Regulations, and additional draft subsidiary legislation to be prescribed under the Petroleum (Exploration & Production) Act of 1991. The current Model Petroleum Agreement implemented in 2007 was also be amended, and a local content legal framework is being mooted. The intended reform will also look at clarification of the regime for the governance of environmental matters for petroleum operations and the possible preparation of draft subsidiary environmental legislation for the upstream sector. The pertinent intended amendments include the following: a review of current annual charges for exploration and production licences to track an inflationary measure; drafting of a Local Content Policy and Regulations; a review of the current Royalty Rate to a level more consistent with other frontier petroleum jurisdictions; a review of the current formula for Additional Profit Tax; the rate of Petroleum Income Tax is to be prescribed in regulations rather than within the main body of the Petroleum Taxation Act of 1991; the details regarding State Participation in petroleum operations are to be enhanced; a review of the provisions on decommissioning; a

provision for unitization and crossborder cooperation; and clarification of the ownership of petroleum data and information obtained from licence areas.

The legislative framework governing the Namibian upstream oil and gas business is modern and well developed, and has been specially formulated for the international oil industry. They include: (1) Petroleum Act[979]; (2) Petroleum Taxation Act[980]; (3) Petroleum Laws Amendment Act[981]; and the Model Petroleum Agreement.[982] The legislation sets out the three main fiscal elements: The Royalty (Petroleum (Exploration and Production) Act and Petroleum Laws Amendment Act); the Petroleum Income Tax (Petroleum (Taxation) Act; and the Additional Petroleum Tax (Petroleum (Taxation) Act.

Downstream legal framework

The Petroleum Products and Energy Act of 1990 was amended and consolidate all current amendments into a single document. The Petroleum Products Regulations was also amended, and existing amendments will be consolidated.

The Ministry of Mines and Energy, Namibia has already consulted the petroleum industry regarding the intended reforms. Both the upstream and downstream stakeholders/industry players have submitted their input for consideration. The intended reforms to the petroleum legal regime are expected to be completed in the second half of 2021.

The mining Act, 1992 & Environment Management Act, 2007

The two main laws in Namibia dealing with mining and the environment are the Minerals (Prospecting and Mining) Act, 1992 ("MA") and the Environmental managemental Act, 2007 ("EMA"). The MA vests all of Namibia's prospecting and exploitation rights in the State and gives the Minister of Mines and Energy power to grant licenses for mining activities. It also provides for the appointment of a Mining Commissioner to assist in the licensing process. The EMA, promotes

[979]Petroleum (Exploration and Production) Act, 1991 (Act 2 of 1991).
[980]Petroleum Taxation Act, 1991 (Act 3 of 1991).
[981]Petroleum Laws Amendment Act, 1998 (Act 24 of 1998) (Act 24 of 1998)
[982]Model Petroleum Agreement (MPA), 2007.

sustainable management of the Namibian environment and use of its natural resources. It provides for an Environmental Commissioner and a process to assess and control activities that may have significant effects on the environment.

INSTITUTIONAL FRAMEWORK IN NAMIBIA

The Ministry of Mines and Energy

The Ministry of Mines and Energy's White paper on Energy Policy states that security of energy supply and attracting investment and growth are primary goals in the policy framework. The policy identifies the different roles and functions of industry participants, and lays out the basic legal and fiscal criteria.

The National Petroleum Corporation of Namibia (NAMCOR)

The National Petroleum Corporation of Namibia's (NAMCOR's) main tasks up to 1998 have been the acquisition of data and the promotion of Namibia's petroleum potential. It also assists the Ministry with the administration of the Petroleum (Exploration and Production) Act.

In the past NAMCOR did not seek a participatory interest in licenses awarded. However, Namibia have now amended its policy such that NAMCOR can participate in licenses if this is offered to the company during negotiations and if NAMCOR decides of its own accord to accept the invitation to participate. NAMCOR's interests will be carried during the exploration phase but it will contribute fully from the development phase onwards. No applicant will be compelled to offer NAMCOR a share in a license and no applicant will therefore be penalized for not making an offer to NAMCOR.

LEGAL AND INSTITUTIONAL FRAMEWORK IN LIBYA

Legal Framework in Libya

The law of Libya has historically been influenced by Ottoman, French, Italian, and Egyptian sources. Under the Great Socialist People's Libyan Arab Jamahiriya,

Libya has moved towards a legal system based on Sharia, but with various deviations from it.

Petroleum Law No 25 of 1955

Libya's key petroleum legislation is the Petroleum Law No. 25 of 1955 (the "Petroleum Law"), which came into force the same year that saw the first Libyan concessions awarded. It was seen as one of the more sophisticated oil laws in existence, offering smaller concession areas and including relinquishment requirements. By 1968, 137 concession agreements were in place with over 40 different companies. Over the following decades the Petroleum Law has been amended by various regulations, negotiations and new versions of model contracts. [983]

After the enactment of the Petroleum Law, the Libyan government conducted numerous renegotiations of concessions previously offered under the original Petroleum Law and managed to impose tough fiscal terms on IOCs, using favourable market conditions to its advantage. By the 1970s the Libyan Government began to demand higher shares of petroleum revenue and exercised greater control over the industry. This led to a series of various degrees of nationalizations of oil assets. In 1972, participation agreements replaced the concessions, transferring 51% of all concessions to the Libyan National Oil Company (NOC). During 19711973 BP, Occidental and Hunts' Libya assets was fully nationalized.

In relation to the petroleum sector, Law No.25 of 1955 (the ‘Petroleum Law’) is still in effect. However, in 1961, 1965 and 1970 the law and the concessions were amended significantly with the terms and conditions changing to be heavily in favour of the Government.

The Petroleum Law established a concessionary framework for the exploration and production of petroleum within Libya. In Article 1 it laid down the basic rule that all petroleum in Libya in its natural state, contained in strata, is the property of the Libyan State and that no person shall explore or prospect for, mine or produce

[983] Amir Kordvani (2012): Libya: An Overview of The Libyan Oil and Gas Regime (Article 1 of 4) Clyde & Co

petroleum unless authorized by a permit or concession issued under the law. The Minister of Petroleum shall consider applications for permits or concessions submitted by eligible applicants. At present, the usual way for a foreign oil company to undertake oil operations in Libya, unless it takes over an existing concession interest, is to enter into an EPSA or a Development and Production Sharing Agreement ('DEPSA') with NOC. The Government usually authorizes NOC to announce a need for EPSA candidates, usually announced in the international media, and this is done in the form of open bidding. The bids are made by the foreign parent company and then the company that is successful in the bid must open a branch office in Libya.[984]

The Petroleum Law established a concessionary framework for the exploration and production of petroleum within Libya. In Article 1 it laid down the basic rule that all petroleum in Libya in its natural state, contained in strata, is the property of the Libyan State and that no person shall explore or prospect for, mine or produce petroleum unless authorized by a permit or concession issued under the law.

Article 3 of the Petroleum Regulation details decommissioning and abandonment requirements. The concession holder should notify the NOC of its intended abandonment 3 months prior to the abandonment date. Expenses for abandonment related to exploration and appraisal operations is the sole responsibility of the company. The company shall be liable for 50% of expenses incurred as a result of development and exploitation operations.

Exploration and Production Sharing Contracts (EPSA)

In 1973 the Libyan Government introduced Exploration and Production Sharing Contracts (EPSA). EPSAs are subject to the principles set out in the Petroleum Law (as amended by subsequent amending acts and regulations).

[984] Bob Palmer (2016): Conducting oil and gas activities in Libya, at www.cmslegal.com.

Under an EPSA, the Libyan Government, through the NOC, retains exclusive ownership of oil fields while signatory oil companies are considered contractors. Numerous versions of the EPSA have since been released. The last EPSA round under the old regime was held in 2005 on an arguably more attractive version of the EPSA, "EPSAIV", as a postsanctions initiative to invite the muchneeded foreign investment to the country's oil and gas sector. The key difference between various versions of EPSA relates to the scope of obligations of the Government and the IOC with respect to the recovery of development and production costs. In addition, EPSAIV contracts were awarded on a competitivebidding basis rather than the negotiated method used in the previous rounds.

EPSAIV created tough terms for oil companies, who agreed to low profit shares and the handing over of large signature bonuses in return for licenses in order to win the concessions. Whilst being criticized for their lack of transparency, EPSAIV contracts remain in force under the General National Congress (GNC), although it was reported that the GNC was to subject them to a corruption review process.

Under the EPSA IV, an IOC or a consortium of IOCs commonly enter into a joint venture with the NOC. The IOC or consortium undertakes exploration work and bears the costs for a minimum of 5 years, while the NOC retains exclusive ownership. The joint venture company management is assigned to a committee comprising of two NOC representatives and one IOC with decisions being made using unanimous voting. Over the course of 2008, a number of IOCs had the terms of their Exploration and Production contracts with the NOC renegotiated outside of the bidding rounds, to bring them into line with the new EPSA IV framework. The EPSAIV contract is seen as having particularly tough commercial terms relative to the global oil industry and IOCs have been keen to express their desire for a new version of the EPSA offering more attractive terms (Royal Dutch Shell has recently ceased exploration under its Libyan licenses citing poor exploration results that cannot be economically justified under the EPSAIV terms).

The National Transitional Council (the predecessor to Libya's General National Congress) made suggestions in June of this year that productionsharing agreements with IOCs will be offered on improved terms in order to encourage IOCs to invest more money in exploration and enhanced oil recovery. However, it has also made clear such a development will not occur this year. More recently NOC officials have been reported as stating that there are plans to make Libya a more attractive upstream destination by offering more favourable contract terms.

The NOC recently indicated that there will be no new bidding rounds until at least a permanent fully sovereign Government is in place which will not occur until after new elections are held following enactment of the new Constitution. However, they failed to elaborate further on the nature of any contracts that will be offered in the future.

INSTITUTIONAL FRAMEWORK IN LIBYA

The National Oil Corporation (NOC)

The National Oil Corporation ('NOC'), recognized by Decree No. 10 of 1979, is the State corporation regulating the oil sector and is the State representative in oil exploration contracts, regulating the affairs of completely owned companies, Joint Ventures ('JVs') and Exploration and Production Sharing Agreements ('EPSA').[985]

NOC is responsible for many aspects of the upstream and downstream oil and gas sector in Libya, including licensing procedures and implementation, oil policy and contract negotiations. NOC carries out the objectives of Libya's development plan by increasing, developing and exploiting oil and gas reserves, and operating and investing in those reserves. Furthermore, NOC has de facto taken over the technical and regulatory functions that were previously held by the Minister of Petroleum. The new government intends to divide the NOC into two bodies, as

[985]Bob Palmer (2016): Conducting oil and gas activities in Libya, at www.cmslegal.com

follows: 1) NOC – Exploration and Production of Oil and Gas. 2) NOC – Refinery and Petrochemicals.

The NOC of Libya is a stateowned company that is responsible for implementing EPSAIVs and controlling Libya's oil and gas production. The NOC was established in 1970 replacing the Libyan Petroleum Company and oversees all petroleum activities in Libya including oil and gas exploration, drilling and production; refineries operation; petrochemical production; marketing and distribution of petroleum products and petrochemicals. The NOC's main upstream subsidiaries are: The Sirte Oil Company and Arabian Gulf Oil Company. The main downstream subsidiaries are: Ras Lanuf Oil and Gas Processing Company; Zawia Oil Refining Company; and Brega Petroleum Marketing company.

The role of the NOC going forward is unclear. It is unlikely that there will be any significant changes to the oil and gas sector prior to the establishment of a permanent government and the enactment of the new constitution. Also unclear is the new structure of the NOC. The creation of the Ministry of Oil by the NTC indicates that some of the NOC's power will be redistributed to the new Oil Ministry. Prior to the 2011 conflict, control over oil and gas was heavily centralized in Tripoli. It seems likely that power will be somewhat decentralized in order to reflect the geographical distribution of oil and gas reserves and allow greater autonomy for the oilrich region of Cyrenaica in the East of Libya. Certainly, the Eastern Region's arguments for federal rule have been driven by the longstanding complaint that it has been deprived of a fair share of oil wealth. Given Benghazi's importance in relation to the oil sector it is likely to become a new economic hub in Libya and will want its own policy making role.

The Ministry of Petroleum

The Minister of Petroleum shall consider applications for permits or concessions submitted by eligible applicants. At present, the usual way for a foreign oil company to undertake oil operations in Libya, unless it takes over an existing concession interest, is to enter into an EPSA or a Development and Production

Sharing Agreement ('DEPSA') with NOC. The Government usually authorizes NOC to announce a need for EPSA candidates, usually announced in the international media, and this is done in the form of open bidding. The bids are made by the foreign parent company and then the company that is successful in the bid must open a branch office in Libya.

Article 17 states that permits and concessions shall not be assigned except with the written consent of the Minister of Petroleum, which may impose any conditions that it deems appropriate in the public interest. The notice of the grant, renewal, assignment, revocation, termination or surrender of the whole or any part of any permit or concession must be published in the Official Gazette, as per Article 19.

The Government has the right to participate and be carried in the Licence. The foreign company undertakes all exploration and appraisal expenditures at its own risk. Development expenditure and exploitation capital expenditure are usually shared 50/50 between NOC and the foreign company. The foreign company is guaranteed an initial share of production with a view to enabling it to recover the expenditure it has incurred during the exploration, development and production phases.

EPSA IV allows for NOC to receive a share of production with the remainder being available for cost recovery by the company. Under EPSA IV provisions cost recovery ranges from 30% to 40% depending on the field size. Once full cost recovery has taken place, net production (profit oil) is shared between the NOC and the company.

Legal and Institutional Framework in Ghana

Under the Constitution of Ghana, all untapped natural resources including oil and gas resources are vested in the President of Ghana for and on behalf of the people of Ghana. This is restated in the E&P Act. Therefore, the right to explore and develop such resources is subject to agreement or licence granted by the government (through the Ministry of Energy) and approved by Parliament. Initial petroleum activities in Ghana are governed by the Ghana National Petroleum Corporation Act, 1983 (Provisional National Defense Council Law (PNDCL) 64),

which constitutes an establishment and instrument of the national oil corporation and the Petroleum Income Tax Act, 1987 (PNDCL 188). However, owing to increased activities in the upstream oil and gas sector after the commercial discoveries in the deepwaters, various regulatory reforms were initiated. This resulted in the enactment of the Petroleum Commission Act 2011 (Act 821), the E&P Act that provides an overarching framework, and the Petroleum (Local Content and Local Participation) Regulations 2013 (LI 2204) enacted to ensure local participation in the sector given the increase in the activities of foreignowned entities in the sector, among others. There is also the Petroleum Revenue Management Act 2011 (Act 815) that governs the use of petroleum revenue accruing to the state from petroleum exploration. These laws are in addition to other regulations, directives and guidelines issued to guide operations in the sector.

The primary laws governing the upstream oil and gas sectors are the E&P Act and the Ghana National Petroleum Corporation Act, 1983 (PNDCL 64) and a taxation regime under the Petroleum Income Tax Act, 1987 (PNDCL 188)[986] and the Income Tax Act, 2015 (Act 896) as amended.[987]

Legal Framework in Ghana

In the mid1980s, the government introduced the first legislative framework for upstream oil and gas activities in Ghana. Three main pieces of legislation were enacted by the government to regulate the upstream oil and gas activities. Chief among the reforms was the passage of the Ghana National Petroleum Corporation Act, 1983 (PNDCL 64), which established the Ghana National Petroleum Corporation (GNPC) as the national oil corporation to champion state activities in the upstream oil and gas sectors. In addition, the now repealed Petroleum (Exploration and Production) Law, 1984 (PNDCL 84) was enacted to regulate exploration and production activities as well as provide the framework for engagement of international oil firms by the government to undertake exploration and production activities. Lastly, the Petroleum Income Tax Law 1987 (PNDCL

[986] Only applicable to specific pre-2015 petroleum agreements with fiscal stabilisation clauses.
[987] Income Tax (Amendment) Act, 2016 (Act 907)

188) was passed to regulate operations and taxation in the upstream oil and gas sector. Of the three pieces of legislation, PNDCL 84 and the PNDCL 188 have been repealed and replaced with new pieces of legislation that are currently applicable.

The Fourth Republican Constitution 1992, provides that 'every mineral in its natural state in, under or upon any land in Ghana, rivers, water course throughout Ghana, the exclusive economic zone, any area covered by the territorial sea or continental shelf in the Republic of Ghana is the property of the Republic of Ghana and is vested in the President on behalf of, and in trust for the people of Ghana'.[988] As a check on the powers of the President to control and manage the resources on behalf of the people of Ghana, the Constitution requires parliamentary approval for all transactions involving the grant of a right for the exploitation and production of natural resources in Ghana and further mandated the establishment of specific commissions to be responsible for the regulation and management of the utilization of the natural resources and the coordination of the relevant policies.

Upon the discovery of oil in commercial quantities offshore Ghana in 2007, the Petroleum Commission Act, 2011 (Act 821) was subsequently passed to set up the Petroleum Commission as the regulator to coordinate activities in the upstream petroleum industry in accordance with the Constitution.[989] In addition, the Petroleum Revenue Management Act, 2011 (Act 815) as amended by Petroleum Revenue Management (Amendment) Act, 2015 (Act 893), was enacted to provide the framework for management of petroleum revenues. In 2016, the Petroleum (Exploration and Production) Act, 2016 (Act 919) (the E&P Act), was passed to replace the PNDCL 84, as the primary legislation for the regulation of petroleum activities in the upstream sector. Also, the Income Tax Act 2015 (Act 896) as amended provides a regime for the taxation of income of contractors and

[988] Article 257(6) of the 1992 Constitution.
[989] Prior to the establishment of the Petroleum Commission, the function was somehow performed by the national oil company in addition to its mandate as the national oil corporation.

subcontractors in the sector. In order to support the implementation of the key laws in the sector, the government through the Minister of Energy (the Minister) and the Petroleum Commission have enacted a number of regulations, guidelines and developed policies for the sector. These include the following: The Petroleum (Local Content and Local Participation) Regulations, 2013 (LI 2204); the Petroleum Commission (Fees and Charges) Regulations, 2015 (LI 2221); the Petroleum (Exploration and Production) (Measurement) Regulations, 2016 (LI 2246); the Petroleum Exploration and ProductionData Management Regulation, 2017 (LI 2257); and the Petroleum (Exploration and Production) (Health, Safety and Environment) Regulations, 2017 (LI 2258) among others. The main legislation relating to the upstream oil and gas sector are as follows:

The Ghana National Petroleum Corporation Act, 1983 (PNDCL 64)

The first major activity to set the stage for regulatory reform of the upstream sector was the establishment of the GNPC under PNDCL 64. The GNPC is established as the national oil corporation charged with the responsibility to explore, develop, produce and dispose of hydrocarbons.

The law also mandated GNPC to advise government on oil and gas matters and to promote the exploration and orderly development of the petroleum resources of Ghana. In effect, the GNPC was created as a regulator and operator performing both regulatory and commercial functions under the supervision of the Ministry of Energy. At the earlier stages, the GNPC led the effort to acquire data to establish Ghana's reserves potential, and also led efforts to market the potential to IOCs interested in investing in the upstream sector in Ghana. However, the dual roles played by GNPC created conflict in the upstream sector as it seems to be a regulator and a player in the sector. This conflict, or potential conflict, was addressed in later regulatory reform; with the passage of the Petroleum Commission Act, 2011 (Act 821), which transfers the GNPC's regulatory functions to the Petroleum Commission. Currently the GNPC is a commercial operator and the holder of government interests in petroleum operations in Ghana. It is also the national aggregator of natural gas from upstream operators to service the local market. Under the Petroleum Revenue Management Act, a specific percentage of

the net cash flow from the carried and participating interests of the state is ceded to the GNPC to fund its operations.

The Petroleum (Exploration and Production) Act, 2016 (Act 919)

The Exploration and Production Act is the main legislation that regulates the grant of licence for upstream oil and gas activities, and regulates the exploration, development and production of petroleum in Ghana. The Act, in line with the Constitution, provides that petroleum existing in its natural state within Ghana is the property of Ghana and is vested in the President on behalf of the people of Ghana. The Act also permits the Minister to grant rights and enter into agreements for the exploration and production of oil and gas subject to the ratification of such rights or agreements by Parliament. The Minister and the Petroleum Commission are also required by the Act to create rules on healthy building, health & security, quality standards, reference maps for oil blocks, negotiated tendering, and oil and gas contract terms & conditions.

Except in the case of the GNPC, any person who intends to engage in the exploration, development and production of petroleum can only do so in accordance with a petroleum agreement entered into between that person and the government of Ghana and the GNPC. Under the Act, a petroleum agreement can only be entered into after an open, transparent and competitive public tender process. However, the Minister may, on stated grounds, enter into a petroleum agreement without going through a tender process.

The Act mandates the Minister to prepare a reference map showing areas of potential petroleum fields within Ghana divided into numbered areas (blocks). Subject to rights granted to other entities under petroleum agreements entered into, the GNPC has the right to undertake exploration, development and production of petroleum over the blocks declared by the Minister as open for petroleum operations. Prior to exploration activities, the GNPC or the contractor must submit to the Minister for approval, a development plan in respect of a petroleum field to be developed directly by the GNPC or the contractor, as the case may be.

The essential terms and conditions that must be in a petroleum agreement are prescribed under the Exploration and Production Act. The Act prohibits the assignment of petroleum agreements, directly or indirectly, without the written consent of the Minister. The essential provisions of the Act cover the following: the power of the Minister to open an area for petroleum activities;[990] the power of the Minister to close an area or redefine the boundaries;[991] and that petroleum agreements must be entered into in accordance with an open, transparent and competitive public tender process;[992] among others.

The Act also prescribed specific terms that must be provided in the petroleum agreements. These include: the right of GNPC to hold an initial participating carried interest of at least 15 per cent for exploration and development; the GNPC has the option to acquire an additional participating interest as determined in the petroleum agreement within a specified period of time; and the petroleum agreement must be for a term not exceeding 25 years subject to ability of the Minister to extend among others.

The general requirements for petroleum activities under the Act include: the standard of operations in conducting petroleum activities;[993] supervision and inspection;[994] and data and information obtained by a licensee, contractor or subcontractor as a result of petroleum activities are property of Ghana among others.

The Petroleum Commission Act, 2011 (Act 821)

The Petroleum Commission was created under the Petroleum Commission Act as the upstream petroleum supervisor upon commercial discovery of petroleum, having the goal to "control and supervise the usage of oil reserves and to plan policies in regard to them."[995] Fundamentally, the Act creates the Petroleum

[990] Section 7 of Act 919.
[991] Section 8 of Act 919.
[992] Section 10 of Act 919.
[993] Section 10(14) of Act 919.
[994] Sections 50–55 of Act 919.
[995] Section 2 of Act 919.

Commission to carry out the oversight obligations that were formerly carried out by the GNPC under PNDCL 84.

Petroleum (Local Content and Local Participation) Regulations, 2013 (LI 2204)

The Petroleum (Local Content and Local Participation) Regulations, enacted under Act 821 in July 2013, aim to 'encourage the use of local expertise,, commodities and services, enterprises and finance in the oil and gas sector value chain and their retention in the nation,' amongst many other things. The Regulations are aimed at guaranteeing the greatest involvement of native Ghanaians, as well as building local capability and protecting the interests of international oil and gas players.

Contractors, subcontractors, service providers, licensees, and associated organizations in the oil industry are all subject to the Laws.[996] The Regulations establish least equity participation levels for native peoples in oil activities.[997]
The need of 5% native involvement in oil contracts is a fundamental component of the Laws.[998] Nevertheless, this is open to debate and Ministerial clearance. A threshold of 10% Ghanaian stake is required of service providers in the industry. Other criteria include the creation and endorsement of local content programs, that should contain subplans for hiring and training, research & innovation, transfer of technology, and legal and commercial services at a least..[999] In terms of legal services, operators are expected to utilize only Ghanaian attorneys or legal firms for legal assistance that are expected in Ghana.[1000] The oil firms must publish their conformance standards on a routine basis to the local content council, which was established to supervise the laws' execution and guarantee quantifiable and consistent development in local content in the oil and gas industry.[1001]

[996] Regulation 3 of LI 2204.
[997] Regulation 10 of LI 2204.
[998] Regulation 4 of LI 2204.
[999] Regulation 7 of LI 2204.
[1000] Regulation 29 of LI 2204
[1001] Regulation 5 of LI 2204

Petroleum (Exploration and Production) (General) Regulations, 2018 (LI 2359)

In June 2018, the Petroleum (Exploration and Production) (General) Regulations, 2018 (LI 2359) went into effect. Eligibility criteria, terms and circumstances for transparent and competitive tendering procedures, and direct bargaining are all covered under the Regulations. The Laws stipulate the Minister to create a strategic evaluation plan for the opening up of territories for oil and gas operations in conjunction with the Commission and other competent bodiesIt further stipulates that the GNPC's first contributing interest in discovery and production will be a retained stake, with an additional involvement interest in production activities.[1002] The method for licensure and the conditions for granting licenses, as well as changes in management and functioning requirements under an oil deal, are all important aspects.

The Petroleum Exploration and ProductionData Management Regulation, 2017 (LI 2257)

The Regulations govern the reporting and administration of oil and gas information garnered from Ghana's oil industry. This involves receiving, interpreting, and analyzing petroleum data, as well as providing a secure atmosphere for storing and managing supplied oil and gas data, as well as archiving and analysis for information connected to the capture and reporting of oil and gas data. The aim of these Rules is to establish the form, substance, and criteria for the compilation and presentation of geological, geophysical, and production data linked to oil and gas operations in order to facilitate the efficient exploitation of Ghana's petroleum resources.[1003]

The Petroleum (Exploration and Production) (Health, Safety and Environment) Regulations, 2017 (LI 2258)

All oil and gas activities are covered under LI 2258. Its goals include preventing the negative impacts of petroleum activities on human health, security, and the

[1002] Regulation 34 of 2359.
[1003] Regulation 1 of LI 2257

ecosystem, as well as promoting high health and safety guidelines. It establishes minimal health and safety standards for contractors, subcontractors, and other sector players. Development and administration of infrastructure, systems, and machinery, marine equipment, loadbearing structures, drilling and well systems, pollutants and wastes, dismantling, risk assessments, and emergency planning and reporting are among the most important laws.[1004]

The Petroleum Revenue Management Act, 2011 (Act 815) as Amended[1005]

Following the finding of the Jubilee Fields, this Act was passed to establish a system for the transparent, responsible, and continuous gathering, distribution, and administration of petroleum money for the advantage of Ghana's population. The Act established a variety of funds, including the Petroleum Holding Fund,[1006] the Ghana Stabilization Fund[1007] and the Ghana Heritage Fund[1008] – and specifies how income generated by oil and gas activities in Ghana would be distributed and used. All funds established under the Law are public money[1009] that may not be seized, utilized to grant loans, or used as security for the government or private companies.[1010] The Act also prohibits borrowing against petroleum reserves.[1011]

The Petroleum Revenue (Amendment) Act, 2015 (Act 839) was enacted to amend the Petroleum Revenue Management Act 2011. The amendment provides for the allocation of funds to the Ghana Infrastructure Investment Fund for the purposes of infrastructure development, [1012] the establishment of the Investment Advisory Committee[1013] and other related matters.

[1004] Ibid
[1005] The Petroleum Revenue (Amendment) Act 2015 (Act 839).
[1006] Section 2 of Act 815.
[1007] Section 9 of Act 815.
[1008] Section 10 of Act 815.
[1009] Section 42 of Act 815.
[1010] Section 5 of Act 815.
[1011] Ibid
[1012] Section 11 of Act 815.
[1013] Section 10 of Act 815.

Petroleum (Exploration and Production) (Measurement) Regulations, 2016 (LI 2246)

LI 2246 came into force in November 2016 for the main purpose of ensuring that an accurate measurement and allocation of petroleum forms the basis for the determination of revenue that accrue to the parties to a petroleum agreement. It applies to the planning, design, testing, calibration, operation and maintenance of metering systems as well as equipment and methods for measuring the quantities of oil and gas produced, transported and sold. The Petroleum Commission is mandated under this regulation to supervise and inspect metering and allocation systems from the design to operation stage. These Regulations also permit an authorized agency to place a seal on export valves downstream of a metering station to prevent offloading of petroleum without authorization.[1014]

Petroleum Commission Fees and Charges Regulations, 2015 (LI 2221)

These Regulations provide the framework for determining the applicable fees to be paid by participants in petroleum activities to the Petroleum Commission for various activities including permitting, thirdparty access over a facility that is owned by a contractor, registration of assignment of interest or transfer of shares, and registration of encumbrances over participating interest in petroleum agreements. Other costs include expenses and costs incurred by the Petroleum Commission in conducting its regulatory and supervisory services as well as fees for extension of exploration working periods and appraisal periods.[1015]

Institutional Framework in Ghana

Government of Ghana (through the Ministry of Energy)[1016]

The 1992 Constitution vests all petroleum resources in the president of Ghana as the head of the executive branch of government.[1017] The presidency expresses its ownership and control over oil and gas activities through the Ministry of Energy.

[1014] Regulations 1,2 and 4 of LI 2246.
[1015] Regulations 3 and 12–16 of LI 2246.
[1016] Formerly Ministry of Petroleum.
[1017] Article 257(6) of 1992 Constitution and Section 3 of Act 919.

The mandate of the Ministry of Energy includes the formulation, implementation and monitoring of national policies for the sector.[1018]

The Ministry is the driver of government policy and has the overall responsibility to provide policy direction on oil and gas matters based on advice from the Petroleum Commission.[1019]

The Ministry receives applications from prospective contractors, negotiates terms of petroleum agreements and grants the right to explore, develop and produce oil and gas products. It is also responsible for granting consent for the transfer of petroleum rights and resolving disputes between the Petroleum Commission and contractors (prior to resorting to other dispute resolution options).[1020]

Parliament of Ghana

The 1992 Constitution requires all petroleum agreements to be ratified by Parliament.[1021] Parliament may also exempt particular transactions or agreements from ratification.[1022] These exemptions must be supported by the resolution of at least 75 percent of the members of Parliament.[1023]

Petroleum Commission of Ghana

As indicated above, the Petroleum Commission is established under Act 821 as an upstream petroleum regulator. The functions of the Petroleum Commission include: promoting planned, wellexecuted, sustainable and costefficient petroleum activities; recommending to the Minister national policies on petroleum activities; and monitoring compliance with national policies, laws, regulations and agreements among others.

Summary of the Comparative Analysis

This chapter compares and contrasts Algeria, Namibia, Libya, and Ghana with other countries. This chapter comes to a close with a summary of the Ghana analysis. Ghana scores adequately in several important aspects of resource

[1018]https://www.energymin.gov.gh/about.
[1019] Section 94 of Act 919.
[1020] Sections 10 and 16 of Act 919.
[1021] Article 268 of 192 Constitution.
[1022] Article 268(2) of 1992 Constitution.
[1023] Ibid

governance, according to a worldwide index that evaluated the control of mineral wealth in 81 nations.[1024]being one of eight countries in the index for which both mining and oil and gas sectors were assessed. Ghana was found to be the best performing in resource governance index in 2017, making it the best performing extractives sector in subSaharan Africa. In oil and gas, Ghana performed consistently across all three components of resource governance, revenue management and enabling environment.

The Ghana Stabilization Fund is the index's secondbest governed, behind only Colombia's Savings and Stabilization Fund. Ghana's fund was found to be better governed than many with much greater assets, including those of many oilrich states in the Persian Gulf. Ghana's good performance is a result of clearly defined rules for deposits, withdrawals and investments, audit and parliamentary oversight mechanisms and adherence to these requirements. Despite these positive findings, governance of revenue management in Ghana falls behind that of some other states with emerging hydrocarbons sectors.[1025] The country's mining sector performs better than equivalents in many of its African neighbours.

Consecutive governments in Ghana have emphasized the importance of transparency and accountability in the management of oil and gas and the revenue it generates. However, legislative and policy frameworks were in place before actual production would start in 2010. Ghana achieved this remarkable resource governance performance by involving CSOs. The CSOs can play an important role in promoting sound management of oil and gas resources and mitigating negative socialeconomic, political and environmental impacts.[1026]They may help local societies become involved, analyze and evaluate the effects of extraction, and hold important participants responsible. The Ghana Civil Society Platform on Oil and Gas was established by CSOs to help them build their ability to engage in oil and gas problems at various levels. Approximately 120 groups, people, and

[1024]Resource Governance Index (RGI)- Accra 28th June, 2017 at www.resourcegovernanceindex.org
[1025]Resource Governance Index (RGI)- Accra 28th June, 2017 at www.resourcegovernanceindex.org
[1026]Renée Zandvliet (2017): EuropeAid's 'Civil Society and Local Authorities' unit on visiting the European Union Delegation to the Republic of Ghana and met with several representatives from CSOs.

professional organisations make up the forum, which works to ensure openness and accountability in Ghana's oil and gas business.The platform focuses on strengthening the ability of civil society to have their voices heard on oil and gas legislation, revenue collection and environmental protection. The CSOs also sit on and actively contribute to the Public Interest and Accountability Committee which is responsible for monitoring and reporting on oil and gas revenues.

Ghana has moved from the discovery of oil to production in a very short space of time and the institutional framework underpinning the governance of that process has only recently been passed by parliament. Ghana is still looking to further develop key pieces of legislation and policies that are central to the management of the sector and to building vital linkages for delivering inclusive growth, including with the energy sector as a whole. Delivering these policies and laws requires significant efforts to further develop the capability of key institutions.

The paper has also given comparative analysis with the jurisdictions of Algeria, Namibia and Libya besides Ghana. It is therefore hopeful that Uganda can learn lessons to transform its economy from these jurisdictions.

Algeria is ranked third in terms of oil resources, behind Libya and Nigeria, and second on the list of gas resources, behind Nigeria. Algeria established its preferred intervention tool in all areas of the petroleum industry, the state hydrocarbon corporation, Sonatrach, as early as 1963, the year after independence. There are three intercontinental pipelines transporting gas to Europe: one linking Algeria to Italy via Tunisia, another connecting Algeria to Spain via Morocco, and a third connecting Algeria to Europe via an underwater pipeline known as Medgaz.[1027]The legal framework governing foreign investors' oil operations in Algeria was orginally subordinate to a concession regime implemented by Sonatrach, which was the unique bearer of mining rights at this same period, to undertake oil operations, as well as establishing out the framework under which foreign investors' operations in the region of discovering for and utilizing liquid hydrocarbons are conducted. Namibia to date, has 24 explorations and appraisal wells have been drilled offshore Namibia, 18 of which are exploration wells and

[1027] Ibid

six are appraisal wells within the Kudu Gas Field.[1028] The legal framework governing the exploration for, development and production of oil and gas in Namibia is set out in the Petroleum (Exploration and Production) Act, 1991, the Petroleum (Taxation) Act, 1991 (both as amended principally by the Petroleum laws Amendment Act, 1998) and the Model Petroleum Agreement 1998.

Libya's Petroleum Law created a concessionary framework for petroleum discovery and production. It stated in Article 1 that all oil and gas in Libya is the Libya's property in its natural form, embedded in strata, and that no party may discover, search for, extract, or produce oil and gas unless authorized by a license or permit given under the legislation. The Petroleum Law established a concessionary framework for the exploration and production of petroleum within Libya. In Article 1 it laid down the basic rule that all petroleum in Libya in its natural state, contained in strata, is the property of the Libyan State and that no person shall explore or prospect for, mine or produce petroleum unless authorized by a permit or concession issued under the law.

In conclusion it is therefore hopeful that Uganda can learn lessons to transform its economy from these jurisdictions. The National Oil and Gas Policy approved in 2008 articulates and operationalises the framework for prudent management of oil and gas resources. Specifically, it provides for the establishment of a legal and institutional framework which will govern the assessment, collection, use and accountability of oil and gas revenues. In this regard, the Oil and Gas Revenue Management Policy details the framework under which the anticipated oil and gas revenues will be managed.

Forecasts of oil revenue have varied significantly, depending on the information available at the time they were produced, and the assumptions made. Three key risks have been identified by forecasts: worldwide crude oil prices, the projected quantity of recoverable reserves, and project implementation delays. With a steady price of US$77 per barrel and a 2% rate of increase, a lower limit pricing forecast may be utilized, with total recoverable reserves concentrating on 2,181 million

[1028]Energy: Oil & Gas 2020: Namibia, Last *Updated August 10th, 2020.*

barrels by 2027.[1029] More broadly, by drawing on insights from similar approaches and jurisdictions studied, this project will provide a body of evidence of what works and what doesn't in different sociopolitical contexts, supporting the development of a scalable blueprint for sustainable reform in the extractives sector in Uganda.

CHALLENGES OF LEGISLATING AND COMPLIANCE WITH DOMESTIC LAWS, NATIONAL POLICY, INTERNATIONAL AND REGIONAL LEGAL FRAMEWORK THAT PROVIDES FOR STANDARDS OF GAS EXPLORATION.

This part discusses the many challenges that Uganda has faced in ensuring that gas production and exploration is regulated effectively.

The two terms; Oil and Gas have been used so often that they have been taken by many to be one and the same. However, this is not the case. While the two normally exist in the same area and belong to the same industry, the two have differences and their roles upon development also differ.

This phenomenon has led most countries to pass a singular law to govern both aspects even when they are different. In doing this, they have left out the details which are fundamental to the same sectors' progress.

The paradox of plenty resource curse

'resource curse'–means the tendency of resourcerich countries to have weaker economic performance than resource poor countries – is not new. The 'paradox of plenty,' as the resourcecurse is often termed, is embedded in the ageold maxim: *Necessity is the Mother of Innovation*. Resourcepoor countries are forced to innovate and attain economic viability. By contrast, resourcerich countries suffer the paradox of plenty and remain poor. In simple terms, the resource 'curse' is a situation whereby abundance of tradable natural resources (such as diamonds, gold or oil) paradoxically leads to economic stagnation, the death of other traditional and nontraditional exports such as agricultural and manufactured products, and conflicts over the allocation of resources.

[1029] According to the U.S. Energy Information Administration's (EIA) Short-Term Energy Outlook released on July 7, 2021.

The resource curse is associated with eight distinctive problems. First is the national risk of entrenching a primary commodity economy that is dependent on Godgiven (or 'natural') advantages. Yet, globalization not only spells doom for economies that are 'stuck in the Garden of Eden' *(Kiiza, 2006b: 8):* it calls for the structural transformation of the national economy into a high valueadded industrial and information economy.

Second is the problem of repositioning government as the key driver of growth (to the detriment of the private sector). Third, is the erosion of citizens' duties and obligations such as payment of graduated tax (because government is expected to use 'windfall' revenues to finance public services). Fourth is the problem of political instability (a la Nigeria, DRC or Angola). Fifth is the problem of 'leakages' or corruption, which is common in resourcerich countries (such as Nigeria) that have weak institutions of governance. Sixth is the risk of entrenching authoritarian rule or unaccountable governance.[1030] Seventh is the risk posed by oil related activities to people's health and, in particular, the possible negative effects of oil spills on fisheries and the environment. And eighth is the problem of exaggerated expectations. Knowledge of large revenues typically puts pressure on governments to spend and yet as I have discussed, the oil curse is best overcome through saving oil revenue in an oil fund, so as to maintain only the important expenditure and to use the oil revenue in financing other sectors.

Conclusion The biggest mishap is the mentality that laws governing oil can effectively cover gas. While this has been the case in many jurisdictions, there has been no guarantee that these laws could effectively envisage gas emissions. Gas emissions equally pose a threat to the environment and therefore should be considered in law making.

This challenge must be first understood before it can be tackled. The threat of pollution and climate change is eminent and as such, drastic measures must be adopted to safeguard the same for future generations.

[1030] During our field interviews, anxiety was expressed over the 'secrecy' surrounding the licensing process and the signature bonuses; the level of corruption in public office; the poor quality of roads works and infrastructural investments; and the exclusion of different stakeholders (such as Bunyoro and researchers).

If the world is to come anywhere near to meeting its climatechange goals, the oil and gas industry will have to play a big part. The industry's operations account for 9 percent of all humanmade greenhousegas emissions. In addition, it produces the fuels that create another 33 percent of global emissions.

Countries and companies that can credibly demonstrate that they are taking action to reduce their indirect emissions could reasonably argue that these resources should be preferred over higheremission options in a carbonconstrained world. It is crucial for the oil and gas industry to be proactive in limiting, in all ways possible, the environmental impact of oil and gas supply, and for policy makers to recognise this is a pivotal element of global energy transitions.

A comparative analysis of the measures drawn from other jurisdictions in natural gas production and development.

This section has provided comparative analysis of the measures drawn from other jurisdictions (two successful ones) and two failed ones) in natural gas production and development. The criteria for gauging the jurisdiction are picked from the natural resources governance index (NRGI) from the latest publication 2017. The resource governance index 2017 assessed the quality of natural resource governance in 81 countries that together produce, among other commodities, 82 percent of the world's oil, 78 percent of its gas and 72 percent of all copper.[1031] The index has its intellectual foundation the Natural Resource Charter; both are the product of the expertise of natural resource governance index (NRGI) staff and a network of external scholars and practitioners. According to the NRGI the scores per country are ranked on a scale of 100 points as follows: Good (>74); Satisfactory (6074); Weak (4559); Poor (3044): and Failing (<30).[1032] According to this ranking therefore Ghana and Namibia are good (>74); Algeria is poor (3044); Libya is Failing (<30) and Uganda is Poor (3044). These nations have had

[1031] Oil, gas and mineral production shares included in the index are calculated as a sum of country production data (sources for data available from: www.resourcegovernanceindex.org) in 2016, divided by global production in 2016.

[1032] Natural resource governance Index (NRGI) 2017

their different success and failure stories from which Uganda is bound to draw lessons for her nascent oil and gas industry by picking the good and avoiding the bad experiences. The study shall therefore analyse the measures drawn from jurisdictions that are good first and then those that are poor or failing. The measures drawn shall be analysed for Uganda and why Uganda is ranked under poor governance. Good governing jurisdictions are Ghana and Namibia while Algeria is poor and Libya is failing.

Ghana's overall oil and gas sector (country composite) score is 78 out of 100 points in the 2017. The Value realization of (79) was composed of the following subsectors: Licensing (75); Taxation (80); Local Impact (78) and Stateowned Enterprise (84). The revenue management of (85) was composed of the following subsectors: National Budgeting (70) and Sovereign wealth funds (100).The enabling environment of (71) was composed of the following subsectors: Voice and accountability (89); Government effectiveness (60); Regulatory quality (60); Rule of law (82); Control of corruption (79); Political stability and absence of violence (80); and Open data (31).

Strengthened resource governance is underpinned by improvements across both the index's value realization and revenue management components. Ghana's oil and gas sector's moved into the "good" performance band in the 2017 NRGI. It is driven by improvements in the governance of licensing and national budgeting along with continued improvements of the stateowned Ghana National Petroleum Company (GNPC) and the Ghana Stabilization Fund, the country's sovereign wealth fund. Adoption of new laws regarding licensing and national budgeting strengthened Ghana's extractives legal framework and helped drive the 2017 RGI score increase. Both law and practice scores increased, but the difference between them of 22 (regulatory quality, 60 and the rule of law, 82), signals a worrying "implementation gap." GNPC improved its performance through commodity sales disclosures, but areas for future improvement include the timeliness of disclosures and aspects of corporate governance. The Ghana stabilization fund scored a full 100 points on governance, owing to new disclosures of assets and asset classes.

Ghana's open data score of 31 points is low and it lowered the overall country composite score.

Algeria's overall oil and gas (country composite) sector scores 33 of 100 points and ranks 73rd of 89 assessments in the 2017 resource governance index. The Value realization of (40) was composed of the following subsectors:Licensing (37); Taxation (48); Local Impact (29) and Stateowned Enterprise (47). The revenue management of (25) was composed of the following subsectors: National Budgeting (28) and Sovereign wealth funds (27). The enabling environment of (35) was composed of the following subsectors: Voice and accountability (46); Government effectiveness (52); Regulatory quality (21); Rule of law (39); Control of corruption (49); Political stability and absence of violence (22); and Open data (15).

The poor performance of Algeria's oil and gas sector is mainly driven down by a score of 25 in revenue management. The country has oil reserves of 12,000 million barrels and gas reserves of 160 trillion cubic feet, with 94 percent of exports coming from the oil and gas sector. Algeria is one of the world's poorest countries measured by the multidimensional poverty index. In the last decade, the sector has failed to attract significant new investment from international oil companies and to maintain an adequate reserve replacement ratio through the development of new oil and gas fields.

Libya's overall (country composite) oil and gas sector scores 18 of 100 points in the 2017 resource governance index, ranking 87th among 89 assessments in the index and last among 16 countries assessed in the Middle East and North Africa region. The Value realization of (27) was composed of the following subsectors:Licensing (7); Taxation (58); Local Impact (11) and Stateowned Enterprise (32). The revenue management of (20) was composed of the following subsectors: National Budgeting (9) and Sovereign wealth funds (32). The enabling environment of (6) was composed of the following subsectors: Voice and accountability (17); Government effectiveness (2); Regulatory quality (1); Rule of law (4); Control of corruption (4); Political stability and absence of violence (6); and Open data (10).

Libya is one of the most oildependent countries in the world. Oil constituted nearly all of its exports before the conflict that followed the end of former President Muammar Gaddafi's regime. Libya's oil production has suffered significantly as a result of the conflict. Failing governance can be attributed to the enabling environment; Libya also ranks in the bottom five in several critical policy areas. As Libyans struggle to rebuild their economy, reform of vital institutions for the management of oil and gas revenues the Libyan Investment Authority and the National Oil Company is key to stability.

Uganda with a country composite score of 44 is poor but almost joining the weak category. Uganda's oil and gas sector scores 44 of 100 in the 2017 resource governance index, placing it 51st among 89 assessments in the index. The Value realization of (42) was composed of the following subsectors: Licensing (35); Taxation (72); Local Impact (50) and Stateowned Enterprise (13). The revenue management of (42) was composed of the following subsectors: National Budgeting (48) and Sovereign wealth funds (36). The enabling environment of (47) was composed of the following subsectors: Voice and accountability (50); Government effectiveness (55); Regulatory quality (67); Rule of law (68); Control of corruption (23); Political stability and absence of violence (35); and Open data (29).

This result is worsened by governance gaps in the extractive sector components and improved slightly by the enabling environment. Uganda has proven oil reserves of under two billion barrels, which attracted interest in exploration during the commodity boom of the last decade. However, early years of exploitation have been marked by uncertainties related to investment conditions and infrastructure development with neighboring countries, and resistance by local communities. Reforms are under way, aiming to address the poor or failing performance of the oil and gas sector's licensing regime, stateowned enterprise (SOE) and revenue management, so that Uganda can create better governance conditions before it begins larger scale oil production.

Effective governance of the oil and gas sector is a persistent challenge, especially for low and middleincome countries. But as the resource governance index reveals,

it is not an insurmountable one. In the index there are many examples of developing countries defying expectations and stereotypes sometimes in one policy area, sometimes in manymaking progress toward a more judicious use of their natural resources for national development. Ghana's index is satisfactory with a score of 60 while Uganda is weak with a score of 55 and Algeira is also weak with a score of 52 and Libya is failing with score of 2. Some nations like Libya have in recent years worrisome setbacks in the proper use of their natural resources.

Poor management and corruption can take root anywhere, in countries rich or poor. These scourges cannot be eliminated everywhere, all of the time. But citizens, journalists, legislators, politicians, companies, investors and academics can work to mitigate them, and expose them early on. Ghana's index on control of corruption is good with a score of 79 while Uganda is failing with a score of 23 and Algeira is weak with a score of 49 and Libya is failing with score of 4. Uganda is certainly doing very badly in the area of control of corruption and the government needs to seriously address it.

If Uganda is to pick anything from the good performers in the oil and gas industry from Africa, it needs to improve on licensing, taxation, local impact and stateowned enterprise as well as budgeting and sovereign wealth funds. Other areas of critical improvement are voice and accountability, government effectiveness, regulatory quality, rule of law, control of corruption, political stability and absence of violence as well as open data.

Uganda needs to avoid the pitfall of poor or failing performers, it needs to look critically in the areas licensing, local impact, national budgeting, voice and accountability, government effectiveness, regulatory quality, rule of law, control of corruption, political stability and absence of violence as well as open data.

Conclusions

Article 244 of the 1995 Constitution of Uganda places the entire property in and control of all minerals and oil and gas in, on or under any land or water in the

hands of the government on behalf of the Republic of Uganda. It also prohibits the unlicensed exploration or development of oil and gas. The 2008 National Oil and Gas Policy (NOGP) was designed to ensure that the country's oil and gas resources contribute to the early achievement of poverty eradication and create lasting value to society. The NOGP sets out its first objective as ensuring efficiency in licensing areas with the potential for oil and gas production in the country. The Petroleum (Exploration, Development and Production) Act, 2013 (the "Upstream Act") and the Petroleum (Refining, Conversion, Transmission and Midstream) Act, 2013 (the "Midstream Act") also govern licensing. The Upstream Act regulates the licensing and participation of commercial entities in petroleum activities and to provide for an open, transparent and competitive process of licensing. These legalregulatory framework of oil and gas regime have impacts on national oil companies; on local content; on Uganda's oil revenue management regime; on the Telinga Project; on land grabbing/compensation; of access to information; on the environment and wildlife; on health; on Socioeconomic activities; and on sustainable development.

The existing legal/nonlegal framework however, have shortcomings that hinder the development of the natural gas in Uganda. These shortcomings are in the areas of transparency and accountability where for example, contrary to the provisions of the Access to Information Act, the government has unwaveringly declined to disclose Production Sharing Agreements (PSAs), on the basis of confidentiality clauses in the contracts. The government has shortcomings in the Upstream and Midstream laws to pursue opportunities for local and national benefits and account for, mitigate and offset the environmental and social costs of resource extraction projects. There is a shortcoming in the local or national content participation (state or public participation in resource exploitation) which goes to the root foundation of the right to development and economic rights enshrined in the Ugandan Constitution. A shortcoming has been identified in the areas of environment, land compensation and security in the Albertine oil rich region. Where for example, aside from finding companies liable for pollution, regardless of fault, both the

upstream and midstream laws (Section 130 and Section 58 (1)) fail to provide for a compensation regime for victims of such pollution or any losses resulting from poor management of oil and gas operations, in particular, the unforeseeable longterm damages such may have on the environment and human health.

An impact evaluation of the existing legal/nonlegal framework governing natural gas development in Uganda.

Following the commercial oil and gas discoveries in the Albertine Graben, and Buliisa district in particular, in 2006 the decision was made by the Government of Uganda to start development and production of the natural resource. The legal/nonlegal framework was developed by Cabinet and approved by parliament to guide and govern the natural resource development.

The issue of "ownership" of oil and gas is linked to and has an impact on how oil resources are controlled, by whom and on whose behalf. Understanding ownership, the law provides important insights into who controls the resources and who is likely to benefit from them. Article 244 of the 1995 Constitution of Uganda places the entire property in and control of all minerals and oil and gas in, on or under any land or water in the hands of the government on behalf of the Republic of Uganda. It also prohibits the unlicensed exploration or development of oil and gas. The guiding philosophy behind this provision is the public trust doctrine which obliges the government to account to its people as principals/owners, ensuring they participate in the management of their affairs either by themselves or through elected representatives.[1033]

Article 244(2) (ad) of the 1995 Constitution further mandates parliament to make laws to regulate the exploitation of minerals and oil and gas, the sharing of royalties arising from petroleum exploitation, conditions for the payment of indemnities arising out of exploitation of petroleum and minerals, and the restoration of derelict lands. Consequently, various pieces of legislation have been enacted by Parliament to give effect to the relevant constitutional provisions.

[1033] International Alert (2011), "Oil and Gas Laws in Uganda: A legislators' Guide," Oil Discussion Paper No.1 May. pp:.15

Section 4 of the Petroleum (Exploration, Development and Production) Act and Chapter 4 the Oil Gas Revenue Management Policy, 2012 respectively affirm the position of the Constitution that government shall hold petroleum rights on behalf of and for the benefit of the people of Uganda. The Petroleum (Exploration, Development and Production) Act (Chapter 150 Laws of Uganda) is the major legal regime governing the oil and gas industry in Uganda.

The 2008 National Oil and Gas Policy (NOGP) was designed to ensure that the country's oil and gas resources contribute to the early achievement of poverty eradication and create lasting value to society. The NOGP sets out its first objective as ensuring efficiency in licensing areas with the potential for oil and gas production in the country. The policy provides for initiation of gradual licensing *visàvis* licensing all areas at once; open and transparent bidding; execution of due diligence on companies applying for licenses and avoiding the undesirable situation of a monopoly by licensing and maintaining several oil companies.
The Petroleum (Exploration, Development and Production) Act, 2013 (the "Upstream Act") and the Petroleum (Refining, Conversion, Transmission and Midstream) Act, 2013 (the "Midstream Act") also govern licensing. The Upstream Act regulates the licensing and participation of commercial entities in petroleum activities and to provide for an open, transparent and competitive process of licensing. Section 5 of the Act prohibits petroleum activities in Uganda without an authorization license, permit or approval. Anybody who contravenes the provision commits an offence and is liable on conviction to a fine not exceeding 100,000 currency points or imprisonment for a maximum of 10 years or both.[1034] For a body corporate, the fine is a maximum of 1,000,000 currency points. Section 6 gives power to the government to enter into agreements relating to petroleum activities with any person with respect to granting or renewing a license. Section 8 of the Act empowers the Minister to grant and revoke licenses, issue oil and gas regulations and to negotiate and endorse oil and gas agreements, among other

[1034] A currency point is equivalent to UGX.20,000. As at the time of writing, US$1 is equivalent to UGX.3,440.

functions. Section 52 of the Upstream Act requires the Minister with Cabinet approval to announce areas open for bidding for a petroleum exploration licensee. The announcement must be published in the official *Gazette* and in newspapers of national and international circulation. Direct applications may be accepted in exceptional circumstances and in consultation from the authority and must also be published in the *Gazette* and at least one national newspaper of wide circulation.[1035]

Section 69 of the Act gives exclusive rights to the holder of a Petroleum Exploration license who has made the discovery of petroleum in his or her exploration area to apply for the grant of a production license. Any other person may apply notwithstanding that he or she does not hold the petroleum exploration license in respect of the exploration area.[1036] Application for a license may be made to the Minister in the manner prescribed by the regulations and must under section 71 be accompanied by a report on the petroleum reservoir and a field development plan. Such plan should contain information related to: proposals for the development and production of the reservoir; estimated production profiles; cost estimates; safety measures to be adopted in the course of the production of petroleum; the applicants' proposals for employment and training of Ugandan citizens and the applicant's proposals with respect to the procurement of goods and services from Uganda.

The petroleum production license shall be granted on the basis of technical competence, capacity, experience and financial strength; the applicants' understanding of the oil and gas reservoir as well as other conditions as determined by the Minister.[1037] Under section 75, the Minister may grant a production license after consultation with the Authority and approval by Cabinet in such manner as the Minister may determine. A natural gas production license may continue in

[1035] Section 53.
[1036] Section 69(4).
[1037] Section 73).

force for a period not exceeding 20 years and can be renewed for another period on conditions determined by the Minister.[1038]

This section gives the research findings on the impact evaluation of the existing legal/ nonlegal framework governing natural gas development in Buliisa district. It analyzes the existing laws and regulations adopted by Uganda to manage its emerging oil and gas sector and critically evaluates the impact of the legalregulatory framework of oil and gas regime including their impacts on national oil companies; impact on local content; impact on Uganda's oil revenue management regime,; impact on the Telinga Project; impact on land grabbing/compensation; impact of access to information; impact on the environment and wildlife; impact on health; impact on Socioeconomic activities; and impact on sustainable development.

The impact on National Oil Companies

The national oil company is provided for under the NOGP, and is born out of the state's need to create an entity to handle its commercial interests in the oil subsector. Under the regulatory best practice 7.2.5 of the NOGP, the policy outlines the intended roles of the oil company to include: managing the business aspects of state participation**,** developing indepth expertise in the oil and gas industry, participating in contracts and investigating and proposing new upstream, midstream and downstream ventures locally and later internationally. The policy correctly observes that financing the National Oil Company will be difficult in the initial period and therefore, the oil company will not be able to attract shareholders. The proposal is for the National Oil Company to be supported as an embryonic unit at the beginning thus starting with minimal resources and growing steadily by learning from experienced actors.[1039]

Section 42 of the Upstream Act provides that the National Oil Company is to be incorporated and wholly owned by the state to manage the commercial aspects of

[1038] Sections 77 and 80
[1039] Principle 8.1.3 on financing the national oil and gas policy

Uganda's petroleum activities. The Act also provides for some functions of the National oil company and introduces a board of directors for the company under Section 44 who shall be appointed by the President with the approval of Cabinet. The Board of Directors are expected to submit audited accounts of revenues and expenditure to the annual general meeting in respect to the state's participating interests together with an annual report containing an overview of the participating interests managed by the company.

The Midstream Act acknowledges that the National Oil Company shall be deemed to be established for its purposes. However, Section 7(3) makes it clear that it is up to the Minister with the approval of Parliament to decide that the National Oil Company shall participate in midstream operations. Whereas provision for the National Oil Company in the various policies and laws is commendable, the provisions are not as comprehensive as should be expected and need to be improved in detail. A recent development in the area of oil legislation is the Public Finance Management Act of 2015.

The impact on Local Content

The failure to exploit resources sustainably and to ensure that citizens take part in decision making and employment greatly contributes to conflicts emanating from natural resource endowments.[1040] Furthermore, the lack of the involvement of citizens in the exploitation and use of the natural resource sector greatly hinders the trickledown effect of a resource like oil, resulting in negative effects to the economy.[1041] Placing an emphasis on local content ensures that nontax benefits stay incountry or in the backyard of resource regions and local ownerships and capital in the long term.[1042]

Objective 7 of the NOGP aims at ensuring optimum national participation in oil and gas activities through strategies such as promoting state participation in

[1040] Mushemeza, E. D. & Okiira J. (2016), Local Content Frameworks in the African Oil and Gas Sector: Lessons from Angola and Chad, ACODE Policy Research Series, No.72: Kampala.
[1041] Gwayaka, P. M. (2014), "Local content in Oil and Gas Sector: An Assessment of Uganda's Legal and Policy Regimes," ACODE Policy Briefing Paper Series, No.28: Kampala. pp. 2
[1042] Avocats Sans Frontieres (ASF) (2015), *Business, Human rights and Uganda's oil and gas industry: A Briefing of Existing Gaps in the Legal and Policy Framework*, Kampala: ASF. pp.11

production sharing agreements; promoting use of the country's materials, goods and services in the oil and gas sector, and promoting the employment of Ugandans in the sector, among others. In the same spirit, Objective 8 of the NOGP seeks to support the development and maintenance of national expertise through strategies such as the provision of goods and services to the sector by national enterprises and entrepreneurs and broadening the national education curricula to prepare the necessary workforce for engagement with the sector.

These objectives are reflected in both the upstream and midstream laws, such that while applying for a license, the application must contain a statement on how the applicant intends to employ and train Ugandan citizens.[1043] However, there is no strategy listed in the Acts to ensure that licensees follow up on this training. Section 125 of the Upstream Act provides that licensees and their contractors shall give preference to goods produced or available in Uganda and for services rendered by Ugandan citizens and companies. Although wellintentioned, this section has been criticized for its ambiguity. The law does not define what a "Ugandan" company is, thereby leaving a gap for exploitation. Strict interpretation of the word "company" versus "business entity" limits the application of the section only to companies. This leaves out other wellrecognized commercial entities such as partnerships and cooperative societies, among others.[1044]

The Midstream Act attempts to correct the ambiguity by providing that the licensee and its contractors shall give priority to citizens and registered entities owned by Ugandans in the provision of goods and services. Unlike the Upstream Act, the Midstream Act therefore considers other business entities in addition to companies. However, both Acts lack provisions to ensure that Ugandans employed by the oil companies receive the same treatment, pay and opportunities at the work

[1043] Magelah, P.G. (2014). Local Content in the Oil and Gas Sector. An assessment of Uganda's legal and policy regime. (ACODE Policy Briefing Paper Series, No.28, 2014).

[1044]Gwayaka, P. M. (2014), "Local content in Oil and Gas Sector: An Assessment of Uganda's Legal and Policy Regimes," ACODE Policy Briefing Paper Series, No.28: Kampala. pp. 12

place with their foreign counterparts.[1045] The legislation is also silent on other forms of inclusion and equity including gender, ethnic and social status.[1046]

The major concern of community members in the focus group discussions was how they and their families would benefit from the oil and gas industry, especially with regards to employment and training, and how they could protect themselves from any negative impact on their land and livelihoods. A major request for information was with regards to employment opportunities in the oil sector, i.e., knowledge of available jobs and of the qualifications needed to be eligible for them. Community members also demanded affirmative action for labour from oil producing areas. Oil companies, mainly Tullow Oil and Total, were said to advertise jobs within the areas in which they operated, though mainly for semiskilled jobs such as drivers and casual labourers. The companies placed advertisements on local radios and posters at district headquarters and NGOs. Related to the issue of employment was the need for information on available training opportunities and scholarships, both from government and the oil companies. Though respondents and focus group discussants had heard about people training in oil and gas related jobs, they were not sure which scholarships were available when, the qualifications required, and the nature of the training opportunities. In Kaiso, a focus group discussant noted:

We would like to know when these trainings take place and who they are training. We would like to orient our children early enough and encourage them to take up these trainings so that they can work in the oil and gas industry and tap into the new opportunities.

Another focus group discussant in Buliisa noted:

"Our children should be first priority to work in the oil and gas industry. When you go to ask for jobs, they tell you that your children are not qualified. We want to know: how can we get our children qualified? Where do we take them to study

[1045] Avocats Sans Frontieres ASF) (2015), *Business, Human rights and Uganda's oil and gas industry: A Briefing of Existing Gaps in the Legal and Policy Framework*, Kampala: pp.12

[1046] Magelah, P.G. (2014). Local Content in the Oil and Gas Sector. An assessment of Uganda's legal and policy regime. (ACODE Policy Briefing Paper Series, No.28, 2014).

oil and gas, what do they need to have studied at secondary school level, how do they apply for such training?"[1047]

"As a youth, I so much wanted to train in oil and gas at Kigumba and I heard on [the] radio that they train petroleum engineers. However, I tried looking for information and failed. [..] I did not know where to get this information. I asked our district youth counsellor and he was not aware. I also asked the RDC when he came for a meeting on youth funds. He promised to ask and get back [to me] but he has never got back. That is the dilemma we face as youths. You basically do not know where to go."[1048]

Neither district leaders nor NGOs had sufficient information on the available employment and training opportunities, and no systems are in place to obtain and share this information such that persons who are interested can follow up. Total E&P Uganda's Public Relations Officer maintains that the project will create around 13,000 direct jobs, 150,000 indirect jobs, new infrastructure, and numerous economic benefits.

The impact on oil and gas revenue management regime

Revenue management is the most important link in the chain of oil exploitation. Even the best production process cannot cure the debilitating effects of a poor use of oil proceeds. It determines whether the oilexploitation process labored through for years at a huge cost yields real benefit so as to become a great asset to the nation, or yields only the infamous resource curse. Flawed revenue management has the power to cripple nascent economies, extraordinarily grow poverty and income inequality, breed more entrenched autocracies and catalyze conflict, amongst other possibilities.

This section therefore pursues a critical analysis of Uganda's existing oil revenue management legal regime and its impact in the whole oil story. In this respect the Public Financial Management Act (PFMA) 2015 plays a particularly important

[1047] FGD Buliisa-1
[1048] FGD Buliisa-2

role. The PFMA repealed the Public Finance and Accountability Act, 2003 and can be credited for its effort to provide strong checks against government expenditure and conformity of sector budgets to gender and equity budget guidelines. The PFMA mainly addresses four critical issues namely, the Petroleum Fund, the Petroleum Revenue Investment Reserve (PRIR), the Investment Advisory Committee and the issue of royaltyrevenue sharing.

The impact on the Telinga Project

In March 2017, Total started activities aimed at the development of the Telinga project in Buliisa. The project focuses on the development of the industrial park and access roads in Kasenyi village, Buliisa district. A number of community engagement activities have been conducted since the project's commencement, including the development of the District Resettlement Coordination Committee (DIRCO), the disclosure and sharing of the road map, and the election of representatives of Resettlement Planning Committees (RPC). It is hoped that these activities will promote community involvement and ease information flow.

In March 2017, Total E&P Uganda began operations in the Lake Albert region districts of Buliisa and Nwoya (now the Tilenga project). Total Energies is leading the development activities towards production in the Tilenga project area part of which is in the Murchison Falls National Park. Development will be restricted to an area representing less than 1% of the Park's surface area and the Central Processing Facility (CPF) will be located outside the park in Kasenyi Village, Buliisa District.[1049] Working in this sensitive area requires the use of innovative and environmentally friendly exploration and drilling methods such as the use of 3D cableless seismic acquisition used for the first time on shore in Africa and horizontal drilling used for the first in East Africa. Total E&P Uganda has recruited a dedicated team of social, environment and biodiversity experts who ensure, on a daily basis, that our activities are carried out with respect to the environment, tourism and biodiversity. The company and its partners are also

[1049] See list of Charts on the Tilenga Project Area, Murchison Falls National Park and the oil pipeline's path to Tanzania pp. xi.

currently undertaking the development of the 1,443km East African Crude Oil Pipeline (EACOP).

The Tilenga Project is operated by Total E&P Uganda (TEPU), and covers three (03) Production Licenses (PLs) from Contract Area (CA) 1 and three (03) PLs from LA2. The PLs include; JobiRii, Gunya, Ngiri, KasameneWahrindi, KigogoleNgara and Nsoga. The project includes the following facilities: Development of a Central Processing Facility (CPF) with capacity to process 190,000 barrels of oil and 700,000 barrels of total liquid per day; Drilling of over 426 wells (200 water injector wells, 196 oil producer wells, 2 polymer pilot wells and 28 reference wells) which are planned to be drilled on 31 wellpads; Over 160 kilometres of flowlines which will transport crude oil and water from the wells to the CPF; 95 km 24inch feeder pipeline which will transport the processed crude oil from the CPF in Buliisa to the export hub and Refinery in Kabaale in Hoima District; and Other supporting infrastructure include; Victoria Nile Crossing, Temporary and Permanent Operation Support Base camps and a Lake Water Abstraction Station.

The key activities being implemented by the licensees and monitored by the PAU for the Tilenga project included the FrontEnd Engineering and Design (FEED) study, the Environment and Social Impact Assessment (ESIA) study, procurement and contracting of Wells and Drilling Related Services, Technical Surveys, SubSurface Studies and Land Acquisition. The total land requirement for the Tilenga Project is approximately 2,400 acres. The land acquisition process includes developing and implementing five (05) Resettlement Action Plans (RAPs) in a phased manner. The land acquisition process for the Tilenga project stands at 25%, with only RAP1 for the industrial area at 98% implementation, while the planning phase for the other four (04) RAPs was concluded, and implementation commenced in April 2021.

The impact on land grabbing/compensation

Land related issues are a major concern for both local government leaders and community members. Many local government officials noted that land conflicts had increased in anticipation of the benefits from oil. In Buliisa and Hoima, the discovery of oil and gas led to land speculators acquiring big chunks of land and expecting to make large profits from it once oil production began. Communities that have been resettled and others anticipating displacement are voicing grievances regarding their livelihood's upheaval such as delayed and inadequate compensation.

Oil exploitation conflict in Buliisa District, Uganda. Conflicts between Tullow oil company and local people and pastoralists, near Lake Albert. Involves land grabbing and population displacement as well as threat to wildlife. After obtaining their exploration licences for Uganda in 2004, Tullow Oil made their first significant oil discoveries in 2006 in the Lake Albert Rift Basin. In 2007, Tullow took operational control of the exploration and appraisal of exploration area 2 (EA2),[1050] which comprises the Buliisa district. This brought in conflict such has the establishment of reserves/national parks; oil and gas exploration and extraction; and land acquisition conflicts.[1051] The conflict outcome / response include compensation; criminalization of activists; environmental improvements, rehabilitation/restoration of area; land demarcation; court decision (failure for environmental justice); migration/displacement; repression; and violent targeting of activists.[1052] Tullow's EA2, which Buliisa hosts, stretches over an area of 102,500 hectares[1053] in the Lake Albert Rift basin.

[1050] African Institute for Energy Governance (AFIEGO) (2014), Policy Brief: Property and Compensation Rights in Uganda, Policy Briefing Paper No. 13, August 2014.
[1051] African Institute for Energy Governance (AFIEGO) (2014), Policy Brief: Property and Compensation Rights in Uganda, Policy Briefing Paper No. 13, August 2014.
[1052] Oil Refinery Procurement and the New Property Rights and Compensation Law: AFIEGO Statement on Oil Refinery Procurement and the New Property Rights and Compensation Law, 1 September 2014.
[1053] Uganda Land Alliance (ULA) (2011), Land Grabbing and Its Effects on the Communities in the Oil Rich Albertine Region of Uganda, The Case of Hoima, Buliisa and Amuru, September 2011. See chart attached.

Uganda's 1965 Land Acquisition Act justifies the compulsory acquisition of land for "public purposes," stating that fair compensation will be provided for such cases. In Uganda, the Chief Government Valuer with district land boards set values for land and developments on it like crops and infrastructure. Determination of these values has often been questioned by displaced people, including residents in Buliisa and the entire oil region in Uganda. Communities in Buliisa and throughout the oilrich Albertine region remain in limbo without adequate compensation, which has been infuriating for many and lifethreatening for some, as projectaffected people lose their normal way of life. Kayongo,[1054] said that compensation has been addressed only for those removed from the Industrial Area where the Central Processing Facility will be located. Those displaced by the ongoing road construction have not been included to compensate, which Kayongo states are the responsibility of the Uganda National Roads Authority under the government of Uganda. Nine out of the 622 people in concern have turned down the compensation, citing the compensation as inadequate. The funds for those nine ". . . have been deposited in a dedicated account pending a judicial ruling," she explains. Kayongo says that the company is committed to ensuring the highest human rights standards.

A press statement by the advocacy group says the government was committing injustices such as payment delay and unfair compensation to those displaced. Community rights to food, education and access to clean water were adversely affected by the government's land acquisition. The case remains ongoing up to the present. Allegations that people were receiving inadequate compensation based on rates from 2010 and 2011 were added to the list of complaints. 31,716 people are represented by the 4,963 project affected persons (PAPs) who will receive compensation. Each PAP, which represents a household, typically consists of 7 or 8 individuals, according to the second report on the resettlement areas and calculations by Les Amis de la Terre. This means that compensation is often shared amongst several affected individuals. Total did not provide specific information on how many individuals are represented by each PAP.

[1054]Kayongo A. (2021): Corporate Communications Manager at Total E&P Uganda

On December 10, 2020, the affected people expected their case hearing to take place in the Kampala High Court, Civil Division. They wanted the court to declare that the oil refinery compensation process carried out by the government violated Article 26 of the 1995 Uganda Constitution. They wanted the court to confirm that it had resulted in delayed and unfair compensation; declare that the use of cutoffdates that stop the affected people from using their land for new developments before compensation is unconstitutional; order the government to pay fair compensation; and order the government to devise regulations as provided for under section 20 of the 1965 Land Acquisition Act to prevent delayed and unfair compensation that has occurred partly due to the lack of such regulations. Although the people showed up, no hearing took place because the judge claimed to be ill. AFIEGO is working to fix new court hearing dates.

A group of French and Ugandan organizations is seeking a court order under France's new Duty of Vigilance Law that would require Total to disclose and effectively implement its plans to address the adverse impacts of the oil activities. The group includes Les Amis de la Terre in France (Friends of the Earth), Survie (Survival) and four Ugandan associations of AFIEGO, Civic Response on Environment and Development (CRED), National Association of Professional Environmentalists (NAPE)/Friends of the Earth Uganda, and NAVODA.

"This is the only instrument we have at our disposal to force Total to stop the violations on the ground," says Thomas Bart, activist with Survie. Bart says that without this legal minimum, the human rights violations will continue, "as voluntary commitments and declarations of goodwill have already proven to be useless," he concludes.

On the 10th of December 2020, the Versailles Court of Appeal in France ruled in favor of Total, deciding that this dispute falls under jurisdiction of the commercial court instead of the civil court. The fear is that the commercial courts would tend to side with Total, and see the case as "a purely commercial dispute relating to the company's internal management" rather than affecting third parties such as local communities and the environment.

"We are stunned by this decision of the Versailles Court of Appeal. In our opinion, entrusting cases based on the duty of vigilance law to the commercial courts is a misinterpretation of French law, which leads to ignoring the central objective of this law: to protect human rights and the environment,"[1055]

They are considering filing an appeal to the highest court in France, the Cour de Cassation (French Supreme Court). Nearby in the DRC, Total abandoned its oil drilling projects in Virunga National Park due to pushback, proof that civil society mobilization works. "It is unacceptable that the same transnational corporation launches a similar project at the same time in Uganda, just on the other side of the border," Survie and Les Amis de la Terre state.

Civil society has also taken to online platforms. An online petition hosted on Avaaz called "Stop this Total madness" states, "To Total Chief Executive Officer (CEO) and all the backers of the EACOP project: As global citizens, we urgently call on you to cancel the East African Crude Oil Pipeline and stop drilling in national parks. Your plans threaten to destroy precious biodiversity hotspots and wildlife habitats in Uganda and Tanzania, displacing tens of thousands of farmers. This project seriously undermines your commitment to the Paris Agreement and to become "carbonneutral". We urge you to align your business under the values you publicly proclaim." It has received over 1 million signatures.

Kazimura [1056] asserts that more is needed besides impact assessments and mitigation plans written by oil companies and the government.

"Oil companies and the government alone cannot solve these issues to the satisfaction of residents. My proposal is to have local civil society organizations and leaders on grievance handling committees to ensure that interests of the community are adequately represented and concerns addressed," she says.

Kazimura[1057] advocates empowerment for her community in Buliisa District by learning their rights.

[1055] Renaud J. (2020):, senior campaigner with Les Amis de la Terre, in a press release.
[1056] Kazimura A. (2021): Leader of the Kakindo Integrated Women Development Agency in Buliisa
[1057] Ibid.

"People must be knowledgeable, because we don't want to be taken like cows in the bush. [But] if it has failed, where can they go? [the] government should also come out and talk for us. They should be the voice of the communities," she says.

Kazimura continues to lead the Kakindo Integrated Women Development Agency in Buliisa, sensitizing communities, especially women, on how to resist exploitation but also take advantage of opportunities if the oil development ensues.

Community members, especially those living on communal land and under customary tenure, strongly requested information on the processes of land registration and securing land tenure, in order to protect their land from "land grabbers" and companies that wanted to take it. The lack of knowledge in this area was said to be a reason why land related conflicts in the region had increased. Many community members were concerned that they would not be compensated appropriately, or at all, for their land or crops if they were taken for the development of the oil and gas industry. Lack of proper information on what happened in areas such as Buliisa, where oil was discovered, shaped the perceptions of community members in the other districts of the Albertine Graben. The community dreaded the start of oil and gas activities in their own areas. Hence, community members were keen to know details about the type, size and location of land required, the period of time for which it would be used, and other envisaged oil and gas developments that would enable them to prepare early and possibly move their families in time. Therefore, the only way to fight land speculation – a major challenge in the district – was by providing enough oilrelated information to the locals about the size and location of land required for oil activities, such that people are not deceived into selling land to speculators.

Key informants in Buliisa wanted to know how compensation rates for land were computed, as well as how to challenge the rates they did not agree with to make sure they were fairly compensated. The concern was more on how government, through compensation or resettlement, would help affected community members acquire other land, since they were surrounded by Murchison National Park, which severely reduces the land available for cultivation in that district.

The District Production Officer in Buliisa observed that there was a big gap between what people thought the rates for compensation of crops should be and what they actually received. He noted that the rates were determined by the district and based on the prevailing market rates. In spite of this, there seems to be a desire for people to get more from the oil companies. Furthermore, people were not aware of the fact that the rates apply uniformly to everyone in the district. The Production Officer acknowledged the lack of proper consultation with communities during the collection of data for the establishment of the rates. The consultations were limited to farmers' representatives and a few members of the community, who oftentimes did not give feedback to the rest of the community about the rates determined.

The impact on access to information

Buliisa is one of the oilrich districts but the locals say that they are likely to miss out on the benefits of the industry due to a big information gap and lack of resources to tap into it.[1058] Locals in the district say they lack information on how they can benefit from the industry. As the country gears up for commercial oil production in 2025, locals in Buliisa District say they lack information on how they will benefit from the industry.

According to Kaseegu[1059] whose home is located in Kisimo Cell, Buliisa Town Council in Buliisa District, some 284 kilometres northwest of Kampala, the area has at least 26 oil wells. "Ever since oil was discovered in our village, we have become restless. Many rich individuals have invaded the area and claimed ownership of land adjacent to the oil sites" he asserts. The oil prospecting firm Tullow discovered Kasemene1, Kasemene2 and Kasemene3 oil wells in Kisimo cell, Kaseegu's village.

[1058] Mugati A. (2021): Oil production: Buliisa locals ask for inclusion. Daily Monitor on Friday April 30TH 2021.

[1059] Kaseegu E. (2021): "Uganda: Poor Landowners Caught Up in Fight for Land in Oil-Rich Buliisa."

Since oil was discovered in Bunyoro subregion in 2006, the value of land adjacent to the oil the sites have increased dramatically.[1060] The discoveries triggered a rush for land acquisition by investors and speculators. Oil wells were discovered in communal settlements, game parks and on the shores of Lake Albert. The area is mainly inhabited by fishermen, subsistence farmers and hunters, who lived on customary land and had no formal documentation to prove the ownership. Consequently, investors continued to acquire land for oilrelated projects such as oil waste treatment plants, central processing facilities, pipelines, industrial parks and other petroleum related investments...

"New land claimants who had never expressed interest in the land before oil discoveries have emerged in Buliisa district, threatening the interests of residents who have owned land communally for so long,"[1061]

A resident[1062] of Kisansya East Village in Kigwera Sub County, urged the government and oil companies to sensitise the masses on what to expect should oil production commence. “With intensive sensitisation, we will know how to invest our money wisely. The oil companies promised to return and sensitise the people on the benefit of the oil production, but they have not returned,” he said.

A mother[1063] of 12, said: “Let government or oil companies come to our rescue and give us money so that we prepare ourselves to benefit from the oil industry.” A farmer[1064] and a resident of Kisansya East Village in Kigwera Sub County, said there are no signs that production of oil will commence soon which has discouraged many of the locals. A fruit farmer[1065] from Buribo Village in Buliisa Sub County, said: “Without sensitization on what they can do and how to do it, people of Buliisa cannot compete with the investors who have a lot of money and meet the required standards,” he said.

[1060] Uganda: Land acquisition for oil-related infrastructure compromising local communities' livelihoods.
[1061] Mr Angalia Mukonda, the chairperson of Buliisa Elders Forum.
[1062] Key informant interview in Buliisa
[1063] Key informant interview in Buliisa
[1064] Key informant interview in Buliisa
[1065] Key informant interview in Buliisa

"*Government and oil companies are hiding information from the public, especially on numerous agreements and treaties signed with different oil companies. This has left people guessing what is happening right now," he said.*

The Buliisa District Operation Wealth Creation (OWC) coordinator, Col Ben Kisembo, was also skeptical about what the locals would benefit from the industry directly due to the terms and conditions set by oil companies for potential suppliers. These include registering a company, paying tax and online registration of suppliers, among others. Col Kisembo, however, said they are encouraging local farmers to register with oil company or national supplier databank because they may have an opportunity to supply products to the oil companies and other related parties. "The mango farmers, for instance, can register with the Buliisa Mango Grower Cooperative so that they have a voice to determine or negotiate the price to supply at," he said in an interview on April 23. He revealed that another challenge in preparing people to benefit from the oil industry is lack of land for setting up bigger projects.

The impact on the environment and wildlife

Environmental impacts in the area are visible including biodiversity loss (wildlife, agrodiversity). Potential environmental impacts include air pollution, food insecurity (crop damage), waste overflow, oil spills, and loss of landscape/aesthetic degradation. The effects of potential oil spills and infrastructure development could cause irreversible damage in the ecologically sensitive Albertine Region, which contributes 30% of Uganda's fish stocks. Before the explosion in Kibiro, Buliisa residents were already concerned by the oil activities around Lake Albert. Residents say fish populations have reduced, which is rare during the current rainy season. They assert that:

"We have for years known that during the rainy season, flooding is related to plenty of fish. This however has changed. The catch is too poor these days."[1066]

[1066] Buliisa residents during an FGD

Historic data show that before the 1990s, larger fish species were dominant in Lake Albert. Between 2010 to 2015, fish brought ashore per boat declined by almost 30 percent. The main reasons for this decline include the growing fisher population, illegal fishing equipment, weak enforcement, increasing demand, improved access to domestic and Congolese markets, and unrestrained access to fish. Once oil activities begin, threats such as oil spills and construction will become contributing factors to the declining biodiversity of the lake ecosystem. The potential effects of an oil spill on water ecosystems are dire. According to the U.S. National Oceanic and Atmospheric Administration, fish may experience reduced growth, reproduction damage, and other ill effects when exposed to oil.

Kasaija,[1067] is concerned that an oil and gas spill might result in the massive death of aquatic life, leading to the loss of food and income for the community. According to Kasaija, the fishing community believes oil activities near the lake chased the fish away. Kazimura[1068] says that because many oil and gas wells are near the lake, residents suspect the oil and gas activities are the culprit for fish loss. She and other residents speculate that oil might have already spilled into the lake during the construction of drilling sites. “We keep wondering why fish have reduced when oil activities are in high gear,” Kazimura asserts. “They keep telling us that fish has reduced because of poor fishing methods, but these methods are what we have used for ages without the fish becoming scarce.”

Regarding oil and gas spills, Kayongo states that the company’s highest priority is to prevent them through “international industry practices,” which involve providing secondary containment for storage facilities, regularly monitoring tank contents for signs of leakage, fitting drainage systems with retention basins and oil interceptors, and burying all pipelines to minimize accidental damage. The Corporate Communications Manager at Total E&P Uganda said:

“The company is also developing its tiered oil spill response strategy … in consultation with the Petroleum Authority of Uganda and other oil and gas operators to ensure full alignment with the regulatory requirements and the

[1067] Kasaija H. (2021) a fisherman at the Kaiso landing site

[1068] Kazimura A. (2021) the Executive Director of Kakindo Integrated Women Development Agency (KAWIDA), an NGO in Buliisa,

National Oil Spill Contingency Plan. The Lake Albert project is of key strategic importance to Total Group, and together with our partners and the government, we have made commendable progress towards the ultimate goal of achieving the final investment decision by the end of 2020,"[1069] *concludes Total E&P Uganda's statement.*

According to Kayongo, the entire Lake Albert project, including the Tilenga, EACOP and Kingfisher projects, will require a capital investment of over $10 billion, part of which will be spent locally through taxes and locally sourced goods and services. She claims the project will also create around 13,000 direct jobs, 150,000 indirect jobs, new infrastructure, and overall economic benefits.

Human rights groups in Uganda including AFIEGO, NAVODA and KAWIDA are contradicting claims Total and the government have made to protect moving forward with the oil projects. With support from the AFIEGO in March 2014, people affected by the oil refinery brought their case against the government to Kampala High Court, Civil Division, following the government's acquisition of their land in 2012.

A major concern in the discourse on this sector is how oil and gas activities affect the environment and which measures are being or could be taken to mitigate any negative impacts.[1070] At present, there are no mechanisms to share information relating to the environmental effects of oil developments, such as Environmental Impact Assessments (EIAs). The District Environment Officer in Buliisa noted that whereas environment officers were given copies of the EIAs, these were only shared at the time of approval of the assessment reports and a copy was left with the environment office. Furthermore, it was noted that there were no mechanisms to pass environmental information to other officers to enable them to effectively monitor and observe activities in the sector. The fact that the majority of district officials have no access to EIAs means that they are unable to determine whether

[1069] Kayongo A. (2021): Corporate Communications Manager at Total E&P Uganda
[1070] Gwayaka M.P. (2018): Community Information Needs in the Oil and Gas Sector in Uganda. African Perspectives on Social Justice. Friedrich-Ebert-Stiftung Kampala, Uganda.

oil activities are being conducted in accordance with the recommendations of the EIAs or not.

In contrast, environmental officers interviewed observed that regular communication exists between Natural Environment Management Authority (NEMA) and district environmental officials. They noted that this takes place mainly through the capacity building programmes of the central government and when local input was required into EIAs conducted before oil activities commence. NEMA also engages district environmental officials during the collection of data for different environmental reports in the district. However, the lack of equipment and the underfunding of district officials greatly hinders their ability to collect data or effectively assess the claims made in different reports, such as EIAs.

The environment officer in Buliisa noted, for example, that when there is a claim of pollution or abuse of the environment, the officer does not have the facilities required to go to the community and assess the claims. He has to rely on other government departments or NGOs and these may not have activities in that area. Furthermore, the environment officer from Hoima observed that the time given to provide input into some of the EIAs can be as short as ten days, which is not enough to gather the required data to prove or disprove the claims. Another problem highlighted by the interviewees is that there is no direct and official link between district officials and oil companies when it comes to accessing information. District officials said they require the permission of the PS of the MEMD if they want to access oil and gas premises for any kind of information. The District Production Officer in Buliisa observed that:

[…] there is nothing, even if I wanted something, or the CAO needed something, he will have to get clearance from the ministry. This finally limits accessing and processing of information. Put simply, the companies are more or less selfregulating.

Information from the National Charcoal Survey[1071] stated that Uganda's vegetation cover loss stands at 2.6% annually, one of the highest in the world. This is

[1071] Ministry of Energy and Mineral Development (MEMD), "National Charcoal Survey for Uganda 2015".

attributed to the more than 80% of Uganda's rural households using firewood for cooking according to the 2016/17 Uganda National Household Survey. The high demand for wood fuel and limited access to energy saving alternatives like natural gas means that forest cover is at risk of continued degradation. This significant decrease in vegetation cover was attributed to continuously increasing population and economic activities that exert pressure and demand on the vegetation. According to studies[1072], a switch from traditional fuels to natural gas would result into an environmental footprint compared to biomass because of the efficient and complete combustion of natural gas compared to biomass related fuels. The study further states that biomass produce black carbon and shortlived pollutants that contribute to global warming in negligible amounts. Uganda currently uses biomass, coal, heavy fuel oil, kerosene and diesel in its domestic, commercial and industrial sector all of which produce a larger environmental impact compared to natural gas. The utilization of natural gas in these sectors would therefore significantly reduce the adverse environmental impact associated with using these traditional fuel sources.

The impact on human health

Health impacts are currently potential of **infectious** diseases which needs to be mitigated in advance.

The impact on Socioeconomic activities

Socioeconomic impacts are visible including violations of human rights. Potential socioeconomic impacts include displacement, loss of livelihood, loss of traditional knowledge/ practices/cultures and land dispossession.

Impact on sustainable development

The Government of Uganda is implementing the Albertine Region Sustainable Development Project (ARSDP), a multisectoral project aimed at improving

[1072] Grieshop, Andrew P., Julian D. Marshall, and Milind Kandlika (2011): "Health and Climate Benefits of Cookstove Replacement Options." Energy Policy 12 (12): pp. 7530–42

regional and local access to infrastructure, markets and skills development in the Albertine region. The ARSDP is a multisectoral project that is being implemented in the country. It is designed to complement other initiatives that are already ongoing in the Albertine region.

The implementation of the ARSDP project rest with the three different institutions in line with their Institutional mandates. The Ministry of Lands, Housing and Urban Development (MOLHUD) and Uganda National Roads Authority (UNRA) are responsible for the implementation of component 1 of the ARSDP by ensuring that there is reliable regional transport infrastructure that will improve connectivity and access within the Albertine Region and spur growth of other sectors like agriculture, tourism and fishing.

Component 1: Regional Access and Connectivity is being implemented by MOLHUD and UNRA. It aims at improving overall accessibility to the Albertine region, reduction of travel times and improved access to markets and services. The component is financing upgrade of approximately 100 Km stretch of road from Kyenjojo to Kabwoya which forms part of the 238 Km Kyenjojo – Hoima – Masindi – Kigumba road connecting the districts of Kyenjojo, Kibaale, Hoima, Masindi, and Kiryandongo in western Uganda.

Component 2: Is responsible for local area development for orderly and planned growth and improvements in infrastructure and services rapidly urbanizing centres in the region is implemented by the Ministry of Finance, Planning and Economic Development (MOFPED). Local Access, Planning and Development is implemented by the MOFPED supports physical planning and infrastructure development in the three Local Governments of; Hoima District, Buliisa District and Buliisa Town Council. This component also has a physical planning subcomponent which is financing preparation of physical development plans of nine (9) Urban Centres namely; Wanseko, and Biiso in Buliisa District as well as Kigorobya, Kiziranfumbi, Kyangwali, Kabwoya, Butema, Kyarushesha and Buhuka in Hoima District. In addition, the subcomponent also supports capacity building of the respective councils to implement the plans.

Component 3: Is Skills Access and Upgrading and is implemented by the Ministry of Education & Sports (MoES). Aside from planning for the economic development of the Albertine Region, Government prioritized training, to develop the necessary skills for Ugandans to participate more effectively and benefit from the Petroleum Industry. The ARDSP was therefore designed to upgrade the quality of Technical, Vocational Education and Training (TVET), make it more in line with the needs of employers and ensure there is greater access to TVET skills in the Albertine Region. This component is further subdivided into two subcomponents that have been designed to improve institutions in the Albertine Region and establish a Mechanism for the coordination of skill development in the region.

Component 3 of the ARSDP is implemented by the MoES, it was designed to upgrade the quality of Technical, Vocational Education and Training (TVET), make it more in line with the needs of employers and ensure there is greater access to TVET skills in the Albertine Region.

This was to be achieved through financing upgrade of Institutions that support the aspirations of the skilling Uganda Strategy namely; Uganda Petroleum Institute Kigumba (UPIK), Uganda Technical College Kichwamba (UTC Kichwamba). The project was also to establish a third new Institute in Nwoya District. The upgrade of these institutions was to include provision of physical infrastructure and goods, curricula development, retooling of instructors among others. These was meant to enable the provision of skills most required for regional employment opportunities and growth in general.

In the quest to transform Uganda Petroleum Institute Kigumba (UPIK) and Uganda Technical College Kichwamba into Centers of Excellence and internationally accredited and recognised authorities for Oil and Gas Training and Oil and Gas Construction related training respectively, the ARSDP Project has enabled a number of milestones to be realised in this direction. The two colleges have been twinned (partnered) with recognised international TVET training Institutions that have been able to support them to develop 9 new, Competency

Based Oil and Gas related courses, define new workshops as well as equipment requirements that are required for the delivery of the new courses.

UPIK and UTC Kichwamba have recruited new teaching staff, most of whom are undergone training to deliver the new curricula. The instructors have been earmarked to conduct benchmarking visits overseas for learning and improvement of their teaching competencies. Construction of new workshops and procurement of equipment, tools and consumables for purposes of delivery of the new curricula is in advanced stages. The two institutions have undergone high level appraisal by Internationally recognised accreditation Institutions namely; City and Guilds and Offshore Petroleum Training Organization (OPITO) in the case of UPIK and City and Guilds for UTC Kichwamba. UPIK successfully became an accredited center for City and Guilds certification in 2018. Subsequently, another assessment is being planned by City and Guilds to enable the Institution to upgrade or maintain its accreditation status. UPIK applied for OPITO accreditation and following recommendations for improvement in a number of areas, UPIK has addressed these issues and is now readying itself for physical confirmation of their readiness for accreditation by OPITO. UTC Kichwamba has also closed a number of gaps is now awaiting reassessment to become a City and Guilds accredited Center for Oil and Gas construction related training.

A thorough assessment was conducted under the project, and upon validation and confirmation of the findings, the Ministry developed a costed Institutional Development Plan (IDP) for the establishment of a National Institute for Agroprocessing in Nwoya. With all the paperwork in place, the Ministry has now advanced towards developing designs for the construction of the Institute. At the end of the ARSDP project, it is anticipated that priority infrastructure, human resources, equipment and tools will be in place for official operationalization of the Institute by 2022.

The ARSDP project also enabled the implementation of a comprehensive selection process, through which 1091 Residents of the Albertine Region were selected to benefit from the Albertine Region Bursary Scheme. It is a matter of time before

the beneficiaries undergo the trainings since three internationally accredited Institutions have already been selected to deliver the trainings.

Impact on infrastructure requirement for natural gas distribution system

Natural Gas (NG) transport from wellhead to residential or industrial users as clean and efficient source of energy needs of a complex transportation system that have to be safe and reliable. NG moves through a complex pipeline system, which includes elements like pipes, valves, compression stations, pressure regulation stations, metering stations, pressure vessels, pulsation dampeners and relief valves that vent NG when safety conditions are not assured. NG delivery infrastructure can be grouped into four categories: Processing plant; Transportation system; Compressor station; and Storage system.[1073] All these infrastructure networks are impacted by the existing legal/ nonlegal framework. The proposed NG distribution infrastructure is shown in the table of charts. The proposed distribution network below shows natural gas coming into Uganda via the crude oil pipeline corridor, connecting to the proposed Direct Reduced Plant (DRP), the existing and proposed industrial parks so as to maximize natural gas demand and make the investment viable.

The findings from this study on natural gas demand indicate that preliminary natural gas applications should be centred around industrial application due to costs and wayleave challenges associated with setting up a natural gas distribution network for domestic use. To meet the domestic sector demand, it is necessary to build up the household consumption levels by encouraging households to switch from traditional fuels such as charcoal to Liquefied Natural gas (LNG) and then eventually natural gas.

[1073] Transport and Infrastructure Expertise Group (TIEG) (January 2020): Gas Demand Report Technical Assistance to the National Planning Authority, including a Feasibility Study for Establishing a Comprehensive Iron and Steel Industry in Uganda. FWC SIEA 2018. Lot 2, Infrastructure, sustainable growth and jobs. EuropeAid/138778/DH/ SER/Multi. Specific Contract Nr. 2019/406-879. An EU funded project managed by the EU Delegation to Uganda.

In establishing the natural gas distribution plan, Doug[1074] highlights the importance of proper pipeline route selection and states the main considerations in pipeline route selection as the economic, technical, environmental and safety as the primary factors in route selection. Additional factors include cost, land ownership, environmental impact, public safety, pipeline integrity, consequence of gas escape and regulatory requirements. In selection of a pipeline route, it is important to map out the area between the start and end point of the pipeline.

Whereas, the domestic and commercial sector showed to have a large potential demand for natural gas, the challenge comes in the large investment cost required to meet these customers who are spread across the country. The biggest potential for the natural gas demand is in the industrial sector where the distribution network required to meet the demand requirements is not very spreadout. This is because of the proper planning of the industrial parks which house several industries within an established gazetted space. To target the largest natural gas consumers, the industrial parks are considered for the initial distribution network. According to Uganda Investment Authority, there are 12 active (or development in progress) industrial parks in Uganda as of 2019 and 8 proposed industrial parks across the country.

In order to evaluate the best / economically viable route the natural gas distribution pipeline has been done taking into account of the following aspects: the Direct Reduced Plant (DRP) location; the exiting crude oil pipeline (EACOP pipeline); and the industrial parks planned in National Development Plan (NDP) III and NDP IV where NDP III is focused on expanding existing industrial parks and NDP IV is focused on upcoming industrial parks. The time for each planning period in the NDP programs is 5 years. NDP III will began in 2020 and NDP IV will start in 2025. Therefore, the proposed main pipeline distribution route is as show in the chart.

[1074] Doug Evans (2013: International Pipe Line & Offshore Contractors Association (IPLOCA), Oil & Gas Technology Magazine, 6th November 2013, Oil & Gas News, "Pipeline Route Selection – the route to success."

It is important to note that the shortest route is not necessarily the cheapest or most suitable due to environmental impacts, physical barriers and wayleave costs. Selection of the corridor for the Rights of Way acquisition can be done on an interactive basis whereby an initially wide project corridor is selected and consequently reduced to the required corridor width based on consultations with the different project affected persons (PAP) along the project corridor.

Impact on factors affecting natural gas demand

The demand for natural gas in Uganda is being driven by the iron and steel industry which requires natural gas to reduce the iron ore in the manufacture of steel. The natural gas is also be used for domestic and industrial application. The government of Uganda intends to improve the production of liquid steel in Uganda exploiting the iron ore mines in Uganda and using natural gas as reductant agent. The calculation of the amount of natural gas required for Direct Reduced Plant (DRP) processes has been carried out for 2024 for the following reasons: at the present the gas pipeline is not ready but it is estimated that it will be ready in 2024 years; in the next five years the liquid steel production will increase using coalbased processes such as: rotary kiln reactors; and the prediction of steel production model has been modelled up to 2024 due to the fact that the prediction of steel market over than 5 years is not reliable due to the complexity of the ecosystem.[1075]

Domestic and industrial sector demand for natural gas in Uganda were impacted by the fuel sources used in most industries which are biomass, heavy fuel oil, coal and liquefied petroleum gas. In some rare instance electricity is used for heating requirements albeit in small amounts. The industrial stakeholders revealed that these operational requirements can be met more efficiently and probably cheaper by use of natural gas.[1076] A domestic household fuel consumption survey was

[1075] Transport and Infrastructure Expertise Group (TIEG) (January 2020): Gas Demand Report Technical Assistance to the National Planning Authority, including a Feasibility Study for Establishing a Comprehensive Iron and Steel Industry in Uganda. FWC SIEA 2018. Lot 2, Infrastructure, sustainable growth and jobs. EuropeAid/138778/DH/ SER/Multi. Specific Contract Nr. 2019/406-879. An EU funded project managed by the EU Delegation to Uganda.
[1076] Ibid

shows that 80% of households in Uganda use charcoal.[1077] The industrial demand and potential demand for natural gas is high since energy is needed for various applications many of which can be replaced by the use of natural gas. Natural gas can be used for numerous applications in the industrial sector, including: Industrial heating; Electricity generation; and Vehicle propulsion.[1078] The development of the iron and steel industry provides a significant demand for natural gas and is also considered in determining the potential demand for natural gas.

The U.S Energy Information Administration outlines the major factors affecting gas demand as gas price, economic growth, disruption in gas supply, competition with other fuels and weather conditions.[1079] The demand for gas in Uganda is greatly affected by competition from alternative sources of energy. In Uganda, biomass, despite the low energy efficiency as low as 20%, is the most widely applied energy source.[1080] The high domestic sector consumption of biomass is mainly driven by the availability and low prices for biomass in Uganda. Due to the high prices of other energy sources such as gas, the domestic sector consumption for gas is not as prevalent as biomass consumption. The policies established by government in the gas industry may either encourage or discourage investment in development of the gas industry. Some of the government polices include taxes, regulations on gas industry players, safety requirements, quality standards amongst others. Whereas the factors discussed above directly affect gas demand, Hunt *et al.*[1081] reasons that there are exogenous factors, different from gas price and income levels, that influence gas demand. These factors include; change in consumer tastes and preferences; change in regulations such as energy efficiency standards; change in economic structure; change in lifestyles and values; technological progress that accounts for energy efficiency and energy savings; environmental pressures / regulations; changes in labour, capital or raw materials

[1077] Ibid
[1078] Ibid
[1079] US Energy Information Administration, "US Natural Gas Consumption by Sector, 2018"
[1080] Ministry of Energy and Mineral Development (MEMD), "Biomass Energy Strategy (BEST) 2018".
[1081] Hunt, L.C., Judge, G. and Ninomiya, Y, (2003): "Underlying trends and seasonality in UK energy demand: A Sectoral Analysis", Energy Economics 25, Page 93–118

required for energy inputs; changes in industrial value addition; and changes in urbanization levels.[1082]

Uganda natural gas reserves are both associated and nonassociated. The Ministry of Energy and Mineral Development reports the recoverable natural gas reserves as 672 billion ft^3 of which 500 billion ft^3 is nonassociated gas and 173 billion ft^3 is associated gas.[1083] nonassociated gas which is found in reservoirs or gas caps can be extracted separately from oil, that is if the gas reserve is a gas cap ontop of the oil reserves. Uganda's nonassociated gas reserves will be produced independently. The associated gas reserves which are dissolved in the crude oil will only be produced during the extraction of the crude oil and after exhaustion of the crude oil reserves when the associated natural gas is no longer needed to provide pressure in the reservoir to enable free flow of the crude oil through the drillhole.

Information from Uganda National Oil Company and Total E&P[1084] states that the nonassociated gas produced from Uganda's natural gas reserves will be used to generate electricity to run the crude oil upstream operations. Given the electricity requirement for the crude oil upstream operations, the nonassociated natural gas reserves are expected to last upto 8 years. According to China National Offshore Oil Company (CNOOC), the associated gas reserves that will be produced during crude oil drilling operations will be used for manufacture of liquefied petroleum gas.

Impact on savings on petroleum products and coal import bill

There are different benefits that Uganda will enjoy as a result of introduction of natural gas into the Ugandan economy. Statistics from Uganda Bureau of Statistics (UBOS) show that over the years and in the year 2018, to meet some of its industrial production requirements Uganda imported coal, Liquefied Natural gas

[1082] Transport and Infrastructure Expertise Group (TIEG) (January 2020): Gas Demand Report Technical Assistance to the National Planning Authority, including a Feasibility Study for Establishing a Comprehensive Iron and Steel Industry in Uganda. FWC SIEA 2018. Lot 2, Infrastructure, sustainable growth and jobs. EuropeAid/138778/DH/ SER/Multi. Specific Contract Nr. 2019/406-879. An EU funded project managed by the EU Delegation to Uganda.

[1083] Ibid

[1084] Energypedia, https://energypedia.info/index.php/Uganda_Energy_Situation , Retrieved 30th August 2021

(LNG) and Heavy fuel oil (HFO) to the tune of USD 41,886,954. The total import bill inclusive of Liquefied Petroleum gas (LPG) imports comes to USD 55,187,581 for the year 2018.[1085] As there is no rail network to make transportation of imported coal and HFO cheap, the expensive trucking option is the only option available to transport these imports into the country. This transport cost would be overcome by the use of a natural gas pipeline that delivers each calorific unit of fuel cheaper compared to transportation by truck. Natural gas has a higher calorific value than both the coal and HFO which both accounted for the imports that met the largest heating requirements in 2018. Therefore, to meet the same heating requirement, less natural gas would be imported into the country.

The introduction of natural gas in industrial heating applications would overcome all these challenges. These challenges include less production efficiency; depreciation in quality and calorific values over time; disposal of ash waste after burning; shortages in fuel supply; clogging of systems due to ash produced during burning; and production of smoke and flue gases dangerous to health and the environment.[1086] Natural gas would also be advantageous in the food industry because direct heating would be possible and this will not only improve the production efficiency by up to 15% 20% but it would also allow production of production inputs locally that were formerly imported. This will make the locally produced goods more competitive on the market.

Natural gas is used for electricity generation in many countries around the world due to the benefits associated with using natural gas for electricity generation including; quick ramp up time for electricity generation; high reliability because generation facilities are not easily affected by adverse weather; and high conversion rate of heat to electricity.[1087]

Presently, the Uganda industrial sector is plagued with high electricity costs and unreliable poor which has severely affected production and led to high production costs because of the need to install alternative electricity sources such as diesel and Uninterruptible Power Supply (UPS) stabilizers. Many of these industries would greatly benefit from the ability to generate their own electricity by using natural

[1085] Uganda Bureau of Statistics (UBOS) (2018): Statistical Abstract
[1086] Ibid
[1087] Ibid

gas. The industries are willing to consider installation of natural gas fired power plants based on a cost benefit analysis.

Impact on the utilization plan for natural gas

The industrial sector is well informed about the benefits of gas usage and is very welcoming of the switch to gas usage for their industrial applications. The only challenge to gas usage being high cost of gas compared to alternative fuel sources. Site visits to several industrial stakeholders revealed that other many of the industries are using biomass and heavy fuel oil, these industries are not comfortable for this fuel source as they understand the negative environmental impact associated with these fuels. Several industrial stakeholders expressed concerns that not enough is being done to save the forests in Uganda and fight environment degradation in Uganda.

Overall, the move by government to bring natural gas to Uganda was applauded as a move in the right direction for production efficiency and environmental protection. With the planned move to bring in natural gas into Uganda and the proposed LPG production of 220,000t/year from Uganda's crude oil operations it is important to note that Uganda currently consumes 15,000t/year. The gas stakeholders in Uganda therefore have a huge gap to bridge between supply and demand yet the cost for LPG is too high both for domestic and industrial use. To ramp up gas consumption and make the natural gas pipeline more economically viable, Uganda should initially start by increasing LPG consumption and gradually shift to natural gas as the economy grows and infrastructure developments required for natural gas are made. Government should focus on domestic consumption of LPG so as to tackle environmental degradation.

Analysis of the three different natural gas sources revealed that the most suitable source of gas supply in the Ugandan context is the utilization of natural gas from Tanzania. This is because the lifespan of the Tanzanian natural gas reserves under current and planned use is higher than the other two natural gas sources.

The proposed development of the 540,000 ton/y capacity DRP will be the main consumer for the natural gas pipeline. The industrial sector will also consume a significant portion of the natural gas. There is a large potential to increase natural gas consumption by using natural gas to generate electricity.

There is clearly demand for natural gas in Uganda, however, the bottleneck for the natural gas distribution in the country is the lack of the infrastructures for the natural gas distribution; the government ought to invest in the construction of the required infrastructure. This can be done with the support of big industrial companies. The companies can be encouraged to invest by providing economic benefits, warranties and low risk environment for investment. To attract private equity, the government must demonstrate that there is a market for natural gas (NG) in Uganda.

CHAPTER

SEVENTEEN

ALTERNATIVE DISPUTE RESOLUTION (ADR) MECHANISMS IN THE EXPLORATION OF OIL AND GAS IN UGANDA.

Uganda recently discovered oil deposits in the Albertine region in the western part of the country. This discovery has been met with a lot of excitement and happiness. However, the introduction of exploration of Oil and Gas to Uganda is one that must be apprised thoroughly due to the new dimensions it adds to the system. The dynamics that involve engagement of society and relocation basically have not yet been appreciated by the different stakeholders in the abstract.

Oil and gas exploration is a venture that takes up a long amount of time and also involves mining. The bringing of oil to fruition can take years of hard work and as such, there is a lot of upfront investment that must be made at early stages. This investment can only be regained at the end of the exhaustion of the project. This is why the sector is very sensitive to changes in laws and taxation regimes as we know them. If these changes occur to the sector without rightful insurance, it becomes difficult to see the possibility of reaping from the sector.

For this reason, most of the agreements concluded have clauses to hedge against the risk of change in the laws that manage the Mining sector or any other laws that might have a connection to its operation; especially tax laws. The change of tax

laws means that the required upfront investments would be significantly changed and this increases the chances that funds might be recalled or paused.

The exploitation of Oil and Gas has extensive bearings upon the Communities where the oil is situated. The settlers in the Albertan region have so far been affected by the exploration stages of production. Some have been asked to relocate, with or without compensation. Some have been resettled to other parts in the country for purposes of exploration. This is because of the effects the processes of the mining could potentially have on their health and the environment at large.

The environment and climate are usually not spared in this too and as such, many measures must be put in place to preserve the environment as much as is possible during these processes of exploitation of the resource. These measures include the passing or updating of laws concerned with environmental management, and ratifying of international instruments that protect the same.

Also, the production of Oil undergoes different stages of production. The Upstream which entails the exploration and drilling of the oil; midstream which is concerned with transportation of this oil to refineries for purifying; and then downstream which is concerned with the marketing and sale of the product. All these processes will in essence require a lot of contracts with many different organisations and many subcontracts as well. Some are straight up necessary; others are required by the law.

All these factors; numerous contracts, upfront investment, long life span, sensitivity to change in laws and tax regimes, climate and community impact and different stages of production; increase the chances of disputes arising. Indeed, any of the mentioned factors has led to disputes that have required settlement.

If any dispute arises and it is not settled, it has the capacity to extensively affect the operations of the sector. It could potentially derail the oil and gas projects. It can distort the many timelines always put up by the agreements made. The nature of the sector is that most of the licences issued have a timeframe and if a dispute arises, the plan to work within this timeline can be significantly affected.

This in effect eats away the investor’s time to complete the tasks assigned and the resources allocated for the same. Dispute settlement will in most cases require

settlement by compensation and this means the funds of the investor will instead be channelled into this settlement.

Many of the investors carrying out these exploitations are International Oil Companies (OICs) which have a big international reputation; a reputation they have built over a long period of time. Disputes are a formidable threat to the reputation built and if they are not worked upon, they can ultimately tarnish the name of these International Oil Companies.

Disputes can also open the International Oil Companies to criticisms by numerous organisations and ultimately shake the confidence that the different stakeholders have in them. This could be a potential determinant of many agreements and contracts.

Therefore, the different modes of alternative dispute resolution that can be employed to ensure a continued understanding between the parties and points out the best dispute settlement mechanism that International Oil Companies can employ to avoid the threats that the disputes pose and their potential to destroy their business.

Causes of the disputes in oil and gas sector.

Disputes can arise because of many reasons. It could be because of the breakdown of communication; a lack of appreciation and respect; a change in economic and commercial circumstances; a change in the known position of the law; technical problems or defective products; differing views of underlying facts; or even the impact of a third party or what is known as force majeure. Whatever the cause could possibly be, it is important to understand the cause of the problem so as to establish how best to solve it.

The project of developing Oil and Gas is principally and most commonly between the International Oil Companiess and the State that owns the resource. It is however not the only avenue for dispute to arise. Regardless, the State and the IOC can have a dispute arise in between them.[1088]

[1088] Cristal Advocates, February 2019. Dispute Resolution in the Oil and Gas Industry: The Case of Uganda, Cristal Energy Series.

These disagreements between the government and International Oil Companies are usually in relation to agreements for petroleum exploration, development and production which are commonly known as Production Sharing Agreements (PSAs). Disputes between International Oil Companiess and host governments can arise from several issues but more often if there are regulatory revisions that threaten to dilute the value of the project as earlier evaluated, for example resulting from changes to the tax and fiscal regime.[1089]

Another area of potential dispute relates to acquisitions and disposals of interests in projects (either via direct asset sales or disposals of subsidiaries). The avenues provided to resolve such disputes are usually complemented by other techniques such as stabilization clauses that embolden substantive rights relating to the allocation of resource wealth between the state and IOCs[1090]

However, there are other avenues where the disputes may arise. This is because the PSA (Product Sharing Agreement) is not the only agreement that exists in the Oil and Gas exploration, development and production. There are other parties involved in this procedure and as such, disputes may equally arise from there. To begin with, there can be disputes between states.

State to state disputes are rarer but may arise with respect to petroleum fields overlapping international borders both onshore and offshore. Offshore maritime disputes arise largely in respect of who can exercise sovereign rights in the Exclusive Economic Zone. [1091]

Disputes between states can also emanate with respect to the transit fees charges on throughput in cross border oil and gas pipelines. A good example is the recently East African Crude Oil Pipeline (EACOP) whose construction is yet to commence between Uganda and Tanzania to transport Oil from Uganda to Tanzania for refinery via pipeline. This project could be a potential area for dispute to arise.

There can also be dispute arising between the International Oil Companies and the companies. Because of the numerous contracts that the International Oil Companiess must undertake with other stakeholders for numerous different

[1089] Ibid
[1090] Ibid
[1091] Ibid

reasons. These represent disagreements between the International Oil Companiess or with their subcontractors and are also referred to as international commercial disputes. International Oil Companiess enter various agreements during the commercialization of oil and gas discoveries that include though are not limited to joint operations, cost allocation, production and allocation, crude oil off take and purchase, crude oil transportation and lifting among others. The implementation of these agreements can trigger disputes between the International Oil Companies. Service agreements between the International Oil Companiess and their subcontractors can also elicit disputes.[1092]

Also, and probably most dangerously, there can be a dispute between IOCs and individuals. These may be the owners of the land where the exploitation is bound to happen. These are usually because of misunderstanding in obtaining the consent of the communities which are affected by the projects. They could also be because of the nature of the people to be affected; their human rights and property rights. This is the most common and it has historically created the biggest problems for International Oil Companies.[1093]

This kind of Dispute Avenue has been notorious to the extent that some countries have inculcated laws to enable their resolution. For example, under the provisions of the **United States Alien Tort Statute**, individuals outside of the US can institute judicial cases and claims against large corporations that engage in business activities that violate their human rights. This provision has enabled very many communities, especially in West Africa, to drag International Oil Companies to court for hefty amounts of money in terms of compensation.[1094]

Whatever the dispute and whatever the cause, it is almost certain that a dispute will always arise, given that there is an Oil and Gas project. Many times, the government has drafted their contracts to reduce the likeliness of such but you can never foresee all these possibilities, to effectively prevent the disputes from developing.

On **July 26, 2010**, one of the major players in Uganda's petroleum sector, Heritage Oil, sold its exploration licenses in the Albertan Rift to Tullow Oil. (Heritage and Tullow together owned a 50 percent stake in two lucrative exploration blocks: 1

[1092] Ibid
[1093] Ibid
[1094] Ibid

and 3A.) With the sale, Tullow became the sole company licensed to operate in those areas. (In addition to its stake in Blocks 1 and 3A, Tullow also has the sole exploration rights to Block 2.) Tullow purchased Heritage's stake for US $1.45 billion, after which Heritage ceased to operate within Uganda.[1095]

In the aftermath of the deal, however, the Uganda Revenue Authority (URA), which was acting on behalf of the Government of Uganda, requested $434 millionor 30 percent of the salein capital gains taxes? Heritage disputed the tax, saying that its lawyers believed that the sale was not taxable, given that the Production Sharing Agreements (PSAs) which the company signed with the government failed to mention such a payment. Heritage further argued that the sale of its assets to Tullow Oil was not taxable in Uganda because the sale itself took place outside Uganda (in the Channel Islands off the coast of France) and because the company itself is not incorporated in Uganda (being domiciled in Mauritius). The Government of Uganda, meanwhile, argued that the assets sold were located in Uganda, and that their sale was done with the consent of the Ugandan government, making the transaction taxable under Ugandan law.[1096]

Tullow disputed the URA's assessment of $473 million of Capital Gains Tax (CGT) payable following the farmdowns and appealed against the assessment before the Uganda Tax Appeals Tribunal ('TAT') and commenced an International Arbitration in September 2013. In July 2014, the TAT rejected Tullow's appeal and assessed Tullow's CGT liability for the farmdowns at $407 million less $142 million previously paid. In its 2014 accounts, Tullow recorded a contingent liability of $265 million in relation to the dispute. Tullow subsequently appealed the TAT ruling to the Ugandan High Court and continued with its International Arbitration claim. Following this settlement, both these legal proceedings have been withdrawn.[1097]

Although Uganda won the case, the reputation and understanding between the companies was significantly affected. And this is just one of the many cases that

[1095]ACODE, 2011. Understanding The Tax Dispute: Heritage, Tullow, And The Government Of Uganda, Infosheet No. 16, 2011 [online] available at; http://www.acode-u.org/uploadedFiles/infosheet16.pdf (accessed on 2nd July, 2021)

[1096] Ibid

[1097]https://www.tullowoil.com/media/press-releases/tullow-settles-capital-gains-tax-dispute-uganda/

have equally caused many misunderstandings. Therefore, whereas there has been an effort to resolve the disputes, not many have restored the status quo. Many have altered the relationship between the parties and this is not good for the Oil and Gas sector.

It has already been established that dispute is imminent in the oil and gas exploitation In fact; Uganda has already had to settle such disputes. In **2014, Uganda Revenue Authority (URA) had a claim against Tullow Oil**. Resourcerich countries are increasingly inserting requirements for local content ("local content provisions") into their legal framework, through legislation, regulations, contracts, and bidding practices because this is where conflicts start from, the failure to include the community in oil exploration. If successful, a policy to increase local content can lead to job creation, boost the domestic private sector, facilitate technology transfer and build a competitive local workforce. However, local content goals are often unfulfilled and the opportunities are not captured. For example, local content provisions typically require investors to meet targets measured as a percentage of investment, hours worked, equipment supplied, or jobs created. If targets are too high, they may either scare away investment or remain unmet as investors accept the fines or find loopholes. If they are too low, the country will not maximize potential linkages. This shows the importance of the framing of local content provisions. Targets, and other local content objectives, need to be carefully quantified, adapted to the local context and collaborative. Because local content provisions can be key to translating resource investments into sustainable benefits for the local population, this project examines the detail of the existing legal frameworks for local content in a number of countries.[1098]

The Government of Uganda announced discovery of commercially viable quantities of oil in the Albertine Graben, Hoima Western Uganda **(300 million barrels)** in 2006[1099]**.** By around 2014/2015 Uganda had **twenty one (21) oil and gas discoveries with an estimated accumulation of 6.5 million barrels of oil**

[1098] Columbia Center On Sustainable Development

[1099] P Mbabazi & M Muhangi, 'Uganda's Oil Governance Institutions: Fit for Purpose?' (December, 2018) Centre for Research on Peace and Development (CRPD) Working Paper No 60.

equivalent of which 1.4 billion is recoverable[1100]. Uganda's gas reserves are estimated at 672 billion Cubic feet of gas with 499 billion barrels of non associated gas and 173 associated gas,[1101] statistics that reflect and explain the occupied nature of the upstream oil and gas sector.

Oil proceeds if well utilized would potentially turn around the Ugandan economy and assist it to make strides towards becoming a middle income country**.** Oil production is expected to lead to increase in government revenue and promotion of development in Uganda[1102]**.**

It is imperative to examine the role of dispute resolution provisions in Uganda's production Sharing Agreements and their role in developing Uganda's Upstream Oil and gas sector. It is also important to note the legal framework relating to dispute resolution in Uganda's Production Sharing Agreements the challenges faced in implementation of Arbitral awards and the institutional framework in place to ensure implementation of dispute resolution provisions in Production Sharing Agreements. The upstream sector (or exploration and production E & P) includes searching for potential underground or underwater crude oil and natural gas fields, drilling exploratory wells, and subsequently drilling and operating the wells that recover and bring he crude oil or raw natural gas to the surface.[1103]

According to **Article 244 of the Constitution[1104]** the Government of Uganda is dressed with powers to hold in trust for the people of Uganda natural resources which include oil deposits**.** The **Petroleum (Exploration, Development and Production) Act 2013[1105]** enjoins the government with power of licensing and management of the oil resources among other roles**.** The government of Uganda came up with a **Production Sharing Agreement (MPSA)[1106]** which is central in guiding negotiations with potential licensees in the oil exploration and production

[1100] *Ibid.*
[1101] *Ibid.*
[1102] *Ibid*.
[1103] Wikipedia contributors, Upstream (petroleum industry). In Wikipedia, The Free Encyclopedia. (2020, October 28). Retrieved 14:42, November 21, 2020, from https://en.wikipedia.org/w/index.php?title=Upstream_(petroleum_industry)&oldid=985832348
[1104] The Constitution of the Republic of Uganda 1995 as amended
[1105] Petroleum (Exploration, Development and Production) Act, 2013
[1106] Uganda Model Production Sharing Agreement

activities. This is owing to the fact that disputes are bound to happen between government and oil companies especially at the upstream stage.

The Oil and Gas sector in Uganda is a nascent industry capable of bringing about exponential development. Oil deposits are believed to have been discovered around 2006 in the Albertine region situate in Hoima in the Western part of Uganda. The sector has attracted reputable investors such as Heritage Oil and Tullow Oil. Given the nature of the huge investments into the Oil and Gas industry, disputes have always arisen for example **Heritage Oil and Gas Ltd & Anor v Tullow Uganda Ltd,**[1107] among other disputes warranting establishment of dispute resolution mechanisms.

International Commercial Arbitration.

International commercial arbitration has been perceived as the most popular method of alternative dispute resolution. It is also noted that different interpretations have been given by national courts on various aspects of arbitration. One explanation of this is the fact that different national courts adopt different theories in relation to international commercial arbitration.[1108] Taking the issue of delocalization as an example, both French and US courts have placed more emphasis on the contractual element and enforced some arbitral awards which have been set aside at the place of arbitration whereas the English courts are still embracing the jurisdictional nature by following Lord Mustill's statement that '*At all events it cannot be the law of England, for otherwise this House would have dismissed at the very outset the attempt to procure an interim injunction during the currency of an ICC Arbitration*' in ***Channel Tunnel Group Ltd. v. Balfour Beatty Construction Ltd***[1109]. Generally speaking, the various commentaries about the nature of arbitration have been collected into four different theories: the jurisdictional theory, the contractual theory, the hybrid theory (or the mixed theory) and the autonomous theory.

[1107] Heritage Oil and Gas Ltd & Anor v Tullow Uganda Ltd (2014) EWCA Civ 1048 - 23 July 2014
[1108] F E Klein, 'Autonomie de la Volonté et Arbitrage' (1958) 47, Review Critic 255.
[1109] J P Ancel, 'French Judicial Attitudes towards International Arbitration' (1993) 9(2), Arbitration Interest 121.

Among them, the ***jurisdictional theory*** is based on the complete supervisory powers of states to regulate any international commercial arbitration within their jurisdiction, whereas the ***contractual theory*** argues that international commercial arbitration originates from a valid arbitration agreement between the parties and that, therefore, arbitration should be conducted according to the parties' wishes[1110]. The ***hybrid theory*** stands as a compromise between the jurisdictional and contractual theories. It maintains that international commercial arbitration has both a contractual and a jurisdictional character. ***The autonomous theory***, which has been developed more recently, dismisses the traditional approach and places emphasis on the purpose of international commercial arbitration. Instead of fitting arbitration into the existing legal framework, the autonomous theory defines arbitration as an autonomous institution, which should not be restrained by the law of the place of arbitration. As a result, parties should have unlimited autonomy to decide how the arbitration shall be conducted[1111].

Oher dispute resolution mechanisms include; **negotiation**, **mediation**, **arbitration**, **expert determination** and **litigation**.

Negotiation.

Negotiation is the direct and indirect communication between aggrieved parties discussing joint actions for resolving subsisting disputes. Negotiation happens as a matter of course and can be included in oil and gas agreements apart of the multistep dispute resolution process.

Mediation.

With mediation, parties can resolve their disputes without going to court. With the help of a mediator, parties can come to agreement if they focus on their longterm commercial interests without getting preoccupied with the details of asserting their legal rights and obligations under the relevant contract. Mediation is cheaper and

[1110] F A Mann, 'State Contracts and International Arbitration' (1967) 42, British Yearbook International Law 1.
[1111] F A Mann, 'Lex Facit Arbitrum' (1983) 2(3), Arbitration Interest 245.

faster than arbitration but is not commonly used in resolving international oil and gas disputes.

Expert determination is used in disputes requiring expert or technical input, but the parties need to agree in writing on the matters that are covered by this. Though not enforceable like arbitral awards, expert determinations contractually bind the relevant parties.

Litigation is the most common dispute resolution technique for lawyers. While it is practical in domestic energy disputes where all parties are from the same jurisdiction, litigation is not preferred for international disputes because of issues relating to neutrality and enforcement of judgements in foreign jurisdictions and the time it takes to conclude cases.

Arbitration is the technique of choice for dispute resolution in the international oil and gas industry. It is legally binding and the consequential awards enforceable in foreign jurisdictions. Parties can choose their arbitrators, the extent of their arbitration process as well as the venue and forum of arbitration. Arbitration is however fairly expensive.

Uganda has ratified to the International arbitration regime is anchored on the **1958 United Nations Convention on Recognition and Enforcement of Arbitral Awards (the New York Convention)** that it ratified in 1992. **The Arbitration and Conciliation Act Cap 4** that was enacted in 2000 expressly incorporates the New York Convention. 159states are party to this Convention.

Uganda's ratification of the New York Convention came with a declaration stating thus; "The Republic of Uganda will only apply the Convention to recognition and enforcement of awards made in the territory of another Contracting State". Thus, foreign arbitral awards from contracting parties to the New York Convention are recognisable and enforceable in Uganda.

Where parties choose to adopt arbitration for the resolution of their disputes, the Arbitration and Conciliation Act expressly gives precedence to arbitration and requires Courts to suspend legal proceedings and refer a matter to arbitration where a defendant so requests. The Arbitration and Conciliation Act further preserves the integrity of arbitral awards by restricting judicial interference with an

award only to points of law, meaning Courts cannot open up and rehear a dispute which has been submitted to arbitration. The Arbitration and Conciliation Act established the **Centre for Arbitration and Dispute Resolution ("CADR")**to spearhead and conduct arbitration as well as perform supportive functions under the **United Nations Commission for International Trade Law (''UNCITRAL'')Arbitration Rules.**

The author further identifies the ICSID Convention. Uganda is also a state party to the **Convention on Settlement of Investment Disputes** between States and Nationals of Other States 1965 **("the ICSID Convention")**which was ratified on 7th June 1966 and entered into force in Uganda on 14th October 1966. This enables the submission of investment disputes against Uganda for arbitration or conciliation at the International Centre for Settlement of Investment Disputes ("ICSID").

As far as enforcement of ICSID awards is concerned, the Arbitration and Conciliation Act expressly authorizes any party seeking to enforce an ICSID award in Uganda to apply to the High Court to have the award registered for purposes of enforcement.

The **Model PSA of Uganda** is also relevant in concerning dispute resolution. In 2018, a new **Model Production Sharing Agreement(MPSA)** for petroleum exploration, development and production was adopted by the Ugandan Cabinet. **Article 24.1** provides that where a dispute cannot be resolved within 120 days, it shall be referred to arbitration in accordance with the UNCITRAL Arbitration Rules. Such arbitration is to be conducted by three judges and the seat of arbitration is London, United Kingdom. This clause however excludes disputes relating to taxation, health and safety and environment which are determined only in accordance with the procedures set out in the applicable local legislation. An arbitral award/judgment obtained pursuant to this clause is final and binding and may be entered in any Court with jurisdiction for acceptance.

Finally, ADR may also have an increasing role to play. Information is not easy to come by, but the indications are that ADR is being used and may be used more often as lawyers and their clients become accustomed to mediation and what it can

achieve. It may well be that ADR will also have a role to play as a filter mechanism of the kind used in the Boston Central Artery/Tunnel Project and in the Hong Kong Airport Core Programme: that is by way of contractual provisions which specify one or more ADR filter processes, with a longstop provision for arbitration (or litigation) should the ADR filters fail to resolve the disputes.

Laws Governing Dispute Resolution in The Oil and Gas Sector in Uganda

This part covers the different laws in Uganda that have been passed for purposes of resolving disputes. It is important to note that disputes in Oil and Gas do not differ much from disputes arising from other spheres of society. As such, the general mechanisms of dispute resolution equally apply to the Oil and Gas sector.

It is important to note that what sticks out for the Oil and Gas sector would be Article 126 (2) (d); reconciliation between parties. This is because most of the work done is either under the PSA or Joint Venture Agreements and as such, there is need to cooperate even after a certain dispute. The Courts established under chapter 8 have the role of ensuring that as much as possible, this is fulfilled.

The Judicature Act.

This is a statutory law that was promulgated to consolidate and revise the Judicature Act to take account of the provisions of the Constitution relating to the judiciary. This is because there was a judicature act that existed before the Constitution came into force and as such, it was modified to correspond to the new provisions of the Constitution.

The Act generally lays out the courts provided for by the Constitution, their constitution and powers. The jurisdiction; either original or appellate that each court has. The court also provides the scope of law that can be applied by the courts in administering justice or resolving disputes.

Section 26 of the Act provides for references to Referees. The fact that court may refer a case to another forum. Section 27 further provides that;

Where in any cause or matter, other than a criminal proceeding

(a) all the parties interested who are not under disability consent;

(b) the cause or matter requires any prolonged examination of documents or any scientific or legal investigation which cannot, in the opinion of the High Court, conveniently be conducted by the High Court through its ordinary officers; or

(c) the question in dispute consists wholly or partly of accounts,

the High Court may, at any time, order the whole cause or matter or any question of fact arising in it to be tried before a special referee or arbitrator agreed to by the parties or before an official referee or an officer of the High Court.

This provision in essence allows the high court to refer a case to Alternative Dispute Resolution especially where the matter is technical and it would significantly take large amounts of time to settle. The Oil and Gas matters can be said to fall under this ambit given their complexity and technicality.

The Act gives the arbitrator or referee the same powers as the powers of the Judge of the High Court. Section 28 provides that;

In all cases of reference to a referee or arbitrator under this Act, the referee or arbitrator shall be deemed to be an officer of the High Court and, subject to rules of court, shall have such powers and conduct the reference in such manner as the High Court may direct.

Therefore, alternative dispute resolution is a recognised and acknowledged forum for settling disputes other than court.

The Civil Procedure Rules SI 711 as amended.

Under Order 12 rule 2 of the Civil Procedure Rules, the law provides that where parties do not reach an agreement under rule 1(2) of order 12, the court has the power to order for ADR if it is of the view that the case has a good potential for settlement.

The Arbitration and Conciliation Act, Cap 4, Laws of Uganda.

Upon the inception of colonisation, Uganda received many laws from England which were consolidated after independence. With the promulgation of the 1995 constitution, many laws had to be modified to conform to the constitution. therefore, this Act was enacted to amend the law relating to domestic arbitration, international commercial arbitration and enforcement of foreign arbitral awards, to define the law relating to conciliation of disputes and to make other provision relating to the same.

This Act lays out the structure of both domestic and international arbitration. It gives a scope of what can be arbitrated upon and the time frames of the same. The other parts of the Act pertain the enforcement of international arbitral awards, including; awards of the New York Convention, and enforcement of ICSID Convention awards.

The Act further makes provision for Conciliation. It also lays out its structure and procedure and who is entitled to use is as a mechanism of dispute settlement.

The Act also establishes the Centre for Arbitration and Dispute Resolution. Section 67 of the Act provides thus;

(1) There is established a body to be called the Centre for Arbitration and Dispute Resolution.

(2) The centre shall be a body corporate with perpetual succession and a common seal and shall be capable of suing or being sued in its corporate name and may borrow money, acquire and dispose of property and do all such other things as a body corporate may lawfully do.

The Act further lays out the functions of this body under section 68 which provides that;

The functions of the Centre shall, in relation to arbitration and conciliation proceedings under this Act, include the following

(a) to perform the functions referred to in sections 11, 12, 13, 14, 15 and 51;

(b) to perform the functions specified in the UNCITRAL Arbitration Rules of 1976;

(c) to make appropriate rules, administrative procedure and forms for effective performance of the arbitration, conciliation or alternative dispute resolution process;
(d) to establish and enforce a code of ethics for arbitrators, conciliators, neutrals and experts;
(e) to qualify and accredit arbitrators, conciliators and experts;
(f) to provide administrative services and other technical services in aid of arbitration, conciliation and alternative dispute resolution;
(g) to establish appropriate qualifications for institutions, bodies and persons eligible for appointment;
(h) to establish a comprehensive roster of competent and qualified arbitrators, conciliators and experts;
(i) to facilitate certification, registration and authentication of arbitration awards and conciliation settlements;
(j) to establish and administer a schedule of fees for arbitrators;
(k) to avail skills, training and promote the use of alternative dispute resolution methods for stakeholders;
(l) to do all other acts as are required, necessary or conducive to the proper implementation of the objectives of this Act.

The Functions of the body are quite elaborate, but ultimately this cements the fact that Alternative dispute resolution is a recognised forum of settling differences and this is also applicable to the Oil and Gas sector.

The Judicature (Mediation) Rules SI No. 10 of 2013

These rules were made in reference to **Section 41 of the Judicature Act** which gives the Chief Justice the power to make such rules. Originally under Rule 4 of the rules, all civil matters were to undergo mediation. This position was however changed by the amendment to the Civil Procedure Rules with the introduction of Summons for Directions.

This does not take away the mandate of the other provisions of the Rules in as far as mediation is concerned. The rules lay out the procedure to be followed during mediation and the required documents to be tendered in. it describes the different roles of the mediators appointed to oversee the mediation and the efficacy of the decision reached by the parties in the same transaction.

Uganda Model PSA

The PSA is a contract entered into by the government with the licensee or an IOC for the exploration, development and production of Oil and Gas. This Contract covers very many areas of the project including, human rights, the environment, labour rights, health and safety to mention but a few.

The Model PSA for Uganda has an elaborate article on Dispute resolution which I have reproduced for easy reference. Article 24 provides that *Subject to Article 13 and paragraph 25.2, a dispute arising under this Agreement, except disputes relating to taxation, health, safety and environment, which cannot be settled amicably within one hundred and twenty (120) days, shall be referred to Arbitration in accordance with the United Nations Commission for International Trade Law (UNCITRAL) Arbitration Rules. The arbitration shall be conducted by three (3) arbitrators appointed in accordance with the said Rules. The said arbitration shall take place in London, a place agreed upon by the Parties. Judgement on the award rendered may be entered in any court having jurisdiction or application may be made in such court for a judicial acceptance of the award and an order of enforcement, as the case may be. The Arbitration award shall be final and binding on the Parties to this Agreement.*

24.2. Any matter in dispute between the Government and Licensee arising under paragraphs 14.1 and 12.2, may, at the election of either of such parties by written notice to the other, be referred for determination by a sole expert to be appointed by agreement between the Government and the Licensee. If the Government and the Licensee fail to appoint the expert within sixty (60) days after receipt of such written notice, either of such parties may have such expert appointed by the then President of the Institute of Petroleum (London). If the aforesaid President shall

be disqualified to act by reason of professional, personal or social interest or contract with the parties in dispute or their Affiliated Companies, the next highest officer for the time being of said Institute of Petroleum, who is not disqualified shall act in lieu of said President. No person shall be appointed to act as an expert under this section:

(a) unless he or she shall be qualified by education, experience and training to determine the subject matter in dispute; or

(b) if at the time of his or her appointment or at any time before he or she makes his or her determination under such an appointment, he or she has or may have some interest of duty which conflicts or may conflict with his or her function under such appointment.

The expert shall render his or her decision within (60) days after the date of this appointment, unless the Parties otherwise agree. In rendering his or her decision, the expert shall do so within the context of the provisions of this Agreement, the Act, Regulations and the standards of Best petroleum industry practices. The decision of the expert shall be final and binding on both the Licensee and the Government. The expert's fees and expenses, and the costs associated with an appointment, if any, made by the President of the Institute of Petroleum (or the next highest officer thereof), shall be allocated to the Parties in dispute in such manner as the expert may determine.

This Article lays out the forum of dispute settlement to be referral of the dispute to a Dispute Settlement Body using UNICTRAL model of rules. This reference is in London and the award given becomes enforceable between the parties. This is arbitration.

There are quite a number of laws that govern dispute settlement in Uganda. The Oil and Gas sector also has a specified model of settling disputes as envisaged under the Model PSA. However, the fact that a certain mode of settlement of disputes is referred to in the law does not necessarily make it the absolute best.

The Different Mechanisms of Dispute Resolution in Uganda.

We have already established from the assessed laws above that dispute resolution in Uganda is two ways; one is by way of court cases while the other is an out of court settlement. This chapter digs deeper into the modes under the out of court settlement. These include the ones provided for by the law like arbitration, conciliation and mediation and the ones that are not necessarily provided for by the law.

The Concept of Alternative Dispute Resolution.

Alternative Dispute Resolution (ADR) refers to the process of resolving disputes rather than litigation.[1112]Unlike adversarial litigation, ADR procedures are often collaborative and allow the parties to understand each other's positions[1113]. *Sandra Day O'Connor* a retired Justice of the United States of America, Supreme Court stated that *"The courts should not be the places where the resolutions of disputes begin; they should be places where disputes end after alternative methods of resolving disputes have been considered and tried."*

Alternative Dispute Resolution provides a confidential and alternative method of tackling legal disputes which avoids going to court.[1114] Under ADR; mediation, conciliation and arbitration are some of the methods used to resolve disputes between individuals instead of going to court straight up.

As litigants became overburdened by the time and resources required in civil lawsuits, ADR became more and more popular. Smaller claims, in particular, became exceedingly difficult to resolve costeffectively in court and ADR was a

[1112]Dennison & Tibihikira, Legal Ethics and professionalism: A handbook for Uganda,Globethics.net African Law 2, pg.220

[1113]What is Alternative Dispute Resolution,www.Findlaw.com 8th October ,2020, - https://www.findlaw.com/hirealawyer/choosing-the-right-lawyer/alternative-dispute-resolution.html 23rdNovember,2020.

[1114]Alternative Dispute Resolution,www.Rocketlawyer.com https://www.rocketlawyer.com/gb/en/quick-guides/alternative-dispute-resolution 23rd November,2020.

relatively lowcost alternative, solidifying it as a preferred method to handle not only small disputes, but large ones as well. Not only were they quicker and cheaper than litigation, arbitration and mediation were seen as more creative and harmonious ways to resolve disputes.[1115]

Under Alternative Dispute Resolution, the lawyer or advocate has a mandate to advise accordingly and ensure that genuine steps are taken for the dispute to be resolved amicably. This is because lawyers play a role of giving their client confidence that they are getting an equitable result or at least understanding the legal implications of what they are they are conceding. This is mainly under the mandate that lawyers have to provide practical and legal advice on the process and on issues raised and offers made.

In ***Adamson vs. Queensland Law Society Inc*.[1116],** it was held that whether the conduct violates or falls short of, to a substantial degree, the standard of professional conduct observed or approved by members of the profession of good repute and competency.

It was also stated that "The lawyer should put the client's interests first and treat the client fairly and in good faith giving due regard to a client's position of dependence upon the practitioner, and the client's dependence on the lawyer's training and experience and the high degree of trust clients are entitled to place in lawyers…particularly with respect to compromise."

It often involves partnering where disputants meet and agree on how to resolve their conflicts and a system design of the processes to undertake in instances that the conflicts arise. The different forms of ADR include: negotiations, mediation, arbitration, early neutral evaluations, and conciliation among others.

Negotiation.

This is any form of communication between two or more people for the purpose of arriving at a mutually agreeable solution. It involves parties at dispute either

[1115]What is ADR?,www.arbresolutions.com,21st August,2020 https://www.arbresolutions.com/what-is-adr/ 23rd November,2020

[1116][1990]1 QdR 498.

through a competitive or cooperative bargaining style meeting and trying to arrive at a conflict resolution without help of a third party.

Mediation.

This means the process by which a neutral third person facilitates communication between parties to a dispute and assists them in reaching a mutually agreed resolution of the dispute[1117]. The neutral third person (mediator) won't have that decision making power but will with the consent of the parties set and enforce the ground rules for the mediation process.

Arbitration.

this is the adjudication of a dispute or controversy on fact or law or both outside the ordinary civil courts, by one or more persons to whom the parties who are at issue refer the matter for a decision.[1118]It is a process in which a third party neutral, or an odd number panel of neutrals render a decision based on the merits of the case.

Early neutral evaluation.

This means the process where the disputing parties submit their case to a neutral evaluator through a confidential evaluation session so as to consider each side's position before rendering an evaluation of the case. It may take place soon after a case has been filed in court where the parties at dispute either through written comments or oral submissions meet an expert on the matter to provide a balanced and unbiased evaluation of the dispute.

Conciliation.

This is a process whereby the parties to a dispute use a conciliator, who meets with the parties both separately and together in an attempt to resolve their differences.

ARBITRATION.

[1117] Section 3 of the Judicature (Mediation) Rules, 2013.
[1118]Kaggwa David, Arbitration and the Courts, p.8.

Arbitration is defined as the adjudication of a dispute or controversy on fact or law or both outside the ordinary civil courts, by one or more persons to whom the parties who are at issue refer the matter for a decision.[1119] Arbitration in Uganda is governed by the Arbitration and Conciliation Act. Uganda also ratified the New York Convention[1120] on 12th February 1992 and adopted the provisions of the UNCITRAL Model Law.

Arbitration emerged as a tailormade mechanism for the resolution of commercial disputes before a neutral third party (arbitrator) without reference to a court of law. Originally arbitration was a consensual procedure that required an agreement between the parties to solve their disputes through arbitration where either party was entitled to initiate proceedings.

InvestorState arbitration, however, is a somewhat 'asymmetrical' dispute resolution mechanism, whereby only an investor can bring and investment claim against the host State, provided that the host State gives its consent to arbitrate pursuant to the relevant international investment agreement. For instance, the International Centre for Settlement of Investment Disputes (ICSID) Convention provides that such consent to arbitrate may be given by a contract, investment treaty or legislation.

Most International Investment Agreements, which include Bilateral Investment Treaties, free trade agreements with an investment chapter (e.g. North American Free Trade Agreement) and other multilateral agreements (e.g. Energy Charter Treaty), provide rules enabling investors to invoke claims directly against states However, traditionally only states could have rights and duties under international law, and for this reason foreign investors used to solve their disputes through diplomatic protection. International investment agreements are entered into by State parties for the mutual protection of their national investors, as thirdparty beneficiaries.

[1119] Tweedale A, and Tweedale K, 2007, Arbitration and Commercial Disputes, Oxford, p.34
[1120] The New York Convention on the Recognition and Enforcement of Arbitral Awards.

2015 UNCTAD statistics suggest that based on an assessment of publicly available cases, States were significantly more successful than investors on average. By the end of 2014, there were 356 investor state disputes:

Today, there is a growing consensus on the potential contribution that investment dispute settlement mechanisms can make to sustainable development. However, this is on the basis that comprehensive and recurring reforms are undertaken, to ensure that the system takes account of the interests of all stakeholders.

The arbitration process has some advantages and disadvantages, when compared to public litigation. First of all, it is confidential process, which can be important in disputes involving commercial secrets. On the other hand, because of the confidentiality, the disputes settled in the arbitration do not gain such publicity that disputes resolved in the public litigation. The arbitration process usually also gives the parties the freedom to select their arbitrators. Thirdly, it is usually quicker and more flexible than public litigation. However, one disadvantage is that arbitration is normally more expensive than public litigation because of high salary of the arbitrators.

There are two types of arbitration: ad hoc arbitration and arbitration organized in permanent institutions.

Ad hoc arbitration is conducted independently from any influence of institutions and according to the rules chosen by the parties. In this type of process, the arbitrators are appointed by casebycase basis, usually by parties. One option is that the parties select an appointing authority who will appoint arbitrators for the proceeding. The composition of the tribunal can vary from one to several arbitrators depending on procedural rules.

Institutional Arbitration.

Parties to a contract who wish to solve their disputes with the involvement of a specialised institution need to designate, in an arbitration clause, one or a few possible institutions to administer the arbitration process. There are several arbitration institutions, which provide a forum as well as procedural rules under which the arbitration proceedings will take place. ICSID has been the most

prominent in the area of investor State arbitration, followed by the International Chamber of Commerce (ICC), the Permanent Court of Arbitration (PCA) and several others within their own spheres of expertise, be that commercial, investment and regional.

Institutional arbitration has the advantage of administrative assistance from the institution, such as a roster of arbitrators to choose from, determined rules including a standard arbitration clause, which would ensure a smooth and speedy resolution, and could be preferable unless the parties are concerned with costs.

Arbitration is ad hoc if it is undertaken without the involvement of an institution. While it is not always suitable for the longterm nature of petroleum transactions, an ad hoc arbitration has the advantage of being more cost effective than institutional arbitration. Further, institutional arbitration costs often increase in accordance with the amount of the dispute or based on the time spent by the institution and arbitrators. Significant investment disputes settled via ad hoc arbitration in the past, include the Libyan expropriation cases, **British Petroleum v. Libya, Liamco v. Libya, and Texaco/Calasiatic v. Libya.**

Parties to an ad hoc arbitration may design their own rules of procedure or refer to the law of the forum under which the arbitration is being held. The law of the forum may not always be sufficient to apply to the entire proceedings. In this case, if ad hoc arbitration is chosen, the **Arbitration Rules of the United Nations Commission on International Trade Law (UNCITRAL)** can be consulted. The UNCITRAL Rules provide a comprehensive set of procedural rules upon which parties may agree for the conduct of arbitral proceedings arising out of their commercial relationship and are widely used in ad hoc arbitrations as well as administered arbitrations.

The International Institute for Conflict Prevention and Resolution (CPR) is another institution that has guiding rules for ad hoc arbitration. The scope of provisions includes management of the process by the Arbitral Tribunal and counsel, without the need for the involvement of a separate administering entity. The CPR also offers some customised services, such as arbitrator selection and a challenge procedure.

Among the francophone West African countries, the **Organisation for the Harmonisation of Business Law in Africa (OHADA) pr**ovides for ad hoc arbitration under the Uniform Act on Arbitration (UAA). Arbitration rules. These were adopted in 1999 and apply to any arbitration whose seat is in an OHADA Member State. They are generally nonimperative and the parties are free to contract around them. Despite its ad hoc nature, the existence of an arbitration agreement, impartiality of the arbitrators, and requirements for the drafting of awards are prerequisites of the procedure.

The **Association of International Petroleum Negotiators drafted a Model Dispute Resolution Agreement in 2004** which may be used as an arbitration agreement or inserted into the contact, as part of the dispute resolution clause. The aim is to provide the option to choose a detailed or simple, and short dispute settlement as the model provides alternative optout options and a list of available institutional arbitration options. The model also includes a sovereign immunity waiver.

M E D I A T I O N .

Mediation is a nonbinding Alternative Dispute Resolution (ADR) method. The parties to a contract in the oil and gas industry may provide for mediation in their contract, or when the dispute arises, they may enter into a separate agreement to resolve the dispute by mediation. It is common for mediation to be included in a dispute resolution clause, as a first step or a prerequisite to arbitration.

The mediator is not a decision maker, but a facilitator to lead the parties to a settlement. Mediation can be only binding if the parties reach a settlement agreement as an outcome. It can be a cost and time effective dispute resolution tool, considering that the parties are ready to compromise. Mediation tends to be more suitable for national disputes – or at least when both parties are from similar legal jurisdictions or speak the same language. In international disputes, the language, legal culture, and distance differences may decrease the likelihood of reaching a settlement and may increase time and costs. Where state parties are involved in oil and gas disputes, as is often the case, there may also be a barrier to

mediation arising from the ‘negotiated’ character of the process, causing a lack of credibility in the outcome with government officials exposed to the accusation that the deal they agreed to was inadequate or to suspicions about their motives for agreeing to it.

The mediator’s role as a neutral, trained and skilled expert to explore the determinants of a dispute is important, and although technical knowledge and understanding of the sector is advisable, it is not always necessary for the mediator to be an expert in the oil and gas industry.

Mediation is more time saving than litigation. It is a quick process involves the coming into a mutually acceptable agreement to settle the dispute by both sides of the parties. The mediator, who act as the middleman of the disputed parties helps the parties to reflect the benefit concerned by the parties to each other in a private and confidential manner. The whole process, from the application of the mediation to the settlement usually will not take a very long time. Unlike mediation, litigation involves much cumbersome procedure. Besides the cumbersome procedure, litigation involves a lot of legal issues which take time for the court to resolve. Most of the time, a civil case in the ordinary court will take up to at least few years. So, if the disputed parties were to seek for a quick resolution for their particular disputes, they should choose to utilize mediation.

Besides, mediation is also more cost saving than litigation. The charge for mediation service is lower as the time consumed for the settlement of dispute is shorter. The timedragging trial in an ordinary court consumed a lot of lawyer charge. Moreover, some of the mediation services provided in some countries are free of charge, particularly those provided by Malaysian Mediation Centre (MMC).

Mediation also gets the parties to reach a more mutually satisfied settlement. With facilitation of the mediator, both the parties in dispute will raise their concern about their benefit to the dispute to each other. As such, the resolution will be reached upon with compromise and that the possibility not to conform to the agreement settled is lesser.

Mediation helps to mend broken relationship between disputed parties. Unlike in litigation, there is a winwin situation in mediation when there is an agreement reached. This is because the agreement is settled by compromise made by both the parties rather than the onesided judgment made by judges in the ordinary court. In the case of a litigation involving closely related parties such as family members, relatives and employeremployee, the losing party tends to draw a clear line with the winning party. This in turn will not happen in mediation.

The disadvantage with mediation is that an agreement reached under mediation is not binding and final but merely a mutually agreed settlement made by both the parties under the facilitation of the mediator. Indeed, the mediator does not provide any legal advice or any suggestion to the parties. The parties are not bound to comply with the agreement and the party who changed their mind not to accept the resolution reached may bring the dispute into litigation. This in turn, defeated the purpose of mediation to help to clear out backlog of cases in the judiciary.

C O N C I L I A T I O N .

Conciliation is a form of alternative dispute resolution methods in which a conciliator helps the parties to settle their dispute. The conciliator helps by identifying the objectives of the parties. It is different from arbitration in the sense there is no award at the end of proceedings.

It is different from court proceedings because the conciliator doesn't give judgement or decision as is given by a court of law. It is different from mediation because in this process the conciliator actively participates in the proceeding. He conducts himself proceedings by going to the parties and asking them to prioritize their objectives. He asks them to mention which is their first objective and then second and the list goes on. Similarly, he also asks the parties to let him know what are the points in which they will not be ready to shift and what are the points/issues in which they can be flexible. He then goes to the other party and tries to bring them on one of the objectives. He starts with minimum of concession then moves on to maximum.

So, it is different from mediation because a mediator encourages the parties to understand or take charge of their dispute instead of actively participating like this. There is similarity between mediation and conciliation in the sense that in both of the processes, there is one guy who tries to settle the dispute. In both, the outcome is not binding. In both, the proceedings are confidential so other party cannot take those in any other forum. For instance, as it was said earlier the parties cannot rely on this to argue their case or substantiate their case before any other forum. It is because this is purely confidential and private. Another aspect of this is that the conciliation proceedings are not binding, which is same as is mediation.

Expert Determination

Expert determination is also a form of alternative dispute resolution technique, whereby parties submit their dispute to a person who is able to decide in accordance with his acumen. This concept is taken from olden times in which societies were classified into tribes and tribal chiefs or religious influential persons or other influential persons were taken as experts. The dispute was presented to an expert who was expected to give verdict on it.

The verdict is not binding before a court of law but it holds moral authority that the parties will abide by it. In this way it is similar to the court proceedings in which both parties present their views and the matter is resolved by a decision of court which is binding. It is also similar to arbitration proceedings in a way that the decision is binding and the rules of proceedings are flexible unlike court proceedings.

The parties submit their dispute and receive verdict on their dispute. It is not as mediation proceedings in which there is no binding thing as such. Similarly, it is not similar as conciliation proceedings as it is binding on the parties. It is different from court proceedings because its verdict is not binding before a court of law. Similarly, it is different from arbitration proceedings because its verdict is not binding before court of law as is the case for arbitration.

This process is still available in some societies of the world such as Afghanistan, tribal areas of Pakistan, India or in most of the societies it is available at family

level. For instance, the decision of mum is sometimes binding for her son/daughters, though it doesn't have legal value in the eyes of court yet it has some force or sanction of enforcing it. In **Dean v. Prince 1953 Ch. 590 at 591,** the court used the word expert determination instead of an arbitrator.

Early Neutral Evaluation.

Early neutral evaluation is also a method of alternative dispute resolution in which a person acts as a neutral person and evaluates the merits and demerits of their position. This technique is also taken from olden times when people used to go before someone who was wise in the locality to know their position with regard to some claim or defence.

These days this is used alongside mediation proceedings so as to help the parties to evaluate the merits of their case. This is usually done by an experienced litigator who has vast experience of litigation. He gives opinion about the merits and demerits of their case. He is neutral in his opinion and this enables the parties to keep their trust on him. He doesn't know the parties or does not have interest in any one party at the cost of the other. He gets his fees from both parties no matter they settle their dispute or not; this enables him to keep neutral position and also to keep the trust of the parties.

Early neutral evaluation is different from mediation in the sense it is direct communication of early neutral evaluator about their issues. In mediation, the parties try to sort out their dispute/issues themselves. A mediator doesn't comment upon the merits or demerits of a case. He is only facilitator.

In early neutral evaluation, the evaluator deals with the merits and demerits of the case directly. It is different from court or arbitral proceedings because an evaluator only gives opinion about the merits of the case and he doesn't give verdict binding on the parties. Similarly, it is different from conciliation because an evaluator doesn't try to settle the dispute of the parties. All he does is to give an honest and neutral opinion with regard to the merits of the case of parties. In recent times, early neutral evaluation is taken as part of the mediation proceedings. This means it is good technique for the resolution of disputes of commercial nature.

Mini Trial.

Mini trial is also form of alternative dispute resolution technique. This is widely used in these days in the commercial world. In this, the parties to a dispute select one representative from each party to sit on the panel. There is also one neutral person who is independent and who is appointed with mutual agreement. Then parties file their briefs, this is followed by recording of evidence and finally a verdict which is binding on the parties.

This is different from arbitration proceedings because this doesn't end in award. There is a binding judgement which is same like in court but with the consent of parties after settlement is reached. The value of that judgement is the same as is the value of an award in the eyes of courts. It is different from mediation as this involves a process that goes for adjudication of dispute. In other words, the panel sits as adjudicator rather than as mediator. It is also different from conciliation on the same ground that the panel in mini trial sits as adjudicator and not as conciliator.

Moreover, the number of people on the panel is more than the no. of people involved in the mediation or conciliation proceedings. Similarly, there is a difference in the way the proceedings are conducted in mini trial and mediation, conciliation or early neutral evaluation. Another important aspect is that in mini trial the evidence is heard by panel which is followed by settlement proceedings. The parties try to convince each other regarding the merit of the case. Now, both parties know the strengths and weaknesses of their case. They are encouraged to settle the dispute by neutral member of the panel. If an agreement is reached then that agreement is binding and if not then he tries to settle by convincing the parties. If no agreement is reached at all then the proceedings automatically expire within thirty days. Like mediation and conciliation, the proceedings in mini trial are confidential. In other words, these proceedings cannot be used at any forum to substantiate any point.

Adjudication.

Adjudication is a process in which parties take their dispute which involves question of law before some designated forum. It is also a technique of alternative dispute resolution. It is because the matter is not taken before a court. Adjudication also takes place before courts of law and it also takes place before appointed forum. For instance, for the resolution of insurance dispute, some kind of adjudication forum is created to resolve the insurance disputes. Similarly, the disputes regarding construction contracts there is one forum that resolves those legal disputes. The point rose before them is whether or not someone is bound by it or not.

In some countries, there is a forum called ombudsman which resolves such disputes. These disputes include disputes such as electricity bills etc. These are alternative dispute resolution because they are not adjudged by courts. The decisions are binding on litigants. It is different from mediation because the decisions are binding; adjudicator doesn't facilitate dispute settlement but it gives binding decision. It is not judicial settlement because it involves not strict process as is in court.

Negotiations.

Negotiations are the least formal of the proceedings. Negotiations take place regularly between two companies when conducting business. Negotiations could arise over shipping or billing terms, prices, terms of service, durations of a contract, or any other aspect of the business transaction. Negotiation takes place between the two parties absent a third neutral party. Without the need to pay a third party the costs are only the time of the personnel devoted to the negotiations.

The twoparty involvement limits outside influence and allows parties to focus of the problem solving at hand. Potential disadvantages to negotiation include lack of motivation by the parties involved to come to an agreement in a reasonable timeframe. If opposingparty viewpoints are highly varied from one another reaching a conclusion without assistance becomes difficult or impossible. In complex disputes, such as collective bargaining agreements, the assistance of a

third party can help to reach a solution to the problem. To establish and renew collective bargaining agreement negotiations are a necessary factor.

An example includes the National Football League and the National Football League Players association meeting to establish a new collective bargaining agreement before it expires. The parties began with negotiations between representatives of each of the organizations. The agreement was complex and included how to divide the league's $9 billion dollars in revenue, whether or not to expand the number of games, and a new salary scale for rookies. The meetings progressed and no new settlements had been reached. As the deadline approached the two organizations agreed to mediation to see if a third party could help them reach a decision. The NFLPA and the NFL owners agreed to mediate with the Federal Mediation and Conciliation Service, an independent U.S. government agency, for seven days. No decision was reached as a result of these meetings.

Hybrid Processes in ADR.

A hybrid dispute resolution process combines elements of two or more traditionally separate processes into one. The most common hybrid process is mediationarbitration, or "medarb", which uses the same individual or dispute resolution forum first as a mediator, and then if necessary, as an arbitrator. This is distinguished from the common circumstance where more than one type of dispute resolution procedure is provided for in sequence, such as a grievance procedure that provides first for negotiation, then mediation, and finally for arbitration, where each of these processes is carried out by a different person.

Medarb or other hybrid processes are generally used where parties believe a given dispute is likely to require elements of two or more processes, and/or where they believe that an individual or forum is available who has the skills necessary to enact more than one process, with a consequent saving of time and expense.

Medarb was first used in U.S. publicsector collective bargaining, particularly for public safety groups (e.g. police and fire departments) where strikes are generally illegal. In many states, the state legislature has called for a hybrid system to resolving these disputes peacefully and efficiently.

Usually such systems call for mediation, after which either party can compel arbitration if the mediation effort fails to reach an agreement. The mediation in this type of case is often actually the second attempt at mediation, following an earlier "pure mediation" effort by the labourmanagement mediation agency of that state. The hybrid process is invoked if the initial, agency attempt at mediation fails.

Such "duplicate mediation" has two advantages: first, neutrals who practice as mediatorarbitrators are sometimes able to apply skills that agency neutrals may not possess to the same degree (though often, the agency neutrals are themselves highly skilled); second, and more important, is that a mediatorarbitrator's suggestions carry more weight than those of a "pure mediator," even when the suggestions are similar or identical. This is because the mediatorarbitrator may have the final decision if the case is unresolved. This gives the "neutral" more perceived power, even in the mediation, and most certainly in the arbitration phase of the process.

Medarb in these contexts has generally been considered effective, as illegal strikes are very rare, and most parties believe the process works effectively and promptly.

However, parties sometimes object to the amount of power a mediatorarbitrator has. Typically, arbitrators never meet with the parties separately, but only meet together where both sides can hear (and rebut) all the arguments the other side makes. In addition, arbitrators avoid reaching any conclusions or dropping hints as to the decision until the last argument has been fully expressed.

This mode of working is greatly different from the typical working methods of a mediator, which usually include meeting privately with each party, and at times, trying to persuade a party to make a particular concession, or to try another approach to their negotiations. If the mediator is also an arbitrator, such pressure can take the form of an implied threat of an adverse decision if one party is seen as being "unreasonable."

In such cases, the losing party may believe (rightly or wrongly) that the decision was influenced by private conversations between the mediator and the opposing party. Concerns about such issues have led some jurisdictions to opt for mediation

followed by separate arbitration instead of medarb as the public service dispute resolution procedure of choice.

Other hybrid combinations of role also exist. The combination of the roles of facilitator and mediator is so common that many believe that the role of a mediator can hardly be fulfilled without taking on a facilitator's role as well though the converse is not true. And it is quite common for a judge to take on the role of a mediator. While this inherently triggers the same potential concerns as mediationarbitration, it is indisputable that many cases have been resolved, and often to the satisfaction of all parties, when a judge has engaged in adroit and sensitive intervention along these lines.

Parties who understand the risks inherent in mixing the roles of a neutral are in a much better position to make creative uses of available neutral talents, a hallmark of the flexibility that conflict resolution claims as one of its virtues as a field. There is probably no pair of neutral functions that has not been combined in one individual at some point, many times to the benefit of all parties. And there are subtleties in the distinctions between the common combinations: for example, many see a meaningful distinction between a mediatorarbitrator and an arbitratormediator. (In this instance, the distinction is in which role the neutral was primarily selected for. Thus describing a neutral as an "arbitratormediator" typically sets up an expectation that the case will probably be pursued to the point of a decision by an arbitrator, but with the parties willing to mediate if the circumstances seem favorable. A "mediatorarbitrator" is hired by the parties with the expectation that the focus will be on mediation, with arbitration reserved as a last resort.)

Other forms of hybrid include the "Special Master" in such major issues as the September 11 Victims' Compensation Fund or the "Black Farmers' Case" (involving tens of thousands of farmers who sued the U.S. Department of Agriculture over decades of racial discrimination in its lending policies). Both of these are highly responsible functions that include elements of a mediator, an arbitrator, and a magistrate.

Meanwhile, factfinding, summary jury trials, minitrials, and private judging have also been described as hybrid processes, although in these instances the term "hybrid" refers more to a process that exists between two more classical neutral roles than to one in which the neutral is asked to "wear two hats."

Although the latter three processes are more commonly used in more limited or "tractable" conflicts than they are in intractable conflicts, factfinding is used extensively in intractable conflicts (witness the 20022003 U.N. effort to confirm or deny Iraq's asserted stockpile of weapons of mass destruction), and there are occasions where other hybrid processes might be useful as well.

It can be concluded from the above analysis that the Alternative Dispute Resolution provides numerous fora to be undertaken to resolve a dispute. Parties to a dispute will be free to utilise any procedure that they find convenient for them and their settlement.

A comparative analysis of Dispute Resolution in the Oil and Gas Sector of other Countries.

Introduction.

This part will analyse the mode Nigeria have used to tackle disputes. It will compare how these different mechanisms have yielded a great understanding between the parties or shattered the same.

Nigeria.

The Niger Delta region of Nigeria, located in the southsouth zone of the country, is the region that produces oil – the lifeline of the Nigerian economy. Since 1956, when oil was discovered in commercial quantity in Oloibiri in present day Bayesa state, Hydrocarbon resources have been the engines for Nigeria's economy, as oil provides 95% of Nigeria's foreign exchange earnings and 80% of the government's budgetary revenues. [1121] According to the Nigerian National

[1121]Davis, James 2010. Getting it right: Searching for the elusive solution in the Niger Delta. Cornell International Affairs Review, 4 (1)

Petroleum Company, Nigeria's oil production accounts for 8% of the Organisation of Petroleum Exporting Corporation's (OPEC) total daily production and 3% of the world's volume.

However, the discovery of oil, which was expected to improve the lot of the communities where it is sourced, has become a curse rather than a blessing because of oil exploration activities and its attendant hazards, such as air and water pollution. This has led to the indigenous people demanding compensation as well as control of the oil wealth. This demand has led to a confrontation between activists and Multinational Oil Companies operating in the region as well as the Federal Government. The struggle which started as a peaceful protest metamorphosed into armed conflict after the killing of a renowned activist and playwright in the region, Ken SaraWiwa and eight other Ogoni men. The new wave of protests after this has included the abduction of foreign oil workers, bombing of oil installations and destruction of lives and property.

In 2009, the Federal Government interceded with an amnesty programme under former President Musa Yar'adua and his deputy, Goodluck Jonathan. The amnesty, which was proposed to last for five years, required that repentant militants surrendered their arms in return for unconditional national pardon.

This exercise witnessed a total of 26 808 militants surrendering their arms and ammunition and being granted amnesty, which involved coopting or integrating them into the society as well as training them.[1122] While amnesty lasted, there was some reprieve as militants sheathed their swords. However, there has been recourse to arms in the region in recent times as new militant groups emerged in 2016 with various demands.

While the new names that emerged this time differ from the past ones, there is no doubt that this was old wine in new bottles. The new militants are still insisting on resource control and bombing of oil installations, which are reimmersing the country in conflict once again. The Federal Government in its bid to check this has been returning fire for fire by constituting a military operation codenamed

[1122]Ajodo-Adebanjoko, Angela 2016. Assessing amnesty programme in the Niger Delta in the face of renewed militancy in the region. Nasarawa Journal of Political Science, 4 (1), pp. 150–168.

operation 'Crocodile Smiles', which the militants and many analysts feel is not the answer to the problem of conflict in the region.

Conflicts and insecurity in the Niger Delta the Niger Delta region of Nigeria comprises the nine states Abia, AkwaIbom, Bayelsa, Cross River, Delta, Edo, Imo, Ondo and Rivers. About 31 million people live in the region which is renowned as one of the World's ten most important wetland and coastal marine ecosystems.

The Niger Delta is rich with a diverse mosaic of ecological zones, five of which are the Mangrove Forest and Coastal Vegetation Zone, the Fresh Water Swamp Forest Zone, the Lowland Rain Forest Zone, the Derived Savannah Zone and the Montane Zone. The Niger Delta is also the location of massive oil deposits, which have been extracted for decades by the government of Nigeria and by Multinational Oil Companies (MNOCs).[1123]

Since 1970, the country has earned at least $300 billion from energy development and in 2005 it made $450 billion. With about 40 million barrels of proven oil reserves, it currently produces 2.4 million barrels of oil per day, which constitutes about 90% of the government's revenue and 95% of the country's foreign exchange earnings.[1124]

Nigeria is West Africa's biggest producer of petroleum and the sixth largest supplier of oil in the world, thanks to oil from the Niger Delta. Oil wealth has been instrumental to Nigeria's emergence as a leading player in world and regional politics. Specifically, Nigeria has been playing a leading and dynamic role in African politics as a member of several regional organisations, such as the Africa Union (AU) and the Economic Community of West African States (ECOWAS), and an active role in global politics under the United Nations. With the oil boom in the early 1970s, Nigeria began to assert her influence around the globe and to date whatever influence Nigeria has, is credited to the discovery and exploration of oil.

[1123]Ajodo-Adebanjoko, Angela and TakimOjua 2013. An assessment of Niger-Delta crisis on Nigeria's external relations - From 1992–2008. International Journal of Humanities and Social Science, 3 (8), pp. 179–192.

[1124]Ajodo, Angela 2012. Niger Delta crisis and Nigeria's external relations from 1992–1998: An assessment. Ph.D. thesis, University of Abuja.

However, the region which bears this economically important oil has been enmeshed in conflicts for more than four decades – owing to the negative impact of oil exploration. The region is a tale of poverty, squalor and gross underdevelopment in the midst of plenty, due to environmental degradation which has affected the people's agricultural means of livelihood.

The effect of oil spills and gas flares has been death to aquatic lives and waste to farm lands. It is on record that more gas is flared in Nigeria than anywhere else in the World.[1125] It is on record that the oil industry in the Niger Delta is one of the worst cases in the world of gas flaring. Nigeria is the second largest offending country, after Russia, in terms of the total volume of gas flared and the resulting emission of about 70 million tons of CO2 a year, higher than the emissions in Norway.[1126]

In the case of oil spills, Nigeria has the highest number of oil spills in the world; between 9 million and 13 million barrels of oil have been spilled in the Niger Delta (although the Department of Petroleum Resources (DPR) puts the amount of petroleum spilled in the area between 1976 and 1996 at 1.8 million out of a total of 2.4 million).[1127] A UNDP report states that more than 6 800 spills were recorded in the area between 1976 and 2001 while the Nigeria National Petroleum Company (NNPC) places the quantity of petroleum spilled into the environment yearly at 2 300 cubic metres, with an average 300 industrial spills annually. The World Bank however believes that the amount of oil spills could be ten times higher than the officially released figures. Erosion, canalisation, intra and intercommunal conflicts between host communities are also some effects of oil explorations in the region. This has led to protests by the indigenous people, leading in turn to full blown conflicts.

Conflicts in the Niger Delta have been occurring as far back as the precolonial period and the early 1960s when there were protests against the marginalisation of the region. In the early 1990s, there were also nonviolent protests in Ogoniland to

[1125]Nore, P.C. and T. Turner 1980. Oil and class struggle. London, Zed Books.
[1126]Worgu, S. Owabukeruyele 2000. Hydrocarbon exploitation, environmental degradation. Paper presented January 2000 at Lund University, Sweden.
[1127] Supra note 25

protest against the degradation of the environment by Oil companies. After these series of uprisings, a new wave of protests characterised by militancy began in 2003. Violence during this period grew out of the political campaigns in 2003.

As they competed for office, politicians in Rivers State manipulated the Niger Delta Vigilantes (NDV), led by Ateke Tom, and the Niger Delta People's Volunteer Force (NDPVF), led by Alhaji Asari Dokubo, and used these groups to advance their aspirations, often rewarding gang members for acts of political violence and intimidation against their opponents.[1128] This eventually witnessed the emergence of other militant groups, such as the Movement for the Emancipation of the Niger Delta (MEND), and the Niger Delta Liberation Front (NDLF) which unleashed mayhem on the region. This introduced militancy into the region which was characterised by armed attacks, bombing of oil installations and hostage taking, particularly of foreign oil workers – thereby ushering in a Hobbesian Niger Delta.[1129] For several years, the region was characterised by insecurity; and at the height of the crisis, the situation was dreaded by Nigerian citizens and foreigners alike. As a result, many people fled their communities and many foreign businesses were relocated to their home countries.

Amnesty represented an opportunity to stabilise the region for constructive conflict resolution negotiations. It was not the first time that an amnesty initiative had been put forward to resolve the violence in the region, but this time it was an offer backed with solid proposals for the necessary disarmament, demobilisation and reintegration of the region's militants (Davis 2010). Despite this, however, the programme was not able to address regional violence, largely due to the lack of attention to the peculiar type of conflict in the Delta and the issues that gave rise to it. Thus, in order to fully appreciate the task of conflict resolution there, it is

[1128]Bekoe, Dorina 2005. Strategies for peace in the Niger Delta. Peace Brief, United States Institute of Peace.

[1129]Ibeanu, Okechukwu 2006. Civil society and conflict management in the Niger Delta: Scoping gaps for policy and advocacy. CLEEN Foundation Monograph Series No.2. Lagos, CLEEN Foundation.

important to look at past attempts at conflict resolution in order to consider ideas for the future.[1130]

Scholars are unanimous in their views that the end of the Cold War and economic globalisation in the 1990s have had a significant impact on warfare globally and that the search for appropriate theories to explain this has contributed to the growing debate on the importance of natural resources as drivers of violent conflicts[1131].

Theoretical Concept of the Conflict

Empirical studies have also shown that natural resources underlie territorial struggles which have been the most prevalent form of conflict all through history.[1132] Extant literature on conflicts, particularly in Africa, suggests that an overwhelming percentage of these conflicts are resourcebased.[1133]

According to a recent United Nations report in Sylvester (2012), in the last sixty years at least 40% of civil wars on the African continent have been connected with natural resources. Even in the natural sciences, there is a consensus that competition over scarce natural resources is one of the key drivers of violent conflict within and across species.[1134]

Similarly, studies by the World Bank (2003) and others have shown that countries whose wealth is largely dependent on the exportation of primary commodities (Nigeria, Sudan, Chechnya, Liberia, Indonesia and Angola for instance) are highly

[1130] Supra note 22

[1131] Kaldor, Mary 1999. New and old wars: Organized violence in a global era. Cambridge, Polity Press; Duffield, M. 2001. Global governance and the new wars: The merging of development and security. London, Zed Books; see also; De Soysa, Indra 2002. Paradise is a bazaar? Greed, creed, and governance in civil war, 1989–99. Journal of Peace Research, 39 (4), pp. 395–416.

[1132] Alao, Abiodun 2007. Natural resources and conflict in Africa: The tragedy of endowment. Rochester, NY, University of Rochester Press

[1133] Blench, Roger 2004. National resources conflict in North-Central Nigeria: A handbook and case studies. Cambridge, Mallam Dendo Ltd; see also, De Soysa, supra note 31

[1134] Bhattacharyya, Sambit 2015. Natural resources and conflict in Africa: Isolating facts from fiction.

prone to civil violence, and that those with oil and natural gas are the most conflict prone.[1135]

Nigeria is the 12th largest producer of petroleum and its 8th largest exporter worldwide. Resourcerelated conflict in Nigeria revolves around oil with about 95% of violent conflict in Nigeria since 1997 being resourcerelated.[1136] Studies also found that the fight for resource control strengthens the segmentation around already existing ethnic or linguistic cleavages thereby escalating conflict.[1137] Against this background, this work adopts a combination of ecoviolence and psychological primordial theories.

Ecoviolence, also known as environmental conflict, theory was developed by HomerDixon (1999:30) in his attempt to explain the causal relationship between natural resource endowment and the outbreak of violent conflict. According to him, *Decrease in the quality and quantity of renewable resources act singly or in various combinations to increase the scarcity, for certain population groups, of vegetation, farmland, water, forests etc. This scarcity of ecological resources can reduce economic productivity, both for the local groups experiencing the scarcity and for the larger regional and national economies. Consequently, the affected people may migrate or be expelled to new lands … while decreases in wealth can cause deprivation conflicts.*[1138]

The central argument of the theory is that declining availability of renewable natural resources, which results in competition over scarce resources engender violent conflict.[1139] This view was expressed by Kofi Annan[1140] when he stated

[1135]Bannon, Ian and Paul Collier 2003. Natural resources and violent conflict options and actions. Washington, D.C., World Bank.

[1136]Kishi, Roudabeh 2014. Resource-related conflict in Africa.

[1137]Gleditsch, Nils P. and Henrik Urdal 2002. Ecoviolence? Links between population growth, environmental scarcity and violent conflict. Journal of International Affairs, 56 (1), pp. 283–302, see also; Gurr, Ted R. and Barbara Harff 1994. Ethnic conflict in world politics. Boulder, CO, Westview.

[1138]Homer-Dixon, Thomas F. 1999. Environment, scarcity, and violence. Princeton, Princeton University Press.

[1139]Ajaero, C.K., A.T. Mozie, I.C. Okeke, J.P. Okpanachi and C. Onyishi 2015. The drought-migration nexus: Implications for socio-ecological conflicts in Nigeria. Mediterranean Journal of Social Sciences, 6 (2), S1, pp. 470–478.

that 'environmental degradation in forms such as desertification, resource depletion and demographic pressure exacerbates tensions and instability …'. Michael[1141] also noted that:

Competition over the control of valuable oil supplies and pipeline routes has emerged as a particularly acute source of conflict in the 21st century. With the demand for oil growing and many older sources of supply (such as those in the United States, Mexico, and China) in decline, the pressure on remaining supplies, notably those in the Persian Gulf area, the Caspian Sea basin, South America, and Africa, is growing ever more intense.

This is seen from competition in Africa over the revenue generated from scarce natural resources which has led to violent conflict in Angola, the Democratic Republic of the Congo, Rwanda, Sudan and Nigeria.[1142] The foregoing aptly describes the situation in the Niger Delta where oil exploration activities leading to environmental degradation such as shortage of farmlands, death of aquatic life, air and water pollution, oil poisoning causing respiratory ailments and destruction of mangrove forests, often without adequate compensation, have resulted in conflict. This was why the late environmentalist, Ken SaroWiwa, lamented that the people of the region faced extinction in what he described as an ecological war.[1143]

Psychological/primordial theorists, on the other hand, are of the view that humans have a deeprooted psychological need to dichotomise and to establish enemies and allies, which leads to the formation of ethnic and national group identities and behaviours. How a group perceives itself and its relationship with those outside the group determines whether their relationship will be based on cooperation, competition or conflict.[1144]

[1140]Annan, Kofi 2006. Progress report of the secretary general on the prevention of armed conflict. Agenda item 12, 16th Session of the General Assembly, A/60/891

[1141]Klare, Michael T. 2001. Resource wars: The new landscape of global conflict. New York, Henry Holt and Company.

[1142] Supra note 34

[1143]Na'Allah, N. 1998. Ogoni's agonies: Ken Saro Wiwa and the crisis in Nigeria. Trenton, NJ, African World Press.

[1144]https://reliefweb.int/report/nigeria/towards-ending-conflict-and-insecurity-niger-delta-region

Usually those within the group are regarded as better than those outside, and this leads to ‘meyou’, ‘wethey’ ‘insidersoutsiders’ and ‘minoritymajority’ sentiments. In the Niger Delta, conflicts are generated by grievances about natural resources (which border on demands for ownership of the resource concerned), the distribution of resource revenues and about environmental and social damage caused by extracting the resource.[1145]

In Nigeria, the Federal Government is the one responsible for resource allocation and control, but conflict has arisen over the most appropriate revenue sharing formula with the Niger Delta people who demand that a special proportion be given to them due to their oil richness – just as it was done for the north when agricultural produce was the mainstay of the economy.[1146] This demand has however been refused by Nigerians in the rest of the country and by some of the leaders.

The result was the abovementioned primordial sentiments of group versus group, which led to the creation of ethnonationalismidentities.[1147] We see this in the confrontation between foreign oil companies and local communities in the Niger Delta and between the Niger Delta people who view themselves as minorities being marginalised and oppressed and the ‘majorities’ in the other parts of the country that do not produce oil but reap the benefits of revenue allocation. Consequently, there have been violent agitations in the form of militancy and a call for secession by the Niger Delta buttressing the argument of Bannon and Collier[1148] that violent secessionist movements are statistically much more likely if a country has valuable natural resources, especially oil.

Efforts by the Nigerian government to address conflicts in the Niger Delta Various efforts, beginning even before independence, have been made by the Federal

[1145] Ibid

[1146]heriff, Ghali Ibrahim, Sadeeque Abba and Farouq Bibi 2014. Resource based conflicts and political instability in Africa: Major trends, challenges and prospects. International Journal of Humanities, Social Sciences and Education, 1 (9), pp. 71–78.

[1147]Kasomo, D. 2012. An assessment of ethnic conflict and its challenges today. African Journal of Political Science and International Relations, 6 (1), pp. 1–7.

[1148]Bannon, Ian and Paul Collier 2003. Natural resources and violent conflict options and actions. Washington, D.C., World Bank.

Government to end the conflicts in the region. In 1957, the government established the Willink Commission to look into the problems of the minorities, and this Commission acknowledged the utter neglect of the region and, among other proposals, recommended the creation of the Niger Delta Development Board (NDDB). This Board could not achieve its aims for many reasons, one of which was the fact that its headquarters were located in Lagos, far from the problem area. With the creation of twelve states in 1967 and the establishment of the Niger Delta River Basin Authority (NDRBA), the NNDB became obsolete. In the second republic, a 1.5% Federation Account for the development of the Niger Delta region was set up for the oil producing areas, but because of the constraint of operating from its secretariat in Lagos it was not able to achieve its purpose.[1149]

In spite of recurrent failures, and in order to show its commitment to ending the crisis and ensuring the development of the area, the Federal Government established some other Commissions such as the Oil Mineral Producing Areas Development Commission (OMPADEC) which was in operation from 1992 to 1999. OMPADEC was set up by the Ibrahim Babangida Administration under the chairmanship of Chief Albert Horsefall.

Like its predecessors, it failed to achieve its mandate owing to official profligacy, corruption, excessive political interference and lack of transparency. After this, the Niger Delta Environmental Survey was set up in 1995, followed by the Niger Delta Development Commission, established in 2000 by President Olusegun Obasanjo with a vision 'to offer a lasting solution to socioeconomic difficulties of the Niger Delta Region' and a mission 'to facilitate the rapid, even and sustainable development of the Niger Delta into a region that is economically prosperous, socially stable, ecologically regenerative and politically peaceful'.[1150]

The government also put in place other mechanisms such as the Task Force on Pipeline Vandalizationin April 2000 operated by the Nigeria Police Force in collaboration with the NNPC (Niger Delta Development Commission 2001).

[1149] Supra note 44

[1150]Niger Delta Development Commission (NDDC) 2000. Niger Delta Regional Development Master plan. Port Harcourt, NDDC.

Similar task forces were also set up by the navy, army and State Security Service (SSS) in various states of the Niger Delta.

In Delta state, the government passed a law in August 2001 banning militant groups blamed for the disruption of oil activities in the state. The Special Security Committee on Oil Producing Areas was also set up by the Federal Government in November 2001 to address the prevailing situation in the oil producing areas. Other efforts include the convening of the first Niger Delta peace conference in Abuja in 2007, a Joint Task Force (JTF) in 2008, and a Technical Committee made up of stakeholders and the Niger Delta ministry in 2008.

Amnesty and postamnesty era Following criticisms of the military option, especially when it became obvious that the use of force by the JTF was aggravating rather than resolving the conflict, an amnesty programme was set up by the Federal Government on 25 May 2009 under the leadership of a former president, Umar Musa Yar'Adua. Amnesty was the Federal Government's effort towards bringing enduring peace, security, stability and development to the region.

CONCLUSION.

Nigeria was one of the earliest countries in Africa to discover the resource of Oil. Since this discovery, Nigeria has struggled with conflict and this has been majorly between the International Oil Companies or the State with the Communities where the resource was discovered. Failure to resolve the disparities led the disputes to escalate into armed conflicts and the effects exist to date.

Therefore, Alternative Dispute Resolution provides an opportunity to nip these disputes in their buds. The failure to effectively curb them has proven catastrophic for Nigeria, and the same could befall Uganda if no lessons are picked.

CHAPTER

EIGHTEEN

THE ROLE OF COURTS IN THE OIL AND GAS SECTOR.

Because of the special nature of the energy sector, disputes between states and corporations and national governments are likely to arise. Disputes in the oil and gas sector can range from the maritime boundary disputes between states to oil and gas trading contracts and off shore construction and pipeline disputes.

Some of the areas of dispute which may arise include international maritime, boundary dispute, disputes involving equipment, jurisdiction disputes, oil trading contracts, disputes concerning expert determination ,quantity and quality disputes, insurance , exception clauses, piracy and hedging. Resolution of these disputes may be by the courts of law or Alternative Dispute resolution.

The word court originally meant simply an enclosed place, chamber, hall, building or other place where proceedings are held.

Courts are established under article **126(1) of the 1995 constitution** of Uganda. This article provides that judicial power is derived from the people and shall be exercised according to the norms and aspirations.

The structure of the court system is envisaged in article 129 of the constitution and the hierarchy is as follows.

a, Supreme court as the final appellant court.

b, The court of appeal as the second appellant court.

c, High court with original jurisdiction to try all cases regardless of whether they are of civil or criminal nature.

d, such other courts as parliament may by the law prescribe.

The liberal interpretation of this article is that it recognizes the three courts of judicature established by the constitution and other courts or tribunals to deal with particular issues. Forexample, the tax disputes are handled by the tax appeals tribunal, the labour disputes are handled by the industrial court.

Unfortunately the parliament, has not yet prescribed a special tribunal or court to deal with conflicts and disputes in the oil and gas sector. Consequently the disputes that arise in the oil and gas sector are always handled by the Anti corruption court, the Inspectorate General of Government and the office of the Directorate of government.

Even the courts have been reluctant to enforce provisions that would compel government to divulge information on agreements made in the oil sector. In the **Charles Mwanguya Mpagi And Angelo Izama V Attorney General; Miscellaneous Case 751 Of 2007** in which court held that whatever government holds in trust for its people (in this case oil) it must not always disclose since keeping of certain documents secret is necessary for the proper functioning of the public service. The government was not liable for failure to disclose the contents of confidential contracts between the government and various companies.

If courts become embroiled in ordinary political disputes and are seen as just another political actor trying to advance its ideology, interests and preferences, then the legitimacy of the judiciary is gravely damaged.

The anti corruption court.

The Anti Corruption Act 2009 was established to prevent corruption by crimininalizing bribery, and influence of peddling and giving special investigative powers to the head of the inspectorate of government and director of public prosecution. Corruption permeates all parts of Ugandan society and acts as a major constraint in economic development and poverty reduction.

The office of the Inspector General of Government.

The office of the Inspector General of Government was initially established by the IGG statute in 1988. However, with the promulgation of the 1995 constitution, the IGG is now entrenched therein under chapter 13 of the constitution which prescribes its mandate, functions and powers.

The Inspectorate of Government is an independent institution charged with responsibility of eliminating corruption, abuse of authority and public office.

The powers enshrined in the IGG Act and the constitution include investigating, causing arrest, and making orders and give directions during investigation, arrest and search.

Director of Public Prosecution.

The office of the Director of Public Prosecutions is established under **article 120 of the constitution**. The functions of this department are established under **article 120(3) of the constitution** and they include, directing the police to investigate any information of criminal nature and instituting criminal proceedings against any person or authority in any court except the court martial.

Auditor General.

The office of the Auditor General is an institution established under **article 163 of the constitution** as the supreme Audit Institution of Uganda. By carrying out annual audits , the auditor General assists parliament to hold account and to call persons entrusted with management of public funds and resources. According to section 62(2) of the Public Finance Management Act, the withdrawal of money from the Petroleum fund to the petroleum Revenue authority shall be by warrant of the Auditor General.Section 73 of the Public Finance Management Act, 2013 gives power to the auditor General to examine and audit the semi –annual and annual financial statements of Petroleum Revenue Investment reserve and submit an annual report to parliament.

Importance of having formal specialized courts to deal with oil and gas.

The use of specialized courts means that the personnel is well trained, well staffed to do the work itself instead of the anti corruption court or these government departments which are under stuffed, overstretched and lacks the trained man power to monitor and enforce environmental and social impact regulations contained inj the mandate.

Courts create new laws and interpret and define legal provisions. Courts are given power to create new laws called precedents. A precedent is a court made order. It is binding on the court itself and the lower courts. The specialized courts with trained personnel would recognize environmental and law and oil principles such as public interest litigation.

The courts give the rightful penalties in case of infringement. The penalties include damages, injunction, restoration orders among others. An injunction is a mandatory order prohibiting or mandating a specific action. In assessment of damages, the court takes into account the value of the subject matter, the economic inconvenience that the plaintiff may have been put through and the nature and extent of injury suffered. Forexample, a developer who damages the environment by simple air pollution may not be measured the same as another who deliberately cuts a swamp.

In light of the above, formal courts specializing basically in oil and gas law allows the public to move from mere lamentations to strategic, decisive and enforceable action will enable the deprived sections of society to realize their rights.

If such gaps are left unaddressed, there is real danger that environmental risks associated with oil and gas will not be effectively handled.

Prospective challenges that the courts will encounter when dealing with oil related disputes.

Lack of uniform law. It is urgent to note that the oil companies are international. They have subsidiary companies in many countries. This means that in case of a disagreement that needs court's intervention, it will become difficult to determine which law is applicable to lead to the resolution of the dispute.

Lack of independence from the executive and the legislature. It is important to note that oil is valuable mineral that can boost people economically. In reality, everyone regardless of their economic status, would want to obtain income from the oil. And yet in a country with high levels of corruption and low levels of transparency, it means the oil will majorly benefit those in the executive and legislative arm of the government. This independence of the judiciary will be undermined though interference with by these arms of government.

Cross jurisdictional challenges. As aforementioned, the international oil companies have different subsidiary companies . Its very unfortunate that none of them has the headquarters in Uganda. This means that when it comes to dispute resolution courts will find difficulty and exposes in determining which courts have the jurisdiction, what law is applicable to the matter at hand.

Lack of expertise knowledge. Oil and gas law is a relatively new development in Uganda's Jurisprudence. There are few legal practitioners having expertise knowledge in this field. This means that justice might not take place due to the lack of expertise knowledge and thus setting bad precedents in our jurisprudence.

Poor budgetary allocation to the courts. Uganda is a developing country usually with a deficit budget and high levels of corruption. Insufficient funds are allocated to the judiciary and yet International Oil Companies are very rich. The amount of money allocated to the courts for a full financial year does not arrive on time,

Corruption. Multi national oil companies being very rich companies . In case of any legal proceeding taken against them, they might bribe the government to withdraw the case or even bribe the judges.

Lack of information. (difficulty in obtaining envidence). The government has failed to reveal information about oil and gas under the disguise of keeping it for state interest. They do their contracts with the greatest privacy to the extent that sometimes they even go abroad. Even the information posted online has been restricted on their web sites and so making it unavailable. Restricting information conceals important evidence that could have been adduced befgore the courts of law.

In analysizing the role of courts its important to look at the various case laws even if some of the cases were not adjudicated from Uganda.

Tullow Oil Plc and another V Uganda Revenue Authority TAT Application number 4 of 2011..

The applicant Tullow Uganda limited registered under the laws of the Isle of Man and was formerly Energy Africa Uganda Limited . On 8th October 2001, both the applicants and Government of Uganda executed a production Sharing Agreement under which they were granted exploration , development and production rights in Exploration Area. Other production sharing agreements were entered into such as one between Energy Africa, Heritage and by Mr. Rhimwaan on behalf of energy. Heritage and Energy Africa agreed to continue with the joint operating agreement between heritage and Energy . However, later the parent company of both applicants acquired the Energy Africa Group which had a subsidiary which later become Tullow. Tullow later acquired the Hardman Group and property and later become TUOP. Tullow Oil Plc acquired the relevant subsidiaries' rights and interests in the production sharing agreements.

The issues where whether article 245 of the PSA for the area covers capital gains / incomer tax arising from gains deprived out of disposal in interests in the SPA.? The other issue was whether article 24.5 is valid under international law?

The court ruled in favour of Tullow.

Green watch and Advocates coalition for development and Environment (ACODE) V Golf Course Holdings Limited. (HCMisc. Application 390 of 2001.

The applicant NGO concerned with environmental protection sought a temporary injuction to restrain the respondent from constructing a hotel on a waterland. Akiiki Kiiza J , although he declined to order an injuction, recognized the fact that interest of the applicant was of a public nature (Public Interest Litigation) and that section 71 of the NEA gave them a right to sue.

Channel Tunnel Group v Bolfour Beaty Construction limited.

The matter dealt with a contract to build a tunnel under the English Channel linking England and France. Under the contract, the parties had agreed that in case

of dispute, the matter would be resolved by arbitration to the International Chamber of Commerce in Belgium by a panel of 3 experts. Subsequently, a dispute arose over payment.

The panel made a ruling in favour of the contractors and the owners appealed by arbitration. The arbitrators stayed the panel's order pending the final decision by way of appeal. During that period, the owners applied in England for an injuction to prevent contractors from working. The contractors applied for stay of execution.

On appeal to the house of Lords, it was held that even if the parties had agreed to settle the disputes by arbitration, they stated that they had an inherent power to stay proceedings where the parties had agreed on another method of dispute resolution.

Fiona Trust and Holdings Corporation V Privalov (2007) UKHL 40 OR 2007 ALLER 951.

O, the owners of the Russian ships which were never chartered to C, O claimed to have rescinded the charter parties including the arbitration clauses within them on the grounds they had been induced by bribery.

C sought to refer the matter to arbitration and appointed an arbitrator. O applied to court to court seeking to restrain the arbitration on the basis that the charter parties including the arbitration clause) had been rescinded for bribery. In response C applied to stay the court proceedings in favor of arbitration .

The court of appeal ordered the stay. It held that the scope of the arbitration clause was wide enough to encompass a fraud claim. This was upheld by the house of Lords

CHAPTER

NINETEEN

DECOMMISSIONING OF UPSTREAM OIL AND GAS FACILITIES.

Introduction.

The decommissioning of disused offshore oil and gas structures has posed a plethora of legal, regulatory and technical challenges for international law, states and the oil and gas industry. This chapter discusses the progressive development of international law on the subject; how the international oil and gas industry as well as international law have struggled to find the right balance in formulating rules and standards for disposal of disused structures; the seminal effect of the Brent Spar episode on the development of international law and policy; and current law and practices across regions and selected jurisdictions. The chapter identifies evolving legal, policy and removal trends and innovations, and discusses regional law and policy developments in the Gulf of Mexico and North Sea (North East Atlantic), which are suggested as pivotal to general international law. The chapter concludes with aspects of the decommissioning challenge that can now be considered as resolved and those aspects that remain unfinished and with discussion of some particularly challenging issues and jurisdictions.

Abandonment or decommissioning.

Decommissioning' describes the set of activities to be undertaken to manage and dispose of installations and platforms and eliminate environmental footprint once a

producing field is nearing, or reaches, the end of its economic life. In this chapter, the discussion is focused on the decommissioning of those oil and gas installations typically placed on the continental shelf, as these are the subjects of international law. It is estimated that there are more than 6,500 such offshore installations in place around the world.[3]

Decommissioning may involve leaving in place, dismantling, removing or sinking disused facilities. Other technical activities forming part of decommissioning include plugging and abandonment of wells, pipelines, risers and related facilities. The option to be selected will take into consideration the impact on the environment, the safety of personnel and other users of the sea, the reputational impact of any decision and the most costeffective solution.

Terminologies associated with decommissioning are very interesting and have evolved alongside international law on the subject. 'Abandonment', 'removal' and 'disposal' are terms commonly used to describe the process of managing and/or disposing of disused installations. However, the most appropriate term is 'decommissioning', and this is the term which is increasingly gaining currency within the oil and gas industry, as well as among international law commentators. This trend contrasts with the previous tendency to use the term 'abandonment'. It was initially suggested that offshore oil and gas installations should be likened to shipwrecks. It was argued that on disuse, offshore oil and gas installations could be abandoned by the operator, similar to the right of a ship owner to abandon a shipwreck, without any further legal liability or responsibility for the same.[1151] It is, however, now commonly accepted as a general principle of international law as well as a requirement of international treaties that the relevant coastal state is

[1151] See Bruce M Kramer and Gary B Conine, *Joint Development and Operations in International Petroleum Transactions*, Second Edition, Rocky Mt Min L Fdn, 2000, p 651: *"The difficulty with the term 'abandonment' is that it is wrongly believed that the liability of the owner or the operator of the installation continues forever. It should be noted here that the rules on abandonment of a wreck are quite different. Under §531 of the Merchant Shipping Act 1894, as amended, a shipowner is under a duty to remove a wreck if it constitutes an obstruction or hazard to navigation and is liable for any damages suffered by a passing ship if such damage is caused by the lack of marking. (Once the harbour authority or the P&I Club has accepted notice of abandonment, however, the owner normally is relieved of further liability.)"*

responsible for ensuring that disused installations are removed from the continental shelf, or otherwise handled in accordance with the rules of international law.

Decommissioning outlook and activities.

Decommissioning activities form part of the licence to operate. Although decommissioning occurs at the tail end of the upstream oil and gas industry activity cycle, it entails a number of challenges. These include giving consideration to the potential effect on the environment, concerns regarding sustainable development, the level of preparatory work involved, the complexity of the removal activity, high costs and the challenges of a rather complex regulatory structure. It is now obvious to the oil and gas industry, as well as to international law commentators, that the challenges of offshore decommissioning are quite considerable and not to be underestimated – see the diagram on the next page for the scale of the structures involved. Careful planning and preparation (including anticipatory plans during the development phase of an offshore field) are now good practice and a timely plan, properly conceived, is essential to the success of a decommissioning projeDecommissioning activities are now expected to increase across the global oil and[1152] gas industry, with peak decommissioning activity levels likely to be concentrated in the two main regions of the United States' **Gulf of Mexico and the North Sea**, at least for the foreseeable future. In the United States' Gulf of Mexico, at least 210 installations have been removed to date. However, it is thought that as many as 1,000 other fixed installations have ceased production but are yet to be decommissioned. To address the backlog, the **US Minerals Management Service (MMS) directed that by the end of 2006** all inactive offshore platforms should be reactivated or put to some other agreed use, or removed entirely.[1153] It remains to be seen, how much progress has been made towards meeting the end2006 target set by the Mineral Management Service.

[1152] In the UK continental shelf, it is recommended that planning begin not less than three years before cessation of production.

[1153] Scottish Enterprise, *Gulf of Mexico 2005 Oil and Gas Report*, pp 4 and 38.

Across the North Sea, some 40 fields have been abandoned[1154] to date with a further 66 in the process of, or awaiting, abandonment. Of the 40 fields abandoned, 23 are in the United Kingdom, 11 in Norway and six in the Netherlands.[1155] The trend definitely shows an increasing rate of decommissioning and a decreasing rate of new fields or installations. In the United Kingdom, it is expected that some 280 installations (out of some 470 installations altogether) will be decommissioned during the peak removal years from 2012 to 2024 (see graph on next page).

The impending increase in the level of decommissioning activities, particularly in the **Gulf of Mexico and the North Sea**, is a clear indication that the subject will become even more pressing for the international oil and gas industry, interested nongovernmental organisations and other stakeholders as well as international law commentators.

The International Marine Contractors Association estimates that global expenditure on decommissioning will exceed US$75 billion.[1156] It is therefore clear that the costs to be expended by the oil industry (in many cases to be contributed to by host governments either directly or indirectly through fiscal means) are sizeable. One question therefore is how the various parties who are to bear the costs of decommissioning can arrange to do so in a thorough manner. The issue of how to ensure that there are companies or corporate entities available and able to meet the cost of eventual decommissioning, at the end of a field's life, remains problematic in many jurisdictions. This is clearly unfinished business.

Liabilities and relevant topical issues concerning decommissioning.

Perhaps among the biggest legal challenges relating to decommissioning activities are the issues of liability and responsibility for undertaking decommissioning and removal. The relevant issues and questions include:

[1154] Considering that fields described here also include fields permanently shut-in but not necessarily decommissioned yet, the choice of the term 'abandonment' seems appropriate.

[1155] Wood Mackenzie, "Decommissioning in the North Sea", in *Upstream Insights*, November 2006.

[1156] International Marine Contractors Association's Press Release 09/06: http://www.imcaint.com/core/imca/news/press/0609.html.

- Who is to undertake decommissioning activities?
- Who is to bear the costs of the decommissioning?
- Do past licence holders retain liability after divestment?
- What about perpetual liability? Do the operator and/or nonoperator partners retain liability beyond the end of the decommissioning activities? For example, who will be responsible for any deterioration of installations and pipelines if they are left in place?
- In a joint venture environment, do all companies' present financial capabilities?
- What are the consequences if they are jointly and severally liable?
- Is it possible to provide accurate cost estimates for future decommissioning?

Cost recovery, accounting and tax.

Accounting for decommissioning costs will vary according to the legislation of each country. The tax treatment of the cost of decommissioning is key to the recoverability of such costs, and such recoverability is not always certain. Points helpful to determining the most appropriate way of accounting for such costs are whether there are statutory or contractual obligations in place; whether there are requirements to contribute to abandonment funds; whether such funds are properly secured for future use; and whether they will suffice.

On the tax side, it is desirable that the decommissioning funds set aside for future obligations can be accounted for as expenses. Not all tax regimes allow this, considering that costs have not yet been incurred.

Decommissioning funds and other forms of security.

Decommissioning costs are extremely high and will be incurred when the field is no longer producing at its highest level (if at all). Hence, securing funds early for eventual decommissioning activities, and preferably well ahead of time, is a good preparatory measure. However, in view of questions relating to what type of security is required or accepted, and for what period of time, along with the tax

treatment and the costs of such security, the otherwise sound preventive measure of providing early security has proved to be problematic in many jurisdictions.

Ordinarily speaking, the best security is a decommissioning fund, by which certain sums are contributed from time to time during the economic life of the field, in order to build up a cash fund. Such a fund will then be utilised to finance removal or decommissioning activities in the future, when production ceases.

There are various forms of security, including abandonment funds, trust funds, letters of credit, performance bonds and parent company guarantees.

The establishment of a form of security will be a significant issue for licensees and coventurers, with respect to their obligations to one another. This issue will also be of interest to transferors in the event of a transfer or assignment of participating interests, when past licence holders hold residual liabilities; and governments will also wish to secure the compliance of licensees with regard to their decommissioning obligations.

Process planning.

As discussed above, due to the complexity of decommissioning, planning is essential if success is to be assured and more easily attained, and difficulties reduced or eliminated. Matters relating to decommissioning should be addressed at the early stages of field development and not left until mid or late field life. The field development plan should address decommissioning, provision of financial security, indicative plans made for addressing liabilities, estimated costs, funding and execution of decommissioning activities.

The mapping of the regulatory framework is an important element of the plan, perhaps as important as the analysis and mapping of the stakeholders to be engaged in the process. A stakeholder engagement plan should be in place and address the required approvals and permits and wider society’s concerns and expectations. The plan should also list the facilities to be decommissioned. This is not an easy task, considering the numerous materials and components, and the complexity of their integration.

The decommissioning process itself should begin with the setting up of a dedicated decommissioning team. The decommissioning team should as a minimum include (on a full or parttime basis) personnel from both technical and support disciplines, such as finance, operations and maintenance, economics, logistics, well engineering, contracts, external affairs, tax, and legal.

The destination of hazardous materials (oil waste, asbestos, chromium and so on) must be properly addressed. Similarly, transportation and destination are sensitive matters to be considered, especially where it is planned to move waste across international borders. Equally important is the establishment of safe procedures for the workers or contractors who will deal with hazardous materials and those who will undertake the decommissioning activities in the field. Therefore, a health and safety programme should be put in place, following a risk assessment.

It is also important to engage with contractors at an early stage, to check their availability and the availability of vessels, materials, equipment and machinery necessary to undertake the decommissioning. Supply chain has an important role in the process and in activities such as subsea studies and site surveys, project management, facility decommissioning, well decommissioning and abandonment, disposal of structures, post survey and so on. The number of experienced and specialized contractors, who have the requisite technical capacity to undertake highly complex decommissioning operations, is small relative to the number of facilities to be decommissioned in the short to medium term.

The decommissioning plan will define the destination and possible usage of the items to be decommissioned. The possibilities include salvage, waste storage, recycling and reuse. Commercial possibilities will also be assessed, including carbon capture and storage, gas storage and pipeline reuse. A diagram of the major steps in such a plan is shown overleaf.

Other issues.

Other factors to be considered when planning for decommissioning include health and environment, safety of navigation, age of installation, cost–benefit societal pressures, and public and stakeholder perceptions.

It is in the best interest of all stakeholders (oil companies, governments and governmental agencies, regulators, local communities and nongovernmental organizations) that a clear and reasonable set of decommissioning obligations is established. At a minimum, they should include a definition of liabilities, details of either the funding mechanism or adequate provision (funds or provision to be cost recoverable, tax deductible and appropriate and sufficient), plans for sustainable development, impact on the environment and standards generally accepted in the international oil and gas industry to drive the decommissioning plans to be agreed and implemented.

Progress of international law on decommissioning.

International law obligations and regulations relating to the disposal of disused offshore oil and gas installations progressed from the initial absoluteremoval regime of **Article 5(5) of the Geneva Convention on the Continental Shelf 1958**, to the permissive provisions of Article 60(3) of the United Nations Law of the Sea Convention 1982 (UNCLOS). Article 5(5) was the first opportunity for international law to provide for the handling of disused offshore oil and gas structures. It provided simply that: “Due notice must be given of the construction of any such installations, and permanent means for giving warning of their presence must be maintained. Any installations which are abandoned or disused must be entirely removed.”

Although it would appear that the provisions of Article 5(5) were plain and unambiguous, a lively debate ensued as to the interpretation of the article. One school of thought contended that complete removal of disused offshore oil and gas installations was required, whilst another body of opinion argued that Article 5(5) permitted partial or lessthancomplete removal (and in appropriate cases, even leaving in place disused installations). The vigorous debate formed the background to the negotiations on the subject of offshore decommissioning in the conferences and discussions that led to the finalisation and adoption of the **United Nations**

Law of the Sea Convention (UNCLOS) in 1982. Article 60(3) of UNCLOS provides *inter alia* that:

"Any installations or structures which are abandoned or disused shall be removed to ensure safety of navigation, taking into account any generally accepted international standards established in this regard by the competent international organization. Such removal shall also have due regard to fishing, the protection of the marine environment and the rights and duties of other States. Appropriate publicity shall be given to the depth, position and dimensions of any installations or structures not entirely removed."

UNCLOS had a number of significant implications for the evolution of international law on decommissioning of offshore oil and gas installations. First, its requirements are clearly less onerous than those of Article 5(5) of the 1958 Geneva Continental Shelf Convention. Secondly, it established, or admitted for the first time in unequivocal terms, the concept of partial or lessthancomplete removal of disused installations. In view of the analysis of law and practice in a number of jurisdictions considered in this chapter, and the identification of customary international law on the subject, it can now be concluded for the purposes of international law that the lessthancompleteremoval regime established by Article 60(3) of UNCLOS has now superseded the completeremoval regime set out in the 1958 Continental Shelf Convention. However, unlike the rather emphatic and conclusive provisions of Article 5(5) of the 1958 Convention, the provisions of Article 60(3) of UNCLOS are somewhat tentative to the extent that the setting of detailed rules or standards for offshore decommissioning was left to be established by an unspecified "competent international organization".

In 1989, and before UNCLOS came into force, the International Maritime Organization assumed the mantle of the unspecified "competent international organization" and consequently adopted the IMO Guidelines and Standards for the Removal of Offshore Installations and Structures on the Continental Shelf and in the Exclusive Economic Zone 1989.[1157] The IMO Guidelines and Standards, though not legally binding, effectively give to coastal states considerable

[1157] www.imo.org/home.asp.

discretion to determine in what manner any particular disused facility may be dealt with on decommissioning. The guidelines set out a general principle that all abandoned or disused offshore installations or structures on the continental shelf should be removed except where nonremoval or partial removal is consistent with the detailed standards.[1158] The decision as to whether to allow a disused structure to remain on the seabed should be taken by the relevant coastal state after assessment to be undertaken on a casebycase basis.[1159] One difficulty with the IMO Guidelines and Standards is that they are recommendatory in nature and not binding.[1160] This may have been one of the many factors that contributed to the Brent Spar episode.

The Brent spar episode.

The Brent Spar was a cylindrical buoy (offshore the United Kingdom) owned and utilised by Shell and Esso, as an offshore storage and loading facility. The spar ceased operating in 1991 and was made ready for disposal. After numerous detailed studies, deepsea disposal or dumping was thought the "best practicable option" and the UK government granted a permit for that purpose.[1161] The spar was being towed to its final disposal site when Greenpeace activists boarded it. Greenpeace claimed that deepsea disposal would damage the marine environment[1162] and could set a bad precedent for other disused installations in the North Sea. An international furore followed. On the one hand, the UK government contended that it and Shell were acting properly and consistently under international law. At the same time, Greenpeace's protest attracted support from many western European countries (including some European governments). There followed a boycott of Shell products and petrol stations and, in a few instances,

[1158] IMO Guidelines, clause 1.1.
[1159] IMO Guidelines, clause 3.4.
[1160] IMO Guidelines, preamble 2.
[1161] Shell UK, *North Sea abandonment Brent Spar disposal*, Shell Media Information, February 16 1995.
[1162] "Security Men Storm Oil Platform Held by Greenpeace", *The Times*, May 24 1995.

firebombing of stations. Eventually, Shell decided unilaterally to abandon deepsea disposal and instead opted to scrap the spar onshore.

The implications of the Brent Spar episode for the development of international law and policy on offshore decommissioning were farreaching and are beyond the scope of this chapter.[1163] The episode turned out to be the defining moment for the development of international law and policy on decommissioning of disused offshore oil and gas installations. In the first place, it brought the issue of offshore decommissioning into the public arena. Secondly, the incident acted as a test of the prevailing international law on offshore decommissioning (as represented by the provisions of Article 60(3) of UNCLOS and the IMO Guidelines and Standards 1989). The Brent Spar episode suggested that the IMO Guidelines and Standards (and perhaps Article 60(3) to a lesser extent) were inadequate to meet the competing considerations relating to offshore decommissioning and therefore failed to be conclusive of rulemaking on the subject.

Most of the policy and law developments relating to offshore decommissioning since Brent Spar have taken place in Europe. This is perhaps to be expected, in that the United Kingdom and other European countries in the North Sea area were those with the closest connection to the Brent Spar case. Furthermore, as seen earlier, the oil and gas sector in the North Sea has reached maturity, and planning has now begun in earnest for the decommissioning of many fields and installations.

The Ospar decision 98/3.

The Oslo and Paris Commission adopted the OSPAR Decision 98/3 on the Disposal of Disused Offshore Installations, which came into force on February 9 1999. The decision set out detailed guidelines, standards and procedures to govern the decommissioning of disused offshore platforms in the NorthEast Atlantic area. The preamble to the decision provides the policy thrust underlying the guidelines and states:

[1163] For a fuller examination, see Igiehon and Park, "Evolution of International Law on the Decommissioning of Oil and Gas Installations" (2001) *IELTR* 198.

"RECALLING the relevant provisions of the United Nations Convention on the Law of the Sea,
RECOGNIZING that an increasing number of offshore installations in the maritime area are approaching the end of their operational lifetime …
RECOGNIZING that reuse, recycling or final disposal on land will generally be the preferred option for the decommissioning of offshore installations in the maritime area, ACKNOWLEDGING that the national legal and administrative systems of relevant Contracting Parties need to make adequate provision for establishing and satisfying legal liabilities in respect of disused offshore installations …"

The OSPAR Decision 98/3 sets out very detailed guidelines emphasising the rule that complete removal of disused platforms is the norm.[21] Member states may grant permits allowing derogation or exception to the completeremoval regime, but, to ensure that derogation is not granted or exercised peremptorily, the allowable grounds are also clearly set out.[22] A procedure is also established for 32week consultation periods preceding the decision by a member state to grant a permit of derogation, or exception to the completeremoval norm.[23] The consultation process[24] allows other states, apart from the state seeking to issue the permit, to contribute robustly and even object if they are of the opinion that there is no justification for the proposal to grant a partialremoval permit. Indeed, if a concerned state is unable to resolve the objections with the objecting state(s), then there are provisions for the executive secretary of the OSPAR Commission to convene a special consultative meeting, to consider the issues. Under the process for such a consultative meeting, the relevant state cannot simply ignore either the objections (of other objecting states) or the outcome of the consultative meeting. Where a final decision is taken to allow a disused platform to be left in place or partially removed, then the permit for such partial removal must cover a number of issues. Some of the issues which every partial removal permit must cover[1164] include:

[1164] See Annex 4 to OSPAR Decision 98/3.

- provision for independent verification that the conditions before disposal began are consistent with both the terms of the permit as well as with the information which was provided in order to secure the permit;
- arrangements and allocation of responsibility for monitoring the condition of the installation post disposal works; and
- identification of the owner(s) of those parts of the disused installation remaining in place for the purposes of meeting claims for future damages which might arise after abandonment.

At the same 1998 meeting, the Oslo and Paris Commission members also adopted new rules of procedure to govern the activities of the Commission.[1165] One of the declared objectives of the new rules was "to facilitate the participation of NGOs in the work of the Commission, with the intention of enabling NGOs to participate at all levels of the Commission working While only directly binding on NorthEast Atlantic States, there is evidence that OSPAR Decision 98/3 is well considered beyond the NorthEast Atlantic area. Though beyond the scope of this work, it is likely that OSPAR Decision 98/3 will become the basis of wider state practice beyond the NorthEast Atlantic region. If so, wide use of and adherence to OSPAR Decision 98/3 outside the Oslo and Paris Commission states could to some extent render the IMO Guidelines redundant. The proper determination of the role, status and use of OSPAR Decision 98/3 *visàvis* the IMO Guidelines needs to be addressed and resolved.

Other relevant international laws governing decommissioning.

There are a number of other international law regulations relevant to offshore decommissioning, such as the Convention on the Prevention of Marine Dumping of Wastes and Other Matter 1972 (the London Dumping Convention), amended by its 1996 Protocol, and the OECD Decision on the Control of Transboundary Movements of Wastes Destined for Recovery Operations 2001, as amended in

[1165] Revised Rules of Procedure of the OSPAR Commission, 2001-6.

2004. Among the limited number of decommissioning projects executed in the North Sea to date, there have been instances of disused installations removed from the continental shelf of the United Kingdom and taken away to Norway for recovery and scrapping. The OECD Decision closely regulates the movement of waste (including disused installations and their components) from the area of an exporting state to that of an importing state. Also relevant to decommissioning within the North East Atlantic Area is OSPAR Recommendation 2006/5 on a Management Regime for Offshore Cuttings Piles, which became effective on June 30 2006.[1166] The Recommendation introduced a management regime for offshore drill cuttings piles, accumulations of which are typically to be encountered under or near offshore platforms and therefore forming part of materials to be handled or disposed of at decommissioning.

While the regulations discussed above are mainly applicable to North East Atlantic states, it is likely that they will have some influence in the establishment of decommissioning regulations in other regions of the world.

Decommissioning in national legislation and upstream agreements.

National legislation on decommissioning in jurisdictions across the world is evolving. While some jurisdictions have well established and relevant laws or regulations in place, many others either have not yet established such laws or are still in the process of discussing what to adopt.[1167] We are still a long way from having decommissioning properly provided for in national or regional regulation in all oil and gas producing countries.

For companies in the upstream offshore oil and gas industry, decommissioning obligations may arise out of national legislation (or regulation), a contractual

[1166] www.ospar.org.

[1167] In the North Sea area for example, the United Kingdom, Norway, the Netherlands, Germany, Ireland and Spain have specific legislation in place. Denmark has no specific national regulation but is signatory to most international conventions. In any event, under the relevant international regulations, all installations offshore from Denmark will have to be completely removed.

framework or both. Aside from regulatory requirements, parties may commit to certain arrangements and obligations in anticipation of future decommissioning and related costs. Early oil and gas agreements (whether concession or other types) did not usually provide for decommissioning. Although references to well abandonment provisions are commonly found in early contracts, it is only in later agreements that decommissioning began to be specifically provided for.[1168]

Early joint operating agreements would simply provide for the operator's obligation to recover or dispose of all jointventure property by the end of the economic life of the field, followed by the distribution of net proceeds to the joint account. Some later joint operating agreements would require an abandonment agreement to be executed by the parties (perhaps at a certain date, or on the occurrence of a certain event). Typical provisions in such abandonment agreements include how decommissioning works will be effected, by whom, who is liable to meet the costs of decommissioning and financial security arrangements towards meeting the costs of decommissioning.

Both the 1995 and the 2002 AIPN[1169] Model International Operating Agreements address abandonment of wells and operations in their Article 10. Article 10 provides for an optional provision. According to this Article, depending on whether in the jurisdiction where the operations are undertaken the parties are liable for the costs of ceasing operations, when negotiating the field development plan they must agree on a security agreement.[1170] Furthermore, according to both

[1168] Bruce M Kramer and Gary B Conine, "Joint Development and Operations", p 646, in *International Petroleum Transactions*, Second Edition (Rocky Mt Min L Fdn, 2000): "Although some abandonment requirements, such as well plugging, have been in effect for many decades, widespread recognition of the environmental damage and health and safety hazards resulting from unreclaimed energy projects and the need to plan in advance for field abandonment did not occur until the 1970s and 1980s. For example, Norway did not enact special legislation dealing with abandonment of offshore facilities until 1985; Britain followed suit two years later."

[1169] Association of International Petroleum Negotiators.

[1170] The AIPN 1995 Model International Operating Agreement defines security as a letter of credit issued by a bank or an on-demand bond issued by a surety corporation, or cash contributed to a trust fund. The 2002 Model slightly changed the definition of security to enlarge it, as follows: *"1.53 Security means (i) a guarantee or standby letter of credit issued by a bank; (ii) an on-demand bond issued by a surety corporation; (iii) a corporate guarantee; (iv) any financial*

model forms, a withdrawing party remains liable for plugging and abandonment costs relating to wells in which it participated, and such withdrawing party may be requested to provide the remaining parties with security to satisfy them that such abandonment costs will be met to the extent legally required. In the event of transfer of interest or rights, the 1995 model form provides for the transferring party to remain liable before the other parties for obligations that have vested, matured or accrued prior to the transfer. In the 2002 model form, however, liability of the transferring party for costs of plugging and abandoning wells or portions of wells and decommissioning facilities in which the transferring party participated is subject to negotiation. Yet, the draft models suggest that if a well has been drilled as a joint operation and hydrocarbons have been produced as an exclusive operation, then the party that assumes it will bear the costs and liability of its plugging and abandonment, as required by applicable regulations.

AIPN also addressed decommissioning matters in its 2006 Model Form International Unitization and Unit Operating Agreement in its optional Article 12, Article 15.4 and in Exhibit D. Decommissioning costs and expenses are for the unit account. Parties are due to provide cash deposits in a decommissioning trust fund, or to provide an alternative security in lieu of such payment, all according to a decommissioning work programme and budget. The parties may unanimously agree alternative arrangements to the formation of a decommissioning trust fund. Such security and other related decommissioning matters are further specified in Exhibit D. In the case of termination of operations due to a group[1171] default or a group withdrawal, the other group has the option to take over such operations, in which zcase they will inherit the related facilities and the liability for their decommissioning costs and will provide security for such obligation. The same principle applies to a single well to be abandoned by one unit group but taken over

security required by the Contract or this Agreement; and (v) any financial security agreed from time to time by the Parties; provided, however, that the bank, surety or corporation issuing the guarantee, standby letter of credit, bond or other security (as applicable) has a credit rating indicating it has a sufficient worth to pay its obligations in all reasonably foreseeable circumstances."

[1171] 'Group' in this sense means the unit group, ie the parties that together form one of the parties to the unitisation and unit operating agreement.

by another. Notwithstanding the provisions of Article 12.1 with respect to liabilities of the group taking over operations, in the event of a group's withdrawal or default, Article 15.4 establishes (among other obligations and liabilities) that a withdrawing party remains liable for its share of the costs of plugging and abandoning wells or portions of wells that formed part of a work programme and budget (or an authorization of expenditure) prior to such party's notification of withdrawal. Such liability will be to the extent that decommissioning costs are legally required to be payable by the parties. The withdrawing party will be asked to provide security to the satisfaction of the other parties to fulfil obligations and liabilities for which it remains liable after the withdrawal. The decommissioning obligation will be one such continuing obligation.

Overview of national legislation.

The following discussion of decommissioning legislation in a number of jurisdictions is not intended to be exhaustive, but it provides an overview of law and policy in the selected jurisdictions.

Brazil.

The decommissioning obligations that the concessionaires[1172] will be bound by are defined in the Brazilian Federal Petroleum Law,[1173] in ANP,[1174] by regulation[1175] and in concession contracts. Furthermore, although IBAMA[1176] is entitled to rule over this matter, they have not so far done so.

Concessionaires must present to ANP an installation deactivation programme, which will be discussed, agreed and approved by ANP. Such a programme should include a proposal for the plugging and abandonment of wells, and the

[1172] Brazil adopted the concession regime; hence oil companies that hold a participating interest in concession contracts are referred to as 'concessionaires'.

[1173] Federal Law 9,478 of 1997, article 28, §§ 1 and 2, article 43, VI.

[1174] 'ANP' stands for *Agência Nacional do Petróleo, Gás Natural e Biocombustíveis* (National Agency for Oil, Gas and Biofules), the regulatory body.

[1175] Resolution 27/06 (Technical Rules for Decommissioning), Resolution 28/06 (Alienation and Reversion of Assets Procedures) and *Portaria* 25/02 (Technical Rules for Well Abandonment).

[1176] 'IBAMA' stands for *Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis* (Brazilian Institute for the Environment and Natural Renewable Resources), a federal environmental body.

deactivation and removal of plant, equipment and all other facilities. Title to all assets in respect of which acquisition costs are deductible for the calculation of the socalled 'special participation tax', which the ANP concludes is necessary for the continuity of production or are in the public interest, must revert to the Government of Brazil. Those assets that will not be subject to the said reversion are to be removed and disposed of.

The ANP may require a deactivation and abandonment guarantee, which must be in a form satisfactory to the ANP. Although actual costs or expenditure on decommissioning activities are tax deductible, their provision is not.

Decommissioning in different countries.

Kazakhstan.

The Government of Kazakhstan has enacted rules that provide for the activities to be undertaken upon termination of the contract or of production.[1177] Besides the obligations that arise out of laws and regulations, subsurfaceuse contracts also establish decommissioning obligations, such as the creation of an abandonment fund, the liquidation of environmental and other violations in the contract area, the restoration of the contract area for suitable further use, and the payment of compensation for environmental damage.

It is the responsibility of the licensee (or contractor, as the case may be)[1178] to undertake the decommissioning activities and to bear the related costs and

[1177] Article 66 of Subsurface Law of January 27 1996; article 16.3 of PSA Law, of July 8 2005; chapter 32 and article 268 of chapter 38 of the Ecological Code of January 9 2007; Unified Rules for the Development of Oil and Gas Deposits of the Republic of Kazakhstan and Unified Rules for Subsurface Protection in the Course of Development of Deposits of Minerals, Oil, Gas, and Subsurface Water in the Republic of Kazakhstan, approved, respectively by Government Resolutions no 745 of the Republic of Kazakhstan dated June 18 1996, and no 1019 of the Republic of Kazakhstan dated July 21 1999; Procedure for Termination or Suspension of Subsurface use Operations, approved by the Order of the Minister of Energy and Natural Resources of June 6 1997; and Rules on the Procedure for Liquidation of Oil, Gas, and Other Wells and Rules on the Procedure for the Plugging and Abandoning of Wells in Oil and Gas Deposit, Underground Gas Deposits and Thermal Water Deposits (both adapted from the Soviet era).

[1178] Production sharing agreement, tax royalty contract and service contract regimes coexist in Kazakhstan.

expenses. Licensees (or contractors) are jointly and severally liable for the decommissioning costs.

Contributions to the abandonment fund are recognised as expenditures and therefore are cost recoverable. If the abandonment fund is not sufficient to support all decommissioning activities, then the licensees (or contractors) must bear the additional costs. It is unclear whether payment of such additional costs is tax deductible, but it would be fair and reasonable to expect that the same principle and treatment applied for the contributions to the abandonment fund will be extended to such additional payments.

In the event of transfer of the totality of rights and interests, the seller does not retain residual liabilities (ie, the decommissioning obligations are transferred to the buyer). However, if the transfer is only partial, then the seller will remain liable for decommissioning costs to the extent that the licensees (or contractors) are jointly and severally liable.

Malaysia.

Decommissioning obligations are in place in Malaysia, which typically utilises the production sharing contract upstream arrangements. The use of a decommissioning fund is required. If the end of the economic life of the field is reached during the term of the production sharing contract, then the contractor will be responsible for undertaking decommissioning activities; otherwise the national oil company will use the decommissioning fund to finance the decommissioning activities in the future. In 2000, Malaysia was one of the few countries in the region that adopted recoverable provisioning for decommissioning. Such costs are also tax deductible. Malaysia requires that all disused offshore installations should be removed, unless otherwise justifiable.

Nigeria.

9In Nigeria, there is a mix of joint ventures (with the national oil company as a necessary party) and production sharing contracts. Decommissioning laws are in place in Nigeria. An abandonment programme is required to be submitted to the

Department of Petroleum Resources (DPR) for approval before its implementation. The Department of Petroleum Resources (DPR) will decide whether it wishes to acquire the installations. If the DPR does not exercise its option to take over the disused installations, then the licensee must proceed with decommissioning activities and restoration of the site. Complete removal is the rule in Nigeria.

A decommissioning fund can also be set up, though not mandatorily required by law. Contributions to the fund are recoverable.

Norway.

The rule in Norway is also the complete removal of installations from offshore oil and gas fields, with partial removal only accepted in exceptional cases. Responsibility for decommissioning activities lies with the existing licensees jointly and severally. However, a change in the norm is expected to include the possibility of seeking such responsibilities from previous licensees, but limited to their respective participating interest at the time of transfer or assignment.

Licence holders are subject to residual liability for facilities or parts of facilities left in place. Financial securities are not usually required by the Norwegian authorities for decommissioning obligations. However, in the event of the transfer of a participating interest, the Ministry of Petroleum and Energy may require a guarantee from the transferee if its financial capabilities are not believed to be adequate to meet decommissioning obligations.

Future decommissioning costs must be accrued, but are not subject to tax deductibility until effectively incurred. Norway provides different treatment for abandonment (in this case removal of facilities) compared with the plugging and abandonment of wells.

A new fiscal law of June 2003, commonly called the ‘grant method’, provided for the state to cover part of the decommissioning costs in accordance with the average tax rate paid by the licensee over the life of the field. It also allows full tax deduction of decommissioning costs in the year activities are undertaken. In the case of a licensee exiting the country, cash payments will be made by the state for taxloss carry forward caused by decommissioning costs.

Oman.

In Oman, the operator is responsible for undertaking decommissioning activities, using funds contributed by the joint venturers. Contributions to an abandonment fund are required, and these are cost recoverable. Expenditure associated with decommissioning activities is also cost recoverable. Contributions to decommissioning funds and decommissioning expenditures are tax deductible.

In the case of continuity of production after the term of the licence and handover of the facilities and operations to the government, the abandonment fund will be transferred along with the decommissioning responsibility and liability.

United kingdom.

In the United Kingdom, the rule is the complete removal of installations from offshore oil and gas fields, with partial removal only accepted in exceptional cases that fall within the OSPAR derogations discussed above. It is primarily the responsibility of the licence holders to undertake decommissioning activities. This responsibility and liability is joint and several. In the event of default by current licence holders, previous licensees may be called upon to undertake the decommissioning.

There is residual liability for licence holders, and they will remain liable in perpetuity for the assets or parts of assets left in place. Currently, the regulator does not require from licence holders any form of financial security, except at the point of approval of a decommissioning programme. However, recent developments and legislative changes as contained in the Energy Act 2008[42] enabled the secretary of state to make all the relevant parties liable for the decommissioning of an installation or pipeline and, where a licence covers multiple subareas, clarifying which licensees will be liable.

The **Energy Act 2008** also gave the secretary of state power to require decommissioning security at any time during the life of an oil or gas field if the risks to the taxpayer are assessed as unacceptable.

Furthermore, the **Energy Act 2008** provides for protection of the funds put aside for decommissioning, in such a way that in the event of insolvency of the relevant

party, the funds remain available to pay for decommissioning and the taxpayers' exposure is minimised.

This is an indication that in future, depending on the financial capacity of licensees, the government will be able at any time to require the licensees to submit security for meeting the eventual cost of decommissioning.

United States outer continental shelf.

In the United States, lessees are required completely to remove all disused facilities from offshore oil and gas fields within one year of cessation of production.[43] However, exceptions have been granted for the formation of artificial reefs, partial removal or the reuse of facilities. 'Salvage' and 'abandonment' are terms commonly used in the United States. In the United States, where the lease regime is in place, the last lessee is primarily responsible for decommissioning costs. In the event of the default of the last lessees, then prior lessees are liable to meet the costs of decommissioning.

The Department of Interior Minerals Management Service requires lessees to provide bonds as a form of security towards meeting their decommissioning obligations. In the United States, the costs incurred for decommissioning are considered business costs and are tax deductible.

Venezuela.

Venezuela has recently changed its operating service contract scheme to a joint venture system in which the national oil company is necessarily a party. The contracts then in place were terminated, and migration to the new system took place by way of the incorporation of new joint ventures with the national oil company, PdVSA.[1179]

On termination of the granted exploration and production rights, the assets must revert from the joint venture to the government for continuity of activities, or else the production must be terminated and decommissioning undertaken in a manner that combines the most costeffective way and meets environmental protection

[1179] Petróleos de Venezuela, SA.

imperatives.[1180] This is in line with Venezuelan oil industry concepts of rational use of hydrocarbons and maximising the ultimate recovery of the reservoirs.[1181]
Decommissioning costs are treated as operational costs and, as such, are tax deductible.[1182]
Decommissioning activities must be carried out by the joint venture and are subject to the supervision and approval of the Ministry of Energy and Petroleum. In terms of residual liabilities, environmental damage occurring after decommissioning is expressly considered an environmental crime and is subject to liabilities and sanctions.[1183]

Challenges and opportunities for the future.

Decommissioning presents a complex mix of technological, financial and legal challenges, particularly in light of the complexity of removal operations, high removal costs, the immature legislation of many jurisdictions, the level of liabilities involved (some of which will be uncertain, and most occurring in the future), and important health, safety and environmental considerations. However, development of innovative technology will no doubt, lead to less onerous decommissioning or removal processes (or extend the range of options for alternative uses for disused installations), whilst at the same time addressing other industry challenges and needs.

CO2 sequestration as a reuse option.

One such opportunity is the utilisation of depleted reservoirs as storage sites for greenhouse gases. Such carbon capture sequestration projects (CCS) are about capturing and underground storage or use of CO2. The capture of and storing of CO2 in underground reservoirs is now widely acknowledged as one of the viable ways of reducing CO2 levels in the atmosphere and thus reducing greenhouse gas in the Earth's atmosphere. Further development of available carbon capture and

[1180] Organic Hydrocarbons Law, article 34.3(a).
[1181] New Hydrocarbons Law, article 19.
[1182] Income Tax Law, article 27.
[1183] Income Tax Law, article 27.

storage technologies is progressing. Depleted oil and gas reservoirs (and associated disused installations) could act as effective underground storage sites for captured CO2. Other storagesite options for storing CO2 are deep saline reservoirs and unmineable coal seams. Decommissioned oil and gas fields could be particularly attractive for the underground storage of CO2, as oil and gas reservoirs are proven traps that have held liquids and gases for thousands of years. The geology of such depleted reservoirs has become well known over the course of exploration and production lifecycles, as has the extent of the considerable storage capacity available. Some depleted reservoirs might therefore be modified for CO2 storage.[1184]

Even though there are already cases of carbon underground storage, there are still many technical, economical and legal challenges to be resolved. These challenges include finding adequate storage and transportation, developing an understanding of reservoir behaviour after injection, and issues as to economic viability, rights to proceed with the storage and clear definition of liabilities.

It is also worth noting that apart from underground storage of CO2, captured CO2 can also be utilised to enhance recovery of oil and gas from mature oil and gas reservoirs using an established CO2EOR (enhanced oil recovery) technique. The income from such CO2EOR schemes can prolong the life of a depleted oil and gas field.

Whilst offshore storage is the subject of international law, the storage of CO2 in reservoirs under land is generally subject to national law and is beyond the scope of this chapter. Until recently, the offshore storage of CO2 under the seabed was not permitted by international law, as CO2 was not listed among the items that could be dumped under international conventions. By amendments adopted by the contracting parties on November 2 2006 to the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972 (the London Dumping Convention), which took effect from February 10 2007, storage of CO2 under the deep seabed is now permitted by international law. The

[1184] See IEA Greenhouse Gas R&D Programme, *Putting Carbon Back into the Ground*, February 2001. 50 OSPAR Decision 2007/1 and OSPAR Decision 2007/2.

amendments (and further guidance) will regulate CO2 storage in the seabed. The amendments prescribe that disposal of CO2 can only be into subseabed geological formations; such CO2 must consist overwhelmingly of carbon dioxide; and no waste or other matter may be added for the purpose of disposal. Disposal of CO2 directly into the deep oceans is not permitted.

The combined effect of the amendments to the London Dumping Convention (and the detailed guidance adopted in November 2007 under the title *Risk Assessment Framework for CO2 Sequestration in SubSealed Geological Structures*) means that CO2 storage or sequestration under the seabed will be subject to licences to be issued by governments under licensing regimes developed pursuant to the London Dumping Convention. Applicants for CO2 storage licences will have to demonstrate that the CO2 will remain permanently in place when placed or stored. Applicants will, therefore, have to prove the integrity of the proposed storage site and mitigation safeguards to be put in place.

The OSPAR Commission has recently adopted annexes to the OSPAR Convention.[50] By the amendments, storage of CO2 in geological formations under the seabed in the OSPAR area is now permitted. However, the placement of CO2 into the watercolumn of the sea and on the seabed remains prohibited.

Current decommissioning projects, activities and technology.

An overview of current decommissioning activities and projects reveals that whereas the majority of removals (in terms of numbers) are occurring in the Gulf of Mexico, at the rate of about 100 installations a year, the largest, most expensive, most complex and most challenging removal projects are in the North Sea. Currently, the three largest decommissioning projects in the North Sea are the Philips Petroleumoperated Ekofisk field, the Totaloperated Frigg field and the BPoperated North West Hutton installation. Others recently commenced, or in which decommissioning planning is ongoing, include the Indefatigable field

(operated by Shell),[1185] the huge Brent field (operated by Shell)[1186] and the Miller field (operated by BP).

Brent Redudant Facilities removal project.

The decommissioning and removal of Brent Redundant Facilities (operated by Shell) has been completed. The project entailed the complete removal to shore of the Brent flare tower and six anchor blocks that previously held the Brent Spar in place. The Brent Redundant Facilities removal project was completed at a cost of around U$100 million. The redundant facilities were removed from their offshore location in the summer of 2005. The anchor blocks were reused for land reclamation in Norway and the flare stack scrapped at the Aker Stord yard in Norway.[1187]

Current decommissioning projects in the North sea.

The Ekofisk field located in the Norwegian sector of the North Sea comprises some 34 installations and is operated by Philips Petroleum. The Ekofisk decommissioning project is perhaps the largest removal project to date and is estimated to cost US$1.1 billion.[1188] Removal will continue until about 2013. The operation is now in its first phase (flare and bridge removals). The contract for removal of the second phase covers 15 platforms and topsides. The Ekofisk tank was the first concrete structure granted derogation under OSPAR 98/3. Topsides have now been successfully removed by an engineering technique known as the 'piecesmall' technique (said to be a North Sea first).

The Frigg field straddles the United Kingdom and Norwegian sectors of the North Sea and comprised six installations. The governments of Norway and the United Kingdom jointly considered and approved Total's proposed decommissioning

[1185] http://www.shell.co.uk/home/content/gbr/aboutshell/shell_businesses/e_and_p/facts_figures/decommissioning/indefatigable/dir_indedecom_25071530.html.

[1186] http://www.shell.co.uk/home/content/gbr/aboutshell/shell_businesses/e_and_p/facts_figures/decommissioning/brent_field_decomm_studies/dir_brentfield_decommissioning.html.

[1187] http://www.shell.co.uk/home/content/gbr/aboutshell/shell_businesses/e_and_p/facts_figures/decommissioning/brent_anchor_blocks/dir_brentdecom_14071040.html.

[1188] Petter Osmundsen, "Decommissioning of petroleum installations – major policy issues", *ScienceDirect* February 4 2003: www.sciencedirect.com.

programme. Derogation under OSPAR 98/3 has been granted allowing four concrete structures (TCP2, CDP1, TP1 and MCP01) to be left in place. Aside from the derogations, the Frigg facilities are expected to be removed by the end of 2012 at an estimated cost of US$708 million (excluding pipelines). Removal of the topsides and jackets has been under way since 2006, with a major lift campaign under way in 2007 involving large tandem lift of a module support frame (weighing more than 8,000 tonnes) backloaded onto a barge. Again, the latter is a new engineering challenge and achievement for the North Sea.

The NW Hutton field and installations in the United Kingdom continental shelf (operated by BP) are now in normally unattended mode, having ceased production in 2002. They are now awaiting final removal in the period 2008 to 2010. The decommissioning programme approved by the UK government under OSPAR requires the removal of all topsides and steel jackets down to the top of the jacket footings. Derogation was granted, permitting the jacket footings to be left in place. The first phase of the removal project was completed in 2008 and involved the removal of topside modules and other structures in preparation for removal of the jacket. The topsides were removed by heavy lift vessel and transported onshore to the United Kingdom for recycling and disposal. The decommissioning project is estimated to cost more than US$285 million.

The challenges of decommissioning in the United Kingdom.

The legal and regulatory regime on decommissioning in the United Kingdom poses interesting challenges that have exercised the efforts of the oil and gas industry as well as the United Kingdom government over the past few years. These challenges have been described by *Oil and Gas UK* thus:

"The UK Petroleum Act 1998 ... puts a requirement on all these companies to eliminate the risk to government of any default on decommissioning obligations. It is in everyone's interest to ensure that joint ventures partners can cover their obligations and liabilities – but current government policy requirements drive

particularly onerous security provisions for the UK oil and gas sector. The impact of this, by its nature, falls mainly on the smaller, less financially robust companies. This is further burdened by uncertainties concerning future tax relief, which requires companies to put up guarantees at a beforetax rate. There are also large uncertainties around the costs that need to be securitised. Together, these can create substantive barriers to negotiating asset transfers, which can hamper new investment for realising UK reserves.

The major threat which decommissioning poses, however, is the shadow that the legacy liabilities cast over asset trading and investment today.

Recent work has created a better understanding of the different effects that the UK offshore decommissioning liability is having on different stakeholders. This has resulted in a number of new initiatives that have the potential to significantly improve the situation."[1189]

Uncertainty in the estimation of costs for future decommissioning liability is another problem. This uncertainty arises largely as a result of decommissioning being relatively new and unexplored territory for the oil and gas industry, as well as for governments (at least in the NorthEast Atlantic area). Crucial to achieving more accurate estimates and reducing decommissioning costs will, first, be experience; secondly, development of new technology to help overcome engineering and technical challenges; and thirdly, finding ways to share learning across the industry whilst safeguarding the necessary liquid and competitive contractor market.

The oil and gas industry in the United Kingdom together with the relevant government departments have tried to address the challenges summarised above, and a number of initiatives are under way. These include the development of a standard decommissioning security agreement; common parameters for estimating decommissioning/removal costs; and consideration of new securitisation tools for decommissioning liability.

The Petroleum Act 1998 provides that the government, through the secretary of state, can require field owners to submit an abandonment programme setting out

[1189] Paul Dymond, "Shadow Cast by Decommissioning Liability", 2006 *IELTR* 222 to 225.

how they propose to deal with disused installations. The obligation of the field owners properly to remove and/or decommission disused installations in accordance with an approved programme is joint and several. Under the provisions of the Petroleum Act 1998, the secretary of state also has the power to require the parties to an approved decommissioning programme to establish financial security where the secretary of state is concerned about the ability of the parties to carry out the approved decommissioning programme. **The Energy Act 2008** extends the powers of the secretary of state such that in future, he/she will be able to require financial security at any stage of field life, and even before the submission and approval of a decommissioning programme. The provisions of the new Energy Act 2008 will further enable the secretary of state to widen the net of relevant parties liable to undertake decommissioning of a disused installation. Furthermore, its provisions provide protection for funds set aside for decommissioning, so that even if any of the parties who have contributed or provided the security were to be become insolvent, the security will be protected against a liquidator.

Whether the oil and gas industryled initiatives and the UK government's changes to the legislation on decommissioning as set out in the Energy Act 2008 and the Guidance Notes published by the Offshore Decommissioning Unit of the Department of Energy and Climate Change[1190] Bill will resolve the existing difficulties in the United Kingdom's legal and regulatory regime on decommissioning remains an open question.

The unfinished business.

The discussion in this chapter shows that the issues relating to offshore decommissioning and the adequacy of international law treaty and regulatory provisions as so sharply highlighted by the Brent Spar episode have now largely been resolved. There is now a settled body of international law (as well as some regional guidelines and regulations – for example in the NorthEast Atlantic area) regulating decommissioning. However, detailed guidelines do not yet exist and are not settled in many regions. Furthermore, many jurisdictions are yet to establish

[1190] https://www.og.berr.gov.uk/regulation/guidance/decommission.htm.

full complements of national statutes and regulations on decommissioning. Even in those jurisdictions with extant statutes, some of those statutes are now clearly inadequate and need to be revisited, with more thoroughgoing regulation put in place.

Although, as seen above, international law on offshore decommissioning is now well settled, the status of the IMO Guidelines and Standards 1989 is still somewhat unclear, as it could be argued that those guidelines have been rendered redundant by OSPAR Decision 98/3. There is a need for the International Maritime Organisation to reassess the status, utility and continued use of the IMO Guidelines and Standards.

This is unfinished business.

In the United Kingdom at least, there are questions regarding the complex and onerous obligations placed by the national decommissioning legislation. This complexity has led to multiplication and duplication of security arrangements among upstream parties. There are ongoing efforts by both the government of the United Kingdom and the oil industry to bring about needed changes. The UK government has now passed the **Energy Act 2008** with wideranging changes to aspects of existing legislation on decommissioning. But this remains unfinished business.

The least that can be concluded is that although decommissioning is now better understood and well provided for in many jurisdictions, compared with the state of knowledge and legislation in 1995 when the Brent Spar episode occurred, the number and magnitude of issues yet to be resolved and concluded (relating to legal, regulatory, technical and engineering, financial and tax challenges) across many regions and jurisdictions demonstrates that decommissioning will continue to be the subject of considerable legal, legislative and technical activity in the near future.

Institutional capacity for managing environmental impacts in Uganda.

The institutional arrangements for enforcing decommissioning are found in the **Petroleum (Exploration, Development Act 2013)** are not articulated. NEMA's

role is clearly critical, yet the agency finds itself underresourced to cope with the increase in demand and technicalities related to oil and gas. Provisions for its expansion and empowerment should be made explicit in the Bill. NEMA should be among the first government institutions to be empowered through accelerated training of more human resources by using some of the funds obtained from exploration licence fees.

The Bill should provide for impact assessment and monitoring teams to include at all times an independent, nongovernmental third party. Results of monitoring should be made available to the public, both positive reports and records of infractions, to incentivize the companies to remain in compliance. What is the stopping mechanism if environmental impacts are determined to be too great? Who determines how much impact is "too much"? Who is liable for legal fees under the inevitable "breach of contract" battles if an operation is shut down?

Chain of authority needs to be established for granting licences in protected areas when there is a gap in leadership at the UWA or the NFA as there is now. The following questions also need to be addressed: Who else is able to assess whether potential impacts are acceptable? What input are they required to get from which protectedarea agency staff? And, when executive leadership is reestablished in these agencies, what authority do they have to reassess the agreements?

Decommissioning plans in Uganda.

Section 118 of the Bill requires a licensee to submit a decommissioning plan to the Petroleum Authority before a petroleum production licence or a specific licence to install and operate facilities expires or is surrendered. The plan should be submitted at the earliest two years, but at the latest one year, before the use of a facility is expected to be terminated permanently. The Bill also provides for a decommissioning fund to implement the decommissioning plan, and, where the monies in the decommissioning fund are not sufficient to cover implementation, the licensee and, where applicable, the owner of the facilities shall cover the costs and expenses.

International best practice

There are a number of international organizations that have been closely monitoring the oil and gas industry's environmental footprint and standards of operation for decades. Among the multilateral agencies these include the United Nations Environment Programme (UNEP) as well as the World Bank and International Finance Corporation which together provide a large share of financing for capital intensive oil and gas projects around the world, and promote higher standards of EIA to inform decisionmaking about such investments. IPIECA is a global industry association set up in the 1970s by UNEP focused on social and environmental issues related to oil and gas, and offers guidance and publications in its focal areas, such as biodiversity; climate change; and oilspill preparedness, on its website www.ipieca.org. Global advocacy NGOs such as Greenpeace, Global Witness and WWF, as well as a vast number of countryspecific coalitions, have also produced evidencebased recommendations concerning management of environmental impacts from the industry.

Many oil and gas companies have adopted internal best practice policies, ensuring that they will meet the criteria set out at international level such as the Equator Principles (EPs).[44] These are broad principles adopted in June 2003 by 10 of the world's major private banks as a condition for lending money to oil and gas companies – all of whom depend on raising capital to conduct their activities. The EPs are a voluntary set of standards for determining, assessing and managing social and environmental risk in project financing. They are considered the financial industry "gold standard" for sustainable project finance, and are based on the IFC 'Performance Standards on Social and Environmental Sustainability' and the World Bank Group's 'Environmental, Health and Safety General Guidelines'. EP financial institutions commit to not providing loans to projects where the borrower does not comply with the standards.

When companies are bidding for exploration blocks, one of the major considerations should be their corporate biodiversity policies. Statoil of Norway,

for example, has the goal ‘zero harm to the environment’. This objective is defined as conserving biodiversity, limiting emissions and discharges and limiting land use. The goals include:

- *No habitat destruction;*
- *9No introduction of foreign species; and*
- *No effects on population levels.*

Statoil states, *inter alia*, that it will act according to the precautionary principle; comply with applicable regulations and legislation; set specific targets and implement measures based on relevant knowledge of the area affected and by applying risk analysis to assess environmental and health effects; and consult and cooperate with relevant stakeholders and strive for solutions acceptable to all affected parties.

Local knowledge and traditional uses of biodiversity in those areas where oil and gas are being explored should also be validated. The Albertine Graben is famous for its rich concentration of biodiversity, some of which are threatened, while others are on the verge of extinction. It is proposed that some of these species be collected in botanical gardens established close by. Such a project can constitute an aspect of an oil company’s corporate social responsibility.

Environment Advocacy Policy.

General. The law articulates the responsibilities of licensees to observe environmental impacts and this must be complied with.

Most oil development is taking place in the areas that draw the most tourists. It is relatively easy to assess the financial impacts of taking agricultural lands out of production, but much harder to determine how much tourism revenue is lost through impacts to natural areas. Where possible, impacts to tourism should be minimised. For example, in national parks, wells should not be placed on hilltops or in other highly visible areas; signage should be kept to a minimum, etc. It should be recognised that tourism has the ability to provide revenue long after the

oil has stopped flowing.Clear guidelines need to be established around areas that will *not* be accessed for oil development due to environmental sensitivity, such as critical wetland areas (implying a need for the government to conduct in parallel a strategic environment assessment helping to determine these). The oil below these areas could still be accessed by horizontal/directional drilling methods. At this time the oil companies often claim that it is not economically feasible to use those methods, but that should simply be included as a cost of doing business in highly sensitive areas. The government should set guidelines stating in which areas directional drilling *must* be used.

Pollution

The Liability for Pollution Damage is found in the **Petroleum (Exploration, Development and Production) Act 2013 and the National Environment Act 2019**.It requires the licensees/operators to cover their liability for any pollution damage.

Given the certain increase in oil sector activity in coming years, and the environmental risks associated with this, further legislative detail is required on industry practices and potential issues such as gas flaring; pipeline construction and pipeline leaks; drilling technologies that prevent water and soil contamination; control of adverse effects of oil spills to the atmosphere, surrounding lands and nearby water bodies; noise and light that may scare away wild animals from their natural habitats; emergence of human domestic waste and disease due to population increase in the areas; destruction of forests and grass cover; disposal of oil waste; environmental restoration after the oil production stops; strategic assessments of environmental impacts; comprehensive biodiversity management strategy for the Albertine Rift; payment for environmental services; air quality management and monitoring; compliance with the national EIA system and procedures; appropriate penalties; and enhancing capacity and modalities for multistakeholder engagement in monitoring the impact of the oil industry on the environment. **Section 80 of the National Environment Act 2019** provides that a person who pollutes the environment is strictly liable for any damage caused to

human health or the environment.

Section 112 of the Petroleum (Exploration, Development and Production)Act 2013 provides that the licensee shall submit a de4commissioning plan to the authority before a petroleum production licence or specific licence to install and operate facilities expires or inspires. **Section 97(4) of the National Environment Act 2019** clearly prohibit companies from entering into private arrangements with landowners concerning disposal of toxic waste or other polluting substances.

Oil companies are required to have the equipment and staff necessary for spill cleanup *on hand* for the worst disasters that can be reasonably expected. It is not sufficient for them to have this equipment regionally, as an immediate response is required, particularly when the spill is in water. Even though drilling is not taking place in Lake Albert right now, regulations need to be in place for possible future developments. In addition, responsibility for cleanup of spills that happen during transport by pipeline, train or truck should be established. Financial liability should also be determined for loss of livelihood for fishermen, farmers, etc., whose livelihoods are affected by pollution/spills. According to **section 78(3) of Natonal Environment Act 2019** where any law permits venting of flaring of gases and other particulate matter into which the atmosphere for normal operational purposes or emergency situations, the person who vents or flares shall take measures necessary to minimize pollution caused by flaring or venting.

Section 115 of the Petroleum (Exploration, Development and Production) Act 2013, provides for dismissal of decommissioned facilities. It provides that the Petroleum Authority shall issue guidelines based on technical, safety, environmental and economic aspects as well as consideration for other users relating to the dismissal of decommissioned facilities. The licensee or owner of the decommissioned facility shall ensure that a direction relating to disposal is carried out basing on the specified guidelines.

CHAPTER

TWENTY

AN ANTIDOTE TO THE RESOURCE CURSE: THE BLESSING OF RENEWABLE ENERGY

"lay not up for yourselves treasures upon earth's (crude oil), where the moth and rust doth corrupt and where thieves break through and steal; but lay up for yourselves upon … (the sun), where neither moth nor… thieves do not break through nor steal." (Mathew: 6. 1920) (All emphasis mine)

The resource curse is confirmed only for crude oil and resource productivity in the single equation model while renewable energy has a positive relationship to growth. In the simultaneous two equation model, countries with high oil production and emissions also have a higher production of renewable energies. The increasing production of renewable energy is accompanied by a decreasing production of crude oil, coal and lignite and a somewhat stable production of gas. The demand for coal and gas is driven by the fact that they remain the lowest cost technologies for electricity generation in most parts of the world *(Borenstein, 2012).*

It is important to note that whereas oil production and extraction process require an input of power and have great capital demands and yet have an effect to collapsing the rest of the other sectors, the development of renewable energy

resources itself is an automatic boom of technology development for their exploitation. This is on the face of it, expressive of what option is preferable.

Contrary to basic common sense, empirical studies consistently find that resource curse exploitation and dependence is accompanied with poor economic growth across countries or even entities of a more disaggregated level (James and Aadland, 2011). With the exception of few countries such as Great Britain and Germany that deployed resources in a profitable way to themselves (with their ore and coal resources), by investing them to increase their prosperity, there are many other examples which define the paradox. For instance, Japan or Switzerland with very limited resources, have nevertheless achieved remarkable growth rates while viceversa, countries with rich resource endowments have experienced meager growth rates and entered the vicious circle of poverty and underdevelopment, giving rise to a number of structural and agency based political economy explanations. Decisions of political elites together with rentseeking behaviors affect resource exploitation and are highly probable to inhibit renewable energy development through patronage activities and 'white elephant' investments. A conflict might arise between the existent actors in nonrenewable resources and the actors of renewable ones. If demand for nonrenewable resources slows down, the existent actors will seek compensation for their decline of dividends and try to maintain their statusquo. However, despite the competitive roles of fossil fuel and renewable energy, renewable energy is both diffuse and highly diversified, so that rentseeking behavior is more difficult to achieve.

Renewable energy sources are currently unevenly and insufficiently exploited in the European Union (EU). Although many of them are abundantly available, and their real economic potential is considerable, they make only a small contribution of about 7.88% to the EU overall gross inland energy consumption. The EU's dependence on energy imports is already 53.1% and is expected to rise reaching 70% by 2020. This applies particularly for oil and gas.[1191]

[1191] The Kyoto Protocol to the United Nations Framework Convention on Climate Change was a cornerstone in the promotion of renewable energy sources.

STATE OF RENEWABLE ENERGY

The **Renewable Energy Policy 2007**[1192] defines modern renewable energy as *renewable energy resources that are transformed into modern energy services such as electricity, which can be generated from solar energy, wind power, water power, geothermal energy and biomass cogeneration.* The Renewable Energy Policy also refers to clean fuels derived from renewable energy resources like biogas, ethanol, methanol, hydrogen or solar water heating as well as biomass utilized in efficient biomass technologies, like improved charcoal stoves and improved firewood stoves. As countries in the Sub Saharan Africa are celebrating the oil joy, first world nations have already embraced technological development as an obvious benefit of adopting renewable energy development.

It is important to note that in the resources field, sustainability of the same remains a great question to answer. Oil and gas are so much prone to depletion and suffer as destitute of sustainability unlike renewable energy resources which stay forever. The impacts of oil's nonrenewable nature is seen in various social, political, environmental and economical parameters. More so, Renewable energy sources play a role in providing energy services in a sustainable manner, and in particular in mitigating climate change. This justifies the need to have a shift towards renewable energy so as to explore more the merits of an everlasting ……

In line with the *Renewable Energy Policy 2007,* Government's policy vision for renewable energy is to make modern renewable energy a substantial part of the national energy consumption[1193]. Renewable energy technologies now constitute more than half of the new power plants built worldwide each year[1194]. In 2014, growth rates for coal use stalled globally for the first time, including in China, and

[1192] Renewable Energy Policy 2007

[1193] Electricity Regulatory Authority: Uganda Renewable Energy Feed-in Tariff (REFIT) Phase 2 Guidelines. Revised 15th November 2012

[1194] REN21 (2016) *Renewables 2016 Global Status Report*, Paris, REN21 Secretariat Available at: www.ren21.net/status-of-renewables/global-status-report/

this trend continued throughout 2015 and 2016[1195]. **Solar photovoltaic** (PV) market will grow exponentially with the expected growth in electric vehicles. Today, solar photovoltaic, at the household level, is cheaper than retail electricity prices (tariffs) in most industrialised countries, making it costeffective for many households to produce their own renewable power.

In addition, **wind power** has become the least expensive technology globally for new power plants, spurring a huge global market for wind that saw an additional capacity of 54,000 megawatts added worldwide during 2016. With renewable energy technologies now faster and more economical to build than fossil fuelbased power generation facilities, and subsequent reduction in dependency on imported fuels, these global developments support global goal of providing access to renewable energy for all.

Electricity is essential for the social economic transformation of the country. However the national electrification rates continue to be low at only 10% in the rural areas and 20% nationwide when all forms of electricity are included[1196]. This low rate of electrification cannot deliver the much needed socio economic transformation that can make the country move into middle income status according to Vision 2040 and the target set in the Second National Development Plan (NDP II). Government has been implementing electricity access projects in rural Uganda. Through the implementation of these projects, it has been reported that electricity is one of the major drivers of social and economic transformation[1197].

Presently, the Energy Sector in Uganda is guided by the **Energy Policy for Uganda 2007**. Under **objective two of the Energy Policy for Uganda**, government aims at increasing access to modern affordable and reliable energy services as a contribution to poverty eradication. Under this policy objective,

[1195] Li Junfeng, Director General at the National Climate Change Strategy Research and International Cooperation Centre: *The Guardian Interview*, 20th January 2016. Available at: www.theguardian.com/environment/2016/jan/19/chinas-coal-burning-in-significant-decline-figures-show

[1196] Ministry of Energy and Mineral Development (2018 – 2027): *Electricity Connection policy-Financing and Implementation for Connections*. Period 2018 – 2027

[1197] REA Access Report 2008

modern energy targets aspects of improved cook stoves and solar PV systems among others. This largely looks at only meeting household energy needs for domestic use. The Policy is silent on access to the grid due to the low generation capacity at the time of its formation. The need for an appropriate Electricity Connection Policy (ECP) is also recognized by the Constitution of the Republic of Uganda which states: *"The state shall promote and implement energy policies that will ensure that people's basic needs and those of environmental preservation are met"* [1198] . Hence, investigating the policies and legislation with appropriate recommendations to achieving the connectivity targets of NDPII and Vision 2040 aims at lifting Ugandans to middle income level and eventually transform Uganda into a prosperous nation.

Uganda has considerable renewable energy resources for energy production and the provision of energy services[1199], yet they remain unexploited, largely due to the perceived technical and financial risks.

These resources include: biomass, geothermal, large scale hydro, mini/micro/picohydro, wind and solar energy. However, with the exception of biomass, whose contribution is very significant, the remaining renewable sources (including large hydros), contribute about 5% of the country's total energy consumption.

This limits the scope and productivity of economic activities that can be undertaken in any part of the country. Thus it is imperative that the use of these abundant resources should be enhanced.

Recently completed studies gave the potential as indicated below. The Renewable Energy Power Potential.[1200]

A comparative opinion on Oil development *visaviz* development of renewable energy.

[1198] The Constitution of Uganda, 1995
[1199] Renewable Policy for Uganda, 2007
[1200] Alternative Energy Sources Assessment Report, 2004, National Biomass Assessment Study 2003

The literature on the resource curse seeks explanation to the puzzling phenomenon of countries endowed with natural resources which at the same time become outperformed by countries with less resource endowments despite the natural capital they are supposed to be accumulating. Various explanations are purported about the resource curse hypothesis. One of them is the Dutch effect according to which natural resource abundance leads to an appreciation of the real wage rate and real exchange rate which in turn raises the cost of exports and a country becomes less competitive in the traded economy, the agricultural and manufacturing sectors, particularly when these sectors are characterized by economies of scale, learning and productivity changes (Sachs and Warner, 1995). The revenue volatility from rents and a longterm declining trend in the terms of trade for resource exporters should not be overseen (Auty, 2001).

Another explanation to the resource curse stems from decentralized political economy models. When a country relies on its natural resources, this causes the reallocation of human resources, labor and capital from hightechnology and highskilled manufacturing sector to the lowtechnology and lowskilled natural resource sector. Natural resources lead to engaging in nonproductive activities and the state to underprovide public goods because rents are not invested in social wealth.

Besides the education level shortages thus incurred, institutions in a country also matter because they affect and shape the political or economic model of governance pursued in one country (Andersen and Aslaksen, 2008). Particularly the latter elaborates in that the resource curse is more probable to realize in presidential democratic countries rather than parliamentary democratic countries, because the former have a tendency to favor powerful minorities. Robinson et al. (2006) state that resource dependent economies are characterized by dysfunctional state behavior, large public sectors, a poor rule of law and unsustainable budgetary policies provoked by favoritism and not the general public interest, while Williams (2011) highlights the negative role of political elites and governments' lack of transparency on growth.

Interestingly, resource rich countries run the risk of violent conflicts and poor democracy accountability. According to Melhum et al. (2006) this difference in the growth performance of rich resource countries is due to the rent distribution through institutional arrangements, corruption included, which reflects directly to the inability of governments to manage large resource revenues in a sustainable way, i.e. their inability to transform rents into net saving, all this termed as *'Nigerian disease' by Williams (2011).* Public employment (patronage) can be a politically appealing way to distribute rents, as documented in centralized political economy models *(Alesina et al, 1998).*

There is a vast literature on the topic of resource curse dealing with its various facets. Some studies are concerned with the definition of the phenomenon and whether it holds throughout the world, other experiment with different econometric methods or definitions of variables and transmission channels as termed by Papyrakis and Gerlagh (2004). Existent is also literature supporting that rich countries can circumvent the resource curse problem (Auty, 2001). Departure being that the resource curse might not be a deterministic phenomenon but rather a policy oriented one, resource rich countries might reap both costs and benefits as a result of their natural wealth; (Stijns, 2006) but what about Uganda (emphasis mine)!! These countries can achieve that because usually they have well functioning institutions, that deal effectively with distributional conflicts (Mikesell, 1997) and are flexible in handling the general equilibrium effects that ensue at the different stages of the production circle in an economy (Leamer et al., 1999), a thing which meets operational difficulty in Uganda owing to the undeveloped institutions. Research and innovation therefore needs to be made in the fields of how better to maximize renewable sources like the sun. We have seen that day by day, new benefits are discovered as well as new challenges whose solution would lie in finding a befitting use and development of renewable energy resources. Take for instance, the predominant *covid19* challenge finds an enemy in vitamin D's antiviral properties yet this is a product of the sun as a renewable energy source. If for instance truly it is that by research, people with low levels of

vitamin D had a 7.2% chance of testing covid19 positive, I can imagine how many more benefits we avoid by not exploring the renewable energy sources' field.

Moreover the type of resource present in each country can determine the presence and the degree to which a country is inflicted by the curse. Williams (2011) thus distinguishes between point resources (fuels, ores, metals) and diffuse resources (mainly agriculture). The latter are less prone to the curse. *Boschini et al (2007)* and *Mehlum et al (2006)* further refine their results by noticing that the effect of institutions is larger in the case of minerals rather than on the rest of the resources. Therefore the usage of certain variables needs caution and crossvalidation for result robustness.

A negative relationship there is between growth and primary production of crude oil, resource productivity, energy dependence, expenditure on education, early leavers from education, shares of world exports and market integration of goods. Therefore, the resource curse hypothesis is confirmed only for one type of resource, the crude oil which has a negative sign. Moreover, resource productivity has an inverse relationship with growth which in a way, can be regarded as a weak confirmation of the resource curse.
The positive relationship between growth and renewable energy and the nonconfirmation of the resource curse has a political economy explanation: Resources that need considerable technological development for their exploitation *(this is also the case for renewable energy)* may spur technological advances and through their valuable education spillovers, eventually lead to growth, minimizing the typical negative side effects from resource rents *(Gylfasson, 2008; Kolstad and Wiig, 2009).*

Of course we cannot escape the explanation that rich countries may be immune to the resource curse if certain conditions are fulfilled *(Auty, 2001)* and of which Uganda is not among so I stand sure that the statement applies to Uganda. We cannot escape the call for a robust investment in renewable energy in fact the oil

discovery and production was long delayed for us to put it under focus; today's era and global pace backed by the impending greenhouse emissions, demands an adoption of and robust focus on renewable energy resources like solar, wind and hydro power.

Anything that uses more technology, actually develops the latter and the blessings of therefore are closer to tap. For example a state might be spending on education, but if the education system of a country is not connected with new high technologies that add to specialization, then knowledge intensive labor will not be implemented. Therefore, expenditure on education, does not tell how efficient education is, or what its connection to the jobsector is.

We cannot reject the oil given freely, but to focus alone on what fades with time would be leaning on the wind; in my opinion, I feel persuaded by the biblical warning that "*lay not up for yourselves treasures upon earth's (crude oil), where the moth and rust doth corrupt and where thieves break through and steal; but lay up for yourselves treasures upon … (the sun), where neither moth nor… thieves do not break through nor steal." (Mathew 6. 1920) (all emphasis mine)*

Take for instance, as Uganda savors the oil discovery excitement, China plans to explore and in this regard, "*lay up for itself a satellite on the sun"* whose existence and energy is everlasting[1201]. It is on record that the energy which the sun provides to the earth for one hour could meet the global energy need for one year.[1202] The question is whether Uganda is well positioned to benefit from it. The present times have seen Ugandans adopting and making use of Solar panels for domestic uses such as lighting and cooking though a large scale solar application remains wanting possibly due to the expense attached. Among all benefits of solar panels, the first and most important thing is that;

[1201] China is launching its first satellite to the sun and asking the public to give it a name; a newspaper under the ministry of science and Technology reported. Available at. https://www.amp.scmp.com/news/people-culture/trending-china/article/3150301/china-launch-its-first-satellite-sun

[1202] https://www.greenmatch.co.uk/blog2014/08/5-advantages-and-5-disadvantages-of-solar-energy

Solar energy is a truly renewable energy source. It can be harnessed everyday. We cannot run out of solar energy, unlike some other energy sources like oil whose for instance its exploitation is already calculated to be about 20 years or more in case more oil is discovered. Among other benefits of solar energy is the;

Low maintenance costs. Solar energy systems don't require a lot of maintenance. You only need to keep the relatively clean, so cleaning them a couple of times per year will do well. More so, most solar companies offer a long time warranty, some being 20 – 25 years and this further levels down the maintenance expenses.

Technology development. Technology in the solar power industry is constantly advancing and improvement will intensify in the future. Innovations in quantum physic and nanotechnology van potentially increase the effectiveness of solar panels and double or even triple, the electrical input of the solar power systems.

Diverse applications. Solar energy can be used for diverse purposes. You can generate electricity or heat. Solar energy can be used to produce electricity in areas without access to the energy grid, to distill water in regions with limited clean water supplies and to power satellites in space. Solar energy can be integrated into the materials used for building. Not long ago, transparent solar energy windows were introduced.

Reduces electricity bills. Since some of the energy needs formerly met with UMEME can now be met with solar, one's electricity bills certainly drop. The amount you save on your bill depends on the size of the solar system and your electricity or heat usage.

To benefit more from the oil production would require large investment in technology development and more emphasis or expenditure on renewable energies technologies development. Whereas High oil producing countries in Europe are industrialized countries and it is also those countries that emphasize and spend on renewable energy technologies development poor African countries like Uganda remain immersed in the *oil excitement* with its obvious oil curse that follows mismanagement. The negative sign of gas and coal production is as expected by intuition. It is also logical that countries with a focus on renewable energy

development are also countries that promote education. After all, with the absence of the latter, it would be impossible to achieve the former. The positive sign of greenhouse emissions was not expected but we believe that it is countries with high emissions that are interested more to develop renewable energies with the aim to reduce this magnitude in the longrun.

CLIMATE CHANGE AND RENEWABLE ENERGY

Greenhouse gases (GHG), including CO_2 emissions are associated with the conventional provision of energy services and are a major cause of climate change[1203]. Globally, coal is the second largest primary energy source used worldwide (preceded by oil), and the first source for power generation. In terms of electricity generation or supply, South Africa is highly dependent on coalfired power plants and therefore energy supply is carbon dioxideintensive. Studies conducted on coal usage indicated that household coal burning contributed the largest percentage followed by industrial and commercial usage. Based on 2008 fossilfuel CO_2 emissions, South Africa was rated the 13th largest emitting country in the world and the largest emitting country on the continent of Africa.

Monitoring and reporting of GHG emissions is done by defining the specific carbon footprint, expressed in carbon dioxide equivalent (CO_2 eq.) of an activity, site or operation. GHG emissions reporting is not currently mandatory in South Africa, however, industry and regulators broadly anticipate increasing implementation of regional and international carbon reporting and reduction requirements through various means, including mandatory reporting, carbon pricing, caps, taxes and trading. A growing number of energy producers today anticipate a future regulatory mandate for GHG emissions reporting by participating in voluntary corporate reporting. Many companies and cities participate in the voluntary reporting initiative, the notforprofit Carbon Disclosure Project (CDP), the only global system to measure, disclose, manage and share vital environmental information. The CDP holds the largest collection of primary climate change, water and forestrisk information in the world, and use this

[1203] Department of Environmental Affairs (2015): EIA Guideline for Renewable Energy Projects. Department of Environmental Affairs, Pretoria, South Africa pp 25

information to assist industries and governments to collaboratively manage environmental risk (www.cdproject.net). This risk can be managed in part by increasing renewable energy sources, and reducing reliance on carbonintensive energy provision services.

Renewable energy sources play a role in providing energy services in a sustainable manner, and in particular in mitigating climate change. Eskom, South Africa and Uganda's largest energy generating services has a comprehensive climate change strategy which is based on six pillars[1204]: Diversification of the generation mix to lower carbon emitting technologies; Energy efficiency measures to reduce demand and greenhouse gas and other emissions; Adaptation to the negative impacts of climate change; Innovation through research, demonstration and development; Investment through carbon market mechanisms; and Progress through advocacy, partnerships and collaboration.

Increasing the share of renewables in the energy industry is an effective way of making our energy supply more environmentally friendly, diversifying energy sources, reducing the effects of climate change as well as contributing to sustainable development.

Sustainable Development

Sustainable energy[1205] can be defined as energy which provides affordable, accessible and reliable energy services that meet economic, social and environmental needs within the overall developmental context of society, while recognizing equitable distribution in meeting those needs. Sustainable energy is an element of sustainable development which is defined as development that meets the present needs and goals of the population without compromising the ability of future generations to meet theirs.

Looking at the resource endowments Uganda has, need there is to remember that whereas oil and gas can be depleted, renewable resources last forever and so does

[1204] Department of Environmental Affairs (2015): EIA Guideline for Renewable Energy Projects. Department of Environmental Affairs, Pretoria, South Africa pg. 27

[1205] Ibid

the benefit obtained thereunder. This implies that sustainability is better off achieved through use of renewable energy sources than fossil fuels.
On the overall sustainable development is underpinned by economic development (growth efficiency), social development (culture, heritage, poverty, and empowerment) and environmental development (pollution and natural resources).

Renewable energy is considered as a contribution to sustainable development[1206]. Most renewable energy sources are indigenous and naturally available, and the use of renewables therefore strengthens energy security because it is not subject to disruption by international crisis. Fuel wood, charcoal, coal and kerosene (paraffin) in the rural and periurban South Africa is the primary source of energy for cooking and heating. Sustainable development implies replacing firewood and charcoal with more modern energy sources, while at the same time introducing technological innovations to improve the efficiency and environmental problems associated with coal and kerosene. Sustainable development also implies the provision of electricity and other modern fuels to the commercial and industrial sectors to promote their economic competitiveness and future prosperity.
The United Nations Conference on Sustainable Development[1207] or Rio+20 took place in Rio de Janeiro, Brazil on 2022 June 2012. It resulted in a focused political outcome document which contains clear and practical measures for implementing sustainable development. In Rio, Member States decided to launch a process to develop a set of Sustainable Development Goals (SDGs), which will build upon the Millennium Development Goals and converge with the post 2015 development agenda

[1206] United Nations Conference on Sustainable Development, Rio+20; Rio de Janeiro, Brazil, 20-22 June 2012; A/CONF.216/16 - Report of the United Nations Conference on Sustainable Development Rio+20 Conference website

[1207] Ibid

Geothermal Energy

A number of laws, regulations, and Executive Orders apply to geothermal energy development activities. For the most part, laws and regulations do not apply to geothermal energy development on tribal lands

Geothermal energy is one of the possible alternative renewable energy sources in Uganda, which will supplement other sources of energy. Its major advantages are that it is environmentally friendly and multidisciplinary in uses, since it can support various development activities ranging from production to processing of raw materials, like minerals and agricultural produce. Geothermal investigations in Uganda have so far identified three potential areas for detailed exploration[1208]. They are all situated in western Uganda, in the western branch of the East African Rift Valley. The three potential areas are KatweKikorongo, Buranga and Kibiro. Based on recent assessments, they have all been ranked as potential targets for geothermal development. The total geothermal energy potential is estimated at 450 MW[1209].

Current efforts by Government are focused on developing the above three areas to a prefeasibility stage, which would pave way for availing required data for feasibility study. The prefeasibility study will involve drilling of deep exploration wells, which will provide information on reservoir temperature, fluid chemistry and other petrophysical parameters. The current study results indicate that the temperature level varies between 150 C° and 200 C°. Further studies are being carried out countrywide to generate further potential geothermal sites. These geothermal areas will then be ranked.

Wind Energy

Onshore wind energy technology is the most commonly used and commercially developed renewable energy technology. Wind turbines are used to generate energy and they produce power over a wide range of wind speeds. Essentially, the turbine blades are designed to capture the kinetic energy in wind. When the turbine

[1208] The Renewable Energy Policy for Uganda, 2007
[1209] Ibid

blades capture wind energy and start moving, they spin a shaft that leads from the hub of the rotor to a generator. The generator turns that rotational energy into electricity.

Wind power generates electricity without releasing toxic pollution or CO_2 emissions. Wind is abundant and inexhaustible. At the same time, however, the construction and operation of wind turbines may possibly lead to unfavourable environmental impacts on biodiversity, landuse and communities in the form of noise and visual impacts. In addition to species disturbance and mortality, the issues of habitat loss and fragmentation needs to be considered for all affected living organisms inclusive of plants, invertebrates and vertebrates including birds and bats. Potential impacts from wind energy installations must therefore be assessed and mitigated when necessary.

The National Environmental Management Act (Act 107 of 1998; as amended) defines environmental impact assessment (EIA) as the procedure which ensures that impacts of projects are identified and assessed before authorisation is considered. The main objective is to avoid or minimise negative effects from the beginning of a project rather than trying to mitigate them later.

Wind speed is moderate in most areas of Uganda[1210]. The average wind speeds in low heights (less than 10 m) generally range from 2 m/s to about 4 m/s. In some areas with complex terrain, the wind may speed up due to slopes of hills and escapements and tunneling effects. Based on wind data collected by the Meteorology Department, it was concluded that the wind energy resource in Uganda, is sufficient for small scale electricity generation and for special applications, such as water pumping mainly in the Karamoja region. More recently, low speed turbines have been developed and they have proved effective for power generation. Recent studies also confirm that electricity generation through wind is feasible, especially for small industries or in rural areas where targets for a mill range from 2.5 kV to 10 kV[1211].

[1210] Ibid
[1211] Ibid

Solar Energy

Existing solar data clearly show that the solar energy resource in Uganda is high throughout the year. The mean solar radiation is 5.1 kWh/m^2 per day, on a horizontal surface. This level of insolation is quite favorable, for the application of a number of solar technologies. These include solar water heating and solar photovoltaic systems for supply of basic electricity in rural institutions and households as well as areas not connected to the grid. The total new installed photovoltaic capacity annually is estimated at 200 kWp for households, institutions and commercial use. Solar thermal has a great potential in the form of solar water heaters in electrified areas.

Today electricity is most often used for water heating, in spite of the fact that it will in many cases be cheaper for the consumer to use solar energy. Furthermore, small solar water heaters are relevant for remote areas, where hot water is needed like in rural clinics and tourism areas, to provide a cheap, reliable and environmentally friendly, source of energy.

Solar technology can also be used for power generation; however, the prohibitive costs make it less favorable than other sources of power generation.

Environmental Impacts of Solar energy

The potential environmental impacts associated with solar power (land use and habitat loss, water use, and the use of hazardous materials in manufacturing) vary greatly depending on the technology to be used. In broad terms the range of potential impacts could include:

- Land use: Depending on their location, larger utilityscale solar facilities can raise concerns about land degradation and habitat loss. Total land area requirements estimates for utilityscale PV systems range from 1.5 to 4 hectors per megawatt, while estimates for CSP facilities are between 0.65 and 2.7 ha per megawatt[1212];

[1212] 3 www.ucsusa.org

- Water use: Solar PV cells do not use water for generating electricity. However, as in all manufacturing processes, some water is used to manufacture solar PV components. CSP in common with all thermal electric plants, require water for cooling. Water use depends on the plant design, plant location, and the type of cooling system;
- Hazardous materials: The PV cell manufacturing process includes a number of hazardous materials, most of which are used to clean and purify the semiconductor surface. These chemicals (similar to those used in the general semiconductor industry) include hydrochloric acid, sulphuric acid, nitric acid, hydrogen fluoride, trichloroethane, and acetone. The amount and type of chemicals used depends on the type of cell, the amount of cleaning that is needed, and the size of silicon
  wafer[1213] and
- Other impacts in terms of noise, visual issues, electromagnetics and aircraft interference.

Residual Biomass & Biofuels

Residual biomass energy is generally derived from renewable sources of organic matter and can be used to provide heat, make liquid fuels (Biofuels) or to generate electricity. The types of biomass include plants, residues from agriculture or forestry, and organic components in municipal and industrial wastes[1214].

Biofuels in liquid form are produced from the conversion of biomass and when correctly utilised, can be substituted for fossilfuel derived fuel oils. Typical applications include transportation use and the generation of power via internal combustion engines. The two most commonly encountered biofuels are bioethanol and biodiesel. Bioethanol is produced through a fermentation process, whereas biodiesel is manufactured using the chemical reactions transesterification and esterification. The biodiesel manufacturing process involves vegetable or animal

[1213] Department of Environmental Affairs (2015): EIA Guideline for Renewable Energy Projects. Department of Environmental Affairs, Pretoria, South Africa

[1214] http://www.altenergy.org/renewables/biomass.html

fats and oils being reacted with shortchain alcohols (typically methanol or ethanol).

Bagasse is a subcategory of residual biomass derived from the remains of sorghum and sugarcane, and is proven to be a good renewable alternative for producing electrical power and heat. In South Africa bagasse is extensively used within the sugarmilling industry to generate process power and heat. The mills use the sugar and juices for their products and then retain the crushed stalks which are then stored in wet conditions. Because of the decomposition of the stalks, the pile starts to dry and becomes highly combustible and ready for burning. For every 100 tonnes of sugar cane harvested and milled, 10 tonnes of sugar is produced together with some 28 tonnes of solid waste in the form of bagasse. Typically, the mill uses a portion of the bagasse in a low efficiency steam cycle to produce the electricity and steam which it needs for its own use.
With sugar mills currently geCnerating a significant amount of power for own use and even limited export, bagasse offers some of the best potential for IPPs in South Africa using renewable resources. It is estimated that an energy conversion rate of 120kWh/ton can be achieved using conventional steam plants running at higher pressures. Using integrated combined cycle combustion technologies the yield per ton of bagasse can be increased to 200kWh/ton. Purely through increased efficiency and new technologies the potential of this resource can be increased from the current 210GWh to 1 400GWh per annum[1215]

Energy from Waste (Landfill Gas)

As waste in landfills decomposes, different gases are continuously produced in varying proportions. Landfill gas (LFG) comprises approximately 50% CH4, 40% CO2, small quantities of oxygen and nitrogen, and over 100 other trace gases, including CO and H2S. Whilst CO2 is found in much greater quantities in the atmosphere, CH4 is a potent greenhouse gas that is a key contributor to global

[1215] 2003 Renewable Energy White Paper: Department of Environmental Affairs (2015): EIA Guideline for Renewable Energy Projects. Department of Environmental Affairs, Pretoria, South Africa

climate change (over 21 times more potent than CO2). In addition, typical LFG if permitted to accumulate in low lying or enclosed or confined spaces (such as buildings and houses next to a landfill), may produce an atmosphere that is both explosive and hazardous to life.

The extraction of LFG can take place once landfill cells reach capacity, at which point the landfill is covered, extraction equipment and collection pipe networks set in place, and the process of extracting the LFG can begin. In addition, the installation of LFG extraction systems can be incorporated in the landfilling process, enabling the extraction of LFG much earlier and prior to the completion of individual landfill cells. LFG is converted into electricity through the following process: LFG is extracted from the landfill via extraction wells and a centrifugal blower; Gas collection pipes collect and transport the LFG from the wells to an extraction plant; At the extraction plant the LFG is burned. The burning of the CH4 component drives a generator that produces electricity. Any surplus is flared via flare units; and the resulting electricity is then fed into the regional grid.

Biogas

Biogas typically refers to the gas which is produced by the biological breakdown of organic matter. Organic wastestreams such as animal manure and municipal wastewater (sewerage) can be converted into biogas using anaerobic digestion systems. Biogas consists mainly of CH4 and CO2. Biogas can be used as fuel for cooking, lighting, water heating as well as being able to run biogas generators to produce electricity.

In industrialised countries, power generation is the main purpose of biogas plants where the conversion of biogas to electricity has become a standard technology. In most cases, biogas is used as a fuel for combustion engines linked to a standard power generation arrangement. Frequently the waste heat from the engine cooling system is util3ised within the digester or another local heatsink.

For use within gas or diesel engines, biogas must fulfill certain requirements. The methane content should be as high as possible as this is the main combustible part of the gas; The water vapour and CO_2 content should be as low as possible, as they

reduce calorific value of the gas; and The sulphur content (mainly in form of H2S) must be low as it is converted to corrosioncausing acids by condensation and combustion. The percentage of hydrogen sulphide content in the biogas can be addressed via a range of gas scrubbing methods.

Legal and Policy Framework for Compliance to Environmental Standards during Renewable Energy Production

The Constitution of the Republic of Uganda (1995) (as amended)

The 1995 Constitution of the Republic of Uganda has elaborate provisions regarding environmental management. In the National Objectives and Directive Principles of State Policy, the Constitution requires the Government of Uganda to take measures to protect important natural resources, including land, water, wetlands, minerals, oil, fauna and flora on behalf of the people of Uganda[1216]. The government is also required to promote and implement energy policies that will ensure that people's basic needs and those of environmental preservation are met. It is further required to promote the rational use of natural resources so as to safeguard and protect the biodiversity of Uganda. The Constitution also requires government to promote a good water management system at all levels[1217]; promote sustainable development and public awareness of the need to manage land, air, water resources in a balanced and sustainable manner for the present and future generations and to prevent or minimize damage and destruction to land, air and water resources resulting from pollution or other causes[1218].

In the substantive provisions, the Constitution has a specific provision for the right to a clean and healthy environment. Under Article 39, every Ugandan has a right to a clean and healthy environment. This provision is reiterated under section 3 of the National Environment Act Cap 153; and section 5(2) of the National Forestry and Tree Planting Act No. 8 of 2003 which all provide for the right to clean and healthy environment. The breach of the right entitles any person or responsible body to bring an action in furtherance of the right. The Constitution further

[1216] Principle XIII
[1217] Principle XXI
[1218] Principle XXVII

imposes on the State and the citizens the duty to create and protect a clean and healthy environment[1219] which is echoed in the Occupational Health and Safety Act of 2006.

The above provisions imply that a person whose right to clean and healthy environment is violated due to oil exploration and production may take the company responsible or government to court to seek redress[1220]. The constitution vests the ownership of all minerals and petroleum in the government which is to hold the same on trust for the people of Uganda. This introduces the public trust doctrine in the management of oil and gas resources[1221] and this was courtesy of the Constitutional (Amendment) Act of 2005.

This Amendment Act has significant implications for oil and gas management and control, and sharing of royalties from oil and gas. Part XIII and specifically section 43 amends article 244 of the Constitution by replacement. Accordingly, the entire property in and the control of all minerals and petroleum in, on or under any land or waters in Uganda are vested in the Government on behalf of the Republic of Uganda.

This is however subject to article 26 of the Constitution which emphasizes the need to fairly and adequately compensate surface land owners before the Government can take over the petroleum rich lands. Parliament is mandated to make laws regulating the exploitation of minerals and petroleum; the sharing of royalties arising from mineral and petroleum exploitation; the conditions for payment of indemnities arising out of the exploitation of minerals and petroleum and conditions regarding the restoration of derelict lands. Some of the laws hereinafter have therefore been enacted under this amendment.

[1219] Article 17 (I) (J)

[1220] In the case of *Environmental Action Network v. British American Tobacco*, the applicant brought an application under article 50(2) of the 1995 Constitution and rule 3 of the Fundamental Rights and Freedoms (Enforcement Procedure) Rules, for a court order compelling the respondent, a manufacturer of "dangerous products" (cigarettes), to fully and adequately warn consumers of the health risks associated with its products. Although the order was ultimately denied, the court did confirm the *locus standi* of the applicant, that article 50(2) enabled individuals to bring public interest matters to court on behalf of those who were not in a position to do so.

[1221] Article 244

The provisions on equitable development (Article IX), the stimulation of agricultural and industrial growth (Article XI) and promotion of energy policies for meeting people's energy needs in an environmentally friendly manner (Article XI) provides the necessary mandate in meeting the objectives of the Poverty Eradication Action Plan (PEAP) and, on a larger scale, achieving the Millennium Development Goals now Sustainable Development Goals[1222].

The Electricity Act 1999

The Electricity Act 1999 sets the legal framework for reforms in the Power Subsector and the Rural Electrification Strategy and Plan, the regulatory framework for power generation from small renewable energy sources and the establishment of the Rural Electrification Fund.

The National Environment Act, Cap 153

The National Environment Act (NEA) is Uganda's framework environmental law and its central tenet is sustainable environmental management. It prescribes a set of environmental management principles which include:[1223] to assure all people living in the country the fundamental right to an environment adequate for their health and wellbeing; encourage the maximum participation by the people of Uganda in the development of policies, plans and processes for the management of the environment; use and conserve the environment and natural resources of Uganda equitably and for the benefit of both present and future generations, taking into account the rate of population growth and the productivity of the available resources.

The National Environment Statute (1995), which obligates all energy projects to undergo an Environmental Impact Assessment (EIA) as a condition for licensing or implementation.

Conservation of the cultural heritage and use the environment and natural resources of Uganda for the benefit of both present and future generations; maintain stable functioning relations between the living and nonliving parts of the

[1222] The renewable Energy Policy for Uganda, 2007
[1223] The National Environment Act, Cap 153 Laws of Uganda, 2000. Section 2

environment through preserving biological diversity and respecting the principle of optimum sustainable yield in the use of natural resources and reclaim lost ecosystems where possible and reverse the degradation of natural resources.

Further principles include, to establish adequate environmental protection standards and to monitor changes in environmental quality; publish relevant data on environmental quality and resource use; require prior environmental assessments of proposed projects which may significantly affect the environment or use of natural resources; ensure that environmental awareness is treated as an integral part of education at all levels; ensure that the true and total costs of environmental pollution are borne by the polluter; and to promote international cooperation between Uganda and other states in the field of the environment.

It establishes the National Environment Management Authority (NEMA) as a body responsible for coordinating, monitoring and supervising all environmental matters in Uganda[1224]. The NEA confers on every person has a right to a healthy environment and obligates every person to maintain and enhance the environment, and where need arises inform the authority or the local environment committee of all activities and phenomena that may affect the environment significantly[1225].

In furtherance of the right to a healthy environment and enforcement of the duty to maintain and enhance the environment, the authority or the local environment committee is entitled to bring an action against any other person whose activities or omissions have or are likely to have a significant impact on the environment to prevent, stop or discontinue any act or omission deleterious to the environment; compel any public officer to take measures to prevent or to discontinue any act or omission deleterious to the environment; require that any ongoing activity be subjected to an environmental audit or require that any ongoing activity be subjected to environmental monitoring or request a court order for the taking of other measures that would ensure that the environment does not suffer any significant damage.

[1224] Ibid Sections 4, 5 and 6
[1225] Section 3

NEMA or the local environment committee proceeding is entitled to bring an action notwithstanding that the person cannot show that the defendant's act or omission has caused or is likely to cause any personal loss or injury. NEMA Approval Process Schematics in general terms include the typical basic assessment and scoping & environmental impact assessment timeframes for one environmental system processes in terms of NEMA. It must be noted that the nature and location of each project will ultimately determine the requirements.

The Act further requires that Environmental Impact Assessment (EIA) be undertaken by a developer where the lead agency, in consultation with the executive director, is of the view that the project may have an impact on the environment; is likely to have a significant impact on the environment; or will have a significant impact on the environment[1226].

The NEA prescribes the requirement to observe environmental quality standards. In this vein, it prohibits any person from carrying out any activity which is likely to pollute the air, the water or the land in excess of standards or guidelines prescribed or issued under Act. Thus a person requires a pollution licensee to carry out a polluting activity. A pollution license cannot be issued unless the licensee is capable of compensating the victims of the pollution and cleaning the environment in accordance with the "polluter pays" principle.

NEA requires NEMA to establish standards for air quality,[1227] water quality,[1228] the discharge of effluent into water,[1229] the control of noxious smells,[1230] the control of noise, vibration and pollution,[1231] soil quality[1232] and standards for minimization of radiation[1233]. Section 35 prohibits any activity not being a

[1226] Section 19 (3)
[1227] Ibid Section 24
[1228] Ibid Section 25
[1229] Ibid Section 26
[1230] Ibid Section 27
[1231] Ibid Section 28
[1232] Ibid Section 30
[1233] Ibid Section 31

traditional activity, in a wetland without the prior written approval of the Authority given in consultation with the lead agency responsible.

Section 49 of the National Environment Act provides for the protection of natural heritage sites. It provides that NEMA, with the assistance of Local Environment Committees, District Environment Committees and the lead agency, identify those elements, objects and sites in the natural environment which are of cultural importance to the various peoples of Uganda.

The National Environment Act (Section 19 (1), Chapter 153) provides clear guidelines for project developers as described in the Third Schedule of the Act, to prepare and submit to National Environment Management Authority (NEMA) project briefs (ESIA) with information on potential impacts of the proposed projects on the environment and mitigation measures for the identified impacts.

In this regard, ESIA project brief report is to provide the necessary information on the proposed project to guide NEMA and REA to ensure that the proposed project is considered for approval, and when approved, implemented in an environmentally and socially sound manner, consistent with established environmental regulations and the Environmental and Social Management Plan (ESMP). This ESIA also proposes mitigation measures to enhance positive and reduce negative impacts that have been identified. It must be noted that to avoid significant negative social impacts, the provisions of the ESMP must be fully implemented, especially by the appointed Contractor.

Environmental law[1234] touches on practically every facet of society. It seeks to protect human health, manage natural resources and sustain the biosphere. This is frequently done, among other ways, through laws that set standards for environmental planning, wildlife, plant, mineral resources, land use management and other activities that can affect the air, water and soil. Given the wide range of human activities that can impact on the environment, environmental law

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increasingly utilises everything from tax law (which can provide incentives or disincentives) to criminal law (which punishes individuals or corporate bodies for actions that can harm human health or the environment), to corporate law (which increasingly recognizes the need to respect environmental priorities), to administrative law (setting the ground rules as to how government agencies make and implement decisions). As such, environmental law becomes as much a perspective, as anybody of law.

Religious traditions entail an evolving body of norms that govern most aspects of life. At the same time, different passages in the Bible have been invoked to justify and explain the conquest of nature[1235]. The *Shari'ah* the body of Islamic law mentions the environment in more than 300 places. Most of these provisions are general, commanding respect for the environment. When combined with Islamic emphasis on cleanliness (and thus constraining pollution), the *Shari'ah* can be a powerful source of norms for environmental protection.

African customary or traditional tribal law frequently governs important natural resources such as water, grazing, timber and minerals. Some tribes seek to protect the quality of their drinking water by prohibiting livestock from the vicinity of wells and other sources of portable water.

The rise of large urban centers saw the development of laws seeking to allow people to live harmoniously in close proximity. Thus, medieval England saw such a development. First, there is considerable judicial unanimity in considering the precautionary principle as of sanitation ordinances for urban areas[1236]. And

[1235] Genesis chapt. 1, v.27-28 ("so God created man in his own image…. And God said to them, 'Be fruitful and
multiply, and fill the earth and subdue it; and have domain over the fish of the sea, and over the birds of the air, and
over everything that moves above the earth";

[1236] Robert Percival et al., Environmental Regulation: Law Science, and Policy(1992), 103(citing 12 Rich. 2c. 13 of
1338, which prohibited" the throwing of dung, filth, or garbage into ditches, rivers, or the waters near any city or
borough or town.").

legislation requiring chimneys to be built to prevent excessive smoke or threat of fire[1237]

Occupational Safety and Health Act (2006)

The Act was intended to consolidate, harmonize and update the law relating to occupational safety and health; repeal the Factories Act Cap.220 and provide for connected matters[1238]. The Act makes provisions for the protection of the health, safety and welfare, and provision of appropriate training of persons employed in work places. Section 18 (1) of the Act requires the employer to monitor and control the release of dangerous substances into the environment.

Thus where there is major handling of chemicals or any dangerous substance which is liable to be airborne or to be released into rivers or lakes or soil and which are a danger to the animal and plant life, it shall be the duty of the concerned employer to arrange for equipment and apparatus to monitor the air, soil, and water pollution and to arrange for the actual monitoring of these mediums, with a view of rendering them safe from the dangerous undertaking.

Subs. (2) states that the records of monitoring in subsection (1) shall be kept and made available to the inspector. These provisions are applicable to all Oil Companies and Mining Companies in respect of Oil and Gas exploration and mining because of the danger they expose to the environment and human safety.

The Water Act

The Water Act is one piece of Uganda's environmental legislation with key provisions to enhance sustainable development of water resources. It provides for the use, protection and management of water use and supply. Most of its provisions have the key objective of protecting the environment and in turn ensuring all water resourcebased development is sustainable. Important aspects in the Act include the following

[1237] Frank P. Grad, Environmental Law(1971), 1.01; see also D.A.R Williams, Environmental Law in New
Zealand(1980), 1 (noting that the first smoke abatement law was passed by Edward I[of England] in 1273
prohibiting the use of coal as being detrimental to human health".)

[1238] Long Title

Rights in water are vested in government;

All rights to investigate, control, protect and manage water are vested in the government of Uganda[1239]. Government is accordingly better placed to ensure that water resources are utilized sustainably.

Planning for water use;

The Act establishes the water policy committee, an intersectoral body, charged with coordinating the preparation, revising and keeping up to date the comprehensive action plan for the investigation, controlling protection, management and administration of water resources for the nation. Such planning may specify types of activities, development of works, which may not be done without the prior approval of the policy committee[1240].

Control on the use of water resources;

The Act provides for the use of permits to use and supply water. A person who needs to construct or operate any water works or for waste discharge[1241], needs permission [1242] . The permit system ensures that use of water resources is environmentally friendly and promotes sustainable development. These controls also ensure that water is not treated as a free good, but as a good with a value to be paid for. This economic valuation of water is an important incentive for its conservation. The Water Act, however, excludes abstraction of small quantities of water from the operation of the water permits.

Water easements;

An easement is the right of a person over the land of another person. Under Water Act, an easement may enable a holder of a water abstraction permit to bring water to or drain water from his land over land owned or occupied by another person. In the same way, an easement may enable a holder of a waste discharge permit to drain waste from his land over the land owned or occupied by another person. The

[1239] See Section 4
[1240] See section 15 and 16
[1241] see section 27
[1242] See section 17

works for which an easement is granted has to be maintained and repaired so as to comply with development that is sustainable.

Control over water works and water use;

An authorized person may enter land for the purposes of inspecting works for the use of water. He may take samples and make tests to find out whether water is being wasted, misused or polluted, or whether the terms of any permit are being met[1243]. Noncompliance is an offence under the Act. All these aspects of the Water Act have the object of sustainable use of water resources, which runs through the entire Act. Waste, misuse and pollution, which may lead to unsustainable use of water, are prohibited.

The National Environment Management Policy (1994)

The National Environment Management Policy is an output of the National Environment Action Plan (NEAP) process. The overall goal of the policy is to establish sustainable social and economic development, which maintains or enhances environmental quality and resource productivity on a longterm basis that meets the needs of the present generation without compromising the ability of the future generation to meet their own needs[1244]. Specifically, the policy seeks to meet the following objectives:[1245]

To enhance the health and quality of life of all people in Uganda and promote longterm sustainable, socioeconomic development through sound environmental and natural resource management and use; integrate environmental concerns in all development policies, planning and activities at national, district and local levels, with full participation of the people; and conserve, preserve and restore ecosystems and maintain ecological processes and life support systems, especially conservation of national biological diversity. This is geared at ensuring that there is adequate environmental health and safety.

The policy also seeks to optimize resource use and achieve a sustainable level of resource consumption; raise public awareness to understand the appreciate linkages between environment and development; and ensure individual and

[1243] See section 36.
[1244] Chapter 2 part 2.1 of the policy
[1245] Part 2.2

community participation in environmental improvement activities. Underlying these broad policy objectives are certain key principles which guide policy development and implementation strategies:[1246]

Every person should have a constitutional right to live in a healthy environment and the obligation to keep the environment clean; the development of Uganda's economy should be based on sustainable natural resource use and sound management; security of land and resource tenure is a fundamental requirement of sustainable natural, resource management; and that the utilization of nonrenewable resources should be optimized and where possible their life extended by recycling.

Environmentally friendly, socially acceptable and affordable technologies should be developed and disseminated for efficient use of natural resources; full environmental and social costs or benefits foregone as a result of environmental damage or degradation should be incorporated in public and private sector planning and minimized where possible; priority should be given to establishing a social and economic environment which provides appropriate incentives for sustainable natural resource use and environmental management; and an integrated and multisectoral systems approach to resource planning and environmental management should be put in place.

Regular monitoring and accurate assessment of the environment should be carried out and the information widely publicized; increased awareness and understanding of environmental and natural resource issues by Government and the public should be promoted; social equity, particularly when allocating resource use should be promoted; and subregional, regional and global environmental interdependence should be recognized.

The Plan for Modernization of Agriculture (PMA), which has one of its main outcomes as "increased access to and use of electricity" to support onand off farm economic activities.

The Prosperity for All (Bonna Baggaggawale) Government Policy (2006), which addresses elevating standards of living through developing the economy in areas of microfinance, marketing, production and processing. In order to achieve this, there

[1246] Part 2.3

is need to also address the energy issue, which is one of the driving forces. Uganda's ratification of the Kyoto Protocol, which provides incentives for investors in renewable energy technologies for the abatement of carbon missions.

Institutional Framework for enforcing compliance to Environmental law standards during Renewable energy production

Ministry of Energy and Mineral Development

The Ministry of Energy and Mineral Development (MEMD) is responsible for the Energy and Minerals sector in Uganda. This is the Ministry responsible for management, regulation and development of the renewable energy in Uganda[1247]. One of the main functions of the Ministry is to issue operating licenses to companies to enable them carry out exploration and production in renewable energy in Uganda.

These licenses are issued subject to fulfillment of the mandatory requirements as indicated in the Environment Act (Chapter 153) of 2013 for example the Environmental and Social Impact Assessment (ESIA) for the Proposed Construction of Rural Electrification Projects. This plan must be presented in accordance with other requirements in the Act (Chapter 153) to ensure that there is a plan to deal with the inevitable environmental health and safety impacts that will result from the renewable energy project for example the Government of Uganda is implementing the Energy for Rural Transformation (ERT) Project, which is funded by the World Bank[1248].The primary Development Objective of the project is to increase access to energy in the rural areas of Uganda. Much of Uganda's rural population remains severely limited in terms of access to the economy, due to

[1247] http://www.energyandminerals.go.ug/ accessed on 8th/March/2017

[1248] Environmental and Social Impact Assessment (ESIA) Report: 'Project Brief' standard of assessment under the National Environment Act (Cap 153) dated July 2018

a lack of access to reliable and affordable electricity[1249]. Uganda's Vision 2040 policy supports the modernisation of the nation. Such a national development imperative requires increased access to electricity, to stimulate local economic development, across all sectors of the rural economy; resulting in part in improving services provided by health care facilities and schools, as well as stimulating economic growth in rural trading centres (TCs). Environmental Impact Assessment (EIA) procedure ensures that environmental consequences of projects are identified and assessed before authorisation for the project is given[1250] (under NEMA Act). NEMA offers schematics guidelines, in general terms, the typical basic assessment and scoping & environmental impact assessment timeframes for one environmental system processes. It must be noted that the nature and location of each project will ultimately determine the ultimate requirements[1251].

Ministry of Water and Environment (MWE)

The Ministry of Water and Environment, is a cabinetlevel government ministry of Uganda. It is responsible for the "sound management and sustainable utilisation of water and environment resources for the betterment of the population of Uganda". The ministry is headed by Minister Sam Cheptoris. Ministry of Water and Environment is a Government Ministry to ensure provision of quality water and environmental protection services in the country.

This Ministry is one of the key social service delivery sectors charged with management and sustainable utilization of water and environment resources for the betterment of the population of Uganda. Ministry of Water as it is commonly known has Directorates that include; Water Resources Management, Water Development, and Environmental Affairs. This Ministry has affiliated institutions like National Water and Sewerage Corporation (NWSC), National Environment

[1249] The message from the recent PowerGen Africa Conference held in Johannesburg (South Africa), is for African nations to look at both 'centralised' and 'decentralised' options to increase access to electricity, with emphasis placed on the fact that access to electricity needs to be radically changed to promote growth and development in Africa (Engineering News, 20 July 2017).

[1250] EIA Guideline for Renewable Energy Projects – Refer to the List of Certified and Registered Environmental Practitioners in Uganda, 2015

[1251] Ibid

Management Authority (NEMA), National Forestry Authority (NFA) to carry out its role.

The role of this Ministry is to oversee a number of areas that include: development of public sanitary facilities, promotion of good practices of hygiene and sanitation in small towns and rural growth centers, water for production both on farm and off farm, water use and management of industries, commerce, wildlife and tourism. Ministry of Water and Environment is mandated to management and sustainable utilization of water and environment resources for the betterment; to improve the quality Water resources for the population; and to ensure better access of water and environment resources in all parts of the country.

Authorities and Agencies

Electricity Regulatory Authority (ERA)

The Electricity Regulatory Authority (ERA) is responsible for reviewing and determining the required connection charges and as well it supervises the quality of connections made by the Electricity Service Providers (ESPs).

Rural Electrification Agency (REA)

The Rural Electrification Agency (REA), with its mandate to plan and implement the national rural electrification programme, acknowledging that 85% of the population which is targeted for electricity connection lives in rural areas. REA is the lead agency for ECP and it is the point of contact for all matters pertaining to the ECP implementation.

National Environmental Management Authority (NEMA)

The National Environmental Management Authority is a tool for monitoring all activities that affect the environment in Uganda provided for in the National Environment Act (NEA). This Act defines environmental monitoring to mean the continuous determination of actual and potential effects of any activity or phenomenon on the environment, whether short term or long term. The general objective of monitoring is to establish the status of environment and to evaluate the impacts of various activities on the environment in general and natural resources in particular.

The specific objectives are: to understand the present levels of degradation by various agents so as to judge whether the abatement policies, projects and programmes are succeeding; identify environmental risks and impacts not previously known so that they can be brought under control; follow the movement of harmful agents though the environment into living creatures and man himself; and to identify activities that are beneficial to the environment and ensure sustainable use of natural resources.

NEMA is required, in consultation with a lead agency, to monitor all environmental phenomena with a view to making an assessment of any possible changes in the environment and their possible impacts; and the operation of any industry, project or activity with a view to determining its immediate and longterm effects on the environment. For this purpose, an environmental inspector appointed[1252] may enter upon any land or premises to monitor the effects upon the environment of any activities carried out on that land or premises[1253]. This is to ensure that there is proper use of the environment such that it is not depleted totally because there has to be sustainable development which enables future generations to use the same environment as well.

NonGovernmental Organizations

Nongovernmental organisations such as Advocates Coalition for Development and Environment (ACODE) and TEAN have contributed massively to environmental health and safety standards. ACODE for example is an independent public policy research and advocacy think tank based in Uganda but working in Eastern and Southern Africa. One of the core pillars of ACODE is to transfer evidence based research findings and alternative policy options from research papers and books into civic spaces that generate public debate to promote propoor policy making and effective policy implementation.

Conclusion

Uganda has certainly come a long way in developing its electricity sector. There is no doubt that with the existence of a robust renewable energy policy 2007 which

[1252] Section 79 NEA
[1253] Section 23 NEA

aims to provide a framework to increase in significant proportions the contribution of renewable energy in the energy mix (from 4%in 2007) and legal framework, opportunities for further development and participation in the electricity industry can only grow, particularly in light of national and regional fast growing energy demands.

Barriers to the adoption of Renewable Energy in Africa

There is growing consensus among policy makers that efforts to disseminate RETs in Africa have fallen short of expectations. While it is recognised that RETs cannot solve all of Africa's energy problems, RETs are still seen as having a significant unexploited potential to enable Africa countries to meet their growing energy requirements. Renewable energy is already the dominant source of energy for the household subsector (biomass energy). If properly harnessed, it could meet a significant proportion of energy demand from the industrial, agricultural, transport and commercial subsectors.

Despite recognition that they are important sources of energy for subSaharan Africa, RETs have attracted neither the requisite level of investment nor tangible policy commitment. Although national and international resources allocated to developing, adapting and disseminating RETs in the last two decades may appear substantial, the total amount is still insignificant compared to that allocated to the conventional energy sector. The success of RETs in the region has been limited by a combination of factors which include: poor institutional framework and infrastructure; inadequate RET planning policies; lack of coordination and linkage in RETs programmes; pricing distortions which have placed renewable energy at a disadvantage; high initial capital costs; weak dissemination strategies; lack of skilled manpower; poor baseline information; and, weak maintenance service and infrastructure.

Policy and Legal Barriers

Experience in the region shows that the introduction and success of any renewable technology is to a large extent, dependent on the existing government policy. Government policies are an important factor in terms of their ability to create an

enabling environment for RETs dissemination and mobilising resources, as well as encouraging private sector investment[1254].

Most of the early policy initiatives on renewables in the region were driven by the oil crises of the early and late 1970s. In response to the crises, governments established either an autonomous Ministry of Energy or a department dedicated to the promotion of sound energy policies, including the development of RETs. For example, Zambia responded by outlining policy proposals in its Third National Development Plan (197983) to develop alternative forms of energy as partial substitutes for conventional energy resources. Unfortunately, once the energy crisis subsided, government support for energy development and RETS activities diminished significantly. Now most of the remaining support is at rhetorical level.

Most governments do not have a clearcut policy on the development and promotion of RETs, which continue to be undertaken within an energy planning and policy vacuum. As a result, RETs development follows an ad hoc path, with no clear link to national power master plans, which are rarely available or out of date[1255] .

A survey carried out in Botswana revealed that about 57% of the respondents had no knowledge of government policies designed to promote the use of RETs[1256]. In Malawi the policy vacuum has meant that the majority of RETs dissemination efforts have not only been ad hoc, but have operated largely as informal sector activities outside the framework of government machinery, thus failing to mobilise

[1254] Sampa, R. C., 1994.'Renewable Energy Technologies Dissemination in Zambia ', paper prepared for the first Regional RETs Workshop, 31May- 1 June 1994, Naivasha, Kenya, SEI-AFREPREN/FWD, Nairobi, pp.14-15.

[1255] Karekezi, Stephen, 2002a. 'Renewables in Africa – Meeting the Energy Needs of the Poor', Energy Policy, Vol. 30 Nos. 11-12, Special Issue – Africa: Improving Modern Energy Services for the Poor. Oxford: Elsevier Science Limited

[1256] Mosimanyane, M.T., Zhou. P and Kgathi, D.L., 1995. Renewable Energy Technologies in Botswana – The Case of Wind Energy for Water Pumping. SEI/AFREPREN/FWD, Draft Report.

the fiscal support of the central government and its major donors[1257] . A study on wind energy undertaken in Kenya showed that Dutch aid officials would have been interested in financing wind projects if there was an official wind energy policy strongly supported by the Government[1258].

Limited policy support for renewables is further demonstrated by the low budgetary allocations to renewables in most countries. Most countries place more emphasis on the petroleum and power sectors, which supply a small portion of the population, than on renewables (especially biomass) which supply a large portion of the population. Very little expenditure is allocated to small and medium scale renewable energy technologies as compared to the conventional energy sector. For example investment trends in Ethiopia's energy sector reveal heavy investments in the electricity and petroleum subsectors. As shown in, investments in petroleum quadrupled from 19902000, while investments in electricity almost tripled in the same period. In contrast, expenditure on traditional and alternative energy (which includes RETs) has steadily decreased from about 1% of total expenditure in 1990, to 0.1% of total expenditure in the year 2000[1259] .

Only 2.9% of total forecast expenditure for the energy sector in Kenya was be allocated to renewable energy, as shown in Table 15 (Ministry of Energy 1987). In addition, the public investment plan indicates that only 1% of priority project investment for the energy sector was allocated to small and medium RETs in 1999/2000 (Ministry of Finance and Planning, 1998).

The Public Investments Plan for Uganda, which highlights priority projects for funding by Government, indicates that RETs were not considered priority investment projects in the energy sector portfolio. Out of 12 priority projects in

[1257] Karekezi, Stephen, 2002a. 'Renewables in Africa – Meeting the Energy Needs of the Poor', Energy Policy, Vol. 30 Nos. 11-12, Special Issue – Africa: Improving Modern Energy Services for the Poor. Oxford: Elsevier Science Limited

[1258] IT Power, 1988. Global Wind pump Evaluation Programme- Botswana, IT Power Limited, Rugby.
Kammen D.M., 1991. Solar Cooking For Developing Nations. Harvard University, Cambridge, MA.

[1259] World Bank, 2002. African Development Indicators 2003. Washington DC: The World Bank

1994/95 – 1996/97, only 2 were RETs projects, accounting for only 0.3% of total estimated budget for that period[1260] Although the expenditure on renewable energy has been increasing over the years in Botswana, the bulk of expenditure is allocated to rural power supplies, which mainly involves the extension of the grid to rural areas. Table 16 provides time series data on expenditure in the energy sector in Botswana.

The planned disbursement for the energy sector in Zambia indicates a heavy emphasis on electrification (mainly grid extension). Only about 2.5% of planned investments in the public investment plan are allocated to RETs, namely micro hydropower (1.5%), wood fuel efficiency (0.2%), and solar PV (0.8%)[1261]. RETs programmes in Africa are unlikely to register significant development and dissemination without supportive government policies, which are backed by the requisite budgetary allocations.

Technical Barriers

The introduction of unfamiliar technologies such as RETs requires the development of technical skills. The importance of technical knowhow in the increased utilisation of RETs has been recognised in the region, but in spite of efforts by governments, there is a continuing shortage of qualified personnel[1262]. Technical knowledge is important in order to build over the long term, a critical mass of professional African policy analysts, economic managers and engineers who will be able to manage all aspects of the RET development process and to ensure effective utilisation of already trained African analysts and managers[1263]. Trained manpower capable of developing and manufacturing renewable energy technologies is a prerequisite for their successful dissemination.

Government and ministries in Africa suffer from a shortage of qualified RETs personnel. In Kenya, for example, there is a lack of general expertise in all aspects

[1260] Ministry of Finance and Economic Planning, 2002 Uganda

[1261] Ibid

[1262] Mosimanyane, M.T., Zhou. P and Kgathi, D.L., 1995. Renewable Energy Technologies in Botswana – The Case of Wind Energy for Water Pumping. SEI/AFREPREN/FWD, Draft Report.

[1263] World Bank, 1996. African Development Indicators 2003. Washington DC: The World Bank

of wind pumps in the relevant ministries and NGOs[1264]. In Zambia, at one time, only one engineer was responsible for cocoordinating all renewable energy activities of the government[1265]. A Britishfinanced project to map out the wind regime in Seychelles was unsuccessful due to the absence of trained personnel[1266]. This deficit is largely responsible for the generally under developed research and technological capability and the poor management of renewable energy programs.

Given the limited technical expertise in the formal sector, the situation in the informal sector presents a greater challenge. In the case of the informal sector, technical skills are largely mechanical. Thus, electrical technologies are more difficult to grasp for artisans in the informal sector, as well as majority of end users, especially in rural areas. This may explain the low uptake of electrical RETs such as solar PV and wind generators. These technologies are fairly complex, and with the shortage of technical skill, result in the reliance of expatriates or individuals based in urban areas. The departure of the outsiders often leads to the demise of the RET projects. This is exemplified by a case in Kenya, where an expatriate developed a lowcost, locally made control unit for PV lighting systems; on his departure, production stopped and has not resumed since[1267]. Numerous examples of similar situations are common in the continent. The level of technical expertise existing in African countries is a key prerequisite for the successful implementation of RETs.

Financial Barriers

Financing plays a major role in the formulation of RET policies. Studies have shown that one of the main obstacle to implementing renewable energy projects is

[1264] IT Power, 1988. Global Wind pump Evaluation Programme- Botswana, IT Power Limited, Rugby.

[1265] Sampa, R. C., 1994.'Renewable Energy Technologies Dissemination in Zambia ', paper prepared for the first Regional RETs Workshop, 31May- 1 June 1994, Naivasha, Kenya, SEI-AFREPREN/FWD, Nairobi, pp.14-15.

[1266] Razanajatovo, M., Juliette, Y. and Jean- Louis, A., 1994. Renewable Energy Technologies Dissemination in Seychelles, AFREPREN/FWD, Nairobi, Kenya.

[1267] Karekezi, S. and Kithyoma, W., 2002. 'Renewable Energy Strategies for Rural Africa: is a PV-led renewable energy strategy the right approach for providing modern energy to the rural poor of sub-Saharan Africa?' Energy Policy, Vol. 30 Nos. 11-12, Special Issue – Africa: Improving Modern Energy Services for the Poor. Oxford: Elsevier Science Limited

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often not the technical feasibility of these projects but the absence of lowcost, longterm financing. This problem is complicated by competition for limited funds by the diverse projects and becomes critical if the country is operating under unfavorable macroeconomic conditions. Governments and private enterprises must therefore seek creative ways of financing RETs projects. The challenge of financing projects for RETs is to develop models that can provide these technologies to consumers (including the very poor) at affordable prices while ensuring that the industry remains sustainable. As shown earlier, limited policy support for RETs in the region is indicated by minimal budget allocation to renewables at government level. Consequently, the private sector is left to bear the burden of financing RETs.

Most advanced and electrical RETs are not affordable to majority of the population in Africa who are poor, with national poverty levels of 5070%. This is especially true for RETs that have high cost imported components, than for those that can be locally manufactured and assembled using locally available components. RETs with high cost imported components place an additional burden on foreign exchange reserves of Africa countries, which are often minuscule and nearing exhaustion, and require expensive financing schemes and large subsidies[1268]. These subsidies are not sustainable in the long run, unless the technologies provided are designed to include income generation.

Banking institutions have unfavorable requirements for RETs financing. Banking institutions normally lay down strict conditions for RETs investors and this deters potential users. Conditions required included a feasibility study conducted at the applicant's expense, due to the limited knowledge on renewables by banks. In addition, the banks required land titles as collateral, port folios of project sponsors and managers, data on past and current operations, approximate value of existing investment, a valuation report, raw material procurement plans, and the marketing strategy for the finished product[1269].

[1268] Ibid

[1269] Ward, R. F., Ashworth, J,H., Burril, G., 1984. Renewable Energy Technologies in Africa: An Assessment of Field Experience and Future Directions. Bureau for Africa/Agency for International Development. Washington.

In cases where financing mechanisms are provided for end users, these are often not within the reach of the majority of the population. For example, the UNDP/ GEF PV project in Zimbabwe benefited mainly affluent rural households, since over 80% of rural population could not afford the smallest system even at the cheapest rates. Stringent requirements for loan applications excluded the majority of the rural population from qualifying[1270]. In another study on the viability of PV in Manicaland, Zimbabwe, 65% of the rural population could not afford to pay the solar service fee (the lowest cost possible for providing PVbased electricity), while 91.5% could not afford a credit scheme[1271].

OVERCOMING THE BARRIERS TO THE ADOPTION OF RENEWABLES IN AFRICA

Policy and legal frameworks

Proactive and longterm policyoriented renewable energy programs aimed at senior decisionmakers in both Government and the private sector should be initiated. The innovative energy policy program of the African Energy Policy Research Network (AFREPREN/FWD) provides a model. The policy programmes should be designed to demonstrate the economic and environmental benefits of renewables technologies to Africa's poor and proposes short and medium term policy initiatives that would engender largescale dissemination of renewables. Priority should be given to highlighting the real and tangible economic benefits (such as job creation and income generation) that renewable energy programmes can deliver to the region at both the micro and macro levels. For example, renewable energy technologies are generally more labourintensive than conventional and centralised energy projects and can help to address problems of employment of the urban and rural poor. Empirical data and information on this would possibly result in higher budgetary allocations to the development of RETs.

[1270] Mbewe, A. (2000). Renewables and Energy for Rural Development Theme Group: Data and Statistics Compilation - Zimbabwe. African Energy Policy Research Network (AFREPREN/FWD), Nairobi.
[1271] Chiwaya, A., 2001. Energy Sector Reform Theme Group: data and Statistics Compilation – Malawi. African Energy Policy Research Network (AFREPREN/FWD), Nairobi, Kenya.

Of particular interest to policymakers in subSaharan Africa would be revenue neutral policy and institutional measures. For example, it is possible to make the case that the loss of revenue associated with the removal of duties and taxes on renewable energy technologies such as wind pumps can be recouped from the longterm savings in imports of petroleum fuels that require scarce convertible currencies as well as from the income and sales tax remittances from a large and functional wind pump industry.

Appropriate technology, technology transfer and building local capacity

The choice of renewable energy technologies for dissemination and development in subSaharan Africa should take into account the existing technical knowledge and local industries. Technologies that improve existing methods and build on already established industries are likely to be successfully disseminated. In addition, these technologies can become selfsustainable in the longterm. Electrical renewable energy technologies (e.g. solar PV) are unlikely to be widely disseminated in the region, due to the lack of technical knowhow locally on their operation. As mentioned earlier, a significant proportion of conventional energy investments have gone to waste mainly due to the heavy emphasis on electricity and on imported technology. In addition, a significant portion of the components in electrical technologies is imported. This raises the costs and reduces the opportunities for local technological development.

Mechanical and thermal/ heat technologies (e.g. wind pumps, small hydro, and improved cook stoves) build on local knowledge and skills. Consequently, maintenance is a less of problem, which results in greater and more sustainable dissemination. In addition, these technologies are modular (can be increased gradually over time), and can be locally manufactured. This translates to opportunities for employment and enterprise creation locally. With increased financial support at national and international levels for such technologies, it may be possible for an African country to become a significant player in the global renewable energy industry. For instance, with the exception of solar photo voltaics technologies, over 60% of the components required in many renewable energy technologies can be sourced locally.

Longterm renewable energy training programmes designed to develop a critical mass of locallytrained manpower with the requisite technical, economic and socialcultural skills are urgently needed. Many of the engineering and technical

courses that are currently taught at universities and colleges in Africa provide little exposure to energy technologies. Modest changes in the curricula of existing colleges and universities could significantly increase the supply of skilled renewable energy engineers, policy analysts and technicians.

Both capacity and demand for local analytical expertise to provide comprehensive evaluations of available renewable energy resources and options for utilising them are needed in Africa. Nonpartisan groups, such as NGOs and independent research institutes and networks are well placed for performing such studies. Fostering the development of human resources and encouraging their use is a valuable area for investing donor support, as it directly equips recipient countries with tools for managing their resources on their own.

Efforts to integrate analytical expertise within the energy sector with that of other key actors in the development process such as expertise within the banking, social/community development and public sectors should be included in this area of support. This is key to understanding not only the resources and technologies available but the institutional setting through which they may be adopted and the needs and interests of the target communities as well.

Innovative Financing Mechanisms

Priority should be given to the establishment of innovative and sustainable financing programs for renewable energy technologies. This may range from the creation of a National Fund for renewable energy projects financed by a modest tax on fossil fuels to credit schemes specifically aimed at developing renewable energy industries and endowment funding of renewable energy agencies.

Experience has shown that most renewable energy technologies (especially those that can be locally manufactured) require subsidies only in the initial stages, and can become financially sustainable in the short to medium term after a certain level of technology dissemination has been attained. After attaining a dissemination of certain critical mass number of units and assemblers / manufacturers, the renewable energy industry can become selfsustaining and subsidies can be gradually withdrawn without any adverse effects on continued dissemination of renewable energy technologies.

In Ghana, a national energy fund has been successfully utilized to finance renewable energy projects and energy efficiency activities on a sustainable basis. An important challenge is the bundling of discrete renewable energy projects into

large programs, which can be financed by major bilateral and multilateral donor and financing agencies. In order to increase access to loans, banks should find alternatives to stringent requirements e.g. the collateral requirements. But since bank policy is unlikely to change in the near future, one possibility is to encourage potential consumers to form selfhelp groups or cooperatives so that they can acquire loans through cooperative banks, most of which do not have stringent collateral requirements. In addition, small credit institutions (microfinance institutions) could provide financing for RETs investors and users at affordable and accessible terms. Smallcredit institutions are crucial in ensuring continuity when external support ceases. Many have a nationwide network in place and are able to provide service even to remote rural areas.

The Clean Development Mechanism – Opportunities for Africa

The Clean Development Mechanism (CDM) presents a useful financing opportunity for Africa. This mechanism allows industrialised countries to meet part of their commitment to reduce emissions by investing in projects of developing countries that reduce GHG emissions. The rationale is that emissions reduction is less costly in developing countries.

The CDM could solve the financing barrier of RETs in Africa in several ways. Firstly, one of the basic requirements of the CDM is that the projects that industrialised countries invest in should meet the host country's development priorities. This provides room for the host country to select the projects for investment, and hopefully this would ensure that the host country has more leverage on the implementation of the project. The range of technologies being considered under the CDM project is wide, and includes renewable energy technologies.

GOING ABOUT THE – RENEWABLE ENERGY INITIATIVE

Renewable energy technologies have an important role to play in Africa's energy sector. With the right approach, the renewable energy industry in Africa can become a major player in the energy sector, and meet the energy needs of a significant proportion of the population. Renewable energy technologies can play a major role in national development in terms of job creation and income generation as well as providing an environmentally sound energy service. Aggressive lobbying for renewables at national, regional and subregional levels is required.

Renewables can play complementary roles to largescale conventional energy technologies. For example, RETs can be important alternatives for power generation in many droughtprone countries, when the conventional electricity sector (largely hydrobased) experiences deficits. Geothermal (Kenya) and cogeneration (Mauritius) ably met the energy deficit during the drought periods in Mauritius in 1999 and in Kenya between 1998 2000[1272]. During the 2year drought, the two geothermal power plants at Olkaria, Kenya offered continuous baseload power with almost 100% availability, unaffected by the prevailing weather condition[1273]. In Mauritius, energy from sugarcane bagasse increased from 259 GWh in 1998 to 343 GWh in 1999.

The architects of the NEPAD energy program should ensure that the needs of the majority of Africa's population are not forgotten and are assured the requisite level of policy attention and eventual program and project finance. Of particular interest to Africa would be renewable energy projects that promote local small and microlevel enterprises as well as provide employment to rapidly growing population of Africa. To ensure that Africa's energy community is able exploit the unique opportunity that NEPAD provides for the development of renewables in Africa, the following multipronged strategy is proposed: A nearterm fast track program (15 years) that would aim to implement lowrisk and lowcost near term initiatives; and A longterm track program (510 years) that is built around major renewable energy sector initiatives that are currently taking place.

The nearterm fast track program would consider implementation of projects that have proven track records and that maximise the use of local resources, expertise and available grant finance. Some of the aforementioned barriers to RETs development could also be addressed in the near term. Typical projects that could be implemented under such a program would include the following: Biomassbased cogeneration; geothermal energy; and Smallscale renewables (improved cook stoves and kilns, solar dyers, solar water heaters, wind pumps, small hydro)

[1272] Kenya Generation 2000

[1273] Bronicki, L. ORMAT'S (2002): Experience in implementing Geothermal Projects. The Example of Olkaria III. ORMAT International, Inc.

The longterm track program would build on successes from the near term fast track program to develop medium and longterm initiatives. It would rely largely on ongoing and planned energy sector reform to establish an enabling environment that would attract both bilateral/multilateral as well as private finance for major investments in both national and regional RETs projects. Examples of such projects include: Largescale wind power projects; Large scale urban wastetoenergy projects; and Longterm capacity building & training, policy and financing programs

Conclusion

Resource curse is the paradox of growth stagnation in countries rich with natural resources. The current paper is an empirical study of the curse for European countries and its novelty lies not only in that this kind of research is applied for Europe but mainly and foremost that it also introduces renewable energy resources in the context. The fact that renewable energies have not developed so far evenly or sufficiently in Europe begs the question of whether they have an effect on the degree of manifestation of the resource curse phenomenon. European Union consists of developed or highly developed countries; therefore, the phenomenon was not so intense.

Renewable energy sources will eventually substitute or ideally crowd out the natural resources in the longrun. Although our data did not permit the validation of a Dutch effect for Europe, since we would additionally need data about price levels, investigating the role of renewable energy sources will contribute to soothing, if not canceling out, the resource curse, because rent seeking behavior is less probable in diffuse natural resources. Emphasis must be laid on the elite groups that might hinder renewable resources development to protect their established statusquo. Apt fiscal policy that will lead to a stable growing of renewable energies will help Europe to grow in a 'sterilized manner' so that not to fire Dutch effects. Humanity is entitled to dividends from renewable energy and policy should work towards this direction.

CHAPTER

TWENTY ONE

THE EAST AFRICAN CRUDE OIL PIPELINE.

Oil exploration started way back in the early 347 AD in China with the first well drilled. In East Africa, oil exploration started in the early 1930s by the British colonialists faced with many challenges[1274]. The discovery of oil in South Sudan, then Sudan, in 1987 brought many prospects of oil discoveries in East Africa. In 2006 massive oil reserves were discovered on the Ugandan shores of Lake Albert. However, the discovery of oil in Uganda is traceable far back before independence. Oil exploration activities were started in the 1920s by W.J. Wayland, a Colonial Government Geologist of the British Protectorate[1275]. The first well was drilled at a place called ButiabaWaki in 1938,[1276]however, the activities did not solemnize due to the outbreak of the Second World War in the 1940s and the political instabilities of in the 1960s 1970s. These activities were resumed in 1983, leading to confirmation of the presence of oil in reasonable commercial reserves. The first recoverable oil discovery was made in 2006 by Hardman Petroleum and Energy Africa (now Tullow Oil) in Mputa1 well KaisoTonya.

[1274] Nanok, Josephat Koli; Onyango, Christopher Ouma, *A socio-economic and environmental analysis of the effects of oil exploration on the local community in Lokichar, Turkana County, Kenya,International Journal of Management, Economics and Social Sciences 2017, Vol. 6(3), pp.144 – 156. ISSN 2304 – 1366 http://www.ijmess.com*

[1275] E. Kasimbazi, "Environmental Regulation of Oil and Gas Exploration and Production in Uganda" in Journal of Energy and Natural Resources Law Vol. 30 No.2 of 2010 at p.189

[1276]Civil Society Coalition on Oil in Uganda (2010) Uganda's Oil Agreements Place Profit before People, at 5 and E. Kaweesi, "Uganda's Security amidst Oil Exploration, Development and Production" in Makerere Law Journal (2013) at 10

Approximately 1.7 billion barrels of oil have been discovered in the Albertain graben; the basin of lake Albert, the border between DRC and Uganda. Extraction will take place at two fields i.e. the kingfisher field operated by China Offshore Oil Corporation limited CNOOC and the Tilenga Field operated by Total S.A. Once extracted, the oil will be partly in refined in Uganda to supply the local market and partly exported to the international market. This is through transportation via the East African Crude Oil Pipeline. / EACOP.

The East African Crude Oil Pipeline is a proposed s 1,443km crude oil export pipeline that will transport Uganda's crude oil from Kabaale – Hoima in Uganda to the Chongoleani peninsula near Tanga port in Tanzania.[1277] It should be noted that the potential impacts of the environment maybe with regard to, Social Economic Impacts, Ecosystem, Water quality, Land and atmosphere.[1278]

The East African Crude oil pipeline (EACOP) upon completion, is slated to be the longest heated pipeline the world has; stretching to as far as 1,445 km into the interior of Uganda i.e. from the port of Tanga to Hoima. The East African Crude Oil Pipeline is a 1,443km crude oil export pipeline that will transport Uganda's crude oil from Kabaale – Hoima in Uganda to the Chongoleani peninsula near Tanga port in Tanzania.[1279] This proposed HoimaTanga oil pipeline (East African Crude Oil Pipeline (EACOP) has been agreed upon between the Ugandan and Tanzanian governments over an alternative route to Lamu in Kenya ostensibly because it was cheaper when all factors were considered, to transport crude oil from Uganda for export via Tanga Port at the Indian Ocean in NorthEastern Tanzania. The EACOP is 1,445km long and will run from Hoima Western Uganda to North Eastern Tanzania[1280].

[1277] https://eacop.com/about-us/overview/ accessed on the 12th April 2021
[1278] GREENWATCH Uganda, A User Friendly Community Guide Tool to Monitor the Impacts of the East African Crude Oil Pipeline on the Environment in Uganda
[1279] https://eacop.com/about-us/overview/ accessed on the 12th April 2021
[1280]The oil pipeline will start in Buseruka sub-county, Hoima District in Mid-western Uganda, passing through Masaka and Mutukula (in Uganda), Biraharamulo, Shinyanga and Tanga in Northern Tanzania

It should be noted that the potential impacts of the environment maybe with regard to, Social Economic Impacts, Ecosystem, Water quality, Land and atmosphere.[1281]
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Approximately 1.7 billion barrels of oil have been discovered in the Albertain graben; the basin of lake Albert, the border between DRC and Uganda. Extraction will take place at two fields i.e. the kingfisher field operated by China Offshore Oil Corporation limited CNOOC and the Tilenga Field operated by Total S.A. The explorartion was initiated and completed by top oil companies in Uganda i.e. CNNOOC LTD, TOTAL and TULLOW Plc. Upon such exploration, it was discovered that approximately, 1.7 billion barrels of recoverable oil were ready thereon. Extraction will take place at two oil fields: the Kingfisher field, operated by China National Offshore Oil Corporation Ltd (CNOOC Ltd), and the Tilenga field, operated by Total S.A.
Once extracted, the oil will be partly in refined in Uganda to supply the local market and partly exported to the international market via the EACOP. Both the extraction site and the EACOP pose serious environmental and social risks to protected wild life areas, water sources and communities throughout Uganda and Tanzania. As such the project is facing significant local community and civil society resistance.
Various shareholders have taken up the onus to jointly contribute towards the said construction of the pipeline. These include; *Uganda National Oil Company,* the *Tanzania Petroleum Development Corporation* and the two oil companies; TOTAL and CNOOC.

[1281] GREENWATCH Uganda, A User Friendly Community Guide Tool to Monitor the Impacts of the East African Crude Oil Pipeline on the Environment in Uganda
[1282] https://eacop.com/about-us/overview/ accessed on the 12th April 2021
[1283] GREENWATCH Uganda, A User Friendly Community Guide Tool to Monitor the Impacts of the East African Crude Oil Pipeline on the Environment in Uganda

The oil discovery is one of those projects about which former writers have written that if not well managed, the benefit sharing process would turn the oil factor into a curse for Uganda rather than a blessing[1284]. Consideration is placed along not only the eventual outcome of the project but also the process leading to it as both are susceptible to posing a great environmental and social harm. While the Uganda is enthusiastic about this new oil venture, it appears to be of little surprise to the modern world which has already experienced the merits of similar projects but more especially the disaster; socioeconomic and ecological in nature potentially affecting the high value conservation areas with rich and unique biodiversity. Even the contacted communities expressed their concerns over the possibility of oil spills and other pollution affecting the river and having impacts as distant as North Africa and leading to an increase in **crossborder conflicts.**

Investment license for oil activities in Uganda.

For any investor to commence investment activity in Uganda, they must first of all obtain such license as to permit their activity within. According to section 15(1)&(2) of the Investment Code Act[1285], the *Uganda Investment Authority UIA shall issue to the applicant an investment license which shall authorize the holder of a license to make all arrangements necessary for establishing the business enterprise described in the license.* Among the benefits of acquiring such a license is that *(i) the holder is assisted in acquiring secondary licenses or approvals in areas such as mining, drugs, pharmaceuticals, education services etc… (ii) they also benefit assistance in access to land for investment, (iii) possibility of joint venture partnerships through the match making of the licensed domestic investors with foreign inward missions, as well as the establishment of markets for licensed investors to supply raw materials or finished products.*[1286] Reports show that this license has been obtained by the investing companies of TOTAL and CNO3OC to further a smooth run up.

[1284] Tom Ogwang, Frank Vanclay – The Impact of Trans Border Projects- The Case of the East African Crude Oil Pipeline
[1285] (Cap 92 of the Laws of Uganda)
[1286] https://www.hg.org/legal-articles/benefits-of-an-investiment-license-in-uganda-38168

The environmental law impactions on the East African crude oil pipeline.

Environmental law is one field that is incapable of conclusive and definite definition. As a result, various authors have come about to give their own analogies thereof. According to Wilkinson[1287], environment to mean the totality of physical, economic, social, circumstances and factors that surround and affect the desirability, value of people and also affect the quality of people's lives. It is the tool by which our common future is to be realized. In this sense, the core function of environmental law is to ensure intraand intergenerational equity.

National Environment Act defines environment to mean, the physical factors of the surroundings of human beings, including land, water, air, atmosphere, climate, sound, odour and taste, the biological factors of animals and plants and the social factors of aesthetics, health, safety and Nanok, Josephat Koli; Onyango, Christopher Ouma, A socioeconomic and environmental analysis of the effects of oil exploration on the loellbeing of people, and includes human interaction with both the natural and the built environment.[1288]

The *Brundtland Commission on Environment and Development*, defined sustainable development to mean, "*development that meets the needs of the present without compromising the ability of the future generations to meet their own needs."* The parameters of sustainable development are clarified in *Agenda 21* and the Rio Declaration, principle 4 of the Rio Declaration, the 1995 Constitution under its objectives.[1289] The same principles are repeated even in more detail in sections 2 and 5 (2) (b) of the National Environment Act 2019. The environment consists of all the natural and artificial elements that sustain life. It is the total context within which all the components of nature exist and interact[1290]. Environment meansthe physical factors of the surroundings of human beings, including land, water, air,

[1287] Wilkinson and Wyman, Environmental Challenge: Learning for Tomorrow's World (London, Malthouse Press, 1986) p. 87

[1288] NATIONAL ENVIRONMENT ACT 2019

[1289] XXVII(i) and XXVII(ii)

[1290] C.O. Okidi, P. Kameri-Mbote and Migai Akech, Environmental Governance in Kenya, 2008, at page 5

atmosphere, climate, sound, odour and taste; the biological factors of animals and plants; and the social factors of aesthetics, health, safety and wellbeing of people, and includes human interaction with both the natural and the built environment[1291].
Environmental law is one of those areas of the law that is identified by its underlying philosophy and by its subject matter rather than by the nature and source of the rights and obligations that sustain it. This does not mean that an analysis of environmental law can avoid consideration of legal doctrine. On the contrary, environmental law has increasingly been characterized over the last decade or so by a range of evolving concepts and doctrines relevant to achieving the objectives of managing the environment. The legal framework within which the management of the environment takes place comprises a complicated set of interlocking rights, duties, powers and liabilities of diverse kinds. Environmental law comprises rules and doctrines arising from common Law; provisions from constitutions; Statutes; general principles (otherwise called soft law); and treaties that deal with the protection, management and utilization of natural resources and the environment. Environmental law is a key natural resource management tool whose nature and content may either put the conservation program on the right course for the realization of the national policy principles for environmental management or derail such a program.
The fundamental function of environmental law/ legislation is to ensure that the utilization or management of the environment ensures intergenerational equity; that the present generation does not jeopardize the interest of the future generation. Thus, the fundamental justification for environmental law is to ensure that the development interests of the present generation are realized without jeopardizing those of the future generation. Thus, promotion of intergenerational equity is fundamental to Environmental law[1292].
The concerns for Environmental Law begun to appear on the international agenda during the early 20th century with the conclusion of several international

[1291]Section 2, National Environment Act, No.5 of 2019.
[1292]C.O. Okidi, P. Kameri-Mbote and Migai Akech, Environmental Governance in Kenya, at Page 5.

conventions[1293]that were narrow in scope and designed to protect specific species. By **19401972** the number of international treaties increased dramatically during this period. There were approximately 60 International agreements completed by 1970[1294]. However, the most significant development during this period was the establishment of the United Nations system that through its mandate it entered into agreements with established agencies and thus got involved in issues of environmental management. And in **1972 the Stockholm conference** was held that resulted in the Stockholm Declaration which led to the creation of the Environmental agency known as the UNEP that played a very important role in the development of various international agreements. The next fundamental development in Environmental Law did not happen until 1992. This was the Rio declaration that built on the **Stockholm Declaration of 1972.** The Rio Declaration introduced the concept of sustainable development. In addition to the concept of sustainable development, the Rio Declaration recognized intergenerational equity i.e., use of resources today in a way that the future generation can also benefit from them, called upon states to enact effective environmental legislation and adopted the precautionary principle[1295]. The impact of the Rio Declaration is that most of the Environmental legislation has been developed basing the principles enshrined in this declaration. The next landmark development in **Environmental Law was followed by the World Summit on Sustainable Development hosted in South Africa in 2002** that renewed emphasis on the synergies between combating poverty and improving the environment.

In Uganda before colonial rule, customary rules governed the use of natural resources such as forests and wetlands[1296]. There was communal use of resources and the management of resources was based on rules of nature such as nomadic

[1293]Convention for the Protection of Useful Birds to Agriculture of 102, Convention for Regulation of Whaling, The Convention Concerning the Use of White Lead in Painting, Geneva 1921, The Convention Relating to the Protection of Flora and Fauna in Their Natural State, London 1933, among others)

[1294]Dinah Shelton & Alexandre Kiss, Judicial Handbook on Environmental Law, 2005 at page 3

[1295]***Ibid,*** at page 6

[1296]Kenneth Kakuru &Irene Ssekyana, Handbook on Environmental Law in Uganda,2nd edition, at page 81.

pastoralism and shifting cultivation. Certain flora and fauna species were given special protection due to medicinal or religious reasons. Traditional religion also saw the conservation of certain features which were regarded as bodies of the gods e.g., Lake Victoria (Lake Nalubaale) was considered as a home for the god of rain. When Uganda was colonized by the British, several laws relating to environmental management were developed. These however were intended to regulate the use of specific resources and collect revenue. Legislations of Environmental Law during colonial times included the **Forestry Act, 11947, The Timber Export Act and the Games Parks Preservation Act.**

When Uganda gained its Independence in 1962. Most basic aspects of the policies and laws governing natural resources remained intact. All that was done was to substitute words and names such as 'public' for 'crown' and 'Uganda' for 'Britain[1297]'. The failure to develop 'homegrown' concepts and laws to govern the use of natural resources becomes an expensive premium on the environment. Apart from the Forestry and Fisheries sector, the management of other resources was on a basis of numerous laws and regulations passed without a gazette policy. Moreover, these laws were so scattered that their implementation has often resulted in pitched conflicts between government departments, which in turn undermined their effectiveness on the ground.

It was not until 1986 when the National Resistance Movement took power that several measures to address the environmental problems were undertaken. The Cabinet portfolio and Ministry of Environmental Protection were established with the mandate to coordinate and regulate national efforts in the wise management of lifesupporting natural resources to ensure their availability for sustainable development[1298]. And in 1991, the government initiated a participatory and consultative process to improve environmental governance. **Between 1991 to 1994** the Government of Uganda developed a National Environment Action Plan (NEAP). The NEAP provided a framework for addressing gaps in environmental management as well as a strategy for integrating the environment into national

[1297] ***Ibid,*** at page 95.
[1298] ***Ibid,*** at page 102.

socioeconomic development. This was a major milestone in Uganda's development of environmental law because it provided strategies for addressing concerns in the areas of policy, legislation, institutional reforms and new investments with a view of promoting sustainable development. This process was closely followed by the adoption of the National Environment Management Policy for Uganda 1994 (NEMP) which sets out the overall policy goals, objective and principles for environmental management. NEMP provides for the integration of environmental concerns in the national socioeconomic development planning process, avenues for intersectoral cooperation, and comprehensive and coordinated environmental management[1299].

To achieve the overall policy goal of sustainable development, the National Environmental Management Policy recommended four initial actions which included inter alia, the creation of an appropriate institutional and legal framework as well as the revision and modernization of sectoral policies, laws and regulations. It was through this process that the current legal regime relating to the management of the environment emerged i.e., the policy provided a basis for the formulation of a comprehensive environmental legal framework under the 1995 Constitution and the National Environment Act. And in 1995 the National Environment Act, Cap 153 was enacted that has been repealed by the National Environment Act No. 5, 2019.

It's important to note that the overall structure of Environmental Law comprises the general principles, made up of what is usually referred to as soft law instruments. These are mainly in the form of solemn declaration of principles from global or regional organizations. However, it's important to note that irrespective of the principles of Environmental law being global and soft law, in the Case of Uganda, they have been incorporated in the national law, policies and regulations that govern environmental concerns because they have guided the formulation of the Policies, Regulations and Laws. These principles include:

[1299]Christine Echookit Akello, Environmental Regulation in Uganda: Successes and Challenges', 3/1 Law, Environment and Development Journal (2007), p. 20, available at http://www.lead-journal.org/content/07020.pdf, (last accessed on 18th April 2021), at page22)

The Environment law Principles.

Sustainable utilization and intergenerational Equity

This principle entails that all environmental management strategies should be aimed at meeting the development objectives of the present generation without jeopardizing the interests of future generation to enjoy the say. This principle is the foundation of all Environmental laws/Legislation and management. Intergenerational equity is an essential foundation for environmental protection and the concept of sustainable development. Therefore, the development of environmental laws should be viewed, initially as promoting utilization of natural resources, which also protects the threshold of sustainability. This principle is reflected in **Objective XXVII** [1300] This principle is illustrated in ***Section 5 (2)(b)***[1301]which states that the Authority in ensuring Environmental Management principles are followed shall "*...providing for equitable, genderresponsive and sustainable use of the environment and natural resources, including cultural and natural heritage, for the benefit of both present and future generations''.* In ***M.C. Mehta V Union & Ors***[1302]**, the** court in ordering the closure of polluting tanneries stated that "*....To defend and improve the human environment for the present and future generations has become an imperative goal. Achievement of this environmental goal will demand the acceptance of responsibilities by citizens and communities and by enterprise and institutions at every level…*" and *in Juan Antonio Oposa & Anor V the Honorable Fulgencio S. Factoran & Anor*[1303] the court in disposing of the suit recognized at the outset the case raised the rights of the people of Philippines to balanced and concept of intergeneral responsibility and intergenerational justice. The court held *inter alia that* the petitioners had the right to sue on behalf of succeeding generations because every generation has a responsibility to the next to preserve the rhythm and harmony of nature for the full enjoyment of a balanced and healthful ecology.

[1300]1995 Constitution of the Republic of Uganda, National objectives and directive principles of state policy.
[1301]National Environment Act, No. 5 of 2019.
[1302]1987 SCR (1) 819, AIR 1987 965
[1303]No. 101083 July 30th, 1993

Principle of integration of all environmental exigencies into development planning and management.

Views in most decades have been environmental considerations that impede development. Also until recently, the general position has been that environmental degradation i.e. pollution is historically part and parcel of economic and industrially development. This position is a manifest confusion of concepts because development should include qualitative improvement rather than simple cumulative sectoral growth. The principle thus requires environmental legislation which facilitates the integration of environmental exigencies into development planning and management. The principle requires that tradition inordinate reliance on the state police powers characterized by commandandcontrol mechanism be reduced and place the primary responsibility on the line ministries or departments to safeguard the threshold of sustainability in the actual management and promotion of productivity in each sector regarding the environment.

This principle is reflected in the creation of the National Environmental Management Authority[1304] and other bodies mandated to protect and manage the environment. *Section 9*[1305] provides for the functions of NEMA to include among other functions regulating, monitoring, supervising and coordinating all activities relating to the environment.

Principle of public participation in environmental matters.

It's well established that public participation in decision making is essential for locallevel development in general and in the management of natural resources in particular. The principle is directed at the empowerment of civil society in decision making or members of the public to seek enforcement of environmental protection through judicial or administrative procedures. The principle may lead to modification or cancellation of the proposed project.

Principle of Legal and Institution Arrangement. This is the bottom line for the actual application of all principles of Environmental law. Actual development and

[1304]Section 8, National Environment Act, No.5 of 2019

[1305]National Environment Act, No. 5 of 2019.

enforcement of environmental law require specification of the normative demands, institution arrangements and the procedural mechanism.

Public Trust Doctrine

The principle requires the state to preserve and protect certain resources that the government holds in trust for the public [1306] ***Objective XIII*** [1307] **and** ***article 237(2)(b)***[1308] pronounce the public trust doctrine. Like the Constitution, **section 44 (1), (4) and (5)**[1309] thereof enshrines the public trust doctrine and provides that the government or local government holds in trust and protects for the common good of all citizens of Uganda certain environmentally sensitive areas such as natural lakes and rivers, groundwater, natural ponds and streams, wetlands, forest reserves, national parks and any other land reserved for ecological and touristic purposes. Accordingly, under the Land Act, Government has no powers to lease or otherwise alienate any natural resource mentioned above but may only grant concessions or licenses or permits in respect of that natural resource.

Polluter pays principle.

The principle entails that whoever is responsible for environmental degradation should be responsible for its reparation, covering both civil liability and criminal responsibility. This principle is reflected in section 80[1310] which states that "*A person who pollutes the environment contrary to this Act or any other applicable law is strictly liable for any damage caused to human health or the environment, regardless of fault.* **In *Godfrey Nyakana v NEMA &Ors***[1311] court stated that "*That is the right to be heard in a court or a tribunal was a prerequisite to the issuance of restoration orders, the environment would be seriously and adversely affected by acts of persons; and that the cardinal principles of precautionary and polluter pay*

[1306] Kenneth Kakuru &Irene Ssekyana, Handbook on3 Environmental Law in Uganda, Second Edition, on page 24.
[1307] National Objectives and Directive Principles of State Policy, 1995 Constitution for the Republic of Uganda
[1308] 1995 Constitution of the Republic of Uganda.
[1309] Land Act
[1310] National Environment Act, No. 2019
[1311] [2015] UGSC 14

in environmental management would not achieve the desired effect of good environmental practice and protection"

In **Vellore Citizens Welfare Forum –Vs Union Of India & Others**[1312] the court stated in regards to this principle that "*The "Polluter Pays Principle" as interpreted by this Court means that the absolute liability for harm to the environment extends not only to compensate the victims of pollution but also the cost of restoring the environmental degradation. Remediation of the damaged environment is part of the process of "Sustainable Development" and as such the polluter is liable to pay the cost to the individual sufferers as well as the cost of reversing the damaged ecology."*

– ***Principle of Precautionary Measures***. –

This principle requires that every precaution and prudence be exercised to prevent any possible deleterious environmental consequences of any socialeconomic activities. Examples of measures to be taken under this principle include; Environmental socialeconomic Risk Assessments (ESEIAs), Environmental Impact Assessment, Environmental Risk Management, Environmental Audits and Monitoring. The above principle is provided for under section 4(3)[1313]which states that "*Government shall apply precaution and restriction measures in all activities that can lead to the extinction of species, the destruction of the ecosystems or the permanent alteration of the natural cycle.*"

In the case of ***Ms. Sheila Zia & Ors V WAPDA[1314],*** the court made the following observation in regards to this principle "*The rule of precautionary policy is to first consider the welfare and safety of human beings and the environment and then pick up a policy and execute the plan which is more suited to obviate the possible danger or make such alternate precautionary measures which may ensure safety*."

In **Vellore Citizens Welfare Forum –Vs Union of India & Others[1315],** the court considered this principle at length and stated that "*The "Precautionary Principle" – in the context of municipal law – means*: (*i*) *The Environmental measures – by*

[1312](1996) 5 Supreme Court cases, 647
[1313]National Environment Act, No. 5 of 2019
[1314]PLD 1994 SC 693
[1315](1996) 5 Supreme Court cases, 647

the State Government and the Statutory authorities must anticipate, prevent and attack the causes of environmental degradation. (ii) *Where there are threats of serious and irreversible damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation."*

The above principles have been adopted and applied by the State so that it carries out its Constitutional mandate to protect the environment and guarantee a clean and healthy environment for the citizens, while at the same time promoting sustainable development.

Irrespective of the above guiding principles, the major legislative framework for Environmental Law is covered by the Constitution of the Republic of Uganda, 1995. One has to start with the National Objectives and Directive Principles of State Policy which are meant to guide all organs and agencies of the State, all citizens, organizations and other bodies and persons in applying or interpreting the Constitution or any other law and in taking and implementing any policy decisions for the establishment and promotion of a just, free and democratic society. ***Objective No. XIII***[1316] commands the state to protect the natural resources of Uganda. The above objective states that" *The State shall protect important natural resources, including Land, water, wetlands, minerals, oil, fauna and flora on behalf of the people of Uganda* **". *Objective XXI***[1317] obligates the State to take all practical measures to promote a good water management system at all levels. ***Objective XXVII***[1318] obligates the State to protect the environment and to ensure that land, air and water resources are managed sustainably to promote development. In particular, under paragraph (ii) it states as follows:"*The utilization of the natural resources of Uganda shall be managed in such a way as to meet the development and environmental needs of present and future generations of Ugandans; and, in particular, the State shall take all possible measures to prevent or minimize damage and destruction to land, air and water resources resulting from pollution or other causes"* These objectives have gone beyond merely guiding us in interpreting the Constitution, but may in themselves be justiciable.

[1316] 1995 Constitution of the Republic of Uganda (As Amended)
[1317] ***Ibid.***
[1318] ***ibid***

The directives on the protection of the environment must in my view be read together with Article 39[1319] of the Constitution on the right to a clean and healthy environment to which every Ugandan has a right to. The constitution also enshrines a constitutional right to a clean and healthy environment[1320]. In the case of ***Patrick Nyakana Amooti Vs NEMA &Ors*****[1321]. The** court stated that the need to protect the environment is enshrined in the constitution. Furthermore, the right to a clean and healthy environment enshrined in the Constitution must be protected by the State. Civil society has used article 50[1322] to enforce this right using public interest litigation i.e., the article gives any person the right to take judicial action to redress the breach of a fundamental right, irrespective of whether the breach affects him or another person[1323]. *Article 245*[1324] on Protection and preservation of the environment is particularly relevant to this appeal. It states as follows: "*Parliament shall by law, provide measures intended to protect and preserve the environment from abuse, pollution and degradation, to manage and preserve the environment for sustainable development and to promote environmental awareness*". Similarly, under article *245*, Parliament has made the law whose purpose is to protect and preserve the environment. That law is the National Environment Act[1325]. The National Environment Act is the instrument that the State has to use to protect the environment from abuse, pollution and degradation. So, the purpose of that Act[1326] is to serve a Constitutional fiat, and if properly implemented, the effect would be to preserve the environment for the common good of the people of Uganda.

This requires the government to preserve and protect certain resources that the government holds in trust for the public. This has been grounded under objective

[1319]***Ibid.***
[1320]Article 39
[1321][2015] UGSC 14
[1322]1995 Constitution of the Republic of Uganda (As Amended)
[1323]Kenneth Kakuru &Irene Ssekyana, Handbook on Environmental Law in Uganda, Second Edition, on page 86
[1324]1995 Constitution of the Republic of Uganda (As Amended)
[1325]No. 5 of 2019.
[1326].National Environment Act, No. 19 of 2019

XIII and article 237(b) of the Constitution. The Courts have applied the public trust doctrine, to require express legislative action, and to identify public rights over resource access and use. This is seen in the case of ***National Adubon Society v Superior Court of Alpine County*** **(the Mono Lake Case)**[1327] in which the California Supreme Court summed up the powers of the state as trustee in the following terms;

"Thus the public trust doctrine is more than an affirmation of the duty of the state to protect the people's common heritage of streams, lakes, marshlands and the tide lands, surrendering the right only in rare cases when the abandonment of that right is consistent with the purposes of the trust."

Polluter Pays Principle

Under the polluter pays principle, the polluter is required to repair the damage he has caused either by making actual reparation or paying the necessary monetary compensation to society. Such compensation can be paid before or after the event. Payment before the event can be in form of deposit bonds, which are tied to environmental performance, to be forfeited if performance falls below expected standards. The polluter pays principle is provided for under sections 3(5) (gi), 5(2) (l), 80, 144 and 171 of the National Environment Act[1328], principle 16 of the Rio Declaration.

The Participatory Principle

The participatory principle involves the participation of the public in environmental affairs. This enables the public to know what the decision making processes are, what decisions are being contemplated, the alleged factual bases for proposed and accomplished governmental actions, and other aspects of governmental processes. The participatory principle is provided for under sections 5(2)(a), 5(2)(i), 50 and 51(2)(ab) of the National Environment Act.[1329] Several International instruments provide for public participation in environmental affairs, these include: The Rio

[1327] 33 Cal 3d 419
[1328] 2019
[1329] 2019

Declaration under principle 7, article 4 (1) (i), of the 1992 United National Framework Convention on Climate Change and article 29 Article 3 (a) (c) the 1994 Desertification Convention.

The Principle of Good Governance

The concept of good governance is relatively recent and reflects a growing awareness of the importance to sustainable development of transparent and accountable, honest governance, as well as a growing awareness of the corrosive effect of corruption on public morale, economic efficiency, political stability and sustainable development in general. The concept implies, among others, that states and international organizations should: (a) adopt democratic and transparent decisionmaking procedures and financial accountability; (b) take effective measures to combat official or other corruption; (c) respect due process in their procedures and observe the rule of law more generally; (d) protect human rights; and (e) conduct public procurement in a transparent, noncorrupt manner.

In streamlining the environment sector, the government has come up with various laws that guide and govern the mode, maintenance and control of the environment as a fragile sector that if not taken with serious care has nearly nonrenewable features that could be lost. Therefore it should be noted that the oil exploration and construction of the pipeline activities have serious impacts on the environment and hence should be monitored and managed with a close eye.

Section 1 of the National Environment Act defines **Environment** is defined under **The National Environment Act**[1330] as the physical factors of the surroundings of human beings, including (*a) land, water, air, atmosphere, climate, sound, odour and taste; (b) the biological factors of animals and plants; and (c) the social factors of aesthetics, health, safety and wellbeing of people, and includes human interaction with both the natural and the built environment;*

[1330]Section 1

The Petroleum Act [1331] tasks the National Environment and Management Authority (NEMA) with the duty of making regulations for the management of the production, transportation, storage, treatment and disposal of waste arising out of petroleum activities. A case in point is the **Kiboro hot springs**[1332] where there is also the risk of the **accumulation or disposal of hazardous waste**. *The pipeline will have to be regularly cleaned, and this cleaning generates hazardous waste containing benzene,* a human carcinogen. This waste will have to be either incinerated, which can generate hazardous *air pollution,* or be disposed of in storage sites at each pumping station, meaning each pumping station would become a hazardouswaste disposal site. Nevertheless, a pollution license to that effect has been obtained in accordance with the National Environment Act.

Environmental and social assessments.

The law requires that environmental and social impact assessments are carried to determine the gravity of harm social and environmental, likely to arise from any given project. This is the requirement under *sections 110, 111 and 114*[1333] and it must take into account the environmental principles set out in section 5(2). The above statutory provisions have been complied with and accordingly, the EACOP Environmental and Social Impact Assessment Report has been drawn, published and made public. The Report contains a detailed analysis of the possible environmental and social impacts that may result from the construction of the crude oil pipeline; mechanisms to mitigate negative effects; and also the benefits and costs of the project with regards to sustainable development. In regards to EACOP, it has complied with the requirement to carry out the EIA and Environmental and Social Impact Assessment.[1334] From the reading of the above ESIAs on EACOP, if executed in the way it is described in the ESIA report, would most likely not lead to major or unacceptable impacts. The proposed pipeline technology and methodology, and the general environmental and social approach and standards in

[1331] Petroleum (Exploration, Development and Production) Act for the (Upstream), 2013.
[1332] Accessed via online sources on March 29, 2020
[1333] National Environment Act
[1334]https://eacop.com/publication/view/eacop-uganda-esia-non-technical-summary/.

the ESIA report do not immediately lead to red flags. The ESIA is good and has followed the comments to the scoping report and on the face of it complies with section 110, 113, 114[1335] of the NEA. However, the EIA in general, is biased in stressing the positive impacts and downplaying the negative ones. The ESIA document/process is not transparent: it is impossible to follow how potential impacts have been assessed, mitigated and made acceptable. The elaboration of many mitigation measures is postponed to (management) plans still to be written and yet the law requires that such mitigation measures be availed before such activities with adverse effect on the environment be carried out.

Public consultations.

Despite the social and environmental impact statements at hand, human rights activists[1336] and environmental lawyers have taken up various actions against this project in the East African Court seeking an assessment report on the human rights implications caused by the project. They asked court to stop continuity of the project until *"a climate change impact assessment; Human rights impact assessment; and meaningful, effective and transparent public consultations ensuring robust community and broad public participation."* Nevertheless, I am still not acquainted with information regarding the proposed mass consultation with the public on this project.

The EACOP from its inception has been welcomed with skepticism and negativity owing to the anticipated natural hazards and negative Environmental Iaw implications it could pose to both the environment and society. The development of oil and gas pipelines over the world has been closely associated with serious environmental and social implications, which if not well addressed could negatively impact on the environmental conservation and the overall human

[1335]National Environment Act, No. 5 of 2019. National Environment (Waste Management) Regulation S.I. No. 49 of 2020, Regulation 34, *National Environment (Wetlands, Riverbanks and Lake Shores Management) Regulations 153-5.*

[1336] Centre for Food and Adequate Living Rights (CEFROHT) and Nairobi based Natural Justice-Kenya, Center for Strategic Litigation based in Zanzibar

development situation in the region.[1337]

In the ***socioeconomic*** perspective, it is important to note that even if in some regions where the pipeline will pass, there are no big activities taking place, inevitable it is that some destructions however minor, will still be caused to for instance, people's banana plantations, coffee, tea, and their settlements thereby affecting their social and economic set up. This was recorded under survey from a resident top local government official in *Kiziranfumbi subcounty.* Nevertheless, the socioeconomic advantage can never be excluded from this project in areas of *food supplies, catering and hospitality, transport, civil works, general supplies, construction materials, manpower, and provision of security services.*

In some areas, **the bursting of oil pipes** will certainly be disastrous to their livelihood, economic activities as well as settlement if such is not properly managed. This is most certain to occur naturally with naturally disasters such as landslides, soil erosions and floods etc. which affect the environment too. In fact, reports of oil spills have been recorded in Hoima and on March 29 during the drilling of a well at Kibiro hot springs. Though such spills did not affect the ecology and aquatic species, residents fear that the spill poses a risk to their livelihood and health and threatens the hot springs. the law recognizes the need to protect the public against such implications. **Objective xxiii** provides that *the state shall institute an effective machinery for dealing with any hazard or disaster arising out of natural calamities or any situation resulting in general displacement of people or serious disruption of their normal life.*

In the socioeconomic sense, the EACOP project falls under the situation resulting into general *displacement of people* hence; the state has already undertaken the resettlement schedule of people living along those EACOP related regions. Furthermore, an environmental impact assessment including baseline information and potential impacts on natural resources, cultural heritage and biodiversity has been undertaken and mitigation measures proposed to avoid or reduce impacts and all remote consequences.

[1337] World Wide Fund for Nature(WWF) and Civil Society Coalition on Oil and Gas in Uganda (CSCO), Safeguarding People and Nature in the East African Crude Oil Pipeline Project

Objective XIII[1338] states that the state shall protect important natural resources including land, oil, water flora and Fauna on behalf of the people of Uganda. **Objective XXVII** [1339] provides that the state shall promote **sustainable development** and **public awareness** of the need to manage land, air, water resources in a balanced and sustainable manner for the present and future generations. This shows the deliberate step by the state to ensure sustainability of resources including oil resources. A tour made along those oil regions reveals serious deployment of military personnel in charge of protecting these oil resources on behalf of Ugandans.

Land acquisition for the project. To start with, the participants in the EACOP project enjoy the legal mandate to acquire land for its own use subject to Article 237 (2a) that; *the government or a local government may acquire land in the public interest.* Similarly, article 26 enshrines the right of every Ugandan to own property and specifies the conditions under which these rights may be waived in the public interest. The relevance of this to the EACOP is that government has through the guidance of these legal provisions, acquired land for the pipeline usage.

Resettlement. However much government acquires land in the public interest, it has to take into account the need for compensation of the affected victims and resettlement therefore. In line with this, Hundreds of people have been bought off and compensated with money so as to facilitate their resettlement off the mining regions. A resettlement strategy of displaced people has been adopted in accordance with the Land Act in *section 10 – appendix K* of the ESI to comply with article 237[1340] and section 43 of the Land Act on the position of bonafide occupants of land.

National Environment Act[1341] imposes a duty upon the undertakers of such environment related hazards to have **emergency response system against acute pollution**. The National Environment Management Authority under **Section 89 (4)**

[1338] 1995 Uganda Constitution as amended

[1340] 1995 Constitution of the Republic of Uganda. (as variously amended)

requires such a person involved in similar activities located in the same geographical area to cooperate in the establishment or implementation of joint emergency preparedness and response system. The onus is thus thrust upon TOTAL and CNOOC to show their readiness to handle this problem first by safeguarding against it. Bearing this, the Uganda ESIA report has been caused to reflect the same.

The National Environment Regulations[1342]**.** These regulations require that certain facilities such as pipelines, installations, platforms, refinery, storage facilities among others must be in place to curb the extremities of pollution taking the form of oil spills and other pollution risks. In all circumstances, the competent authorities must be notified.

Parliament is mandated to make laws for *regulating the exploitation of minerals and petroleum*; the sharing of royalties arising from oil exploitation; the conditions for payment of indemnities arising out of exploitation. In line with the EACOP, the parliament has passed such guiding laws such as the *Petroleum (exploration, development & Producation) Act 2013* as well as the *Petroleum (Refining, Conversion, Transmission & Midstream) Regulations 2016*. Similarly, in 2005, the ***1995 Constitution*** was amended to the effect that control of all minerals and petroleum in or under any land or waters in Uganda is vested 'in government on behalf of the republic of Uganda.[1343]

Management of pollution. To start with, the **objective xxvii** is to the effect that the state shall take all possible measures to prevent or minimize damage and destruction to land, air and water resources resulting from pollution or other causes. Pollution has been contained by the existing rules. in the *water sources,* The pipeline poses high risks of freshwater pollution and degradation, particularly to the Lake Victoria basin, which over 400 kilometres of the pipeline will traverse. More to this, constructing and testing the pipeline requires a significant amount of water to be used, a thing which drains the water sources. The Tanzanian ESIA mentions several large batches of approximately *16,000 m3 of water* will be needed

[1342] The National Environment (Oil Spill Prevention, Preparedness and response) Regulations, 2020:
[1343] section 43 of the Constitution Amendment Act no. 1 2005 repealed and replaced article 244 of the constitution

for testing. According to the Tanzania ESIA, the pipeline will pass through several regions that receive little rainfall and are already water scarce further threatening the water availability. It is unfortunate that both the upstream and midstream laws (**Section 130 and Section 58 (1)**) do not provide for a compensation regime for victims of such pollution or any losses resulting from poor management of petroleum operations, in particular, the unforeseeable longterm damages such may have on the environment and human health.

Section 3(d) of the Petroleum Supply Act provides that *the objective of the Act is… to ensure public safety and protection of public health and the environment in all petroleum supply operations and installations.* Therein, *Section 32* mandates the commissioner to *develop and implement or cause the implementation of a program of gradual adoption and adaptation of the prevailing international standards, technical specifications and codes of practice in relation to the petroleum supply industry in cooperation with the Uganda National Bureau of Standards and the committee.* In particular, section 17 of the Act instructs the project undertakers to obtain a petroleum construction permit which according to the ESIA, has been complied with.

Displacement. This will take place in various ways; displacement of soil, aquatic, nonaquatic habitats, soil, fauna etc… Much as resettlement is so possible with people, the same cannot apply to plant and certain animal aquatic species. The large moving objects will cause soil erosion which soil shall displace plant life species and where such species cannot survive upon certain areas, soil types and drainage, they shall go extinct. As is well documented in literature, several development projects (oil inclusive) cause displacement and, if not carefully managed, resettlement causes negative consequences[1344].

International conventions. Article 123 allows the making of treaties, conventions agreements or other arrangements in the name of Uganda with other countries and organizations in respect of any matters and the environment. (*Emphasis mine).* In essence, Uganda has assented to the jurisdiction of various trearties and conventions pertaining to the environment. Take for instance, one of the main

[1344] (IFC, 2012; Terminski, 2014; Smyth & Vanclay, 2017).

objectives of the **Treaty of the East African Community 1999** is to *promote sustainable utilization of the natural resources* of its partner states. *Article 111* deals with the management of the environment and its natural resources whereas Article 112 and 114 deal with the management of the environment alone and of natural resources respectively. Owing to the notion of ratification, Uganda has come to ratify *Conventions on Biological Diversity and Conventions on Trade and Endangered Species.*

Similarly, the ***East African Community Memorandum of Understanding on the Environment.*** provides for the harmonized natural and sectoral mechanisms of management of shared – Transboundary resources and ecosystems especially forests, water, wildlife and marine.

Article 123 of the **COMESA TREATY** requires member states to adopt common legislation for the preservation of shared land, marine and forestry resources and arrest environmental degradation.

Going more intercontinental, ***Principle 4 of the Rio Declaration*** states that *"in order to achieve sustainable development,* ***environmental protection*** *shall constitute states that are an integral part of the development process and cannot be considered in isolation from it.*

The international community has expressed concern about the relationship existing between the **environment and socioeconomic development** which also forms the substance of what I am discussing about in relation to victims of the EACOPO resettlement scheme. In June 1922, the **United Nations Conference on Environment and Development (UNCED)** was held in Rio de Janeiro to the same effect.

Neverthesless, the requirement to carry out an environmental impact assessment before signing of treaties ahs been pronounced and highly emphasized as under the ***Protocol on the Environment and Natural Resources Management*** and the ***Protocol for the Sustainable Development of the Lake Victoria Basin.***

Protection of fauna and wildlife.

The Uganda Wildlife Policy, 2014 requires that all developments on land are subject to environmental impact assessments to prevent misuse and destruction of

land natural resources. According to the ESIA, it is true that damage will be caused to wildlife and fauna even though much is being done to avoid such. Mitigation measures have been proposed for affected areas and wildlife and will be adopted in the biodiversity management. To mitigate the damage on **fauna,** the developer shall ensure that construction facilities must be undertaken outside breeding seasons for species of conservation concern so as to preserve and conserve wildlife. It will serve to mitigate the damage caused by moving vehicles causing mortality of fauna species and the existence of construction structure causing destruction of their breeding grounds. There is a likelihood of predation by predator species after destruction of their habitat and obviously damage to wildlife shall follow.

Destruction of cultural land facilities and cultural preservations.

Albertine Graben Physical Development Plan, 2015 focuses on achieving Uganda's objectives in its mission 2040 among which is cultural preservation and conservation of the cultural land facilities. The plan provides a planning framework to promote and guide the physical development process in the Albertine Graben in a sustainable way over a 25year period. The plan gets its overall guidance from Uganda's Vision 2040 and the *Second National Development Plan.* Bearing that this project is taking place in the Albertine region and is basically oil based which is the major component characterizing the region, the project will thus take the guidance and measures in the plan into account. In particular, the ESIA has assessed and will aim to mitigate impacts on cultural heritage and biodiversity, which the plan recognizes as requiring protection. The project will target maximizing the economic benefits associated with the pipeline, such as local employment and improvement of infrastructure.[1345]

Destruction of forest reserves.

The construction process will have to take place within regions of forest reserves whereby it stands inevitable that destruction will accrue thereof. **Section 38** of the *National Forestry and Tree Planting Act* stipulates that a person intending to

[1345] EACOP Project: Section 4: The Uganda ESIA - Legislative, Policy and Administrative Framework, Permitting Requirements, and International Conventions, Standards, Guidelines and Agreements

undertake a project or activity which may, or is likely to have a significant impact on a forest shall undertake an environmental impact assessment. The potential loss of forest cover involved in constructing the EACOP is particularly problematic considering Uganda is already losing about 90,000 hectares of forest per year.

Waste management.

The Petroleum Act [1346] tasks the National Environment and Management Authority (NEMA) with the duty of making regulations for the management of the production, transportation, storage, treatment and disposal of waste arising out of petroleum activities. A case in point is the **Kiboro hot springs**[1347] where there is also the risk of the **accumulation or disposal of hazardous waste**. *The pipeline will have to be regularly cleaned, and this cleaning generates hazardous waste containing benzene*, a human carcinogen. This waste will have to be either incinerated, which can generate hazardous *air pollution,* or be disposed of in storage sites at each pumping station, meaning each pumping station would become a hazardouswaste disposal site. Nevertheless, a pollution license to that effect has been obtained in accordance with the National Environment Act.

Section 34 [1348] prohibits a range of activities in a lake or river unless the requirement is waived by NEMA. This has been complied to by obtaining license and authorizations before setting hands on any activity in the Taala Forest Reserve and will comply with their conditions. The Act further sets the guidelines managing activity in hilly areas. And also those requirements for waste management but also requires them to identify those elements and sites in the natural environment which are of cultural importance to the various peoples of Uganda. The constructing body may do this in cooperation with NEMA, local environment committees, district environment committees and the lead agency. To comply with the same an Environmental Social Impact Assessment study has been

[1346] Petroleum (Exploration, Development and Production) Act for the (Upstream), 2013.
[1347] Accessed via online sources on March 29, 2020
[1348] National Environmental Management Act cap 153

undertaken in strict observance of the Act together with the National Environment (Environmental Impact Assessment) Regulations.[1349]

Adverse Impacts on tourism:

The pipeline will pass through areas of tourist activity which include the Murchison Falls National Park, Uganda's largest park and a popular tourist destination, where 40% of Lake Albert's oil is located. Tanzania, where 1,149 kilometers of the pipeline will be built and operated, is a country heavily dependent on tourism and on its wetland ecosystem for transport, fishing, agropastoral activities, hydrological processes and irrigation.

It is important to remember that the tourism sector is a great source of livelihood to many people and though a total of 5,000 job is expected to be created, only 300 of these shall be permanent which shall eventually leave many people displaced in the job market[1350]. The possibility of a pipeline leak leading to degradation of these key ecosystems, protected areas and wildlife habitats is not only an environmental threat, but a severe socioeconomic one as well.

Biodiversity, wildlife and protected nature areas:

Extraction at the oil fields in Albertine Graben will most directly impact the Murchison Falls National Park, posing a serious threat to biodiversity and rare and endangered species. Moreover, important tributaries of the Nile flow nearby. It is unfortunate that according to the baseline surveys, there is a likelihood of destroying the habitats of 13 animals species of conservation importance within the area of influence which are nationally and or globally rare and threatened. These include but are not limited to *Bohor, reedbuck, African golden cat, hippopotamus and spot spotnecked other.*

The situation gets worse in Tanzania, where the pipeline will run through even more (protected) areas crucial for biodiversity including the Biharamulo Game Reserve and Wembere Steppe Key Biodiversity Area. The Tanzania ESIA reports

[1349] 1998 (SI No.153-1)

[1350] Accessed on May 4, 2021 at The East African Crude Oil Pipeline- EACOP- published by BankTrack, 350.org Africa, AFIEGO & Inclusive Development International on March 5th 2021

confirms that Biharamulo Game Reserve which hosts a diversity of animals such as lions, buffalo, elands, lesser kudu, impalas, hippos, giraffes, zebras, roan antelopes, sitatungas, sables, aardvarks, and the red colobus monkey and The Wembere steppe, both of which are important places for seasonal birds will be tampered with. Summarily, about 500km2 of wildlife corridors for the Eastern Chimpanzee and African Elephant are likely to be severely degraded per the Tanzania Environmental and SocioEconomic Impact Assessment report.

Production of nuisance health hazards.

Subject to *section 54 of the Public Health Act*[1351], there is need to safeguard and promote public health, provide a general prohibition of nuisances or conditions liable to be hazardous to health. It is inarguably true that the project will produce nonhazardous and hazardous waste, effluent and air emissions with potential effects on public health per the Ugandan ESIA. In response to the law, the Impacts of waste and air emissions on community health have been assessed and mitigation measures identified to avoid the creation of a nuisance and risk to public health Waste management, pollution prevention and community health, safety and security plans will be prepared that will include mitigation measures.[1352]

National Oil Contigency Preparedness and Response Plan is provided for under the National Environment Act. it focuses on ensuring that the effects of oil spills are countered. ***Section 93(1)*** requires that the office of *the Prime Minister shall, in consultation with the Authority, the Petroleum Authority of Uganda and any other relevant lead agency, establish a National Oil Contingency Plan in the manner prescribed by regulations*. This requirement is so essential to the success of the pipeline and mitigating the likely harm possible if complied with.

[1351] Public Health Act (Cap 281 of the Laws of Uganda)
[1352] EACOP Project: Section 4: The Uganda ESIA - Legislative, Policy and Administrative Framework, Permitting Requirements, and International Conventions, Standards, Guidelines and Agreements

Climate change:

It is arguably true that there will be a climatic problem caused by the project activities which deliberately destroy the environment. The EACOP pipeline will carry 216,000 barrels of crude oil per day at 'plateau production'. This oil is likely to result in CO2 emissions of over 33 million tonnes each year, significantly greater than the combined emissions of Uganda and Tanzania, at a time when the world's scientists are telling us that new fossil fuel developments need to stop if we are to tackle the climate crisis[1353]. According to a report from the Carbon Tracker Initiative, several of Total and CNOOC's projects in Uganda are incompatible with the Paris Agreement. Significant climate changes manifested in long drought seasons will thus be expected.

Article 244(3) of the 1995 Constitution stipulates that minerals, mineral ores and petroleum shall be exploited taking into account the interest of the individual landowners, local governments and the Government. Indeed, by practice, compensation and resettlement schemes have been undertaken by the government in the public interest in fav or of those affected by the project. Despite all, it is important to note that the question whether the compensation amount is adequate still remains unanswered.

The National Oil and Gas Policy: focuses on creating lasting benefits for Ugandans. By way of ensuring sustainability of resources. The policy states that government shall ensure that it collects the right revenues; uses them to create lasting value for the entire nation; ensure optimum national participation in oil and gas activities; support the development and maintenance of national expertise and ensure that oil and gas activities are undertaken in a manner that conserves the environment, biodiversity and ensures mutually beneficial relationships between all stakeholders in the development of a desired oil and gas sector for the country. This according to the ESIA report, has been complied with accurately. Other important sections under the Act include ***section 52(2***), which provides for restrictions on the use of natural lakes and rivers in particular restricts the deposit any substance in a lake or river in, on or under its bed, if that substance would or is

[1353] ESIA report of Uganda- EACOP Project

like to have an adverse effect on the environment[1354].Under the act, the following are emphasized as common legal mechanism of environmental protection under the Act;

Control of Pollution.

Since pollution is a relative state of affairs, the act provides mechanisms to establish environmental standards and criteria for what is considered environmentally acceptable behavior and phenomena i.e. The act prohibits any person from carrying out any activity that is likely to pollute the environment (air, the water or soil) in excess of any standards or guidelines issued under the Act [1355].Pollution is defined to mean any direct or indirect alteration of the physical, thermal. Chemical, biological or radioactive properties of any part of the environment by discharging, emitting or depositing wastes so as to affect any beneficial use adversely, to cause a condition which is hazardous or potentially hazardous to public health, safety or welfare, or to animals, birds, wildlife, fish or aquatic life, or to plants or to cause a contravention of any condition, limitation or restriction which is subject to a license under this Act[1356].the Act requires that for activities likely to cause pollution, measures to prevent such pollution from occurring be taken by using the best environmental practices[1357]. The basis of the provisions of the Act against pollution can be traced from ***Principle XXI***[1358] provides that the state shall take all practical measures to promote a good water management system at all levels. The state is also required to take possible measures to prevent or minimize damage and destruction to land, air and water resources resulting from pollution or other causes. In addition, ***Article***

[1354]Section 52 (2) (e)
[1355]Section 78, National Environment Act, No.5 2019. Section 31, Water Acy Cap 152
[1356]Section 2, National Environment Act, No. 5 of 2019
[1357]Section 78 (2), National Environment Act, No. 5 of 2019
[1358]National Objectives and Directive Principles of State Policy, 1995 Constitution of the Republic of Uganda (as amended)

245[1359]requires Parliament to provide for measures intended to protect and preserve the environment from abuse, pollution and degradation.

1. Environmental Impact Assessment.

Under the Act, the EIA are made legal requirements. The EIA is undertaken as part of the process of environmental and social impact assessment.[1360] ***Section 2***[1361] defines Environmental Impact Assessment (EIA) as a systematic process of identifying and estimating the likelihood or probability of an adverse or hazardous outcome or event and its consequences on human health or the environment. The EIA fulfils the principle of precautionary measures principle. The EIA identifies, predicts, evaluates and proposes mitigating measures for the likely adverse impact on the environment due to planned activities and projects. The obligation to carry out this lies with developers[1362]. EIA is carried out where the activity may contribute to increasing the vulnerability of or lead to the extinction of species; the activity is likely to impact critical habitats, species of concern or cultural or natural heritage; the activity requires the introduction of technologies, chemicals or processes that have the effect of creating high ecological risks; he activity may cause acute pollution; the activity relates to the handling of petroleum commodities or products throughout their value chain.[1363] **Schedule 5**[1364] lists projects for which Environmental and Social Impact Assessments are mandatory and *inter alia* include nature conservation areas and petroleum operations such as the EACOP. Also, **schedule**[1365] **10** lists projects not listed in **Schedule 6** but planned to be located in or near environmentally sensitive areas such as National protected areas, wildlife conservation areas, water bodies, areas supporting endangered species for which an EIA is required to be carried out regarding projects that pose a threat to those areas.

[1359]1995 Constitution of the Republic of Uganda (as amended)
[1360]Section114, National Environment Act, No. 19 of 2019
[1361]National Environment Act, No. 19 of 2019
[1362]Section 111, National Environment Act, No. 19 of 2019
[1363]**ibid** Regulation 15, National Environment (Waste Management) Regulation S.I. No. 49 of 2020, Regulation 34, *National Environment (Wetlands, Riverbanks and Lake Shores Management) Regulations 153-5.*
[1364]National Environment Act, No. 19 of 2019
[1365]***Ibid***

Several regulations have been made under the National Environmental Act to implement its provisions, which are relevant to the regulation of oil exploration and production and in this case EACOP. These include' ***National Environment (Standards for Discharge of Effluent into Water or Land) Regulations 2020.*** The regulations provide for the standards for effluent or waste water before its discharged into water. The regulations provide for the general obligation to mitigate pollution[1366]. They require that every industry or establishment to install, at its premises, antipollution equipment for the treatment of effluent chemical discharge emanating from the industry or establishment. The antipollution equipment has to be based on the best practicable means for environmentally sound practice[1367].

Noise pollution.

The National Environment (Noise Standards and Control Regulations; are aimed at ensuring the maintenance of a healthy environment for all people in Uganda, the tranquility of their surroundings and their psychological wellbeing by regulating noise levels and generally, to elevate the standards of living of the people by prescribing the maximum permissible noise levels from a facility or activity/project to which people may be exposed and to provide for the control of noise and for mitigating measures to reduce noise[1368]. They establish permissible noise levels for factories, workshops, construction sites and mine quarries. Other important legislation includes;

Water pollution.

The Water Act, Cap 152 provides for the use, protection and management of water resources and supply, the constitution of water and sewage authorities and the devolution of water supply and sewerage undertakings. The objective of the Act include; promoting the rational management and use of waters in Uganda through progressive introduction and application of appropriate standards and techniques for the investigation, use, control, protection, management and administration of

[1366]Regulation 4
[1367]Regulation 6
[1368]Regulation 3

water resources; coordination of all public and private activities that may influence the quality, quantity, distribution, use, or management of water resources[1369]

Section 34 [1370] prohibits a range of activities in a lake or river unless the requirement is waived by NEMA. This has been complied to by obtaining license and authorizations before setting hands on any activity in the Taala Forest Reserve and will comply with their conditions. The Act further sets the guidelines managing activity in hilly areas. And also those requirements for waste management but also requires them to identify those elements and sites in the natural environment which are of cultural importance to the various peoples of Uganda. The constructing body may do this in cooperation with NEMA, local environment committees, district environment committees and the lead agency. To comply with the same an Environmental Social Impact Assessment study has been undertaken in strict observance of the Act together with the National Environment (Environmental Impact Assessment) Regulations.[1371]

Destruction of wild life.

The Uganda Wildlife Act, 2019 was enacted in 1996 but underwent amendment in 2019. The Act provided for sustainable management of wildlife, consolidates the law relating to wildlife management and establishes a coordinating, monitoring and supervisory body for that purpose. The Act intended to conserve wildlife throughout Uganda, so as to maintain the balance of diversity. The above Acts, principles and Regulations are supplemented by several regional and international environmental law instruments such as the Stockholm Declaration, 1972 and Rio Declaration, 1992 among others. One of the major gaps in relation to the implementation of the above Regulations is that Oil industry (EACOP) have not published waste management plans, thus making it difficult to assess the effectiveness of the mitigation measures.

The EACOP project crosses the Biharamulo Game reserve for 33 km and crosses through the Wembere Steppe KBA for 32 km [1372]. Besides, the pipeline also

[1369]Section 4, Water Act, Cap 152

[1370] National Environmental Management Act cap 153

[1371] 1998 (SI No.153-1)

[1372]Nearly 2000km2 of protected wildlife habitat (Biharamulo Game Reserve and Wembere Steppe Key Biodiversity Area) will be affected by significant habitat disturbance, fragmentation and increased risk of wildlife poaching due to the EACOP project

overlaps several wildlife habitats including 510 km of African Elephant Habitat[1373]. In terms of water resources, the pipeline crosses several streams and rivers in both Tanzania and Uganda, in particular the Kagera River, the largest river flowing into this lake. Approximately 460 km of the pipeline will be within the Lake Victoria basin. [1374]Finally, the pipeline will deliver oil to a port located in an area rich in mangroves and coral reef, as well as adjacent to two Ecologically or Biologically Significant Marine Areas (EBSAs)[1375] including; PembaShimoni Kisite in the North and the Tanga Coelacanth in the South[1376]. And with the signing of Host agreements between Uganda and Tanzania on 11th April, construction of EACOP is expected to start soon.

The development and the construction of East African Crude Oil Pipeline in the country presents potential environmental challenges[1377]. This is cardinal because the main area where oil exploration and production activities are going on coincides with Uganda's most important ecologically sensitive and biodiversityrich areas. Statistically, the Albertine Graben is said to be the most speciesrich ecoregion for vertebrates in Africa with over 39% of the continent's Mammalian species, 19% of its Amphibian species and 14% of its Plant and Reptile species.[1378]The Albertine Rift Region also harbors Africa's 51% of Bird species and 79 threatened terrestrial vertebrates of the world, according to the IUCN Red

[1373]Approximately 500km2 of important wildlife corridors for the Eastern Chimpanzee and the African Elephant species are likely to be severely degraded

[1374]High risk of freshwater pollution and degradation especially in the over 400km stretch of the Lake Victoria basin through which the pipeline is planned to traverse. This lake basin currently supports the direct livelihoods of more than 30 million people in the region.

[1375]Two important Ecologically or Biologically Significant Marine Areas (EBSAs) - Pemba-Shimoni-Kisite in the north and the Tanga Coelacanth in the South are at high risk in case of an oil spill. This is especially so given the huge amount of crude oil (more than 170,000 tons per loading) to be transferred offshore at the Tanga Port

[1376]EACOP, Unlocking East Africa's Potential, East African Crude Oil Pipeline, Kampala, 2018. https://eacop.com/publication/view/eacop-project-brochure/ (accessed 16th April 2021).

[1377]The Tilenga project, therefore, endangers the biodiversity of the Murchison Fall National Park, as well as the lakes, rivers and streams that local communities depend on for their survival. Lake Albert is home to approximately 30% of Uganda's fish stocks. The project is also likely to degrade the soil that farmers depend on to grow crops and pollute the air that they breathe. These numerous risks of irreversible environmental damages are in addition to the inherent risks of any oil activities, which include spills, fumes, wastewater discharge and above all, global warming.

[1378]Ministry of Energy and Mineral Development (2010), at 30.

Data Book Listings[1379]. At the same time, the rate of biodiversity loss in Uganda is so high. In 2004, it was estimated to be between 1011% per decade, that is, about 0.8% annually.

This was attributed to factors such as habitat loss, habitat modification and alteration, unsustainable harvesting, pollution and introduction of alien species[1380]. The problem is exacerbated by the fact that international lessons drawn by Uganda especially from African oil producers are not desirable. For example, comparative experiences from Nigeria, Angola, Libya and Gabon show oil exploration and production has resulted in a resource curse manifested inter alia, through gross environmental degeneration[1381].

Destruction of wetlands and biodiversity.

The proposed technique for water and wetland crossings (open trench) has the potential of significant negative impacts, particularly in wetlands thus a violation of **section 78**[1382]that prohibits pollution. **Section 55[1383]** that lists restriction on the use of wetlands. Principles of environment management under section 4[1384], principles of environmental law and international treaties that Uganda is a signatory to. Besides, the ESIA does provide information on ecosystems that will be disturbed, particularly habitats for species of conservation concern and migration routes, linking project activities to potential impacts on biodiversity thus the EACOP will be in violation of ***Section(59), (60), (61)*** that require conservation of biodiversity, Principle of Environmental law especially the principle that requires the use of nature to meet the needs of the present generation without jeopardizing the interests of the future generation. However, some biodiversity concerns remain, like the effectiveness of the mitigation measures for chimpanzee protection and impacts on the Taala Forest Reserve. If not resolved would be a violation of the ***section 59 and***

[1379]L. Johnson, (2007) Assessing the Impacts of Energy Developments and Developing Appropriate Mitigation in Ugandan Portion of the Albertine Rift. A report of findings prepared on behalf of Uganda Wildlife Authority, at 7.

[1380]Ministry of Energy and Mineral De-velopment (2010) Supra, at pp 34-35

[1381] A. Bainomugisha, Hope Kivengere & Benson Tusariwe Escaping the Oil Curse and Making Poverty History: A Review of the Oil and Gas Policy and Legal Framework for Uganda. ACODE Policy Research Series No. 20/2006 at 5, and Civil Society Coalition on Oil in Uganda (2010) at 33.

[1382]National Environment Act, 2019

[1383]**ibid**

[1384]***ibid***

61 [1385] that requires conservation and protection of species threatened with extinction. The risk of failure of the oil heating systems, which would lead to solidification of the oil is not discussed in the ESIA. How would such a situation be managed? Would it result in large quantities of (hazardous) wastes? Also, when waste streams and energy needs are discussed, no quantities are mentioned. It seems as if waxy waste streams will not occur which is highly unlikely. Treatment or disposal of waxy waste streams is not clear and this violates section 93[1386].

Oil spills.

National Environment Act that requires the Prime Minister in consultation with NEMA and other agencies to establish a National oil spill contingency plan aimed at planning, preparing and responding to oil spills on land and water bodies and the Regulations on waste management of hazardous material. *Therefore, the ESIA and EIA do not comply with the Environment Act, Cap 2019, Wildlife Act, Water Act ,National Environment (Noise Standards and Control Regulations, National Environment (Standards for Discharge of Effluent into Water or Land) Regulations 2020*(no measures on how pollution as a result of EACOP will be mitigated especially in water bodies*)* ,and the principles of environmental law such as the principle that requires states to take precautionary measures and thus violates the right to a clean and healthy environment. The challenge is that the above laws as they stand may not lead to the desired degree of environmental law compliance. This is basically because the deterrent fines imposed against violators are not in fact deterrent for, they are so low. Also, there seems to be no political will and commitment towards environmental law compliance as the government is seen to be bending towards development rather than environmental conservation[1387] Even the operators themselves seem to be so defiant and it is doubtable if they shall comply with the requirements prescribed by the above laws. For example, when the CSOs were concerned about the construction of an oil refinery in KaisoTonya, on one occasion a senior manager of Tullow Oil, Mr Peter Javis was reported to have said "*one square kilometer refinery will be built in KaisoTonya Wildlife Reserve, Hoima District before the end of the yea*r" despite concerns by

[1385]Wildlife Act
[1386]National Environment Act, 2019
[1387](Remember the arguments of the Executive during the fight to save Mabira Forest from being given away to Mehta, an Indian investor, for sugarcane plantation).

environmentalists[1388] This, therefore, shows that despite the presence of a sound legal and policy framework environmental law compliance may remain elusive and a mere illusion in regards to the EACOP.

Conclusion.

In my well considered opinion, it is imperative to appreciate all the legal and institutional framework in place to bring about a successful conclusion and operation of the EACPOP as one of the blessings of to our country, East Africa at large as well as a mantle for East African Cooperation on economic and developmental lines. However, we cannot underestimate the potential damage causable upon our environment and with such not being remedied, the oil issue would indeed be a curse than a blessing to our economy. The environmental regulatory framework for oil exploration and protection in Uganda *is* still new and still inadequate in some areas including environmental regulation. in addition to limited financial and human resources to implement the available provisions, there is relatively high risk of harm to the environment during oil exploration and production through projects like the EACOP unless measures for minimizing or causing such harm to ecologically and biodiversity sensitive areas are put in place. Oil in Uganda was discovered in a sensitive place which poses an environmental disadvantage as it's the most species rich eco region and biodiversity hotspot of Uganda. If no mitigation measures are taken, the activities can lead to disastrous environmental consequences. It's important to note that poor intuitional and legal framework has led to the EACOP's noncompliance with the EACOP, this is because the law contains areas which have contributed to noncompliance with environmental standards and principles. Therefore, there needs to be strengthening of legal and institution framework that governs environment and civil society organizations to ensure that there is a followup to check on noncompliance to environmental standards and principles.

[1388]New Vision, Thursday, July 31st, 2008.

CHAPTER

TWENTY TWO

WAY FORWARD

Concerning the Legal Framework

Government should create a legal and policy framework ensuring that exploitation of natural resources is conducted in a manner that respects human rights and freedoms. Oil companies are equally enjoined to respect, protect and provide remedies to victims of their corporate quest for the exploitation of natural resources in Uganda.

Before issuing a certificate of compliance in accordance with the provisions of Section **13(6) of the Public Finance Management Act, 2015, the National Planning Authority (NPA**) should demand that the Ministry of Energy and Mineral Development provides for the review of the Upstream and Midstream laws to make them human rights compliant in the subsequent National Budget Framework.

The legal framework should provide for public disclosure of contracts and environmental impact assessments for accountability purposes and a demonstration by government and international oil companies to provide remedies to those affected by the negative social and environmental externalities of the petroleum industry in Uganda.

International oil companies should work closely with government and civil society to consult and secure free, prior and informed consent through community

engagement in the conduct of environmental impact assessments in addition to making them and other contracts such as production sharing agreements and signature bonuses publicly accessible without superfluous bureaucratic limitations.

The legal framework should be reviewed to ensure that Ugandan local businesses are guaranteed an equitable playing field with regard to employment opportunities in the industry. This will not only guarantee sustainable management of the industry, but lead to a higher Net National Product for Ugandans employed in the industry.

The laws should ensure that government establishes a compensation fund. Government should require oil companies to contribute a minimal percentage of their economic rents periodically as part of their human rights responsibilities. Such a facility would be used to provide basic services such as clean water or resettlement of project affected persons. The fund could also be used to indemnify and compensate victims of human rights violations. This is not a matter of corporate social responsibility, but rather human rights.

Way Forward On Local Content.

Government should create a legal and policy framework ensuring that exploitation of natural resources is conducted in a manner that respects human rights and freedoms. Oil and gas companies are equally enjoined to respect, protect and provide remedies to victims of their corporate quest for the exploitation of natural resources in Uganda.

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Increase Inclusion in decisionmaking is needed in order to increase inclusion and participation of citizens. There is need to formalise the existing participation forums and ensure there are formalised processes of consultations at different levels. This should also enhance feedback at the community level and community involvement in decisions such as Corporate Social Responsibility (CSR), local

participation and local content as well as other company or government interventions.

Uganda should create an institution to manage local content by starting a dedicated institution to manage the local content aspect not only in oil and gas but also in other sectors. Such an institution should have powers to oversee and monitor compliance with the policy and legal requirements for local content in Uganda including powers to punish businesses that violate the local content requirements. Parliament should by law create this institution which will have powers to audit compliance with local content policies and laws in Uganda.

Uganda should make a Law on local content to provide for local content. Specifically, the law should provide for a better definition of Ugandan business entities, an independent authority to monitor compliance with national local content plans as well as monitor the development of national capacity among others.

To successfully increase gas consumption in Uganda, there are several policies that will need to change or be introduced such as policies to reduce taxes on gas and equipment required for gas usage; incorporate gas requirements in building designs, courses and education curriculum; and urban planning needs to take natural gas infrastructure requirements into consideration for future usage of natural gas. There is need to increase regulation in the natural gas market.

The utilization of natural gas will have to be in a phased approach. In the short term the utilization of natural gas in industries is easier than the utilization for domestic application since industrial utilization requires limited infrastructure development to large scale consumption that makes the investment in the pipeline economically viable. Presently about 0.8% – 1% of the Uganda population (household) uses Liquefied Natural Gas (LNG) even if about 22% can afford to use LNG. Less than 9% of the urban population use LNG; the main reasons given

for this mismatch are: the LNG is more expensive compared to firewood or charcoal; and people are afraid of having gas in their houses. The government therefore needs to embark on a mass sensitization campaign to educate people about the falsehoods associated with natural gas usage and create awareness on the benefits associated with natural gas usage.

Industrial stakeholders are eager to benefit from the production advantages associated with natural gas usage, however, the cost/benefit analysis needs to favour them to switch to natural gas to enable industries to economically convert their production lines to natural gas usage. With the proposal to utilize natural gas in the Ugandan economy, the government needs to roll out a masterplan to increase demand for LNG to provide a conducive market reception for natural gas in the Ugandan economy.

Government should partner with private companies and organisations. Infrastructural investment in gas facilities is capital intensive, the government needs to partner with private companies and organisations such as The Global LNG Partnership whose goal is to help countries make the shift to LNG for clean cooking on a large scale, to enable the move of to clean LNG energy for household cooking by 2030. Investments in cylinders, importation facilities, refilling plants, and distribution will support the scaleup of natural gas demand.

Increasing access and affordability of NG is a challenge to lowincome earners who can’t afford the high upfront cost of cylinder, regulator and gas stove. Government needs to support initiatives by the private sector, such as Pay as You Go gas being implemented by Fenix International Ltd which allows the consumer to pay only for the gas consumed. The government should also provide loans for purchase of equipment and initial filling of LNG which is a barrier to many individuals. This will make the equipment required more affordable and more accessible.

Sensitization campaign is needed since there exists a lot of negative mentality towards the usage of natural gas especially in the domestic sector. This is mainly due to the fear to use gas as people generally believe it is not safe to use gas. The government need to sensitize the population on the benefits of using natural gas through hold advertising campaigns to promote the gas utilization and also hold create safety awareness on gas usage.

Providing possible incentives by government is needed to increase gas consumption. This could be through reduction in taxes, giving out free gas stoves and cylinders to communities. Government should also consider providing support and incentives to industries incurring capital costs to convert their production lines for natural gas usage.

Promoting local production is needed since a significant portion of the final gas cost to the final customer is as a result of high costs associated with importation of gas cylinders yet gas cylinders are manufactured within Uganda at a fraction of the cost for imported cylinders. Moreover, these cylinders are of high export quality as shown by the number of Ugandan manufactured cylinders exported to Rwanda, Tanzania and DRC from Uganda without quality complaint. The government needs to support local production by proper monitoring and regulation to ensure local production meets required industrial standards. Import barriers should also be placed on impo3rted cylinders to promote local production.

Championing gas usage is needed to increase natural gas consumption. The government needs to champion the consumption of gas by using gas in its facilities, institutions, offices, and agencies. This will also create awareness about natural gas usage. To scale up gas consumption in Uganda, it is necessary for the government to ensure gas usage is affordable and accessible by providing the prerequisite infrastructure, reducing taxes on gas and gas equipment and also creating awareness on the benefits of gas usage.

Regulation of the gas industry is needed. Uganda National Bureau of Standards UNBS requires capacity building to enhance its role in regulation and monitoring of the gas players. Proper regulation in the gas industry will ensure that safety standards are met by all gas suppliers and distributors. The challenge of blackmarket gas players would also be overcome by proper regulation and monitoring. This will help improve the safety standards in the gas industry.

Standardisation in the gas industry is needed since currently there are 25 different companies[1389] involved in gas supply and distribution and each company produces cylinders of different sizes and capacities. This variation causes an inconvenience to customers who can only refill their cylinders from a particular company brand. To create ease of access an exchange pool system can be applied where customers can refill their cylinders with any company brand.

Government should attract climate funds by packaging natural gas as an environmental benefit so as to attract climate funds that can support development of the natural gas infrastructure.

Concerning Land Aquisation

Resourcedependent countries with poor socioeconomic development often fail to optimally benefit from their natural resource wealth. These countries face slow economic growth and, in some cases, become entangled in violent conflicts. For instance, Chad, the Democratic Republic of Congo, Guinea and Mauritania, whose natural exports contribute close to 90% of total exportsare also the countries with the lowest per capita income in the world; unaccountable and mismanaged institutions, coupled with the discovery of natural wealth, are believed to be the root cause of economic failure and conflicts. Some empirical evidence suggests a

[1389] Transport and Infrastructure Expertise Group (TIEG) (January 2020): Gas Demand Report Technical Assistance to the National Planning Authority, including a Feasibility Study for Establishing a Comprehensive Iron and Steel Industry in Uganda. FWC SIEA 2018. Lot 2, Infrastructure, sustainable growth and jobs. EuropeAid/138778/DH/SER/Multi. Specific Contract Nr. 2019/406-879. An EU funded project managed by the EU Delegation to Uganda

robust correlationoften described as the ‘resource curse’ between natural resource dependency and economic growth.
The government of Uganda should therefore strive to improve the land ownership systems in Uganda. This can be by changing the law on ownership of land to vest it in the government which can then ably plan for the welfare of everyone in the country

It should consider adding more vigilance in respecting the laws set up against corruption and embezzlement and avoid indulging in the same. The initial costs should be mitigated to avoid future high cost oil; human rights should be promoted and the government must refrain from using their power to infringe on the rights of the citizens; consent must be clearly made a prerequisite to acquiring land and compensation must be worked out in a way that the land owner continues to benefit even though they are no longer actively settling on the land; the Oil and gas sector should not be held in higher regard, neglecting the other sectors of the economy; and enough care should be taken to respect the environment and preserving it should be ultimate in all operations.

When citizens lack a sense of public ownership of state revenues, it is easier for governments to maintain secrecy over revenues and expenditures from extractives. Furthermore, when the extracting company pays taxes directly to the state, citizens have minimal oversight regarding the flow of revenue and expenditure. This lack of information and ownership towards resource revenue leads to an accountability deficit and spurs on the illicit moving of funds out of the extractives sector.
Several multistakeholder initiatives should be established to encourage public disclosure of information, apart from mandating this disclosure, these initiatives should aim to create platforms for debate and to empower civil society organisations to use the information and engage with the government for better transparency and accountability and ultimately improved development outcomes.
In theory, legislators can support the governance of extractive industries in a number of ways inter alia by; securing the public disclosure of extraction

contracts, monitoring compliance with contracts and laws, amending and ratifying legislation on extractive sector management, monitoring the performance of government agencies responsible for managing the extractive sector, and informing and managing expectations of the constituents and representing constituents' interests.

Furthermore, as the volume of publicly available data on extractive industries continues to grow, the role of the media and in particular investigative journalism in making sense of this wealth of information is increasingly recognised as key component of the evolving transparency and accountability agenda.

Lack of transparency and accountability coupled with Illicit Financial Flows leads to loss of what are often desperately needed resources to fund public initiatives or critical investments like in this time of the global pandemic. Collectively, for developing countries like in the East African region, this often represents millions of dollars in lost or foregone tax revenues that could have otherwise been collected and used for supporting sustainable economic3 growth, creating jobs, reducing inequality, poverty, and addressing climate change among other things. With billions of dollars estimated to be illicitly leaving developing countries every year, this drain of public resources undermines the efforts of countries to mobilize more domestic resources in order to meet internationally agreed SDGs. Therefore, transparency ought to be emphasized in order to retain the funds being lost from the extractives sector.

Way Forward On Oil Exploitation Impacts On Sustainable Development.

Globally, there is increasing recognition of the benefits of transparency in public data and ever greater momentum towards reform. It is essential that citizens are able to access and understand extractive contracts agreed by their governments in their names, in order to ensure that the public obtains the fullest benefit possible from exploitation of their nation's natural resource wealth. It is also important to ensure that current requirements on politicians and public officials to declare any business interests are met and agree a process to investigate and address potential conflicts of interest. This is particularly true of the extractive sector, with civil

society groups, governments and parliamentarians contributing to a growing movement against opacity and towards improved governance.

Way Forward On Tax Administration and Contract Negotiation On the Sustainability of Uganda's Oil Sector and Development.

In recognition of the fact that apt tax administration and contract negotiation will have a more positively significant marginal effect on the sustainability of the oil industry in Uganda compared to other factors, there is need for a regulatory environment that fosters transparency concerning all revenues and in negotiation and award of contracts. All future contracts should be published immediately upon signature, including details of the ultimate beneficial ownership of contracting companies or shareholders. Furthermore, negotiating with companies and publishing all existing extractives contracts and licenses along with appendices and supplementary material including Environmental Impact Assessments and Development Plans, in hard and soft copy, with local translations where appropriate will be critical. As such, the government needs to adopt the Extractive Industries Transparency Initiative (EITI) because it provides avenues for addressing the general failure to account, transform resource wealth into sustainable development i.e. the resource curse and the associated governance problems in the extractive sector.

Way forward for citizens' involvement in the oil matters on the sustainability of Uganda's oil sector and involvement.

As established earlier, employment opportunities in the oil sector should be prioritized for the local people over foreigners in order to build public participation and capacity to understand the new sector. Moreover, ensuring that the anticipation of wealth from Uganda's oil does not intensify land insecurity, sectarian competition and other conflicts should be at the back of policy makers' minds at all times because the government should be treated merely as a custodian of assets owned collectively by the citizens they represent

The marginal effect of instituting proper tax administration and contract negotiation processes will have a more positively significant effect on the

sustainability of the oil resource while citizens' involvement may not have a significant effect. This implies that the government should go through with adopting the Extractive Industries Transparency Initiative (EITI) because it provides avenues for addressing the general failure to account, transform resource wealth into sustainable development, i.e. the resource curse and the associated governance problems in the extractive sector.

Way forward for the Production Sharing Agreements and Their Efficaciousness in Guaranteeing a Sound and Optimal Safe Guard for the Exploitation of Oil and Gas Resources in Uganda.

Under the **Petroleum (Exploration, Development and Production) Act, 2013** the roles of the Minister tend to often interfere with those of established institutions. For example, under section 6 of the Act, the minister is required to draft a model PSA that is subjected to approval as set out in the Act. The Energy Minister in Uganda is a public servant who can be transferred from one ministry to another at any time since the ministerial position is a political appointment. In most cases the Minister and the deployed members in the office are lacking the required expertise in drafting a competitive PSA in the oil and gas sector. In my view this function ought to have been placed under institutions such as the PAU or the NOC that have specialised experts capable of handling and dealing with petroleum activities.

It is therefore recommended that these roles and functions could be harmonised to realise the rationale for which institutional structures like the PAU and NOC that were established under the **Petroleum (Exploration, Development and Production) Act, 2013**. The Minister's roles ought to be mainly limited to supervisory duties rather than participation and regulation that remains within the scope of the PAU and NOC. According to the **Petroleum (Exploration, development and Production) Act, 2013**, the purpose of the Act is operationalising the National Oil and Gas Policy of Uganda by establishing an effective legal framework and supporting institutional structures to ensure that the exploration, development and production of petroleum resources of Uganda is

carried out in a sustainable manner that guarantees optimum benefits for all Ugandans, both the present and future generations. This is key because this Act is remains one of the guiding laws in oil and gas operations of Uganda. However, neither does the Act nor the PSA model define the term “Dispute” in as far as petroleum activities are concerned. The purpose of parties participating in the oil and gas operations entering into a PSA is to clearly state their obligations so that both of the parties can protect interests from being affected in case of a default or a dispute arising out of the contractual relationship.
This research therefore recommends that both the PSAs and the Acts should define the term “Dispute” and also shed some light on some of the lawfully permissible mechanisms of dispute settlement in the oil and gas operations.

International Oil Companies being the major funders and highest risk bearers in oil and gas operations, they tend to have a comparably higher bargaining power compared to the host states. It is therefore recommendable following from such a possibility that countries like Uganda, countries which are investing or exploiting petroleum resources for the first time should prioritise in the training of experts in not only the drafting of international contracts but also the negotiating of such contracts. The government should also embark on giving the technical staff in the oil and gas sector handson training. An arrangement that might be achievable through making collaborative partnerships with popular IOCs like TOTAL, TULLOW, and CNOOC among others that are currently engaged in the exploration and development of Uganda’s petroleum resources.

And in the case of Uganda this will promote the local content policy and uphold the national local content bill. Local content in the oil and gas sector focuses on citizen participation in the oil and gas activities and this can be done through citizenry empowerment through training, capacity building, technology transfer, employment and service provision. In countries like Uganda where the industry is still growing as earlier noted it is prudent for governments to embark on giving the

technical staff in the oil and gas sector handson training and exert more efforts to ensure that citizens competitively take part in the oil and gas sector.

The sector of oil and gas in Uganda is still growing. For this reason, numerous decisions have to be made regarding its exploration, development and production. Production Sharing agreements provide a great opportunity for Uganda to acquire the expertise required to extract the oil and still have ample profit oil after removal of the cost.

The government should strive to give PSAs more relevance in the laws of Uganda so that it is readily known and acceptable to all the parties affected by the terms concluded in the contract.

Concerning the Best Method Preferable for Dispute Resolution in Oil and Gas Mining and Development

Resourcerelated disputes are good candidates for one or a combination of alternative dispute resolution (ADR) strategies. Facilitated dialogue, forexample, is an effective supplement to traditional administrative, legislative and judicial procedures that often limit cooperation between competing groups, undercut creativity and sometimes lead to politically unstable outcomes. Agreementfocused facilitation and mediation in relation to the subject of discussion therefore involves resorting to skilled facilitation and mediation services to help disputing parties resolve contentious energy resource and environmental disputes, and produce lasting agreement with minimal impact on cordial relationships between the parties. Whereas litigation may destroy longterm relationships, facilitation and mediation can build a basis for collaboration.

Facilitation is a group process that is goaloriented. The facilitator directs traffic, elicits views, clarifies and records significant data but is usually not involved in substantive issues. The facilitator is frequently seen as a 'shadowleader'. His task is to stay in the background with little direct involvement in activities, but to see that the right things happen. The facilitator's task is not to try to keep mistakes from being made, but to help the team avoid outright disaster where possible. In fact, the most important task for the facilitator is to facilitate communication in a manner that helps the teams grow and mature to the point where they are largely

selffacilitating and need to call for assistance only in emergency situations. The ability of the teams to function effectively, while remaining as independent as possible from the facilitator's direct involvement, indicates the degree of success of the entire process.

The combination of arbitration and conciliation is a wellestablished tradition in some parts of the world such as Germany, Switzerland, China and the United States. Linking the two techniques together creates an ADR mechanism that makes the whole a more effective force than the sum of the two components used individually. In combining arbitration and conciliation in the same proceedings, the concerned parties' agreement/consent seems to be the common requirement in some institutional rules. For example, the arbitration laws of Hong Kong, Singapore, India and Nigeria allow arbitral tribunals to render the settlement reached through conciliation in the course of arbitral proceedings as an arbitral award.

Joint factfinding is a strategy for resolving factual disputes. Employing joint factfinding means addressing a factual dispute by forming a single factfinding team comprising experts and decisionmakers representing both sides of a conflict. The team works together in an effort to come to agreement regarding relevant facts, often in the form of scientific, technical or historical claims. In this respect, joint factfinding is really mediation within mediation an attempt to resolve a subconflict over facts as part of an effort to deal with the overall conflict. While joint factfinding is not always a viable or appropriate option, a strong case can be made for it being the preferred method for settling a factual dispute. This is obvious from how joint fact finding works and what can be expected of a successful joint factfinding venture. Often, in carrying out a joint factfinding endeavour, the benefits go beyond reaching a consensus on the facts.

Basically, members from each of the disputing parties or their representatives constitute a factfinding committee. They are given the task of working together to discuss, debate and research the facts. This kind of forum would result in a level of interaction that is not likely to occur under other circumstances. A stage is set for open communication, which can go along way in resolving a factual dispute, as

factual disputes like many disputes may be the result of faulty communication. In addition to providing an opportunity for greatly improved communication, the act of agreeing to a joint factfinding venture is a general shift away from selfserving factfinding strategies such as 'adversary science' Joint factfinding, therefore, addresses the problem of contradictory experts by getting the experts together as a team to respond directly to research, discuss where evidence is soft or misinterpreted, and propose new directions. For example, environmental groups sometimes employ leading scientists and academics, yet academic departments face fairly serious budget constraints, as do many environmental organisations. On the other hand, large industrial companies usually have much larger budgets, allowing them to acquire the latest scientific equipment and experts of their own. If such groups choose to work together on a specific factual inquiry, they gain access to previously unavailable expertise and equipment. In this respect, the whole may turn out to be greater than the sum of the parts or, more specifically, such a sharing of resources holds possibilities beyond reaching agreement on key conflict facts. When diverse knowledge and resources are put together in a 'think tank' environment such as joint factfinding, there is a possibility of achieving a greater understanding of underlying scientific/technical knowledge as a whole. The prospect of actually furthering the relevant fields by sharing resources can provide additional motivation for experts under such conditions to set a side adversarial techniques and work together. This is in addition to the potential benefit of discovering unrecognised opportunities for balancing competing interests.

Like joint factfinding, neutral factfinding serves as one possible way toresolve a factual dispute. Loosely defined, it is a factfinding endeavour inwhich those conducting the investigation are neutral with respect to theconflict at hand. Neutral factfinding can be employed at many levels, fromsmall (but heated) environmental or community conflicts to largescalepolitical or international conflicts.

The obvious advantage of employing neutral parties in an attempt to settle a factual dispute is that neutrals are much more likely to be objective,and in being objective they are more likely to discover the real facts.Stakeholders suffer from a conflict of interests, which is the desire to gainprofit for themselves conflicting

with a duty to discover or embrace thegenuine facts. It is difficult for any people who stand to lose or gain from a conflict's outcome to resist employing strategic methods in informationgathering and factual analyses, and slanting information to suit their ownends. The neutral person by definition does not stand to lose or gainanything as a result of taking one side or the other. Neutrals have no reason to initially favour one set of claims over another. Such a position allows the deciding factors to be what they should be namely, the strength of the evidence, how well it supports certain conclusions, which facts can be agreed on and which facts are justifiably in dispute due to uncertainty orlingering unknowns.

Joint factfinding is probably the best factfinding method to use as a means of improving relations between conflict parties. Yet joint factfinding is not always possible. Some conflicts become too heated, or involve a long history of violence; or the parties in the conflict may be too scared to cooperate. Others involve drastic power differentials, such that one group cannot match the resources or expertise of the other. This situation results in one side having a greater say in the kinds of facts that are collected, thereby skewing the results of the mission in its favour. Still other kinds of conflicts simply do not allow the two sides to come together, such as in the case of an internal conflict between members or groups of the same organisation; in which cases it may be necessary to enrol the aid of a neutral party.

For the larger crises involving the OPCs, MOCs and the government, we advocate the reactive measures discussed above and propose the creation of a specialised institution for ADR that would handle oil and gasrelated disputes arising in the Niger Delta as between communities or between the OPCs and MOCs. We envisage here that such an institution must be completely independent, neutral and capable of funding itself. This specialised institution should be conferred with the authority to: maintain lists of qualified mediators, conciliators, arbitrators and oil andgas experts, receive requests for ADR processes in resolving disputes, assist disputing parties to appoint neutrals and maintain a code of ethics for them, set the necessary rules under which any of the chosen ADR processes would operate and fix a reasonable time limit within which to resolve the issues at stake, notify the public, where necessary, of complaints and the proceedings of the panels of

conciliators, arbitrators or factfinders, render all other services necessary for the peaceful resolution of disputes.

We are mindful of the fact that a specialised institution may not be able toresolve all kinds conflicts emanating from the energy sector. Therefore, we propose that whenever the reactive measures recommended above fail orwhere disputing parties have no inclination to use them, recourse may behad to standard litigation, but with the recommendation that such disputesbe given accelerated hearings to determine the rights and liabilities of theparties before disputes degenerate into violence.

Recommendations on Planning of Oil Exploration/Production and the Resource Curse

The government should ensure that concrete strategies for planning in line with international best practice on “combating the resource curse” are enshrined in the new legislative framework for

oil. This should include transparency in new contracts and licences; institutional mechanisms for revenue collection and management; transparency in the management of any Ugandan oil fund to be set up; and clarity on the respective roles and responsibilities of different oversight agencies. Given that there are other natural resources in the Albertine Graben such as wildlife, limestone and forest cover, a plan for sustainable natural resource exploitation and conservation needs to be developed. The government should devise a comprehensive and longterm plan that clearly shows all oil and gas exploration areas and exploitation activities, along with the places that will be affected by development of the oil and gasrelated infrastructure. It is also important to have a timeframe within which such activities and infrastructure will commence in the various locations in the region.

Coordination of Oil Exploration/Production and a Resource Curse

The government should also embark on developing a proactive information dissemination and coordination strategy that addresses the information needs of people at community level. Information gaps on critical issues in the oil and gas sector seem to be apparent; the current communication strategy should focus on these, as raised by the various stakeholders in this report. The government should produce and distribute clear and timely communications on the oil sector. These should include information on (a) how the revenue will be distributed and to whom (b) timelines for production (c) details on infrastructure projects (d) information pertaining to the award of rights to access the resource and procurement projects surrounding the industry.

Monitoring of Oil Exploration/Production and a Resource Curse

The government and oil exploration companies should be accountable; they should always strive to advance the interests of the people. There is also a need for sustained initiatives by the government in partnership with civil society, district taskforces and the private sector, to engage communities in dialogue on specific issues related to oil exploration and exploitation affecting local communities. Local government taskforces should work collaboratively with the Barazas at community level to seek their views about the sector. This will also increase transparency, integrity and accountability of the governance structures at the various levels. The government should also pay special attention to capturing local content in the development of oil and gas policies. This should involve setting up local content committees at local government and community level to monitor local content targets in their respective localities.

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APPENDICES

Appendix 1: Tanzania Model

MODEL PRODUCTION SHARING AGREEMENT

BETWEEN

THE GOVERNMENT OF THE UNITED REPUBLIC OF

TANZANIA

AND

TANZANIA PETROLEUM DEVELOPMENT CORPORATION

AND

ABC LTD

FOR ANY AREA

2013

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PRODUCTION SHARING AGREEMENT

This Production Sharing Agreement (the "Agreement") is made on the_____day of

_____ , **20[xx]** and constitutes the agreement between:

The Government of the United Republic of Tanzania (hereinafter referred to as the "Government") represented by the Minister for Energy and Minerals (hereinafter referred to as **"**Minister;

The Tanzania Petroleum Development Corporation a statutory Corporation established under the

Laws of the United Republic of Tanzania (hereinafter referred to as (**"**TPDC**"**), represented by its Managing Director;

(all hereinafter called collectively "First Party"); and

ABC Ltd, a company existing under the Laws of the United Republic of Tanzania, with office and legal representative in the United Republic of Tanzania, hereinafter referred to as "ABC" or

"Contractor" or "Second Party" represented by its Chief Executive Officer , which expressions shall, where the context so admits, include its successorsintitle and assigns.

WITNESSETH

PREAMBLE

WHEREAS, Petroleum in or under any land in, or under the jurisdiction of the United Republic of

Tanzania, or to which the United Republic of Tanzania is entitled under international law, including Petroleum underlying the area described in Annex "A" hereof, is vested entirely and solely in the United Republic of Tanzania; and

WHEREAS, TPDC has been established by law for the purpose (*inter alia*)of promoting the development of the Petroleum industry and the production of Petroleum; and

WHEREAS, the Act as defined in Article 1 below makes provision with respect to exploring for and producing Petroleum and, for that purpose subject to certain limitations and conditions, authorises the Minister to grant Exploration Licences and Development Licences; and

WHEREAS, TPDC intends to apply for an Exploration Licence over the area described in Annex "A" and shown on the map in Annex "B" hereof and the Minister intends to grant the said Licence; and

WHEREAS, TPDC with the approval of the Minister, wishes to engage the Contractor to carry out

on its behalf Petroleum Operations in the area of the said Licence and in the area of any Development Licence(s) granted to TPDC hereunder; and

WHEREAS, ABC is willing on certain terms and conditions to undertake the Petroleum Operations aforesaid and has for that purpose the necessary competence, capacity and capability including adequate financial capacity, technical competence, sufficient experience, history of compliance, and professional skill.

WHEREAS, the Parties are committed to ensure that Petroleum Operations shall be managed in compliance with the Law and in an ethical, efficient, safe, transparent and accountable manner on the basis of the best international environmental, social and economic sustainability principles in order to achieve optimal longterm Petroleum resource exploitation for maximum value creation for equitable benefit and welfare of the people of the United Republic of Tanzania.

WHEREAS, the Contractor is willing on certain terms and conditions to undertake Petroleum Operations aforesaid and has for that purpose the necessary financial capacity, technical competence and professional skill.

NOW THEREFORE, in consideration of the premises and mutual covenants herein reserved and contained, IT IS HEREBY AGREED as follows:

ARTICLE 1: DEFINITIONS

The words and terms used in this Agreement shall have the following meanings unless specified otherwise.

(a) **"Act**" means the Petroleum (Exploration and Production) Act, CAP. 328 R.E. 2002 as amended, repealed or replaced from time to time.

(b) **"Abandonment**" means decommissioning, removal and/or disposal of structures, facilities and installations including pipeline equipment and other property used in Petroleum Operations in an area, cleaning up of the area, plugging and secure of Wells, restoration of land, safety clearance of an area, in connection with cessation or partial cessation of Petroleum Operations in an area or part of an area;

(c) **Affiliate Company"** or **"Affiliate"** means any company holding directly or indirectly a majority of shares in any company which is controlled directly or indirectly by any such aforesaid company.

For the purpose of the foregoing definitions:

(i) a company is directly controlled by another company or companies holding shares carrying in the aggregate the majority of votes exercised at general meetings;

(ii) a particular company is indirectly controlled by a company or companies (thereafter called "the parent company or companies") if a series of companies can be specified, beginning with the parent company, are so related that each company of the series, except the parent company or companies, is directly controlled by one or more of the earlier in the series.

(d) "**Adjoining Block**" shall have the meaning ascribed to it by the Act.

(e) **"Agreement"** or **"the Agreement"** means this Production Sharing Agreement executed among the Government, TPDC and the Contractor, including its Annexes.

(f) **"Appraisal**"means the activities to be carried out after a discovery of Petroleum with the aim to better define the parameters of the Petroleum and

the reservoir to which the discovery relates and determine its commerciality and include but is not limited to:

(i) drilling of Wells and running productivity tests;

(ii) collecting special geological samples and reservoir fluids; and

(iii)conducting supplementary studies and acquisition of geophysical and other data, as well as the processing of same data.

(g) **"Appraisal Programme"** means an approved work programme and budgetprepared for the purpose of Appraisal;

(h) **"Appraisal Well**" means any well drilled following a discovery of Petroleum in the Contract Area for the purpose of ascertaining the quantity and areal extent of Petroleum in the Petroleum reservoir to which that discovery relates;

(i) "**Arm's Length**" means the relationship that exists between two or more entities, where neither of such entities exerts or is in position to exert significant influence of any of the other entities having regard to all relevant factors;

(j) **"Associated Natural Gas" or "Associated Gas"** means Natural Gas which exists in a reservoir in solution with Crude Oil and includes what is commonly known asgas cap gas which overlies and is in contact with Crude Oil;

(k) "**Barrel**" means a unit of measure for liquids corresponding to fortytwo (42) United States gallons of Crude Oil net of basic sediment and water, corrected to a temperature of sixty degrees Fahrenheit (60°F) and under one (1) atmospheric pressure;

(l) "**Block**" shall have the meaning ascribed to it by the Act;

(m) "**Business Day''** means a day excluding a Saturday or Sunday or public holiday on which banks in the United Republic of Tanzania are open for business;

(n) '**Btu**'' (British thermal unit) means an energy unit; the quantity of heat necessary to raise the temperature of one poundmass of water one degree

Fahrenheit from 58.5°F to 59.5°F under a standard pressure of 30 inches of mercury at 32°F;

(o) "**Calendar Year**" or "**Year**" means a period of twelve (12) consecutive months according to the Gregorian calendar beginning on January 1 and ending on December 31;

(p) "**Casing Head Gas**" means Natural Gas which existed or exists in a reservoir in solution with Crude Oil, or as free gas cap gas, and is or could be produced with Crude Oil from a well; the predominant production of which is or would be Crude Oil;

(q) "**Contract Area**" means on the Effective Datethe area described in Annex "A" and shown on map in Annex "B", and thereafter, in accordance with Article 3(b) the whole or any part of such area in respect of which Contractor continues to have rights and obligations under this Agreement;

(r) "**Contract Expenses**" means expenses incurred in relation to the Petroleum Operations, as more fully set forth in Annex "D";

(s) "**Contract Year**" means the period, and successive periods, of twelve (12) consecutive Months according to the Gregorian calendar beginning on the Effective Dateof this Agreement;

(t) "**Contractor**" means Second Party as well as any entity to which any interest may be transferred in application of the provisions of Articles 10 or 27;

(u) "Contractor's Joint Operating Agreement" means the Petroleum Joint Operations Agreement in respect of which two or more parties constituting Contractor have elected to enter in order to contribute expenses in accordance with Article 3(d).

(v) "**Cost Gas**" shall have the meaning ascribed to it in Article 12 of this Agreement;

(w) "**CostOil**" shall have the meaning ascribed to it inArticle12ofthis Agreement;

(x) "**Crude Oil**" means a mixture of liquid hydrocarbons produced from the contract area which is in a liquid state at the well head or in the separator

under normal conditions of pressure and temperature, including distillate and condensates, as well as liquids extracted from natural gas "Cost Oil" shall be as defined in Article 12 of this Agreement.

(y) "**Crude Oil Operations**" means Petroleum Operations carried out in respect of Crude Oil;

(z) **"Day"** is a period of twentyfour (24) hours starting at midnight;

(a) **"Delivery Point"** means a point specified in the approved Development Plan within or outside of the Contract Area;

(b) "**Development Area**" shall have the meaning ascribed to it by the Act;

(c) "**Development Expenses**" means those expenses as so categorized in Annex "D", the Accounting Procedure;

(d) **"Development Licence"** shall have the meaning ascribed to it by the Act;

(e) **"Development Operations,"** means operations for or in connection with the production of Petroleum and shall include the activity carried out to prepare the Development Plan and the activity carried out after the grant of the development licence in the respective Development Area. Such activity shall include, but not be limited to:

i. reservoir, geological and geophysical studies and surveys;

ii. drilling of producing and injection Wells;

iii. design, construction, installation, connection and initial testing of equipment, pipelines, systems, facilities, plants, and related activities necessary to produce and operate said Wells, to take, save, treat, handle, store, transport and deliver Petroleum, and to undertake repressuring, recycling and other secondary or tertiary recovery projects;

(f) **"Development Plan"** means the proposals accompanying an application for a Development Licence pursuant to the Act and this Agreement;

(g) "**Development Well**" means a Well drilled for the purpose of producing or enhancing production of Petroleum from a commercial discovery, and includes the Appraisal wells completed as producing or injection wells;

(h) "**Discovery Block**" shall have the meaning ascribed to it by the Act;

(i) "**Effective Date**" means the date on which,this Agreement is signed by the Parties and the Exploration Licence is simultaneously granted by the Minister;

(j) "**Expatriate Employee**" means any professional employee from abroad who is working for the Contractor in relation to this Agreement in the United Republic of Tanzania;

(k) "**Exploration Expenses**" means those expenses as so categorized in Annex "D", the Accounting Procedure;

(l) "**Exploration License**" shall have the meaning ascribed to it by the Act;

(m)**"Exploration Licence Area"**means the Contract Area or a subdivision thereof as specified in Annex "A";

(n) "**Exploration Operations**" means operations for or in connection with the exploration for petroleum and shall include, but not be limited to, such geological and geophysical surveys and studies, aerial surveys and others as may be included in approved Work Programme and Budgets, and the drilling of such shot holes, core holes, stratigraphic tests, Exploration Wells, and other related holes and Wells, and the purchase or acquisition of such supplies, materials and equipment which may be included in approved Work Programme and Budgets;

(o) "**Exploration Period**" means a time period granted for the performance of Exploration Operations as referred to in Article 5;

(p) "**Exploration Well**" means a Well drilled in the course of Exploration Operations conducted hereunder but does not include an Appraisal Well, and whose purpose at commencement of drilling is to explore for an accumulation of petroleum whose existence was at that time unproven by drilling;

(q) "**GasPlant"** means a plant for the treatment, conditioning, synthesizing, refining, processing, separation or conversion of NaturalGas;

(r) "**General and Administrative Costs**" means those costs as so categorized in Annex "D", the Accounting Procedures;

(s) "**Government**" means the Government of the United Republic of Tanzania;

(t) "**Gross Negligence/ Willful Misconduct**" means an intentional and conscious or reckless act or failure to act, by any person or entity, which was in reckless

disregard of or wanton indifference to harmful consequences such person knew or should have known such act or failure to act has or would have caused to the safety or property of any person or entity, but shall not include any act, omission, error of judgment or mistake made in good faith in the exercise of any function, authority or discretion arising out of or in connection with the Petroleum Operations.

(u) "**Joint Operating Agreement**" shall mean the agreement entered into between the parties constituting Contractor, and TPDC where applicable.

(v) "**Joint Operations**" means the Petroleum Operations in respect of which TPDC has elected to contribute expenses or has been carried by the Contractor pursuant to Article 10.

(w) "**Law**" means the legislation; regulations; rules; guidelines; Government Orders, Notices and Directives, precedents and principles in force from time to time in the United Republic of Tanzania; (aaa) "**LIBOR**" is the London InterBank Offered Rate for one month deposits of U.S. Dollars displayed on page 'LIBOR01' of the Reuters Money Rates Service (or any otherpagethatreplaces page 'LIBOR01' for the purposes of displaying the British Bankers

Association (BBA) interest settlement rates for such deposits of U. S. Dollars in the London Interbank market) on the date of determination, or in the event the Reuters Money Rates Service, or a successor thereto, no longer provides such information, such other service as may be agreed by the Parties that provides the BBA interest statement rates for such deposits of U. S. Dollars in the London Interbank market and any required information previously provided on page 'LIBOR01';

(x) "Local Content" means the quantum of composite value added to, or created in, the economy in Tanzania through the deliberate utilization of Tanzanian human and material resources and services in the Petroleum Operations in order to stimulate the development of capabilities indigenous to Tanzania and to encourage foreign investment and participation, without compromising quality, health, safety and environmental standards;

(y) "**Location**" shall have the meaning ascribed to it by the Act;

(z) "**Minister**" shall have the meaning ascribed to it by the Act;

(aa) "**Month**" means a calendar month pursuant to the Gregorian Calendar;

(bb) "**MMscf**" means a million standard cubic feet of Natural Gas;

(cc) "**Natural Gas**" means any hydrocarbons produced from the Contract Area which at a pressure of 1 atmosphere and a temperature of sixty degrees Fahrenheit (60°F) are in a gaseous state at the wellhead, and includes both associated as and Non Associated Natural Gas, and all of its constituent elements produced from any Well in the Contract Area and all nonhydrocarbon substances therein. Such term shall include residue gas after the extraction of liquid hydrocarbons therefrom;

(dd) "**Natural Gas Operations**" means Petroleum Operations carried out in respect of Natural Gas;

(ee) "**NonAssociated Gas**" means Natural Gas other than Casing Head Gas;

(ff) "**Operating Expenses**" means those expenses as so categorized in Annex "D", the Accounting Procedure;

(gg) **"Operator"** means the person designated as the Operator under a Joint Operating Agreement executed by the persons constituting the Contractor pursuant to Article 3 or the operating agreement executed by TPDC and Contractor pursuant to Article 10;

(hh) **"Parties"** means the Government, TPDCand Contractor as Parties to this Agreement, including any permitted successors and assignee;

(ii) "**Party**" means the Government, TPDCor Contractor as a Party to this Agreement, including any permitted successors and assignees;

(jj) "**Participating Interest**" means the proportion of production costs each party will bear and the proportion of production each party will receive, as set out in Article 10(b) (i);

(kk) "**Person**" means any individual, corporation, company, cooperative, partnership, joint venture, association, trust, estate, public body, unincorporated organization of government or any agency or political subdivision thereof;

(ll) "**Petroleum**" shall have the meaning ascribed to it bythe Act;

(mm)"Petroleum Operations" means any and all operations and activities in connection with Exploration Operations, Appraisal Operations, Development Operations, and Production Operations, including all the Abandonment activities as required under Article 21;

(nn) "Production Operations" shall include, but not be limited to, the running, servicing, maintenance and repair of completed Wells and of the equipment, pipelines, systems, facilities and plants completed during Development. It shall also include all activities related to planning, scheduling, controlling, measuring, testing and carrying out the flow, gathering, treating, transporting, storing and dispatching of Petroleum from the underground Petroleum reservoirs to the Delivery Point, and all other operations necessary for the production and marketing of Petroleum. Production Operations shall further include the acquisition of assets and facilities required for the production of Petroleum hereunder and Petroleum Field Abandonment operations;

(oo) "**Quarter**" means a period of three (3) consecutive Months starting with the first day of January, April, July or October of each Calendar Year;

(pp) "**Recoverable Contract Expenses**" shall have the meaning ascribed in Article 12 and as categorized in Annex "D", the Accounting Procedure;

(qq) "**Regulations**" means any regulations made from time to time under the Act;

(rr) **"Service Costs**" means those costs as so categorized in Annex "D", the Accounting Procedure;

(ss) "**Subcontractor**" shall mean any business entity hired by Contractor to carry out all or a portion of Petroleum Operations as approved by Contractor under the terms of this Agreement;

(tt) "**Well**" shall have the meaning ascribed to it by the Act;

(uu) "**Work Programme and Budgets"** means a statement itemizing the Petroleum Operations

ARTICLE 2: AGREEMENT

This Agreement constitutes an agreement made under Section 14 of the Act.

ARTICLE 3: RESPONSIBILITIES AND GRANT OF RIGHTS

(a) As soon as possible, but in any event no later than thirty (30) days, before the signing of this Agreement, TPDC will apply for and the Minister will, under and in accordance with the Act, grant to TPDC an Exploration Licence over the Contract Area. Subject to the provisions of the Act, such licence will be substantially in the form of the draft set out in Annex "C" hereof.

(b) Subject to Article6 and subarticle (e) of Article 9, the areas which at any particular time are subject to the said Exploration Licence or subject to any Development Licence granted to TPDC for which application was made by TPDC at the request of the Contractor hereunder constitute for the purpose of this Agreement the Contract Area.

(c) Save where Joint Operations have been established pursuant to Article 10, the Contractor shall, in accordance with the Act and as otherwise agreed in this Agreement, have the exclusive right to conduct, on behalf of TPDC as licence holder, Petroleum Operations in the Contract Area.

(d) Where the Contractor is constituted by more than one party, the parties constituting the Contractor shall enter into a Contractor's Joint Operating Agreement. The Minister and TPDC shall be entitled to attend the meetings of the committees pursuant to the Joint Operating Agreement as observers in a nonvoting capacity. Government and TPDC shall be entitled to receive any information that is relevant for the activities under the Joint Operating Agreement. Members and observors attending a meeting pursuant to the Joint Operating Agreement may be accompanied by advisers and experts to the extent reasonably necessary to assist with the conduct of such meeting. Such advisers and experts shall not vote, but may contribute in a nonbinding way to discussions and debates of the Advisory Committee.The Contractor shall provide the Minister with the Joint Operating Agreement for prior approval. The Minister may require alterations in the Joint Operating Agreement. Any

amendments to the Joint Operating Agreement after the Effective Date are subject to the prior approval of the Minister.

(e) The responsibility and liability for duties and obligations of the parties constituting Contractor under this Agreement shall be joint and several. The parties constituting Contractor under this Agreement shall not be jointly responsible or liable for payment of corporate taxes

(f) The Contractor shall nominate, and the Minister may approve, an Operator. The Operator shall execute the Petroleum Operations on behalf of the Contractor Party. No change in Operatorship shall take effect unless it has been approved by the Minister.

(g) The Contractor shall:

(i) provide particulars of the technical and industrial qualifications of key employees, particulars of the technical and industrial resources available and particulars of the kind of financial resources available as provided in the Act;

(ii) carry out the Petroleum Operations in the Contract Area diligently, in accordance with the Applicable Laws, with due regard to Best International Petroleum Industry Practices and in such manner as to ensure that in respect of matters which are the responsibility of the Contractor hereunder TPDC is not in default;

(iii) furnish TPDC with such information, reports, records and accounts relating to the Petroleum Operations in the Contract Area as may be necessary to enable TPDC to meet its obligations under the Act;

(iv) if the Contractor has requested TPDC to apply for any extension of the said Exploration Licence, the Contractor shall in consultation with TPDC, select the relevant area for which an application for an extension shall be made in accordance with the requirements of this Agreement and the Act;

(v) pay for copying and shipping of geological and geophysical data relating to the Contract Area;

(vi) subject to Article 11, reimburse TPDC within thirty (30) days from the date of payment thereof, for the annual charges in respect of the said

Exploration Licence or any Development Licence granted to TPDC following the request of the Contractor hereunder, payable by TPDC pursuant to the Act;

(vii) notify the Minister and TPDC promptly of any change in the Contractor's circumstances, or those of any Affiliate or subcontractor upon whom it is dependent for efficient execution of its Petroleum Operations, which has or is likely to have an adverse impact upon its ability to meet its obligations under this Agreement;

(viii) within thirty (30) days after the Effective Date, designate a representative residing in the United Republic of Tanzania who shall have full authority to represent Contractor in respect of matters related to the Agreement and to receive notices addressed to Contractor;

(ix) prior to commencement of Petroleum Operations, maintain an office in the United Republic of Tanzania with the adequate personnel, management and representatives who shall have the necessary competence, capacity and capability to follow up the Petroleum Operations and related matters, and maintain the necessary representatives in charge of the office with full authority to act and to enter into binding commitments on behalf of the Contractor; and

(x) Comply with the legal requirements for local content in effect from time to time. In performing Petroleum Operations under the Agreement, Contractor shall provide for the maximum utilization of goods, services and materials available in the United Republic of Tanzania in accordance with the provisions of Article 20. Contractor shall give priority in employment of nationals indigenous to Tanzania in all aspects of Petroleum Operations and shall undertake the training and development of such personnel in accordance with the provisions of Article 21 The Work Programmes and Budgets submitted and reported pursuant to Articles 6 shall include Contractor's estimate of the local content component of ongoing and planned Petroleum Operations.

(xi) Guarantee Obligations

a. On the Effective Date, upon commencement of each subsequent term of the Exploration Period and upon the approval being granted for an Exploration Work Programme or for any Appraisal Work Programme, Contractor shall provide the Minister with an unconditional, irrevocable ondemand guarantees from a bank acceptable to the Minister in the form and content acceptable to Minister for an amount equal to:

A. value of the minimum expenditure committed for the relevant Work Programme or period;

B. sum of Four Hundred Thousand United States Dollars (USD400,000) for the performance of any obligation under the Contract other than those covered by the guarantees under (A) above.

Such guarantees shall be in a form and content acceptable to Minister.

b. The respective amounts of the guarantees for obligations arising out of Work Programmes shall be:

A. For the Initial Exploration Period _____United States Dollars (USD)

B. For the First Extension Exploration Period _____United States Dollars (USD)

C. For Second Extension Exploration Period _____United States Dollars (USD).

c. Upon delivery to the issuing guarantor of a certificate from Contractor countersigned by TPDC on behalf of the Minister that the corresponding minimum expenditure that have been completed in accordance with the Contract and that all technical data related thereto have been delivered to TPDC, the guarantee(s) shall be reduced by the value of the minimum expenditures that were committed to the applicable phase or programme.

d. Where Contractor has failed to perform in accordance with this Contract all or any part of accrued Work Programmes:

A. at the end of any phase of the Exploration Period;

B. at the end of an approved period in respect of a retained Exploration area;

C. at the end of an approved period in respect of an Appraisal Work Programme or;

D. upon termination of this Contract,

Contractor or its guarantor shall on demand, paythe Minister the entire amount of such outstanding guarantee or guarantees within fifteen (15) days of receipt of a written notice from Minister indicating the amount due to be paid.

e. Without prejudice to the joint and several liability of the Persons constituting the Contractor, the Minister may require that, each of the Persons constituting the Contractor shall upon the Effective Date, deliver to Minister in a form acceptable to Minister, an unconditional and irrevocable performance guarantee in substantially the form as prescribed in Annex [F] ,from a financially, technically and legally competent parent company to each of the Persons constituting Contractor, guaranteeing for the performance of the Contractor under this Agreement including an undertaking that that such parent company shall provide all technical and financial resources that the Contractor may require to meet on a timely basis Contractor's obligations under this Agreement.

(h) TPDC:

(i) will, as licence holder, take such steps as may be necessary from time to time to ensure that in respect of the Contract Area it is not in default under the Act and will not in the Contract Area, without the prior consent in writing of the Contractor, surrender any Block or Blocks, make any request that any Block or Blocks be declared a Location, or apply for Development Licence; and

(ii)if the Contractor so requests, will:

(a) apply for such extensions of the said Exploration Licence as the Act may permit;

(b) when any application is made for an extension of the said Exploration Licence, relinquish to meet the requirements of the Act only Blocks selected for that purpose by the Contractor;

(c) pursuant to the Act, request that a Discovery Block within the Contract Area and such Adjoining Blocks selected by the Contractor be declared by the Minister to be a Location;

(d) apply for a Development Licence or Licences over such Block or Blocks within the Contract Area as the Contractor may specify for that purpose; and

make such other applications, requests, or representations in respect of the Contract Area which the Act may require or permit to be made by a licence holder.

(i) The Government:

(i) will take all such actions as may be necessary from time to time to ensure that TPDC carries out its obligations hereunder and will not without the consent of the Contractor seek or acquiesce in any waiver by TPDC in respect of the Contract Area of its rights as licence holder under the Act;

(ii) undertakes that, where in the case of discovery of Petroleum referred to in Section 29 (1) of the Act, TPDC makes an application for further extension of the said Exploration Licence, the Minister will, in respect of any block to which paragraph (b) of subsection (1) of that Section applies, grant an extension for such period not exceeding three (3) years in the case of Crude Oil and four (4) years in the case of Natural Gas as may be required for Appraisal of the discovery;

(iii) subject to subarticle (f) (vi) of this Article, will at the Contractor's expense make available to the Contractor geological and geophysical data referred to in the said subarticle (f) (vi) in the possession or under the control of Government resulting from petroleum exploration by any other company in the Contract Area and the Contractor shall treat such data as confidential;

(iv) subject to any requirement in the Law and respect by the Contractor for the rights of the others, will permit the Contractor, its Affiliates, employees and agents to have at all times access to the Contract Area for the purpose of carrying on the Petroleum Operations hereunder and for such purpose to move freely therein.

ARTICLE 4: TERM AND TERMINATION

(a) This Agreement shall continue to be in force in accordance with Section 42 of the Act, whose provisions regulate the terms of any Development Licence, and in case no Development Licence is granted, until the end of the last extension of the Exploration Period.

(b) Contractor may propose to TPDC to apply for an extension of the Development Licence in accordance with the Act. In such case, Contractor shall provide to TPDC all relevant information for the application.

(c) An application for an extension of the Development Licence pursuant to subarticle (b) shall be accompanied with a proposal for terms for an extension of this Agreement or a proposal for a new Agreement.

(d) The Minister may grant an extension of the Development Licence on terms in accordance with the Act and enter into an agreement in accordance with Section 14 of the Act.

(e) This Agreement shall come to an end where the Contractor:

(i) subject to the Act and this Agreement, surrenders its rights in respect of the whole of the Contract Area pursuant to Article 6;

(ii) interrupts Production for a period of more than ninety (90) days with no cause or justification acceptable under normal international petroleum industry practice;

(iii) continuously refuses with no justification to comply with the Law;

(iv) intentionally submits false information to the Government or to TPDC;

(v) assigns or transfers any part of its interests, rights or obligations hereunder in breach of the rules provided for in Article 27 including where the majority of the share capital of any entity constituting Contractor Party is transferred to a nonAffiliate third party without having obtained the prior required authorization from TPDC and the Government.

(vi) becomes insolvent or is declared bankrupt by a court of competent jurisdiction;

(vii) does not comply with any final decision resulting from an arbitration process conducted under the terms of the Agreement, after all adequate appeals are exhausted;

(viii) does not fulfill a substantial part of its duties and obligations resulting from the Law and from this Agreement;

(ix) intentionally extracts or produces any mineral which is not covered by the object of this Agreement, unless such extraction or production is

expressly authorized or unavoidable as a result of operations carried out in accordance with accepted international petroleum industry practice.

(x) where the Contractor is In Default, the Government may by notice in writing served on the Contractor terminate this Agreement. In this Article "In Default" in relation to the Contractor means a material breach of any provision of this Agreement or the Act or licence granted and includes any act or omission by the Contractor in respect of matters that are the responsibility of the Contractor hereunder that would cause TPDC to be in breach of any provision of the Act or of any condition of the licence granted hereunder.

(xi) TPDC may terminate this Agreement if the majority of the share capital of any entity constituting Contractor Party is transferred to a nonAffiliate third party without having obtained the prior required authorization from TPDC and the Government.

(f) Minister may terminate this Agreement where the Contractor does not have the necessary technical competence or financial capacity or proffesional skill to adequately perform the Contractor's duties and obligations under the Act and this Agreement.

(g) The Government shall not terminate the Agreement on the grounds aforementioned in sub article (e)(f), unless:

(i) it has, by notice in writing served on the Contractor, given not less than thirty (30) days' notices of its intention to so terminate this Agreement;

(ii) it has, in the notice, specified a date before which the Contractor may, in writing, submit any matter which the Contractor wishes the Government to consider; and it has taken into account any action taken by the Contractor to remove that ground or to prevent the recurrence of similar grounds; and any matters submitted to it by the Contractor.

(h) The Government shall not, under subarticle (b) of this Article, terminate this Agreement on the ground of any default in the payment of any amount payable under this Agreement if, before the date specified in a notice referred to in subarticle (c) of this Article, the Contractor pays the amount of money

concerned together with any interest payable under the Act or this Agreement.

(i) The Government may, by notice in writing served on the Contractor, terminate this Agreement if an order is made or a resolution is passed winding up the affairs of the Contractor, unless the winding up is for the purpose of amalgamation and the Government has consented to the amalgamation, or is for the purpose of reconstruction and the Government has been given notice of the reconstruction.

(j) Where two or more persons constitute the Contractor, the Government shall not, under this Article, terminate the Agreement on the occurrence, in relation to one or some only of the persons constituting the Contractor, of an event entitling the Government to so terminate this Agreement, if any other person or persons constituting the Contractor satisfies or satisfy the Government that the person or those persons, as the case may be, is or are willing and would be able to carry out the duties and obligations of the Contractor.On the termination of this Agreement, the rights of the Contractor hereunder shall cease, but the termination shall not affect any liability incurred prior to the termination including Abandonment liabilities. All obligations that are expressly stated to survive such expiration or termination pursuant to this Agreement or any legal proceedings that might have been commenced or continued against the former Contractor may be commenced or continued against it.

(k) Upon expiration or termination of this Agreement the Parties shall have no further obligations hereunder except for the obligations that arose prior to such expiration or termination and obligations that are expressly stated to survive such expiration or termination pursuant to this Agreement.

ARTICLE 5: EXPLORATION PROGRAMME

(a) Subject to the provisions of the Act and thisArticle, in discharging of its obligation to carry out Exploration Operations in the Contract Area, the Contractor shall, during the periods into which Exploration Operations are

divided hereunder, carry out the minimum work described and spend not less than the total minimum expenditure, if any, specified in subarticle (b) of this Article. The fulfillment of any work obligation shall relieve Contractor of the corresponding minimum expenditure obligation, but the fulfillment of any minimum expenditure obligation shall not relieve Contractor of the corresponding work obligation.

(b)(i) The Initial Exploration Period

Shall commence on the Effective Date and shall terminate on the fourth (4th) anniversary of that date.

Description of minimum work programme:

Contractor shall commence Exploration Operations hereunder within ninety (90) days after the Effective Date. Such Exploration Operations shall be diligently and continuously carried out in accordance with the Best International Petroleum Industry Practices.

During the Initial Exploration Period, which shall be subdivided into two subperiods, the Contractor shall carry out the following Minimum Exploration Work Programme including:

First 2year subperiod.

(A) Geological:

Evaluate, integrate and map all data related to the Contract Area.

(B) Geophysical:

(i) Acquire and process to industry standards at least [..] kilometres of [..] seismic with shooting to commence within fifteen (15) months after the Effective Date.

(ii) Evaluate, integrate and map all seismic data related to the Contract Area.

(C) Geochemical

If present, locate any hydrocarbon seeps, map seeps to relate them to subsurface prospects, characterize the petroleum type and undertake basin analysis for source maturity modeling

Second 2Year Subperiod (D) Drilling:

Drilling of at least [..] Exploration Wells, to depths of at least [...] meters, true vertical depth with spudding of the first such well to be not later than thirty (30) Months after the Effective Date.

Minimum Expenditure for Initial Period.....United States dollars.

(ii) The First Extension Period

Shall commence On the day on which a first extension of the Licence granted is issued to TPDC pursuant to the Act takes effect and shall terminate latest on the 4th anniversaryof that date.

Description of minimum work programme:

- Conduct geological, geochemical and geophysical studies (US$_____)
- Acquisition of _____square kilometres of 3D seismic or _____ line kilometres. of 2D or
- Commensurate mix of both; (US$) Drill at least […..] well (US$)

Minimum Expenditure for 1st Extension Period: US$ .....million

(iii) The Second Extension Period

Shall commence on the day on which a second extension of the licence granted to TPDC pursuant to the Act takes effect and shall terminate on the third (3rd) anniversary of that date.

Description of minimum work programme:

- [Conduct geology, geochemical and geophysical studies (US$_____)
  - Acquisition of _____ square kilometres of [….] seismic or _____ line kilometres. of [..] or commensurate mix of both; (US$_____)
- Drill at least [….] well (US$)]

Minimum Expenditure for 2nd Extension Period: US$ .....million

(c) No Exploration Well drilled by the Contractor shall be treated as discharging any obligation of the Contractor to drill Exploration Wells hereunder unless it has been drilled to the depth or stratigraphic level agreed with the Minister, or before reaching such depth or stratigraphic level:

(i) the economic basement is encountered or insurmountable technical problems are encountered which, in accordance with Best International Petroleum Industry Practices, make further drilling unsafe or impractical;

provided that if the said Well is abandoned owing to the said problems before reaching the economic basement, the Contractor shall drill a substitute Exploration Well in the Contract Area to the same minimum depth as aforesaid.

For the purpose of this subarticle "economic basement" means any stratum in and below which the geological structure or physical characteristics of the rock sequence do not have the properties necessary for the accumulation of petroleum in commercial quantities and which reflects the maximum depth at which any such accumulation can be reasonably expected.

(d) Where in any Exploration Period, the Contractor has carried out more than the minimum technical work obligations specified in subarticle (b) of this Article, for that period the Contractor shall be permitted to credit such excess work obligation as satisfying work obligations specified in that subarticle for the next succeeding Exploration Period.

(e) The Exploration Licence issued to TPDC, pursuant to Article 3 and any extension thereof, shall be on terms and conditions relating to Work Programmes and Minimum Expenditure which correspond to the obligation of the Contractor under this Article. Accordingly, it is understood and agreed that discharge by the Contractor of its obligations under this Article in respect of any Exploration Period will discharge for that period the obligations of TPDC relating to the Work Programme and Minimum Expenditure in respect of the licence issued pursuant to Article 3, and the terms and conditions of the licence aforesaid and any extension thereof shall be drawn up accordingly.

(f) The minimum expenditure for each period specified in subarticle (b) of this Article shall not have been satisfied unless the total expenditure attributable to the work described in subarticle (b) equals or exceeds the same mentioned in the said subarticle; provided that for this purpose all such attributable actual expenditures shall be adjusted, commencing from the Effective Date, by dividing each of them by the following factor **I,** where: **I = A/B.** Save that if B is less than A factor I shall be taken to be one (1) and where:

A is the United States Industrial Goods Producer Price Index (USIGPPI) as reported for the first time in the monthly publication "International Financial Statistics" of the International Monetary Fund (IMF) in the section "Prices, Production, Employment" for the Month of the Effective Date.

B is the USIGPPI as reported for the first time in the aforesaid IMF publication for the month of the expenditure in question.

(g) For the purpose of this Article, no Appraisal Wells drilled or seismic surveys carried out by Contractor as part of an Appraisal Programme and no expenditure incurred by Contractor in carrying out such Appraisal Programme shall be treated as discharging the minimum work obligations under sub article (b) of this Article.

(i) During the Exploration Period, the Contractor shall deliver to TPDC and the Minister, reports on Exploration Operations conducted during each Quarter within fifteen [15] days following the end of that Quarter. Further requests for information by the Minister under the Act and this Agreement shall be complied with within a reasonable time and copies of documents and other material containing such information shall be provided to TPDC.

ARTICLE 6: RELINQUISHMENT OF CONTRACT AREA

(a) If the Contractor has requested TPDC to apply for any extension of the Exploration Licence, the Contractor in consultation with TPDC shall select such parts of the Contract Area to be relinquished by TPDC, and TPDC shall in accordance with the Act relinquish said parts of the Contract Area as follows:

i. On or before the end of the Initial Exploration Period TPDC shall relinquish such parts of the Contract Area corresponding to at least fifty per cent (50%) of the original Contract Area.

ii. On or before the end of the First Extension Period TPDC shall relinquish at least fifty per cent (50%) of the remaining Contract Area at the end of the Exploration Period, TPDC shall relinquish the remainder of the Contract Area which is not a Development Area The area to be relinquished shall

be contiguous and compact and of the size and shape that will permit the effective conduct Petroleum Operations in the relinquished area.

(b) No relinquishment shall relieve Contractor of accrued, but unfulfilled obligations under the Agreement. In the event the Contractor desires to relinquish its rights hereunder in the whole of the Contract Area without having fulfilled all accrued Minimum Exploration Work Programme under Article5, it shall pay to TPDC, prior to the date of such proposed total relinquishment, the sum equal to the remaining amount of the nondischarged guarantees corresponding to such accrued, but unfulfilled work obligations.

(c) The provisions of this Article shall not be read or construed as requiring Contractor to select and TPDC to relinquish any part of the Contract Area which constitutes or forms part of either a Location or a Development Area provided, however that if at the end of the first Subperiod, Second Subperiod, First Extension Period or Second Extension Period as the case may be, Contractor elects not to enter the ensuing period, Contractor shall relinquish the entire Contract Area except for any Development Area.

(d) Contractor shall have the right at any time to request TPDC to relinquish all or part of the Contract Area provided it has undertaken the work obligations of the relevant Exploration Period during which such relinquishment is made.

ARTICLE 7: ANNUAL WORK PROGRAMMES AND BUDGET

(a) Within thirty (30) days of the Effective Date, the Contractor shall prepare and submit to TPDC a detailed Work Programme and Budget setting forth the Exploration Operations which Contractor proposes to carry out in the Calendar Year in which the Exploration Licence is first issued to TPDC hereunder.

(b) So long as the Exploration Licence issued to TPDC hereunder remains in force and at least three (3) months prior to the beginning of each subsequent Calendar Year, Contractor shall prepare and submit to TPDC a detailed Work Programme and Budget setting forth the Exploration Operations which Contractor propose to carry out in that Calendar Year and the estimated cost thereof.

(c) Every Work Programme and Budget submitted to TPDC pursuant to this Article and every revision or amendment thereof shall be consistent with the requirements set out in Article 5 relating to work and expenditure for the Exploration Period and subperiod within which the Work Programme and Budget will fall.

(d) Every Work Programme and Budget and, as the case may be, the Appraisal Programme referred to in Article 9(l) submitted by Contractor to TPDC shall be reviewed by a joint Advisory Committee to be established by TPDC and Contractor pursuant to Article 8. Should TPDC wish to propose a revision of the proposed Work Programme and Budget or Appraisal Programme, as the case may be, TPDC shall, within three (3) weeks after receipt thereof, so notify the Contractor specifying in reasonable detail its reasons and the proposed changes it seeks to introduce. Promptly thereafter, the parties will meet and endeavor to agree upon the revisions proposed by TPDC. Following review by the Advisory Committee, Contractor shall make such revisions as it deems appropriate and submit the Work Programme and Budget or, without prejudice to Article 9(l), appraisal program, as appropriate, to TPDC.

(e) Subject to Article 5, upon giving notice to TPDC, Contractor may amend any Work Programme or Budget or any revised Work Programme or Budget submitted to TPDC, but, subject to any such amendment, Contractor shall carry out the Exploration Operations set forth in the Work Programme or revised Work Programme and spend not less than the sum provided for in the Budget or revised Budget. In the case of an appraisal program, any amendment thereto proposed to TPDC by Contractor will be subject to section 32(2) of the Act; where an Appraisal programme has been agreed by the Advisory Committee as referred to in Article 9(l), no amendment shall be made without the approval of the Advisory Committee. A notice under this subarticle shall state the reasons why, in the opinion of Contractor, an amendment is necessary or desirable.

ARTICLE 8: ADVISORY COMMITTEE

(a) The Advisory Committee shall be composed of four (4) members, two (2) of whom shall be appointed by TPDC and the other two (2) by Contractor. The Minister shall be entitled to attend the Advisory Committee meetings as an

observer in a nonvoting capacity. The Government shall be entitled to receive any information that is relevant for the Advisory Committee. The Advisory Committee meetings cannot take place unless at least three (3) of its members are present.

(b) The Advisory Committee shall meet from time to time as may be convened by the Chairman. (c) The Advisory Committee shall perform the following functions:

(i) Approval of the proposed annual work programme and budget and any amendment there of

(ii) approval of at he proposed exploration work plans and budgets and any amendments there of;

(iii) approval of the proposed appraisal work programme and any amendment there of;

(iv) approval of the proposed Development Plan and any amendment thereof;

(v) approval of the production plan and any amendment there of;

(vi) approval of the lifting schedule and amendment thereof;

(vii) review of expenditures and compliance with the operating and accounting records with the rules established herein and in the applicable Law; and

(viii) any other matter as may be directed by the Parties

(d) The Advisory Committee shall be headed by a Chairperson who shall be appointed by TPDC from among its representatives and who shall be responsible for the following functions:

(ix) to coordinate all the Advisory Committee's activities;

(x) to chair the meetings and to notify the Contractor and TPDC of the timing and location of such meetings, it being understood that the Advisory Committee shall meet at least once every Calendar year or whenever requested by Contractor and/or TPDC;

(xi) to establish the agenda of the meetings, which shall include all matters which the Parties have asked to be discussed;

(xii) to convey to the Parties all decisions of the Advisory Committee, within five (5) working days after the meetings;

(xiii) to request from Contractor any information and to make recommendations that have been requested by any member of the

Advisory Committee, as well as to request from Contractor any advice and studies whose execution has been approved by the Advisory Committee;

(xiv) to request from the technical and other committees of the Advisory Committee any information, recommendations and studies that he has been asked to obtain by any member of the Advisory Committee; and

(xv) to convey to the Parties all information and data provided to him by the Contractor for the Parties.

(e) In the case of an impediment to the Chairperson of the Advisory Committee, the work of any meeting will be chaired by the other member appointed by TPDC.

(f) At the request of TPDC and/or Contractor, the Advisory Committee shall establish and approve its internal regulations, which shall comply with the procedures established in this Agreement.

(g) Each member of the Advisory Committee shall have one (1) vote. The Chairman shall in addition have a casting vote. The decisions of the Advisory Committee shall be taken by simple majority of the votes present or represented, it being understood that any member may be represented by written and duly signed proxy held by another member.

(h) Furthermore, if such majority is not achieved, the proposal under decision shall be reviewed and resubmitted to the Advisory Committee in no more than fifteen (15) days.

(i) Members or observors attending a meeting of the Advisory Committee may be accompanied by advisers and experts to the extent reasonably necessary to assist with the conduct of such meeting. Such advisers and experts shall not vote, but may contribute in a nonbinding way to discussions and debates of the Advisory Committee.

(j) The Contractor shall appoint the Secretary to the Advisory Committee from among its representatives.

(k) The responsibilities of the Secretary are to see to it that:

(i) the minutes of every meeting of the Advisory Committee are recorded;

(ii) the minutes are written in the appropriate record book and signed on behalf of TPDC and the Contractor; and

(iii) the draft of the minutes is prepared, if possible, on the day that the meeting is held and copies of it are sent to TPDC and the Contractor within the following five (5) working days, and their approval shall be deemed granted if no objection is raised within ten (10) working days of the date of receipt of the draft minutes.

ARTICLE 9: DISCOVERY, APPRAISAL AND DEVELOPMENT

(a) If Petroleum is discovered in the Contract Area, Contractor shall:

(i) prior to notification to any third party forthwith notify TPDC which will thereafter notify the Commissioner;

(ii) within thirty (30) days after the date of such discovery provide TPDC and the Minister with all available informa*tion regarding the discovery, including a preliminary classification of the discovery as Crude Oil or Natural Gas to meet the requirements of Section 31(1) and 31(2) of the Act;

(iii) within ninety (90) days after the date of such discovery provide TPDC and the Minister with all information to ascertain the chemical composition, physical properties and quantity to meet there quirements of Section 32 of the Act;

(iv) within one hundred and twenty (120) days from the date of such discovery, also notify in writing to TPDC and the Minister whether or not it considers the discovery of Crude Oil or Natural Gas is of potential commercial interest;

a. if the Contractor notifies TPDC that the discovery is of potential commercial interest, the Contractor shall at the same time notify TPDC whether the discovery is of eventual commercial interest ("Eventual Interest') or of present commercial interest ("Present Interest");

b. if Contractor informs TPDC that, in its opinion, utilizing Best International Petroleum Industry Practices, the discovery is not of potential commercial interest as a standalone or as part of an aggregated production, then the Contractor shall relinquish the said discovery comprising the geological feature (as outlined by the relevant seismic data) in which the discovery islocated;

(v) if Contractor informs TPDC that, in its opinion, utilizing Best International Petroleum Industry Practices, the discovery is of eventual commercial interest orpresent commercial interest, the Contractor shall submit to TPDC an application to the Minister for declaration of a Location to meet the requirement of Section 33, and the Minister shall declare a Location within thirty (30) days from the date of such application. The Minister shall be advised to agree to declare for a Location to allow the Contractor to retain the Discovery Block and not more than eight (8) adjoining blocks within the exploration area

(vi) If no application for a Location is made within one hundred and twenty days (120)

days, the Contractor shall be deemed to have surrendered the discovery to TPDC.

(vii) within one hundred and eighty (180) days from the date of such discovery submit to the TPDC the Appraisal Programme and budget for the determination of the Advisory Committee to meet the requirements of Section 34 of the Act.

(viii) within thirty (30) days following its submission of the Appraisal Program, the

Advisory Committee shall convene to discuss and approve the Appraisal Programme;

(ix) where a Location has been declared by the Minister and in accordance to Section 34 of the Act, the Appraisal period shall be within three (3) years in the case of Crude Oil and four (4) years in the case of Natural Gas to ensure that the Appraisal Programme can be carried out and the results thereof assessed to enable an application to be made by TPDC for a Development Licence within the same period.

(b) Contractor shall conduct the approved Appraisal Programme immediately after being granted a Location.

(c) Contractor shall reassess and inform TPDC and the Minister in accordance to Section 34(3) of the Act the commerciality of the discovery every one (1) year

from the date of notification that the discovery is of Eventual Interest based on the same economic criteria as set out in Article 9(a)(iv)(a); in case of further discoveries that could be tied and developed together in order to make economies of scale.

(d) During the conduct of the Appraisal Programme, the Contractor shall provide TPDC with all information enabling it to make a detailed examination of the data relating to the discovery so as to make an ongoing assessment in full understanding of the facts as to whether or not the discovery is likely to be capable of being commercially exploited. This information shall be provided promptly but in any case, no more than thirty (30) days prior to the expiry of each year during the execution of the Appraisal Programme.

(e) If the results of Contractor's Appraisal Programme determine that the discovery is no longer of potential commercial interest, the provisions of sub article (j) and (p) of this Article shall apply.

(f) Within ninety (90) days from the date on which the said Appraisal Programme related to the discovery is completed, the Contractor shall prepare and submit to TPDC a report containing the results of the Appraisal Programme for consideration by the Advisory Committee. The Appraisal Programme report shall include all available technical and economic data relevant to a determination of commerciality, including but not limited to, geological and geophysical conditions, such as structural configuration, physical properties and the extent of reservoir rocks, areas, thickness and depth of pay zones, pressure, volume and temperature analysis of the reservoir fluids; preliminary estimates of Crude Oil and Natural Gas reserves; recovery drive characteristics; anticipated production performance per reservoir and per well; fluid characteristics, including gravity, sulphur percentage, sediment and water percentage and refinery assay pattern. The report shall also include, technical and economic feasibility studies relating to processing and transport of petroleum from the Location.

(g) If the results of Contractor's reassessment determine that the discovery has become of Present Interest, the provisions of sub articles (k), to (o) of this Article shall apply.

(h) If, upon the expiry of three (3) years in the case of Crude Oil and four (4) years in the case of Natural Gas from the date of notification that the discovery is of Eventual Interest, the results of Contractor's reassessment determine that the discovery is still of Eventual Interest and TPDC does not agree with such determination, TPDC may, at any time prior to the expiry of the three (3) years for the case of Crude Oil and four (4) years for the case of Natural Gas dispute the results of the Contractor's reassessment. If TPDC and the Contractor cannot resolve such dispute within sixty (60) days of the date on which TPDC informed the Contractor of its opinion, then the matter shall be referred to the Technical Expert and the Technical Expert shall determine whether the discovery is of (a) Present Interest; or (b) Eventual Interest. Determination of the commerciality of the discovery shall be carried out within one hundred and eighty (180) days. The Technical Expert shall notify TPDC and the Contractor of its findings and:

A. whereTheTechnicalExpertdeterminesthatthediscoveryisnolongerofpotentialcom m ercialinterestthe provisions of subarticle (o) and (p) of this Article shall apply;

B. where the Technical Expert determines that the discovery is of Present Interest and the Contractor agrees with such determination, the provisions of subarticles (j) to (l) of this Article shall apply;

C. where the Technical Expert determines that the discovery is of Present Interest and the Contractor disagrees with such determination, then the Contractor shall relinquish said discovery comprising the geological feature (as outlined by the relevant seismic data in which the discovery is located; or

D. where the Technical Expert determines that the discovery is still of Eventual Interest, the Contractor may retain the discovery for the remainder of the Exploration Term.

(i) Where the Contractor has relinquished a discovery pursuant to sub article (h) (C) of this Article and TPDC decides to appraise and develop such discovery, the Parties will meet and discuss in good faith the development of said discovery such that it does not impact the exploration, appraisal and development of the remainder of the Contract Area.

(j) Where, Contractor (a) pursuant to sub article (a) of this Article, has informed TPDC that, in its opinion the discovery is of present commercial interest, or (b) pursuant to sub article

(h) (B) of this Article the Contractor agrees with the determination of the Technical Expert that the discovery is of present commercial interest, Contractor shall:

(i) Within one hundred and eighty (180) days after the declaration of commerciality pursuant to subarticle (j), draw up a proposal for a Development Plan in consultation with TPDC which shall accompany the application for a Development Licence per the requirements of Section 35(1) of the Act

(ii) be designed to ensure the recovery of the maximum quantity of Petroleum from the proposed Development Area which the economics of the Development shall justify and it shall be designed in compliance with best international petroleum industry practices;

(iii) contain detailed information on matters of economic, financial, geological, reserves, technical, operational, health, safety and environment in accordance to Section 36 of the Act, including:

(a) a description of development strategy and concept;

(b) an economic assessment of the different development methods, estimated investments, operational costs and selection criteria;

(c) a plan covering the total development to the extent possible where the development is proposed in two or more phases;

(d) an assessment of capacities of facilities;

(e) assessment of possibilities for tieins, third party access and unitization;

(f) area studies for the possibility of coordination of Petroleum Operations;

(g) proposed drilling and well completion plans;

(h) geological parameters and reservoir engineering methodology;
(i) facilities for production, storage, transportation and delivery of Petroleum;
(j) information on facilities for utilisation or processing of Petroleum;
(k) the relevant Delivery Point(s);
(l) an assessment and presentation of the possible outlets for Natural Gas from the discovery in question, both on the local market and for export, together with an evaluation of the necessary means for its marketing, with due consideration to the sale and marketing of the Government's Profit Gas;
(m) a development schedule;
(n) a longterm production schedule;
(o) a description of technical solutions including possible solutions for enhanced recovery of petroleum;
(p) solutions aimed at efficient use of energy, and the prevention and minimisation of environmentally harmful discharges, flaring and emissions;
(q) a method for disposal and use of associated gas where applicable;
(r) information on systems for ensuring compliance, including information on the planning, organization and implementation of the development;
(s) information on operation and maintenance;
(t) a financing plan for the development;
(u) a description of fiscal metering systems;
(v) Petroleum marketing plan;
(w) a health and safety compliance system and plan;
(x) an emergency preparedness and environmental risk management plan;
(y) information on siteclean up, abandonment, decommissioning and disposal of facilities; a decommissioning plan in such detail as the Minister requires, including a calculation of the decommissioning costs, the annual amount in the decommissioning fund, and the proposal for financing of the decommissioning obligation;
(z) information on any applications for permits and licenses required pursuant to applicable legislation in connection with Petroleum Operations related to the Development Plan;

(aa) a local content compliance system and plan including an employment and recruitment programme and a technology and knowhow transfer plan;

(bb) a security management system and plan for protection against deliberate attack; and

(cc) any other matter which the Minister may direct to be included in the Development Plan

(v) TPDC may within ninety (90) days of receipt of the Contractor's Development Programme, make proposals or amendments on the Contractor's Development programme to the extent that the Development programme meet the requirements of

Section 36 of the Act;

(k) WhenanapplicationforaDevelopmentLicenceinrespectofaLocationismadeinaccordancewith the Act then, unless the Contractor is In Default at the time of such application, within sixty (60) days the Minister shall grant pursuant to Section 37(1)(a) of the Act, on such conditions as are necessary for theDevelopment Licence.

(l) The Development Licence so granted pursuant to Section 37(1)(a) of theAct, shall, be infull satisfaction of the requirements of Section 40(1) and (2) of the Act, incorporate by reference the obligations of the Contractor as set out in Article 18 ("**Lifting, Marketing and Domestic Supply Obligation"**) of the PSA.The provisions of Article 18 of the PSA shall apply to both Crude Oil and Natural Gas.

In circumstances where the Parties determine to undertake the gas commercialization project in accordance with the terms and conditions set out in this Agreement, the Contractor in consultation with TPDC shall, in respect of the domestic market obligation and Section 40(2) of the Act, employ a suitably qualified international independent consultant(s) to prepare a reserve assessment report to determine the:

(i) Proven and certified gas reserves in the Block ("**ProvenReserves**");

(ii) The minimum amount of gas required for a gas commercialization project; and

(iii) The amount of Proven Reserves that are to be dedicated for the domestic market.

Following receipt of such report, the consultant shall notify the Contractor and TPDC in writing of the Proven Reserves that are to be dedicated for supply to the gas commercialization project from the Block (the "**AccessibleProvenReserves**") and the amount of Proven Reserves that are to be dedicated for the domestic market (the "**Domestic Market Quantity**").

(m) Contractor shall respectively provide TPDC with at least 90 days prior written notice before dedicating to a thirdparty available capacity in the Pipeline or Gas Processing Plant that would have the effect of reducing or excluding TPDC's ability to transport and process all or any portion of the daily maximum quantity volume through the Pipeline and the Gas Processing Plant. TPDC will consider the effect of such an action to the domestic daily maximum deliverable volume prior to approval.

(n) Natural Gas for the **Domestic Market Quantity** and Natural Gas for the **Accessible Proven Reserves** for the gas commercialization project shall be lifted at the Delivery Point proportionately, subject to normal operational requirements, it being understood that lifting shall be consistent with the Natural Gas lifting schedule for the gas commercialization project and domestic market and shall take into account the delivery obligations of both the gas commercialization project and domestic market.

(o) If Contractor informs TPDC that in its opinion the discovery is not of potential commercial interest then the Contractor shall surrender forthwith its rights and be relieved of its obligations in respect of the Block or Blocks comprising the geological feature (as outlined by the relevant seismic data) in which the discovery is located.

(p) Where pursuant to subarticle (o) of this Article, Contractor has surrendered its rights and been relieved of its obligations in respect of any Block or Blocks in which the discovery is located, notwithstanding that the said Block or Blocks continue to be subject to the Exploration Licence referred to in subarticle (b)

of Article 3, the said Block or Blocks shall not for the purpose of this Agreement, constitute part of the Contract Area.

(q) The Contractor shall not perform any Petroleum Operations with reference to the proposed Development prior to approval of the Development Plan upon granting of the Development Licence, save where the Minister has granted an express permission to enter into specific activities.

(r) The Contractor shall, together with the Development Plan accompanying the application for the Development License, submit evidence that the Contractor has undertaken a prior social and environmental impact assessment study relevant for the proposed Development and a copy of the social and environmental impact assessments study. In addition, the Contractor shall submit the necessary environmental authorisations pursuant to the Law

(s) Any deviations or alterations to the Development Plan or significant alterations to the Development facilities shall require the prior written approval of the Minister. The Contractor shall promptly notify the Minister and TPDC of any significant deviation from the assumptions and preconditions on which the Development Licence with the Development Plan has been submitted or approved. The Ministers may propose changes or modifications to the Development Plan.

(t) The Minister may set conditions for approval of the Development Licence as accompanied with the Development Plan, including that Petroleum shall be transported in specified transportation systems and shall be landed at specific locations

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ARTICLE 10: JOINT OPERATIONS

(a) Save as provided in subarticle (b) and subarticle (c) (iii) of this Article, Contractor shall bear and pay all Contract Expenses incurred in carrying out Petroleum Operations hereunder, and Contractor shall recover such expenses only from the Petroleum to which it is entitled as hereinafter provided in Article 12.

(b) Participating Interest by TPDC:

OIL or GAS

(i) TPDC may at any time, by notice in writing to Contractor, elect to contribute in Participating Interest of not less than twentyfive percent (25%) of Contract Expenses other than Exploration Expenses (such Exploration Expenses to include expenses in respect of Appraisal Programme) incurred in the first and every subsequent Development Area from the date such notice is rendered.

(ii) Where TPDC does elect to participate in the Development of a discovery, TPDC shall pay its share of Contract Expenses.

(iii) If TPDC fails to pay its share of Contract Expenses and such failure is not rectified within a period of thirty (30) days after receipt of a written notice of such failure from the

Contractor, the Contractor shall advance by way of loan up to 100% of unpaid amount of TPDC's share of Contract Expenses. Such Contract Expenses shall bear interest at a rate of LIBOR plus one percent (1%) for the period that such amount remained unpaid and will be recovered from TPDC's Cost Oil [and/or Cost Gas] as defined in Article 12.

(c) Joint operations shall be conducted hereunder in accordance with the terms and conditions of a mutually acceptable form of Operating Agreement to be concluded between TPDC and the Contractor immediately following the first notice given to Contractor by TPDC, pursuant to subparagraph (i) of this subArticle. The Operating Agreement aforesaid will include provisions to give effect to the following principles:

(i) The Operator shall carry out all operations pursuant to work programmes and budgets approved by a Joint Operating Committee. The parties may review at any time the Operatorship of the Joint Operations.

(ii) A Joint Operating Committee shall be established in which TPDC and Contractor shall be equally represented. The Ministershall be entitled to attend the meetings of the committees pursuant to the Operating Agreement in a nonvoting capacity as observer. The Minister shall be entitled to receive any information that is relevant for

the activities under the Operating Agreement. Members and observors attending a meeting pursuant to the Operating Agreement may be accompanied by advisers and experts to the extent reasonably necessary to assist with the conduct of such meeting. Such advisers and experts shall not vote, but may contribute in a nonbinding way to discussions and debates of the Advisory Committee.The representatives aforesaid shall have voting rights proportional to the participating interests of each Contractor entity on the Joint Operating Committee on all matters. Except as otherwise expressly provided for in this Agreement, all decisions, approvals and other actions of the Joint Operating Committee on all proposals coming before it shall be decided by affirmative vote of two (2) or more nonAffiliated Parties holding an aggregate not less than [sixty five percent (65%)] of all Participating Interests ("Pass Mark Vote"); except for decisions relating to TPDC participation in any exploration and appraisal cash calls as a coventure as per Article 10(b) and 10(c)(iii). In case of disagreement, a thirdparty expert, who shall be mutually agreed upon and selected, will resolve the disagreement and his decision shall be final and binding on the parties to the disagreement.

(iii) TPDC shall be liable to contribute the Participating Interests (as contained in

Article 10(b) (i)) of the Contract Expenses other than Exploration Expenses (such Exploration Expenses to include expenses in respect of an Appraisal Programme) of Joint Operations in all Development Areas in respect of which TPDC has elected to participate. The balance of such expenses shall be contributed by the Contractor.

(iv) The contributions aforesaid shall be in such major convertible currencies as may be required from time to time by the Operator for the Joint Operations approved by the Joint Operating Committee but (if there exist expenditures in Tanzanian Shillings), TPDC shall have preference for payment in such Tanzanian Shillings and such amounts will count towards the total

contribution which TPDC is obliged to make in respect of its share in Joint Operations.

(v) Failure by TPDC to meet calls for funds within the time limits agreed shall result in liability for interest on the unpaid amounts for the period that such amounts remain unpaid at LIBOR + 1%.

(vi) If, after the election allowed in subarticle 10(b), TPDC fails to pay its share of Development and/or Production Expenditures and such failure is not rectified within a period of thirty (30) days after receipt of written notice thereof from the Operator, TPDC shall be deemed to have elected on the date of receipt of the notice to have agreed with the Contractor entities that they shall carry TPDC´s share of such expenditures, and the Contractor entities shall pay any of TPDC´s unpaid expenditures before the date of the deemed election and also TPDC´s share of any expenditures incurred after the date of the deemed election recovering such expenditures in accordance with Article 10(c)(v). Notwithstanding the above procedure, if, during the above mentioned thirty (30) days period to rectify the failure to pay, TPDC notifies the Operator that it has provided to rectify such failure to pay in a period not greater than thirty (30) days from such TPDC's notification to Operator, then, the carry from Contractor's entities shall not be triggered unless such notification is not done during these thirty (30) days period. For avoidance of doubt any amounts not remedied other than by the carry procedure herein established are subject to paragraph (iv) above from the date of failure to pay until the date such failure to pay is finally rectified. The Contractor entities shall have the right to recover such expenditures out of the TPDC’s Cost Oil[and/or Cost Gas] as defined in Article 12

ARTICLE 11: PAYMENT AND ANNUAL CHARGES

(a) The annual charge in respect of which the Contractor is obliged to disburse to TPDC, pursuant to Article 3(g) (vii) hereof in respect of the said Exploration Licence, shall be an equivalent amount in Tanzania shillings

calculated by charging the following amounts for every square kilometer of the Contract Area retained:

Period	US $/sq. km
Initial Exploration Period	50
First Extension Period	100
Second Extension Period	200

The annual charge in respect of a Development Licence granted to TPDC, for which application was made at the request of the Contractor, shall be US$ 500 per sq. km.

(b) The sum in United States dollars referred to in paragraph (a) above shall be adjusted annually by dividing the sum by the following factor **I,** where: **I = C/D** and where

C is the United States Industrial Goods Producer Price Index (USIGPPI) as reported for the first time in monthly publication "International Financial Statistics" of the International Monetary Fund (IMF) in the section "Prices, Production, Employment"

for the Month during which the Exploration Licence is first issued to TPDC hereunder.

D is the USIGPPI as reported for the first time in the aforesaid IMF publication for the Month in which the first and any subsequent anniversary of the date on which the Exploration Licence was first issued falls.

For the purpose of this Article 11, and Articles 5(f) and 16(b) and (c), in the event that the USIGPPI ceases to be published the Parties to this agreement shall agree on an appropriate replacement index.

(c) Contractor's financial obligations to the Government, which it shall satisfy at its own expense, shall consist of the following payments:

(i) Signature Bonus: A payment of not less than two million five hundred United States Dollars (USD 2,500,000) on signing of this Agreement.

(ii) Production bonuses payable on commencement of production and shall be not less than five million United States Dollars (USD 5,000,000)

(iii) For subsequent development license in the contract area, the production bonuses payable shall be not less than five million United States Dollars (USD 5,000,000)

ARTICLE 12: RECOVERY OF COSTS AND EXPENSES AND PRODUCTION SHARING

(a) Subject to subarticle (d) and (g) of this Article and Article 15, all Recoverable Contract Expenses incurred by the Contractor and, where Joint Operations have been established, by both TPDC and the Contractor shall be recovered by freely taking and disposing from a volume of Crude Oil and/or Natural Gas produced and saved from the Contract Area and not used in Petroleum Operations (hereinafter referred to as "Cost Oil" and/or "Cost Gas").

Recoverable Contract Expenses shall be limited in any Calendar Year to an amount not exceeding fifty per cent (50%) in case of onshore/shelf areas and offshore areas and Lake Tanganyika of the total Crude Oil or Natural Gas production from the Contract Area net of Royalty. For the purposes of this Article onshore areas include shelf up to water depths of 500 meters and offshore areas include water depths beyond 500 meters.

(b) Recoverable Contract Expenses may be recovered as from the date they have been prudently incurred. To the extent that, in any Calendar Year, the Recoverable Contract Expenses exceed the Cost Oil and/or Cost Gas available in each Calendar Year under Article 12 (a), the unrecovered excess shall be carried forward for recovery in the next succeeding Calendar Year and, to the extent not then recovered, in the subsequent Year or Years until fully recovered or until the termination of the Agreement, where such termination occurs earlier, whatever the reason thereof. No unrecovered cost can be recovered by the Contractor or, as the case may be, TPDC, after such termination.

(c) There shall be ring fencing based on Exploration Licence or Development Licence.

(d) Where a company holds Exploration Licence or more than one Development Licence within a Contract Area (prior to any relinquishments) recoverable Contract Expenses in Licence Areas or Block(s) within the Contract Area (prior to any relinquishments) may only be recoverable from petroleum revenues from such Development Area to the extent that were incurred prior to commencement of Petroleum production from such Development Area.

(e) Royalty as provided for in Article 16(c) shall have a first charge on gross production from the Contract Area. The Royalty shall be reckoned at the Delivery Point before recovery of costs.

(i) The available Cost Oil and/or Cost Gas shall be applied first to recover Operating Expenses, and the Contractor and TPDC shall be entitled to recover such Expenses in proportion to their individual cumulative unrecovered Operating Expenses.

(ii) After recovery of Operating Expenses any excess Cost Oil and/or Cost Gas available for distribution shall be applied to recover Exploration Expenses.

(iii) After recovery of Operating Expenses and Exploration Expenses any excess Cost Oil and/or Cost Gas available for distribution shall be applied, and the Contractor and TPDC shall be entitled to recover such expenses in proportion to their individual cumulative unrecovered Development Expenses.

(iv) Any unrecovered Recoverable Contract Expenses shall be recovered out of the Cost Oil and/or Cost Gas available in the next succeeding Calendar Year or Years in the same manner as set out herein in subarticle (b) above.

(f) Subject to the limitations set out in subarticle (a) and (b) of this Article, the quantity of Cost Oil and/or Cost Gas which the Contractor and, if Joint Operations have been established, TPDC actually acquire shall be entitled to in any Calendar Year will be established on the basis of the average fair market price per barrel determined in accordance with Article 13 herein

(g) (i)(a) Sharing of Profit Oil: The remaining Crude Oil production available in any Calendar Year after Recoverable Contract Expenses have been recovered to the extent and in the manner aforesaid (hereinafter referred to as "Profit Oil"), total Crude Oil production from the Contract Area shall be shared between the Contractor and TPDC based on the following tranches:

Tranches of daily total production rates (barrels of oil per day, BOPD) in the

Contract Area in the onshore and shelf areas

BOPD	
0	12,499
12,500	24,999
25,000	49,999
50,000	99,999
100,000	and above

Tranches of daily total production rates (barrels of oil per day, BOPD) in the Contract Area for the deep water areas

BOPD	
0	49,999
50,000	99,999
100,000	149,999
150,000	199,999
200,000	and above

(i)(b) Sharing of Profit Gas: The remaining balance of Natural Gas production available in any Calendar] Year after Recoverable Contract Expenses have been recovered to the extent and in the manner aforesaid (hereinafter referred to as "Profit Gas"), total

Natural Gas production from the Contract Area shall be shared between the Contractor and TPDC based on the following tranches:

Tranches of daily total production rates (million standard cubic feet) of gas per day in the Contract Area in the onshore and shelf areas

MMSCFD	
0	19.99
20	39.99
40	59.99
60	79.99
80	and above

Tranches of daily total production rates (million standard cubic feet) of gas per day in the contract Area in the deep water areas

MMSC	FD
0	149.999
150	299.999
300	449.999
450	599.999
600	749.999
750	and above

(ii) The tranches of daily total production referred to in this Article 12 and also in Article 10 herein shall be specified in terms of average daily total production rates. The average daily production rates shall be determined for each Calendar Quarter and shall be calculated by dividing the total quantity of Crude Oil and/or Natural Gas produced and saved from the Contract Area during any Quarter by the total number of days during which Crude Oil and/or Natural

Gas was produced in such Quarter.

(iii) The quantity of Cost Oil and/or Cost Gas required to cover Recoverable Contract Expenses in any Calendar Year shall be allocated to each of the applicable tranches of daily total production in the same proportion as the

total production in each tranche of daily total production bears to total production from the Contract Area.

(h) (i) If there are no Joint Operations, after allocation of Recoverable Contract Expenses in accordance with subarticle (f) (iii) of this Article, the resulting Profit Oil in each tranche of daily total production shall be shared as follows:

Tranches of daily total Production (BOPD) rates in the Contract Area for onshore and shelf areas		TPDC Share of Profit Oil	ABC Share Contractor of Profit Oil
0	12,499	70%	30%
12,500	24,999	75%	25%
25,000	49,999	80%	20%
50,000	99,999	85%	15%
100,000 and above		90%	10%
Tranches of daily total Production(BOPD) rates in the Contract Area for deep waters and Lake Tanganyika North		TPDC Share of Profit Oil	ABC Contractor Share of Profit Oil
0	49,999	65%	35%
50,000	99,999	70%	30%
100,000	149,999	75%	25%
150,000	199,999	80%	20%
200,000	and above	85%	15%

(ii) If there are no Joint Operations, after allocation of Recoverable Contract Expenses in accordance with subarticle (f) (iii) of this Article, the resulting Profit Gas in each tranche of daily total production shall be shared as follows:

Tranches of daily total Production (MMSCFD) rates in the Contract Area for onshore and shelf areas		TPDC share of Profit Gas	ABC Contractor Share of Profit Gas
0	19.99	60%	40%
20	39.99	65%	35%
40	59.99	70%	30%
60	79.99	75%	25%
80	and above	80%	20%
Tranches of daily total Production (MMSCFD) rates in the Contract for deep water Areas and Lake Tanganyika North		TPDC share of Profit Gas	ABC Contractor Share of Profit Gas
0	149.999	60%	40%
150	299.999	65%	35%
300	449.999	70%	30%
450	599.999	75%	25%
600	749.999	80%	20%
750	and above	85%	15%

(i) If there are Joint Operations in all Development Areas, TPDC's share of Profit Oil/Gas indicated in subarticle (h) of this Article relative to each tranche of daily total production shall be increased by the number of percentage points obtained by multiplying TPDC's working interest of not less than twenty five (25%) per cent in accordance with Article 10 (b) by the share of the Contractor's Profit Oil/Gas indicated in subarticle (h) (i) and (ii) respectively of this Article relative to such increment of Profit Oil/Gas, and the Contractor's

share shall be reduced accordingly. However, where TPDC has elected pursuant to Article 10 (b) not to participate in Joint Operations in all Development Areas, the increase in TPDC's share of Profit Oil/Gas shall be the result of the above calculation multiplied by the ratio of total production from Joint Operations in which TPDC participates over total production in the Contract Area during each Year.

(ij) With respect to this Article 12, Cost Oil and/or Cost Gas and Profit Oil and/or Profit Gas calculations shall be done for each Calendar Quarter and the Crude Oil/Natural Gas provisionally shared accordingly. To the extent that actual quantities, expenses and prices are not known, provisional estimates of such data based on the approved Work Program, budget and any other relevant documentation or information shall be used. Within sixty (60) days of the end of each Calendar Year a final calculation of Cost Oil and/or Cost Gas and Profit Oil and/or Profit Gas based on actual Crude Oil/Natural Gas quantities, prices and recoverable costs and expenses in respect of that Calendar Year shall be prepared and any necessary adjustments to the Crude Oil/Natural Gas sharing shall be agreed upon between the Contractor and TPDC and made as soon as is practicable.

ARTICLE 13: VALUATION OF PETROLEUM

(a) The parties hereby agree that Tanzanian Crude Oil produced and saved from the Contract Area shall be sold or otherwise disposed of at competitive international market prices. The average fair market price of Tanzanian Crude Oil marketed in any Calendar Quarter shall, for the purpose of giving effect to this Agreement, be determined as follows:

1. as soon as possible after the end of each Calendar Quarter in which Crude Oil has been produced from any Development Area pursuant to this Agreement an average price (in terms of US$ per barrel FOB the Contractor's actual loading point for export from the United Republic of Tanzania) for each separate volume of Crude Oil of the same gravity, sulphur and metal content, pour point, product yield and other relevant characteristics ("quality") shall be determined in respect of production during that Calendar Quarter. It is understood that

production from different Development Areas may be of differing quality and that separate average prices may accordingly be appropriate for any Calendar Quarter in respect of production for each Area, in which event the overall price applicable to production from the Contract Area shall be determined by taking the arithmetic weighted average (weighted by volume) of all such prices separately determined;

2. the prices aforesaid shall be determined on the basis of international fair market value as follows:

(i). in the event that 50% or more of the total volume of sales made by the Contractor during the Calendar Quarter of Crude Oil of a given quality produced and saved hereunder have been third party arm's length sales transacted in foreign exchange (hereinafter referred to as "Third Party Sales"),

the fair market valuation for all Crude Oil of that quality will be taken to be the simple arithmetic average price actually realized in such Third Party Sales. This will be calculated by dividing the total receipts from all Third Party Sales by the total number of Barrels of Crude Oil sold in such sales;

subject to subparagraph (3) below, in the event that less than 50% of the total

(ii). total volume of sales made by the Contractor during the Calendar Quarter of Crude Oil of a given quality produced and saved hereunder have been Third Party Sales, the fair market valuation for all Crude Oil of that quality will be determined by the arithmetic weighted average of:

(A) the simple arithmetic average price actually realized in the Third Party Sales during the Calendar Quarter of such Crude Oil produced and saved hereunder, if any, calculated by dividing the total receipts from all Third Party Sales by the total number of Barrels of Crude Oil sold in such sales; and

(B) the simple arithmetic average price per Barrel at which a selection of major competitive crude oils of generally similar quality to that of Tanzanian Crude Oil produced hereunder and crude of sufficient liquidity daily traded in

sufficient quantities (above 0.1 million barrels a day) which are listed and published in Platt Oilgram) were sold in international markets during the same period; the prices of the crude oils used for reference will be adjusted for differences in quality, quantity, transportation costs, delivery time, payment and other contract terms.

The selected crude oils will be agreed between the Contractor and TPDC, in consultation with the Government in advance for each Calendar year and in making the selection preference will be given to those crude oils of similar quality to Tanzanian Crude Oil which are produced in Africa or the Middle East and are regularly sold in the same markets as Tanzanian Crude Oil is normally sold.

The arithmetic weighted average aforesaid will be determined by the percentage volume of sales of Tanzanian Crude Oil by Contractor that are, (A), and that are not, (B) as the case may be, Third Party Sales during the Calendar Quarter in question.

all such prices will be adjusted to FOB the Contractor's actual loading point (iii for export from the United Republic of Tanzania;
).

for the purposes of this Article, Third Party Sales of Crude Oil made by the (iv Contractor shall include any third party arm's length sales made by the). Contractor on Government's behalf pursuant to Article 18 herein but shall exclude:

(A) Sales, whether direct or indirect through brokers or otherwise, of any seller to any Affiliate of such seller.

(B) Crude Oil exchanges, barter deals or restricted or distress transactions, and more generally any Crude Oil transaction which is motivated in whole or in part by considerations other than the usual economic incentives for commercial arm's length crude oil sales.

3. In the event that less than 50% of the total volume of sales by the Contractor during the Calendar Quarter of Crude Oil/Natural Gas of a given quality produced and saved hereunder have been Third Party Sales,

the Contractor shall promptly notify Government and TPDC of the applicable percentage and respective volumes and prices realized. Government and TPDC shall have the right to elect for the fair market valuation for all Crude Oil/Natural Gas of that quality to be determined for that Quarter

in accordance with subarticle (a) 2 (i) of this Article. If Government and TPDC so elect, they will notify the Contractor in writing within 14 days of receipt of the original notification from the Contractor, and the fair market valuation of the aforesaid Crude Oil shall be determined accordingly. If Government and TPDC do not so elect then the fair market valuation shall be determined in accordance with subarticle (a) (2) (ii) of this Article.

(b) The Contractor shall be responsible for establishing the relevant average prices for Crude Oil in accordance with this Article 13, and such prices shall be subject to agreement by TPDC before they shall be accepted as having been finally determined. The Contractor shall provide TPDC with all relevant material in order that it can satisfy itself that the average price determined by the Contractor is fair. If the parties fail to agree on the average price for any Calendar Quarter within thirty (30) days following the end of such Quarter then the calculation of the relevant average price shall be referred to a sole expert appointed pursuant to subarticle (d) of this Article. The sole expert's determination shall be final and binding.

(c) During the Calendar Year in which production from the Contract Area commences, the Parties will meet in order to establish a provisional selection of the major competitive crude oils and an appropriate mechanism for the purposes of giving effect to subarticle (a) (1) and (2)(ii) (B) of this Article. The selection of crude oils will be reviewed annually and modified if necessary.

(d) In the event of any difference or dispute between the Contractor and Government or TPDC concerning selection of the major competitive crude oils, or more generally about the manner in which the prices are determined according to the provisions of this Article13, the matter or matters in issue

shall finally be resolved by a sole expert appointed by agreement between the parties or, in the absence of such agreement, by the British Energy Institute (formerly British Institute of Petroleum). The costs of the expert shall be shared equally between the Contractor on the one hand and the Government and TPDC on the other hand.

(e) The fair market valueof Natural Gas determined at the Delivery Point shall be the price in United States dollars at which an independent third party would be prepared to buy at the particular time such Natural Gas, on an Arm's Length basis, taking into account the quality,
volume, cost of transportation, possible cost of liquefaction and regasification,terms of payment, and any other relevant conditions, including the then prevailing market conditions for Natural Gas at the final sales destination and shall be based on the higher of actual realized prices or the prices calculated under the marketing arrangements for Natural Gas approved by Minister.

(f) For Natural Gas sales transactions to Affiliates, the value of Natural Gas shall be determined as stipulated in subarticle (e) above.

ARTICLE 14: MEASUREMENT OF PETROLEUM

(a) All Petroleum produced, saved and not used in Petroleum Operations shall be measured at the Measurement Points approved in the Development Plan.

(b) The Measurement Points shall be at the end of the facilities for which the cost is included as a recoverable cost of Petroleum Operations under the Contract.

(c) The Production shall be measured in accordance with the standards set by the Weights and Measures Act CAP 340 and Best International Petroleum Industry Practices. All measurement equipment shall be installed, maintained and operated by Contractor. TPDC shall have the right to inspect the measuring equipment installed by Contractor and all charts and other measurement or test data at all reasonable times. The accuracy of Contractor's measuring equipment shall be verified by tests at regular intervals and upon the request of TPDC, using sound and current means

and methods in accordance with the Weights and Measures Act and Best International Petroleum Industry Practices.

(d) Upon discovery of a meter malfunction, Contractor shall immediately have the meter repaired, adjusted and corrected and following such repairs, adjustment or correction shall have it tested or calibrated to establish its accuracy. Upon the discovery of a metering error, Contractor Shall have the meter tested immediately and shall take the necessary steps to correct any error that may be discovered.

(e) In the event a measuring error is discovered, Contractor shall use its best efforts to determine the correct Production figures for the period during which there was a measuring error and the corrected figures shall be used. In determining the correction, Contractor shall use, where required, the information from other measurements made inside or outside the Production Area. Contractor shall submit for TPDC's approval a report detailing the source and nature of the measuring error and the corrections to be applied. If it proves impossible to determine when the measuring error first occurred, the commencement of the error shall be deemed to be that point in time halfway between the date of the last previous test and the date on which the existence of the measuring error was first discovered.

(f) All measurements for all purposes in this Contract shall be adjusted to standard conditions of pressure and temperature sixty (60) degrees Fahrenheit and 14.7 psia.

ARTICLE 15: NATURAL GAS

(a) Where Contractor has informed TPDC that NonAssociated Natural Gas discovered in the Contract Area is of potential commercial interest, the Contractor shall, as soon as possible but in any case not exceeding thirty days (30) submit to TPDC, for the consideration of the Advisory Committee, its proposals for an appraisal programme as provided in the Act. After completion by the Contractor of an appraisal program, the parties shall meet together with a view to reaching an agreement on the development, production, processing and sale of such gas.

For the purpose of the aforesaid, the parties undertake to negotiate in good faith and in doing so will seek to give effect to the following principles:

(i) all Contract Expenses directly attributed to the discovery and production of such gas shall be recovered from part thereof and the remainder of the gas shared between the Contractor and TPDC as far as possible in accordance with the scheme for cost recovery and sharing of Profit Oil/Gas set out in Article 12; and

(ii) to the extent that market conditions permit, gas will be valued for cost recovery and sold for processing or export at prices which will give to the Contractor a fair return on its investment.

(b) Where:

(i) NonAssociated Natural Gas has been discovered in the Contract Area, and

(ii) a Location has been declared in respect of a Block or Blocks in which such discovery is located, and

(iii) the parties agree that the NonAssociated Gas discovered by the Contractor exists in the Contract Area in quantities sufficient to justify consideration of an export scheme,

the Minister will, in accordance with the Act, if TPDC at the request of the Contractor applies in that behalf, extend for a reasonable time, not to exceed three (3) years, the period within which TPDC may apply for a Development Licence over a Block or Blocks within that Location.

(c) Subject to the provisions of the Act, Natural Gas associated with Crude Oil and not used in Petroleum Operations may be flared only if the use thereof is uneconomic. However, TPDC may elect to off take, free of charge, at the wellhead or gas oil separator and use for domestic requirements such Natural Gas that would otherwise be flared, provided that all costs associated with TPDC's utilization of the Natural Gas be borne by TPDC. It is understood that such off take should not be detrimental to the prompt conduct of oil field operations according to Best International Petroleum Industry Practices.

ARTICLE 16: TAXATION AND ROYALTY

(a) The Contractor shall be subject to Tanzanian taxes on income derived from Petroleum Operations hereunder, as provided for under the provisions of the Law.

(b) In addition to taxes paid in accordance with subarticle (a) above the Contractor or its shareholders in respect of income derived from Petroleum Operations hereunder or in respect of any property held or thing done for any purpose authorized or contemplated hereunder shall be further taxed as follows:

(i) subject to the provisions of Article 23, import duties at the rates specified from time to time in the First Schedule to the East African Customs Union Protocol;

(ii) taxes, duties, fees or other imposts for specific services rendered on request or to the public or commercial enterprises generally and rent due to the Government in respect of any land rights granted or assigned to the Contractor;

(iii) local Government rates or taxes not in excess of those generally applicable in the United Republic of Tanzania; and

(iv) stamp duties, registration fees, licence fees and any other tax, duty, fee or other impost of a minor nature.

(c) TPDC on behalf of itself and the Contractor shall discharge the obligation to pay Royalty under the Act in respect of petroleum obtained from the Contract Area, by delivering to the Government 12.5% for onshore/shelf areas and 7.5% for offshore of total Crude Oil/Natural Gas production (prior to Cost Oil and/or Cost Gas recovery) at such location as the Minister may direct and the Government may require TPDC to dispose of such royalty otherwise to be delivered to the Government in such manner as the Government may direct. For the purposes of this Article onshore areas include shelf up to water depths of 500 meters and offshore areas include water depths beyond 500 meters.

ARTICLE 17: ADDITIONAL PROFITS TAX

(a) Contractor shall be subject to an Additional Profits Tax (hereinafter referred to as "APT") that shall be calculated on a Development Area basis in accordance with the provisions of this Article 17. APT will be calculated for each Calendar Year and will vary with the real rate of return earned by Contractor on the net cash flow from the Development Area in question. If, for any Development Area, either:

(i) the "first accumulated net cash position" (as calculated in the manner set out hereafter and a sample calculation methodology shown in Annex "E" and hereinafter referred to as the "FANCP"); or

(ii) each of the FANCP and the "second accumulated net cash position" (as calculated in the manner set out hereafter and a sample hereinafter and referred to as the "SANCP"). is a positive amount, then the APT from the Development Area in question for any Calendar Year shall be either, in case (i): twentyfive percent (25%) of the FANCP for that Year, or in case (ii): the aggregate of twentyfive percent (25%) of the FANCP for that Year and thirtyfive percent (35%) of the SANCP for that Year. If in any Year the FANCP or the SANCP is a negative amount then no APT shall be due with reference to that FANCP or SANCP.

(b) The FANCP on any Development Area for any Calendar Year shall be calculated according to the following formula: FANCP = A (100%+B) +C where:

"A" equals the FANCP denominated in US dollars at the end of the Calendar Year preceding the Calendar Year for which the calculation is being made

"B" equals twenty percent (20%) plus the percentage change, for the Calendar Year for which the calculation is being made, in the annual average level of the United Stated Industrial Goods Producer Price Index (USIGPPI) as reported for the first time in the monthly publication "International Financial Statistics" of the International Monetary Fund (IMF) in the section "Prices, Production, Employment".

"C" equals the net cash position denominated in US dollars (which may be a positive or negative amount) for the Calendar Year for which the calculation is being made, calculated as follows:

(i). Contractor's share of Cost Oil and Profit Oil for that Calendar Year valued in accordance with Article 12 hereof and allocated to the Development Area in question in accordance with the provisions of Annex " D" to this Agreement plus

(ii).Contractor's share of all credits to the accounts under this Agreement in respect of the Calendar Year, calculated and allocated to the Development Area in question in accordance with the provisions of Annex “D" to this Agreement minus

(iii).Contractor's share of all charges to the accounts under this Agreement in respect of that Calendar Year, calculated and allocated to the Development Area in question in accordance with the provisions of Annex "D" to this Agreement, except that for this purpose Contractor's share of charges shall not include any amounts in respect of interest on loans obtained for the purpose of carrying out Petroleum Operations.

(c) The SANCP on any Development Area for any Calendar Year shall be calculated according to the same formula given under subarticle (b) above except that:

"A" equals the SANCP denominated in US dollars at the end of the Calendar Year preceding the Calendar Year for which the calculation is being made,

"B" equals thirty percent (30%) plus the percentage change, for the Calendar Year for which the calculation is being made, in the annual average level the USIGPPI as reported for the first time in the monthly publication "International Financial Statistics" of the IMF .in the section "Prices, Production, Employment".

To the amount calculated under (iii) in the definition of "C" is subarticle (b) above shall be added any Additional Profits Tax which would be payable from the Development Area if reference were made hereunder only to the FANCP.

(d) If for any Calendar Year the FANCP is positive amount, the FANCP at the end of that Calendar year shall be deemed to be zero for the purpose of calculating the FANCP for the subsequent Calendar Year.

(e) If for any Calendar Year the SANCP is a positive amount, the SANCP at the end of that Calendar Year shall be deemed to be zero for the purpose of calculating the SANCP for the subsequent Calendar Year.

(f) Contractor shall maintain proper records and books of accounts in accordance with the provisions of Annex "D" enabling the calculations described in this Article 17 to be performed. From the Effective Date Contractor shall maintain and submit to the Government annually, or more frequently if so requested, a statement of the FANCP and SANCP.

Within thirty (30) days after the end of each Quarter, the Contractor shall submit to TPDC statement showing the position on additional profit tax

(g) The APT due, if any, shall be paid in cash at such time and in such manner as the Commissioner of Income Tax may reasonably require.

ARTICLE 18: ESTABLISHMENT OF OFFICE, REPORTING, INTERNAL CONTROL, SUPERVISION AND CONFIDENTIALITY

(a) Data and information obtained following Petroleum Operations under this Agreement shall be the property of the Government. Such data and information pursuant to the foregoing shall include but shall not be limited to; the geological, geophysical, technical, financial and economic reports, studies, interpretations and analyses prepared by or on behalf of the Contractor, the Government or the TPDC.

(b) Within thirty (30) days, after the Effective Date Contractor shall establish and maintain an office in the United Republic of Tanzania with sufficient competence and capacity to conduct and perform Petroleum Operations in accordance with the terms of this Agreement

(c) Within thirty (30) days after the effective date Contractor shall designate a representative residing in the United Republic of Tanzania who shall have full

authority to represent it in respect of matters related to the Agreement and to receive notices addressed to Contractor

(d) The Contractor shall at all times prepare and maintain accurate records of its operations in the Contract Area and shall keep all information of technical, economic, accounting or any other nature developed for the conduct of Petroleum Operations. Such records shall be organized and kept in such a way as to allow for the prompt and complete ascertainment of costs and expenditures.

(e) The records and information referred to in the subarticle (a) of this Article shall be kept at the Operator's office in the United Republic of Tanzania.

(f) The Contractor shall save and keep for a reasonable period of time and in the best condition possible a representative portion of each sample of cores, cuttings and fluids taken from drilling wells, to be disposed of or forwarded to the Government or its representative in a manner directed by TPDC. All samples acquired by the Contractor for its own purpose shall be considered available for inspection at any reasonable time by the Government or its representative. Any such samples which the Contractor has kept for a period of forty eight (48) months with the full knowledge of TPDC without receipt of instruction to forward the same to TPDC, Government or its representative, the samples may be disposed of by the Contractor at its discretion, provided TPDC has been given prior notice of not less than ninety (90) days of the Contractor's intention to do so and given the opportunity to take such samples.

(g) Notwithstanding subarticle (b) of this Article, the Contractor shall be freely permitted to export samples for purposes of investigation in laboratories abroad, provided that the Contractor submits samples equivalent in size and quality to TPDC. Originals of records and data may be exported only with the permission of TPDC and provided at least one comparable copy of such records and data has been submitted to TPDC. Such exports shall be repatriated to Tanzania without undue delay and on the understanding that they belong to

the Government.

(h) The Contractor is obliged to comply with the Act, Regulations and individual administrative decisions issued there under through the implementation of necessary systematic measures.

(i) The Contractor, through the implementation of necessary systematic measures for internal control and supervision of its operations develop adequate management systems in compliance with the Act, regulations and individual administrative decisions issued thereunder.

(j) The Contractor shall ensure that anyone performing work for him, either personally through employees or subcontractors shall comply with the health, safety and environmental requirements under the Laws and in this Agreement.

(k) The Government and TPDC, through their duly authorized representatives and employees, shall have full and free access to the Contract Area at all convenient times and be entitled to monitor the Petroleum Operations conducted by the Contractor hereunder and at all reasonable times to inspect all assets, material, records, books and data kept by the Contractor relating to such operations. Contractor shall grant to the said representatives and employees the same facilities in the camp as those afforded to its own employees of similar professional rank. The Contractor shall provide TPDC promptly with copies of any and all data (including, but not limited to geological and geophysical reports, logs and well surveys), information and interpretations of such data and information obtained by the Contractor in the course of carrying out Petroleum Operations hereunder. All such data, information and interpretations, as well as cores and cuttings taken from drilling wells, shall be the property of Government and, save as provided in this Article, the same may not be published, reproduced or otherwise dealt with by the Contractor without the prior written consent of Government or TPDC, which consent shall not be unreasonably withheld or delayed.

(l) The Government and TPDC, through their duly authorized representatives and employees, shall have full and free access to the Contract Area at all convenient times and be entitled to monitor the Petroleum Operations conducted by the Contractor hereunder and at all reasonable times to inspect all

assets, material, records, books and data kept by the Contractor relating to such operations. Contractor shall grant to the said representatives and employees the same facilities in the camp as those afforded to its own employees of similar professional rank. For the purposes of permitting the exercise of the inspection rights, the Contractor shall provide such representatives and employees with reasonable assistance regarding transportation and accommodation.

(m) All data and information and every interpretation thereof provided by the Contractor to TPDC shall, so long as it relates to an area which is a part of the Contract Area, be treated as confidential and each of the Parties hereto undertakes not to disclose the same to any other person without the prior written consent of the other Parties. However, such data, information and interpretations may be disclosed to Affiliate companies or contractors carrying out any part of the Petroleum Operations and to advisers of TPDC and Government who will treat as confidential all that is disclosed to them and undertake not to disclose the same to any other person without the written consent of the Contractor and TPDC. Notwithstanding what is provided in this subarticle (m) of this Article, the Minister may, using such data, information and reports supplied by the Contractor, publish summaries of data, information and reports from geophysical surveys and exploration wells, including lithological groups, classification boundaries and hydrocarbon zones:

(n) The Contractor undertakes not to disclose to third parties any data, information or any interpretation thereof which relates to an area which has ceased to be part of the Contract Area for a period of four (4) years from the date on which the area to which such data, information or any interpretation thereof relates ceased to be part of the Contract Area or from the date on which this Agreement expires or is terminated, whichever occurs first. However, where during the aforesaid period the Contractor carries on Petroleum Operations in the Contract Area, such data, information and interpretations may be disclosed by Contractor to:

(i) Subcontractors, Affiliates, assignees, auditors, financial consultants or legal advisers, provided that such disclosures are required for effective performances of the aforementioned recipients' duties related to Petroleum Operations;

(ii) comply with statutory obligation or the requirements of any governmental agency or the rules of a stock exchange on which a Party's stock is publicly traded in which case the disclosing Party will notify the other Parties of any information so disclosed prior to such disclosure;

(iii) financial institutions involved in the provision of finance for the Petroleum Operations hereunder provided, in all such cases, that the recipients of such data and information agree in writing to keep such data and the information strictly confidential; and

(iv) a third party for the purpose of negotiating an assignment of interest hereunder provided such third party executes an undertaking to keep the information disclosed confidential.

(o) Any public disclosure regarding the interpretation of information acquired in Petroleum Operations shall not be made without the Minister's consent.

ARTICLE 19: LIFTING, MARKETING AND DOMESTIC SUPPLY OBLIGATION

(a) The quantity of production to which TPDC is entitled, pursuant to Article 12 herein, shall be delivered to TPDC or its nominee at the Delivery Point, at which title in production will pass to TPDC or its nominee subject to the terms of the agreement referred to in subarticle (b) of this Article. TPDC shall be responsible for costs associated with its lifting entitlement after the Delivery Point. Where there is no Joint Operations the Contractor, shall be responsible for all costs prior to the Delivery Point. In the event of Joint Operations both the Contractor and TPDC shall be responsible for all costs prior to the Delivery Point.

(b) Within six months after the Minister's approval of a Development Plan, the Contractor shall propose to TPDC an off take procedure to govern the method whereby the parties will nominate and lift their respective shares of Crude Oil/Natural Gas. The details of such procedure shall be discussed and agreed

upon between TPDC and the Contractor for the Minister's approval. The major principles of such procedure shall include the following:

(i) lifting by the parties shall be carried out so as to avoid interference with Petroleum Operations;

(ii) lifting rights and schedules will be subject to operations tolerances and constraints so that each party shall be entitled to lift full cargo loads;

(iii) within reasonable limits and subject to future correction of imbalances, each party may lift more or less than its lifting entitlement so as to allow the lifting of full cargo loads; and

(iv) in general, priority for lifting shall be given to the party having the greatest unlifted lifting entitlement.

(c) The Contractor shall, if requested by TPDC with at least three (3) months advance notice, market abroad on competitive terms all or part of TPDC's lifting entitlement subject to payment by TPDC of direct costs normally borne by a seller in such transactions as may be agreed by TPDC but excluding any commission or marketing fee in respect of such service.

(d) TPDC and the Contractor shall have the obligation to satisfy the domestic market in Tanzania from their proportional share of production. The domestic Natural Gas price shall be determined based on the strategic nature of the project to be undertaken by the Government. The volume of the Crude Oil/Natural Gas which TPDC and the Contractor may be required to supply to meet domestic market obligation shall be determined by the Parties by mutual agreement and shall be on pro rata basis with other producers in the United Republic of Tanzania. TPDC shall give the Contractor at least one (1) month notice in advance of said requirements and the term of the supply will be on an annual basis. The volume of Crude Oil/Natural Gas which shall be required to sell to meet the requirements of

the domestic market shall not exceed TPDC and Contractor's share of Profit Oil/Gas.

(e) Crude Oil/Natural Gas sold pursuant to subarticle (d) above shall be paid for in foreign exchange or its equivalentat a price determined in accordance with Article 13 and 15 of this Agreement.

ARTICLE 20: LOCAL CONTENT

The Contractor shall:

(a) Comply with the Government's Local Content Policy in force and as modified from time to time

(b) purchase Tanzanian goods, services and materials provided such goods and materials are of certified standard and quality in accordance with Tanzania authorities namely Tanzania Bureau of Standards, Tanzania Foods and Drugs Authority or any other relevant authority established and operating under the Law;

(c) give assurance to Local Enterprises in respect of prompt payment for goods and services actually provided for Contractor and its Sub Contractors both foreign and Local;

(d) make use of Tanzanian service companies and contractors, where services of certified standards are available from such contractors at competitive prices and on competitive terms;

(e) Upon purchase of goods, services or materials, follow an efficient, open, transparent, nondiscriminatory and competitive purchasing and award procedure in accordance with the Law and Best International Petroleum Industry Practices and submit the relevant procurement plan to TPDC for review;

(f) Ensure that the unskilled manpower requirement is reserved for Tanzanian nationals only.

(g) ensure that provisions in terms of subarticles (a) to (f) of this Article are contained in contracts between Contractor and its subcontractors;

(h) employ United Republic of Tanzania nationals in order to give effect to Section 37(b) of the Act; and

(i) ensure that subcontracts are scoped, as far as it is economically feasible and practical to match the capability (time, finance and manpower) of Local Enterprises and shall manage the risk to allow their participation.

(j) Employ Tanzanian nationals in order to give effect to the Law and ensure that opportunities are given for the employment of nationals of the Tanzanian.

(k) The contractor shall also:

i. provide to TPDC together with the annual work programme and budgets required under Articles 5 and 7 a list of all projects to be undertaken as well as all goods and services that are required for the conduct of Petroleum Operations;

ii. TPDC and Contractor shall agree on a list of those projects and goods and services which shall be published in at least two local newspapers and on the TPDC's website; and the Contractor shall in collaboration with TPDC invite qualified suppliers and contractors to bid for the supply or execution of the projects as the case may be.

(l) All tenders are to be advertised, evaluated and awarded in the United Republic of Tanzania. Contractor shall apply to TPDC for prior approval where the circumstances warrant that any part of the tender process be conducted outside of United Republic of Tanzania.

(m)give preference to Tanzania companies and by ensuring access to all tender invitations and by including high weighting on local value added in the tender evaluation criteria.

(n) In order to give effect to this Article, the Contractor shall collaborate with TPDC and or any public authority responsible for local content promotion or other public body to identify a list of Tanzanian services and goods suppliers and contractors.

(o) Contractor shall ensure the development of its employees by imparting to nationals' technology and business expertise in all activities in the Petroleum Operations including but not limited to:

(i). fabrication;

(ii). information technology support, including seismic data acquisition, processing and interpretation support;

(iii). operations and maintenance support;

(iv). maritime services;

(v). business support services, including accounting and auditing, human resource services, consulting, marketing and contract negotiations; (vi). financing; and (vii). trading.

(p) For the purposes of this Article,

(i). “Tanzanian goods", means goods manufactured, obtained or produced in the United Republic of Tanzania; "Tanzania Services" means services provided by Tanzanians or Tanzanian companies; and "Tanzanian Materials "means materials obtained, produced or manufactured in the United Republic of Tanzania;

(ii). “Tanzanian Companies” means companies incorporated in the United Republic of Tanzania and whose shares are wholly or at least 51% owned by in Tanzanian nationals.

ARTICLE 21:EMPLOYMENT, TRAINING AND TRANSFER OF TECHNOLOGY

(a) Subject to the requirement of the law relating to immigration, TPDC shall advice the Government on the provision of necessary work permits and other approvals required for the employment of expatriate personnel by the Contractor in the United Republic of Tanzania for the purposes of this Agreement. (b) Without prejudice to Article 20), in the conduct of the Petroleum Operations, the Contractor shall employ Tanzanian citizens having appropriate qualifications to the maximum extent possible. In this connection the Contractor shall, in consultation with Government and TPDC, propose and carry out an effective training and employment programme for Tanzanian employees in each phase and level of operations, taking into account the requirements and need to maintain reasonable international standards of efficiency in the conduct of the Petroleum Operations. Such employees may be

trained in the United Republic of Tanzania or abroad as required by the training programme prepared by the Contractor.

(b) During each year of the term of the Exploration Licence and Development Licence or any renewal thereof the Contractor shall spend a minimum sum of four hundred thousand United States dollars (US$ 500,000) adjusted by dividing by the factor I as defined in Article 5 (e) herein, for one or more of the following purposes:

(i) to provide a mutually agreed number of Government and TPDC personnel with on the job training in the Contractor operations in the United Republic of Tanzania and overseas, and/or training at institutions abroad or the United Republic of Tanzania, including natural earth sciences, engineering, technology, petroleum accounting and economics, economic analysis, contract administration and law as related to the fields of oil and gas exploration and production;

(ii) to send suitable Tanzanian personnel selected by the Government and by TPDC on courses at universities, colleges or other training institutions mutually selected by the Contractor, the Government and TPDC;

(iii) to send Tanzanian personnel selected by the Government and by TPDC to conferences workshops and seminars related to the petroleum industry; and

(iv) to purchase for the Government and TPDC advanced technical books, professional publications, technical software, scientific instruments, technical software or other equipment required by the Government and TPDC.

(c) Not later than six (6) months after the grant of a Development Licence, the Contractor shall, in consultation with TPDC, implement the programme proposed in the Development Plan as approved by the Government for training and employment of Tanzanian nationals in each phase and level of Petroleum Operations and for the transfer of management and technical skills for the safe and efficient conduct of Petroleum Operations. In any case the Contractor shall ensure the transfer of management and operation functions to Tanzanian nationals within a period not exceeding five (5) years from the commencement of commercial operations.

(d) In addition to the requirements in sub article (e) of this Article Contractor shall ensure that the development of people in key areas allows nationals to participate in valueadding, analytical and management areas of:
   (i) of a technical or professional nature including general management, design engineering, project management, seismic data processing, human resource development, legal; and
   (ii) Business strategic skills including leadership, business development, executive management, commercial, analytical, negotiating, strategy development and trading know how and acumen.

(e) The provisions of the Vocational Education and Training Act 1994 (Cap 82) shall apply to the employment of any expatriate employee of the Contractor, including any expatriate employee of any nonresident contractor, during the several periods into which Exploration Operations hereunder are divided.

(f) The Contractor shall prepare an annual local content plan which shall accompany the annual work program and budget for Petroleum Operations in the Contract Area and which shall include but not limited to:
   (i) procurement of Tanzanian goods, material and services;
   (ii) a detailed plan and programme for Tanzanian recruitment, employment and training, including postgraduate training and scholarships; and
   (iii)a plan for the transfer of skills, knowledge, competence and knowhow.

(g) The Contractor shall, together with the annual report on Petroleum Operations in the Contract Area, submit and publish an annual report, which shall be verified by a competent and independent third party, describing the Contractor's activities and results on Tanzanian content and the local value adding other than the production sharing and fiscal obligations.

ARTICLE 22:TITLE TO ASSETS, INSURANCE, SITE CLEAN UP, DECOMMISSIONINGAND ABANDONMENT

(a) All fixed assets, owned by Contractor in connection with the Petroleum Operations carried out by Contractor hereunder shall become the property of

TPDC at the option of TPDC after this Agreement expires or is terminated or at the time when full costs of the acquisition of the asset in question have been recovered by Contractor out of Cost Oil and/or Cost Gas, whichever occurs first.

(b) TPDC's aforesaid option in subarticle (a) shall be exercised by written notice to the Contractor:
   (i) in the case of expiry of this Agreement, of not less than 30 days prior to such expiry;
   (ii) in the case of termination of this Agreement of not more than 30 days after such termination; and
   (iii)in the case of full recovery of costs of the acquisition of the assets in question not later than ninety (90) days after such cost recovery. Such fixed assets shall include but not be limited to buildings, piers, harbors, pipelines, wellheads, separators, compressors, pumps, power lines, telephone lines etc.

(c) Subject to this Article, all movable assets in connection with the Petroleum Operations carried out by the Contractor shall remain TPDC's property on expiration or termination of this Agreement.

(d) If TPDC elects to participate in Joint Operations, then title to any assets acquired pursuant to a Development Plan shall be held jointly by the Contractor and TPDC according to their respective interest in Joint Operations. Any such asset shall become completely owned by TPDC as soon as this Agreement expires or is terminated or, at the time, the Contractor's portion of the full costs of the acquisition of the asset in question has been recovered by the Contractor out of Cost Oil and/or Cost Gas, whichever occurs first. TPDC's aforesaid option shall be exercised by written notice to the Contractor:
   (i) in the case of expiry of this Agreement, of not less than 30 days prior to such expiry;
   (ii) in the case of termination of this Agreement of not more than 30 days after such termination; and

(iii) in the case of full recovery of the Contractor's portion of the costs of the acquisition of assets in question not later than 30 days after such cost recovery.

(e) Notwithstanding what is provided for under Subarticles 22 (a) and 22(c), So long as this

Agreement remains in force, Contractor shall have, free of any charge, for the purpose of carrying on Petroleum Operations hereunder, the right of use of assets which have become the property of TPDC, pursuant to subarticles (a), (b) or (c) above. Contractor shall be liable of maintenance, insurance, decommissioning and sitecleaning and other costs associated with the use and shall keep the assets in reasonably good repair and working order, fair wear and tear excepted, and any maintenance expenses shall be recovered in accordance with the terms hereof.

(f) Where the cost of a physical asset has been recovered for more than 50% in accordance with the terms of this Agreement, TPDC may elect to have the title to the asset transferred from the Contractor to the TPDC upon payment by the TPDC of the unrecovered portion of the cost of the asset.

(g) Unless otherwise agreed to by the Minister in writing, any lien, charge or encumbrance on an asset shall lapse upon the transfer of that asset from Contractor to Government or TPDC under this Article. However, the rights of use established with the consent of the Minister shall remain in force.

(h) A physical asset that is used by the Contractor in Petroleum Operations as a capital or financial lease shall be treated as a purchased asset in accordance with subarticle (a)(h) of this Article. A Contractor shall not be required under this Article to transfer to the Government or the TPDC other assets rented or leased by the Contractor for use in Petroleum Operations and which are of the type customarily leased for use in accordance with.

(i) Subject to the provisions of sub article (a) and (b) of this Article, Contractor shall give TPDC the opportunity to buy, upon such commercially reasonable terms as may be mutually agreed upon, any item imported duty free under Article 21(a) which Contractor intends to dispose of or sell.

(j) Contractor shall affect and, at all times during the terms of this Agreement, maintain for Petroleum Operations hereunder insurance of such type and in such amount as is customary in accordance with the Insurance Act 2009 and Best International Petroleum Industry Practices and/or as required by TPDC in accordance with their minimum insurance guidelines/requirements. The said insurances shall be taken out with Tanzanian registered insurance company(s) approved by TPDC, in accordance with the Insurance Act 2009 and Regulations made there under, and where required be reinsured into International reinsurance markets with minimum Standard and Poor's 'A'rating or the equivalent. All insurances must be approved by TPDC and as appropriate include TPDC as a Named Insured and include a waiver of subrogation against TPDC. The said insurance shall, without prejudice to the generality of the foregoing, cover:

(i) any loss or damage to all assets used in Petroleum Operations;

(ii) operators' extra expenses (OEE) coverage in respect of all wells drilled during Petroleum Operations whether drilling, producing, shutin or workover;

(iii) pollution caused in the course of Petroleum Operations for which Contractor, Operator, Government or TPDC may be held responsible;

(iv) property loss or damage or bodily injury suffered by any third party in the course of Petroleum Operations for which Contractor, Operator, Government or TPDC may be liable or Contractor may be liable to indemnify the Government and TPDC;

(v) the cost of removing wrecks and cleaning up operations following an accident in the course of petroleum Operations; and

(vi) Contractor's and/or Operator's liability to its employees engaged in the Petroleum Operations.

(k) All insurance policies taken out pursuant to this Article shall be made available to TPDC for review and approval prior to operations commencing.

(l) Contractor shall require its subcontractors to carry insurance of such type and in such amount as is customary applicable in accordance with Best

International Petroleum Industry Practices and/or as required by TPDC in accordance with their minimum insurance guidelines/requirements. The said insurances shall be taken out with Tanzanian registered company(s) approved by TDPC in accordance with Tanzanian Insurance Law and as applicable include TPDC as named insured and waive rights of subrogation against TPDC.

(m) Contractor shall not selfinsure or insure through Affiliates.

(n) Prior to relinquishment of any area, Contractor shall perform all necessary abandonment, decommissioning and site cleanup activities to restore the area as nearly as possible, to the condition in which it existed on the Effective Date including removal of such facilities, equipment or installations as Minister may instruct, and shall take action necessary to prevent hazards to human life, property and the environment which may be caused by its facilities, equipment or installations. In carrying such abandonment, decommissioning and site cleanup activities the Contractor shall observe the Environmental Management Act, 2004 and generally Best International Petroleum Industry Practices

(o) In order to discharge its obligations for site cleaning, decommissioning and abandonment, the Contractor, Government and TPDC shall, within two (2) years of the commencement of commercial production, enter into an agreement to establish a Site CleanUp, Decommissioning and Abandonment Cost Reserve Fund (Decommissioning

Fund). Such agreement shall address the administration and utilization of funds deducted from Cost Oil and/or Cost Gas in accordance with the following:

(i) For the purpose of the Decommissioning Fund, TPDC and Contractor shall upon verification of a qualified independent third party, estimate the cost for site cleaning, decommissioningand abandonment in good faith, on the basis of industry average costs in accordance with the Environmental Management Act, 2004 and generally Best International Petroleum Industry Practices

(ii) The payments deposited into the Decommissioning Fund shall be placed in a U.S. Dollar, longterm, interest bearing account in a commercial bank located within the United Republic of Tanzania to be designated by TPDC and Contractor.

(iii)If, upon expiration or other termination of this Agreement, TPDC determines to conduct the site cleanup, decommissioning and abandonment operations, such funds, plus all accrued interest, shall be paid to TPDC whereupon Contractor shall be released from any further obligation and liability with respect to such site cleanup and abandonment.

(iv)If, within sixty (60) days prior to the expiration or other termination of this Agreement, TPDC has failed to advise Contractor of TPDC's determination to conduct the site cleanup, decommissioning and abandonment operations, such funds, plus all accrued interest, shall be paid to Contractor and Contractor shall thereupon conduct all such operations in accordance with the Environmental Management Act, 2004 and generally Accepted International Petroleum Industry Best Practices.

(v) If the Decommissioning Fund above is insufficient to pay the costs of cleanup, decommissioning and abandonment, such shortfall shall be paid by Contractor. Where the Decommissioning Fund exceeds the costs incurred such excess shall revert back to TPDC.

(vi)The Contractor's obligation to undertake decommissioning, abandonment and sitecleanup pursuant to this Article shall continue after the termination of this Agreement.

ARTICLE 23: IMPORT DUTIES

(a) The Contractor and its subcontractors engaged in Petroleum Operations hereunder and TPDC in respect of Joint Operations established pursuant to Article 10 shall be permitted, subject to the limitations and conditions set out in the Law to import, free of duty or other taxes on imports, machinery, equipment, materials, supplies, consumable items (other than foodstuffs cosmetics, personal effects, and alcoholic beverages) and moveable property,

where imports in any of the said categories have been certified by a responsible representative of TPDC to be for use solely in carrying out operations under this Agreement.

(b) Subject to subarticle (a) above, any of the items imported into the United Republic of Tanzania may, if no longer required for the operations hereunder, be freely exported at any time by the importing party without the payment of any export duty provided however that, on the sale or transfer by the importer of any such items to any person in the United Republic of Tanzania, import duty shall be payable by the importer on the value thereof at the date of such sale or transfer.

ARTICLE 24: ACCOUNTING AND AUDIT

(a) The Contractor shall maintain at its business office in the United Republic of Tanzania accounting records relating to Petroleum Operations under this Agreement in accordance with the Accounting Procedure set out in Annex "D" of this Agreement.

(b) TPDC shall have the right to audit Contractor's accounting records in accordance with Annex "D", the Accounting Procedure.

(c) Nothing in this Article shall be construed as limiting the right of the Government and or its agents pursuant to any statutory power to audit or cause to be audited the books of accounts of the Contractor.

ARTICLE 25: HEALTH SAFETY AND ENVIRONMENT

(a) The Contractor shall comply with the Occupational Health and Safety Act 2003, Atomic Energy Act 2003, The Pharmaceuticals and Poisons Act 1978 CAP 219, the Regulations and individual administrative decisions issued by virtue of the Law, all other legislation at any time in force in the United Republic of Tanzania as well as Best International Petroleum Industry Practices, through the implementation of necessary systematic measures.

(b) The Contractor shall establish, follow up and further develop a management system designed to ensure compliance with the health, safety and environment requirements in accordance with the Best International Petroleum Industry Practices.

(c) The Contractor shall ensure that the management of health, safety and the environment comprise the activities, resources, processes and organisation necessary to ensure prudent Petroleum Operations.

(d) When entering into a contract, the Contractor shall ensure that the subcontractors and suppliers are qualified to fulfill the regulatory requirements relating to health, safety and the environment. Furthermore, the Contractor shall follow up to ensure that the participants comply with the requirements while performing the assignment in the activities covered by these regulations.

(e) The responsible party shall stipulate and further develop objectives and strategies to improve health, safety and the environment.

(f) The Contractor shall ensure agreement between shortterm and longterm objectives in various areas, at various levels and between various participants in the activities. A yearly health and safety plan shall be established for the activities required to meet the long term and shortterm objectives.

(g) The objectives shall be expressed so that the degree of achievement can be assessed.

(h) The Contractor shall carry out risk analyses that provide a balanced and most comprehensive possible picture of the risk associated with the activities. The analyses shall be appropriate as regards providing support for decisions related to the upcoming operation or phase. Risk analyses shall be carried out to identify and assess contributions to major accident and environmental risk, as well as ascertain the effectsof various operations and modifications will have on major accident and environmental risk.

Necessary assessments shall be carried out of sensitivity and uncertainty.

(i) In order to achieve a high level of safety, international standards like International Organisation for Standardizations (ISO), International Maritime Organization (IMO),

International Electrotechnical Commission (IEC) and International Petroleum Industry Environmental Conservation Association (IPIECA), shall be used. When the responsible party makes use of a relevant international standard or other standard referred to in the regulation, the responsible party can normally assume that the regulatory requirements have been met.

(j) When other solutions than those recommended above are used, the Contractor shall be able to document that the chosen solution fulfills the regulatory requirements. Combinations of parts of standards shall be avoided.

(k) The Contractor shall ensure that hazard and accident situations that have occurred and that may lead to or have led to acute pollution or other harm, are dully recorded and examined in order to prevent recurrence. The Contractor shall ensure that potential hazard or accident situations that occur frequently or that have great actual or potential consequences shall be investigated.

(l) The Contractor shall carry out necessary analyses to ensure a sound working environment and provide support in the choice of technical, operational and organizational solutions. The analyses shall e.g., contribute to improving the employees' health, welfare and safety and to prevent personal injuries, fatalities and workrelated illness.

(m) The Contractor shall ensure that the persons engaged in Petroleum Operations shall at all times possess the necessary competence and qualifications to carry out the activities in a prudent manner.

(n) The Contractor shall put in place programmes to deal with awareness and control of HIV/AIDS malaria and other epidemic outbreaks in the Contract Area, the areas around the Contract Area and other areas around Petroleum Operations.

(o) In furtherance of the Law or as the Government may otherwise require that from time to time, the Contractor shall take necessary and adequate steps to:

(i) conduct its Petroleum Operations in a manner that will protect the environment including human communities and settlements, flora and fauna and including but not limited to natural resources, including the living resources of the land, air, sea and lakes of the United Republic of Tanzania;

(ii) employ the best available techniques in accordance with Best International Petroleum Industry Practices for the prevention of environmental damage to which its Petroleum Operations might contribute and for the minimization of the effect of such operations on adjoining or neighbouring lands, air, sea and lakes;

(iii)implement its Development Plan regarding the prevention of pollution, the treatment of wastes, the safeguarding of natural resources and the progressive reclamation and rehabilitation of lands disturbed by Petroleum Operations;

(iv)prevent and minimize pollution; and

(v) ensure prompt, fair and adequate compensation for injury or loss to persons, loss or damage of property caused by the effects of Petroleum Operations.

(p) If Contractor's failure to comply with the provisions of subarticle (a) (i) of this Article and the Law results in pollution or damage to the environment or marine life or otherwise, the Contractor shall promptly take all necessary and adequate measures to remedy the failure and effects thereof. If such pollution or damage is the result of gross negligence or willful misconduct of the Contractor, the cost of the remedy shall not be a Recoverable Contract Expense for the purpose of Article 12 and Annex "D".

(q) The Contractor shall notify the Minister and TPDC forthwith in the event of any emergency or accident that may affect the environment, health or safety and shall take such action as may be prudent and necessary in accordance with the Environmental Management Act, 2004 and Best International Petroleum Industry Practices in such circumstances. The costs of such action shall be recoverable costs provided that such emergency or accident is not the result of Gross Negligence or Willful Misconduct of Contractor for the purpose of Article 12 and Annex "D".

(r) If the Contractor does not act promptly so as to control a hazard situation or clean up any pollution or make good any damage or loss caused, TPDC may, after giving the Contractor reasonable notice in the circumstances, take any actions which are necessary in accordance with the Environmental Management Act, 2004 and Best International Petroleum Industry Practices,

and the reasonable costs and expenses of such actions shall be borne by the Contractor.

(s) The Contractor shall undertake at its expense (but as a legitimate recoverable cost) social and environmental impact assessment studies prior to, during and after any major Petroleum Operations. Notwithstanding the generality of the foregoing, the Contractor shall undertake a comprehensive Social and Environmental Impact Assessment *prior to* conducting the following activities:

(i) reconnaissance and seismic activities;

(ii) exploration drilling;

(iii) development and production;

(iv) construction of a system for transportation, treatment and storage;

(v) decommissioning; and

(vi) in any other case in which Petroleum Operations are likely to have a significant social or environmental impact.

The Contractor shall undertake the social and environmental impact assessment in conformity with the Law and best international petroleum industry practice.

(t) The Contractor shall not flare or vent Petroleum without an authorisation from the Government.

(u) The Minister may grant the Contractor an authorisation to flare or vent Petroleum, where it is necessary in the interests of normal operational safety of the Petroleum Operations and in accordance with best international petroleum industry practice.

(v) In case of an emergency, and where there is insufficient time to request an authorisation from the Minister, the Contractor may vent or flare without the prior consent of the Minister but shall ensure that the venting or flaring is done in accordance with a prescribed procedure and best international petroleum industry practice, and shall be at the lowest possible level. Where petroleum has been flared or vented in an emergency, the Contractor shall immediately inform the TPDC of the event.

(vii)The Contractor shall, in consultation with TPDC and upon the Minister's approval, established a safety zone surrounding each petroleum facility, well or transportation system including abandoned facilities, or parts of these facilities.

(x) The Contractor shall prepare an emergency response plan to deal with such emergencies including but not limited to blowouts, fire, storms, petroleum spills, floods and lightning. The Contractor shall cooperate with the security authorities of the United Republic of

Tanzania that are mandated to protect petroleum operations in the Contract Area. The Contractor shall be liable for pollution damage, injury or loss caused by or resulting from the Petroleum Operations without regard to fault or negligence.

(y) The Contractor may be required to contribute to a Petroleum Spill Reserve Fund for cleanup and rehabilitation of the environment after a petroleum spill if such fund is established in the United Republic of Tanzania. If the reserve funds in the Petroleum Spill Reserve Fund are insufficient to pay the costs of cleanup and rehabilitation, such shortfall shall be paid by the Contractor.

ARTICLE 26: FORCE MAJEURE EVENT

(a) A "Force Majeure Event" shall mean any event or circumstance or combination of events or circumstances beyond the reasonable control of a Party occurring on or after the Effective Datethat materially and adversely affects the performance by such affected Party of its obligations under or pursuant to this Agreement; provided, however, that such material and adverse effect could not have been prevented, overcome or remedied by the affected Party through the exercise of diligence and reasonable care. "Force Majeure Events" shall include the following events and circumstances, but only to the extent that they satisfy the above requirements:

(i) any act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, civil commotion, or act of terrorism;

(ii) lightning, earthquake, tsunami, flood, storm, cyclone, typhoon, or tornado; epidemic or plague; explosion, fire, blowout or chemical contamination; mechanical failure; down hole blockage; and

(iii) strikes, workstorule, goslows or other labour disputes, unless such strikes, workstorule, goslows or labour disputes were provoked by the unreasonable action of the management of the affected Party or were, in the reasonable judgment of the affected Party, capable of being resolved in a manner not contrary to such Party's commercial interests.

(b) Force Majeure Events shall expressly not include the following conditions, except and to the extent that they result directly from force majeure: a delay in the performance of any contractor, including late delivery of machinery or materials; and normal wear and tear.

(c) Nothing in this Article shall relieve a Party of the obligations which arose prior to occurrence of a force majeure event.

(d) Notification Obligations

If by reason of a Force Majeure Event a Party is wholly or partially unable to carry out its obligations under this Agreement, then the affected Party shall:

(i) give the other Parties notice of the Force Majeure Event(s) as soon as practicable, but in any event, not later than the later of 48 hours after the affected Party becomes aware of the Force Majeure Event(s) or six hours after the resumption of any means of providing notice; and

(ii) give the other Parties a second notice, describing the Force Majeure Event(s) in reasonable detail and, to the extent that such information can reasonably be determined at the time of the second notice, providing a preliminary evaluation of

the obligations affected and a preliminary estimate of the period of time that the affected Party will be unable to perform such obligations and other relevant matters as soon as practicable, but in any event, not later than seven days after the initial notice of the occurrence of the Force Majeure Event(s) is given by the affected Party. When appropriate or when reasonably requested to do so by another Party, the affected Party shall

provide further notices to such other Party more fully describing the Force Majeure Event(s) and the cause(s) therefore and providing or updating information relating to the efforts of the affected Party to avoid and/or to mitigate the effect(s) thereof and estimates, to the extent practicable, of the time that the affected Party reasonably expects it will be unable to carry out any of its affected obligations due to the Force Majeure Event(s).

(e) The affected Party shall provide notice to the other Parties as soon as possible, but not later than seven days following:
   (i) the cessation of the Force Majeure Event; or
   (ii) its ability to recommence performance of its obligations under this Agreement by reason of the cessation of the Force Majeure Event.

(f) Failure by the affected Party to give written notice of a Force Majeure Event to the other Parties within the 48hour or sixhour period required by this Article shall not prevent the affected Party from giving such notice at a later time; provided, however, that in such case the affected Party shall not be excused pursuant to this Article for any failure or delay in complying with its obligations under or pursuant to this Agreement until such notice has been given. If such notice is given within the 48hour or sixhour period required by this Article, the affected Party shall be excused for such failure or delay pursuant to this Article from the date of commencement of the relevant Force Majeure Event.

(g) Duty to Mitigate

The affected Party shall use all reasonable efforts to mitigate the effects of a Force Majeure Event, including the payment of reasonable sums of money, in light of the likely efficacy of the mitigation measures; provided, however, that the affected Party shall not be required to settle any labour dispute or litigation on terms that, in the reasonable judgment of the affected Party, are contrary to its commercial interests.

(h) Delay Caused by Force Majeure

So long as the affected Party has at all times since the occurrence of the Force Majeure Event complied with the obligations of this Article and continues to so comply then:

(i) the affected Party shall not be liable for any failure or delay in performing its obligations (other than the obligation to make any payment otherwise due hereunder) under or pursuant to this Agreement for so long as and to the extent that the performance of such obligations is affected by the Force Majeure Event; and

(ii) any performance deadline that the affected Party is obligated to meet under this Agreement shall be extended; provided, however, that no relief, including the extension of performance deadlines, shall be granted to the affected Party pursuant to this Article to the extent that such failure or delay would have nevertheless been experienced by the affected Party had the Force Majeure Event not occurred. A Party shall not bear any liability for any Loss suffered by the affected Party as a result of a Force Majeure Event.

(i) Contract Termination Due to a Force Majeure Event

Contractor may terminate this Contract upon a three (3) month written notice to Minister if the fulfillment of the obligation of either Party under this Contract is affected by a Force Majeure Event during the Exploration Period or any extension thereof for a continuous period exceeding two (2) years without further obligation and liabilities of any kind. Nothing in this Article shall relieve a Party of the obligations which arose prior to occurrence of a force majeure event.

ARTICLE 27: ASSIGNMENT AND TRANSFER OF RIGHTS

(a) The Contractor may not assign or transfer, directly or indirectly, to any third party including an Affiliate, in whole or in part, any of its rights, privileges, duties or obligations under this Agreement without the prior written consent of the Minister.

(b) The Contractor shall demonstrate to Minister's satisfaction that the third party to whom the assignment or transfer is proposed to be made is qualified with respect to its technical competence and financial capacity and the assignment or transfer will not adversely affect the performance of the obligations under this Agreement.

(c) In the event that the Contractor wishes to assign in whole or in part any of its rights, privileges, duties or obligations hereunder as aforesaid, the written consent thereto of the Government, if required under this Article, shall not be unreasonably withheld or delayed.

(d) Any assignment made pursuant to this Article to a nonAffiliated person, firm or company shall bind the assignee to all the terms and conditions hereof, and, as a condition to any assignment, the Contractor shall provide an unconditional undertaking by the assignee to assume all obligations by the Contractor under the Agreement.

(e) In case of an assignment, the Contractor shall provide the Government with a Deed of Assignment in which the main conditions and liabilities assumed by the assignee are set out and a copy of the assignment agreement or transfer agreements as well as any other document relevant to the assignment or transfer Furthermore, the assignor or transferor shall submit an evaluation by an independent expert and all material terms of the assignment.

(f) Where the Contractor is more than one person the Government will be provided with copies of all assignments and agreements made between them with respect to Petroleum Operations and will be classified as confidential.

(g) Where the Contractor is more than one person the Contractor shall provide the Government with the following information regarding each agreement executed between them, with respect to Petroleum Operations and as required in the Petroleum Act:

(i) details of the technical and industrial qualifications of the companies and their employees;

(ii) details of the technical and industrial resources available to the Companies; and

(iii)details of the kinds of financial resources available to the companies, including capital, credit facilities and guarantees available.

(h) For each assignment or Transfer made to a nonAffiliate. by any entity or entities comprising Contractor, shall attract a transfer or assignment fee which will be payable to the Government atthe following rates to the corresponding amounts or value of the consideration:

(i) For every dollar of the first US$100 million: 1%.
(ii) For every dollar of the next US$100 million: 1.5%
(iii)For every dollar thereafter: 2%

(j) The Minister reserves the right to employ the services of an independent consultant, at the cost of Contractor or any of the entities comprising Contractor, to be mutually agreed by the Minister and such entity>

(k) to carry out an independent valuation of the transaction. The final determination of the valuation shall remain with the Minister and will be subject to the applicable rates stated in sub article (h) of this Article; and

(l) to carry out an independent due diligence of the assignment or transaction including an evaluation of the technical competence and financial capacity of the assignee or transferee.

(m)No assignment or Transfer amount payable under SubArticle 27 (h) shall be chargeable on any assignment or transfer made under this Article where stamp duty on such assignment or transfer is paid by any entity comprising Contractor. If an amount paid on an assignment or transfer subsequently becomes subject to stamp duty, such amount shall be refunded.

(n) Should an assignment or Transfer referred to under this Article occur without such entity first obtaining the required consent of the Minister; such a transfer shall be null and void.

(o) No assignment or transfer shall in any way absolve the assignor from the obligations undertaken by it under the Agreement except to the extent such obligations are in fact assigned to the assignee or transferree.

(p) Any entity or entities comprising Contractor shall apply for consent, at least ninety (90) calendar days before the proposed effective date of the Transfer; which application shall include evidence to the Minister of the financial and technical competence of the Transferee together with a valuation and all material terms of the Transfer.

(q) Any assignment or transfer under this Article shall be subject to the relevant tax law, including capital gain tax.

(r) TPDC has the right of first refusal to acquire the participating interest that any member of Contractor Party intends to assign to a nonAffiliate, which right should be exercised pursuant to the following procedures:

(s) The assignor company shall notify TPDC of the price and other essential terms and conditions of the proposed assignment and the identity of the prospective assignee;

(i) within sixty (60) days after receipt of the notification referred to in the preceding subparagraph, TPDC shall notify the assigning company whether TPDC elects to exercise the right of first refusal;

(ii) if TPDC does not exercise the right of first refusal by failing to give the notification referred to in the preceding subparagraph, then TPDC shall be deemed to have waived the right of first refusal in respect of such assignment;

(iii) if TPDC exercises the right of first refusal by giving the notification referred to in paragraph (o) (ii) of this Article, then TPDC and the assignor company shall execute the assignment under the terms and conditions contained in the notification referred to in paragraph (o) (i) of this Article.

(t) In the event of TPDC not exercising the right of first refusal referred to in the preceding paragraph, such right shall pass to any Affiliate of TPDC.

(u) Where the Contractor assigns or transfers the participating interest under this Agreement, the Contractor shall have a secondary liability for financial obligations for the cost of implementing site cleanup, decommissioning and abandonment. Such financial obligation shall be limited to possible costs related to installations, sites, petroleum facilities and wells, which existed at

the time of the assignment, and is limited to a share of the costs calculated on the basis of the size of the participating interest assigned. The Contractor shall put in place an adequate security for such secondary liability.

ARTICLE 28: CONSULTATION AND ARBITRATION

(a) TPDC and the Contractor shall periodically meet to discuss the conduct of the operations envisaged under this Agreement and shall make every effort to settle amicably any problem arising therefrom.

(b) If any dispute or difference in relation to or in connection with or arising out of any of the terms and conditions of this Agreement should arise, the same shall be resolved by negotiations between the parties. In the event of no agreement being reached, either party shall, except in the case of a dispute or difference as provided in subarticle 9(h), 13(b) and 13(d), have the right to have such dispute or difference settled through arbitration as provided for herein below.

(c) If, after completion of the above procedure, disagreement remains between the Parties, the dispute shall be settled by arbitration in accordance with the provisions of this Article. Nevertheless, for differences of a technical nature and prior to the arbitration procedure, the Parties may resort to the opinion of a mutually agreed expert. This expert shall notify his opinion to the Parties within thirty (30) Days following the date on which he was designated by the Parties.

(d) If, particularly following completion of the procedure set forth in this Article 28(c), any disputes still exist between the Parties in connection with the application of the provisions of this Agreement or regarding the obligations resulting therefrom, such disputes shall be resolved in accordance with the International Chamber of Commerce Rules of Conciliation and Arbitration, subject to the specific provisions set out below.

The arbitration procedure shall be commenced by request addressed by the applicant Party to the Secretariat of the Court of Arbitration. The starting point of proceedings shall be the date of receipt of that request by the Secretariat of the Court of Arbitration.

In the context of the procedure set out in this Article 28(c), the arbitration procedure shall commence within sixty (60) Days following expiry of the thirty (30) Day period defined in Article 28(c) plus, if applicable, any additional time provided in the same paragraph.

Each Party shall designate its arbitrator and notify the other Party and the Court of Arbitration of that designation within thirty (30) Days after the start of the arbitration proceedings as defined above. If the applicant Party has not designated its arbitrator within that thirty (30) Day period, it shall be deemed to have abandoned its application. If the defending Party has not designated its arbitrator within thirty (30) Days following receipt of notice in accordance with this paragraph, the other Party may directly inform the International Chamber of Commerce Rules of Conciliation and Arbitration, and request that it makes such designation within the shortest possible time.

The arbitrators shall not be of the same nationality as either of the Parties.

Within fortyfive (45) Days after the date of designation of the last of them, the arbitrators thus designated shall select, by mutual agreement, a third arbitrator, who shall become the President of the Court of Arbitration. Failing agreement, the International Chamber of Commerce Rules of Conciliation and Arbitration shall be requested by the most diligent Party to designate this third arbitrator within the shortest possible time.

The arbitrators are free to choose the procedure they intend to apply. The decision of the arbitrators is final; it is binding on the Parties and will be enforceable under the United Republic of Tanzania laws.

(e) The place of arbitration shall be Dar es Salaam, in the United Republic of Tanzania. The Language used shall be English, the applicable law shall be the law of the United Republic of Tanzania and the provisions of this Agreement shall be interpreted in accordance with that law.

(f) The Parties will bear the expenses and fees of Arbitration equally. These costs are not cost recoverable.

(g) The arbitration procedure shall not cause the performance of the Parties' contractual obligations to be suspended during the progress of the arbitration.

ARTICLE 29: APPLICABLE LAW

This Agreement shall be governed by, interpreted and construed in accordance with the Laws of the United Republic of Tanzania.

ARTICLE 30: WORKING LANGUAGE

The Contractor shall use the English language or the Kiswahili language, in all Petroleum Operations including its business operations, correspondence and the fulfillment of its regulatory requirements.

ARTICLE 31: THIRD PARTY ACCESS TO PETROLEUM FACILITIES

(a) The Contractor, [and TPDC where TPDC is party to joint operations pursuant to Article

[9]] shall provide access to third parties for use of its petroleum facilities in the Contract Area for conduct of petroleum operations where such access will not be to an unreasonable detriment of the petroleum operations of the Contractor or other users who have already been granted a right of use. The Contractor shall provide such thirdparty access on reasonable terms and conditions.

(b) An agreement on access to petroleum facilities shall be submitted to the Minister for approval unless the Minister decides otherwise. The Minister may, as a condition for approval of the agreement, modify the tariffs and other terms and conditions agreed between the parties to the access agreement.

(c) Where no agreement for access to petroleum facilities is reached within 180 days from the time of the thirdparty request to the Contractor, the Minister may stipulate the tariffs and other conditions for such thirdparty access.

(d) Where the Minister decides to stipulate, modify or alter or set terms and conditions for third party access to petroleum facilities pursuant to this Article (b)(c), the Minister shall stipulate such reasonable terms and conditions for such third party access in accordance with generally Accepted International Petroleum Industry Practices having due regard to

good resource management considerations and a reasonable profit for the Contractor taking into account, among other, the Contractor's investments and risks, financial and commercial viability of third party access and availability of capacity at the petroleum facilities.

(e) The Contractor shall promptly provide the Minister through TPDC upon receipt of any technical, commercial, financial or other information that is relevant for negotiations with third parties on access to petroleum facilities. Such information shall include, but is not limited to copies of the requests for use, updated information on capacity on the petroleum facilities, any draft agreements and schedules for negotiations.

(f) The Contractor's obligation to grant third party access pursuant to this Article shall apply correspondingly for the use of petroleum facilities where the Contractor has a leasing right for use in Petroleum Operations. The Contractor shall not restrict the third party's right for access to the leased facilities through any agreement with the holder of the title to the petroleum facility or the leaser.

(g) The Minister may appoint representatives who shall be entitled to participate with an observer status at any meeting on negotiations pursuant to this Article. The Contractor shall ensure that the observer who is appointed by the Minister promptly receives any relevant information for the purpose of efficient representation of the Minister at the meetings.

ARTICLE 32: COORDINATION AND UNITISATION OF PETROLEUM OPERATIONS

(a) Where a Petroleum accumulation in the Contract Area extends beyond the boundaries of the Contract Area into another contract area or a licence area, the Contractor shall not develop such petroleum accumulation without seeking an agreement with the contractor or the licensee in the other area. An agreement on the development of the petroleum accumulation to be carried out as single unit shall be submitted to the Minister for approval. In case no such agreement

is submitted, the Minister may direct the relevant parties to enter into an agreement to this effect in accordance with Section 46 of the Act.

(b) Subsequent to the Minister's approval of an agreement in accordance with subarticle

(a), a collective proposal for a common Development Plan of the deposit of Petroleum in accordance with Article 9, shall be submitted by the Contractor and such other entity or entities through to the Minister for approval.

(c) Where a petroleum accumulation in the Contract Area extends beyond the boundaries of the Contract Area into an area not covered by a petroleum agreement or a petroleum licence, the Minister may grant TPDC a licence to develop and produce the petroleum accumulation, and may require the petroleum accumulation to be developed as a single unit. SubArticle (b) above shall apply accordingly. (d) Where a petroleum accumulation in the Contract Area is in proximity to another petroleum accumulation in another area the Minister may, in order to ensure efficient petroleum operations, require the petroleum accumulations to be developed and produced in a coordinated manner in order to ensure optimum petroleum recovery and optimum use of the relevant petroleum infrastructure.

(e) The Contractor shall forthwith notify the Minister and TPDC where the Contractor discovers that a Petroleum accumulation straddles between an international boundary of the United Republic of Tanzania and an international boundary of another sovereign state.

(f) The Contractor shall inform the Minister and TPDC where the Contractor, within the scope of this Agreement, assesses that there may be a potential need for assessing a potential for unitisation or coordination of Petroleum Operations for Petroleum accumulations straddling between or in proximity with the international boundary of the United Republic of Tanzania and an international boundary of another sovereign state.

ARTICLE 33: FOREIGN EXCHANGE AND CURRENCY

(a) The Contractor shall at all times comply with the procedures and formalities relating to dealings in foreign exchange which may be in force in the Republic of Tanzania from time to time.

(b) The Contractor shall, in accordance with the Foreign Exchange Act (CAP 271) the Law and this Contract, have the right:

(i) to open and keep one or more accounts denominated Tanzanian currency or United States Dollars, or other currency as duly authorised, with banks in the United Republic of Tanzania.

(ii) to purchase Tanzanian currency and United States Dollars, or other currency as duly authorised, from any bank in the United Republic of Tanzania or other financial institutions, authorised for this purpose by the Central Bank of Tanzania.

(iii) Without prejudice to withholding tax due, all nonresident subcontractors if duly authorized by the relevant authorities in Tanzania and all the expatriate personnel shall be entitled to receive in any currency the whole or any part of their remunerations outside the Republic of Tanzania. All payments to resident subcontractors shall be made exclusively in Tanzania.

(iv) Subject to withholding tax due, the Contractor shall have the right to freely declare and pay dividends to their shareholders and to remit the same to a place outside Tanzania, under the terms of the Law.

(v) The Contractor has the obligation to inform the Central Bank of Tanzania the number of the account(s), bank details and other currency deposition and exchange dealings with other financial institutions without undue delay upon the occurrence. In addition, the Contractor shall deliver appropriate information and monthly periodic reports to the Central Bank of Tanzania and the Minister and as otherwise required by the authorities in accordance with the Law. The Central Bank of Tanzania shall be entitled to require audit to such accounts. Amounts spent on any such audits shall be cost recoverable paid by the Contractor. The Contractor shall waive banking

confidentiality rights in benefit to the Government of Tanzania in respect of such information and accounts in order to facilitate any such audits.

ARTICLE 34: ANTICORRUPTION

(a) The Contractor and TPDC shall in accordance with the Prevention and Combating of Corruption Act, CAP. 329, establish and implement antibribery and anticorruption policies and measures that are consistent with the requirements in Law, the provisions of this Contract and complementary to any other relevant anticorruption laws and obligations.

(b) The Contractor shall implement necessary systematic measures in order to ensure that any person who undertakes activities that are relevant to this Agreement including work, services or delivering goods will not make, offer, or authorize, any payment, gift, promise or other advantage, whether directly or through any other person or entity, to or for the use or benefit of any public official, any political party, political party official, or candidate for office, or any other individual or entity, where such payment, gift, promise or advantage would violate the Law and other anticorruption laws and obligations applicable to the Contractor.

(c) The Contractor shall comply with the Law and other anticorruption laws and obligations applicable to Contractor

(d) The Contractor shall ensure that its Affiliates and its respective directors, officers, employees and personnel comply with the Law and other anticorruption laws and obligations applicable to Contractor.

(e) Each Party shall as soon as possible notify and keep informed the other Parties of any investigation or proceeding initiated by a governmental authority relating to an alleged violation of the Law and other applicable anticorruption laws and obligations to such Party.

ARTICLE 35: MODIFICATIONS AND HEADINGS

(a) This Agreement shall not be amended or modified in any respect except by the mutual consent in writing of the parties hereto.

(b) The Headings of this Agreement are for convenience only and shall not be taken into account in interpreting the terms of this Agreement.

ARTICLE 36: NOTICES

A notice shall be deemed duly delivered:

i. if presented personally; ii. if received on a Business Day for the receiving Party, when transmitted by facsimile to the receiving Party's facsimile number specified in this Article 32 and, if received on a day that is not a Business Day for the receiving Party, on the first business Day following the date transmitted by facsimile to the receiving Party's facsimile number; And

iii. one Business Day after being deposited in a regular maintained postal service, postage prepaid, registered, or certified mail addressed to the receiving Party; Change of address shall be effective from seventh Business Day after giving a notice of change of address.

If to the Government:

The Permanent Secretary
Ministry of Energy and Minerals
P.O. Box 2000
DAR ES SALAAM
Telephone: 255222 117 1569
Fax: 255222 116 719
Email: psmem@mem.go.tz

If to TPDC:

The Managing Director
Tanzania Petroleum Development Corporation
P.O. Box 2774
DAR ES SALAAM
Telephone: 255222 200 103/4
Fax: 255222 200 113
Email: tpdcmd@tpdctz.com

If to: ABC LTD, TANZANIA

The Director,
ABC Ltd, Tanzania
DAR ES SALAAM

TANZANIA

IN WITNESS whereof this Agreement has been duly executed by the Parties, the day and year first hereinbefore written.

Signed for and on behalf of the Government of the United Republic of Tanzania

By: _____Name:_____

Title: Minister for Energy and Minerals Witnessed by

Signed for and on behalf of the Tanzania Petroleum Development Corporation

By:_____ _____

Name: Name

Title: Managing Director Title:

Signed for and on behalf of ABC Limited

By: _____ _____

Name: Witnessed by

Chief Executive Officer Title: ABC

ANNEX "A": DESCRIPTION OF EXPLORATION LICENCE AREA

The application area is described as totaling (…) square kilometers as per the TPDC Map in Annex B.

Point	***Longitudes Latitudes***	***Remarks***
A		Due (west, east, south north) B

ANNEX "B": MAP OF EXPLORATION LICENCE AREA

Total Number of Blocks = [ ]

Total area amounts to [ ] sq. km.

ANNEX "C": DRAFT EXPLORATION LICENCE

WHEREAS, pursuant to Article 3(a) of the Agreement TPDC has applied for an Exploration Licence in respect of the area described in Annex “A” to the Agreement and shown on the map in Annex “B” thereof respectively:

I,_____Minister for Energy and Minerals pursuant to the powers conferred upon me by Section 21 of the Petroleum (Exploration and Production) Act, 1980 hereby grant TPDC for a period of four (4) years from the date hereof this Exploration Licence over the exploration area described in the First Schedule hereto conferring on TPDC the exclusive right to explore in the said exploration area for petroleum and to carry out such operations and execute such works as are necessary for that purpose.

The Exploration Licence is granted subject to the following conditions:

1. (a) During the period of four (4) years commencing from the date hereof and terminating on the fourth anniversary of the date, TPDC shall in the said exploration area:
   (i) Reprocess existing seismic data.
   (ii) Acquire minimum (…) kilometres of 2D and or (…) square kilometres of 3D seismic data
   (iii)Drill at least (…) exploration wells; and carry out geological and geophysical surveys and related actives in the area; and
   (iv) spend a sum which, when adjusted in accordance with the formula set out in sub article (e) of Article 5 of the Agreement, equals or exceeds (…) million United States dollars

   (b) Subject to any amendment or revision thereof made pursuant to Article 7 of the Agreement, TPDC shall conduct exploration operations under this licence during the year ending 31 December, 20.... in accordance with the detailed Work Programme and Budget set out in the Second Schedule hereto and will spend the sum specified in the said budget.
2. Where during any period covered by the Licence the obligations of TPDC under this Licence have been suspended by reason of Force Majeure pursuant to Article 25 of the Agreement, the period for which this Licence has been granted shall be extended for a period equal to the period during which the obligations of TPDC were so suspended.

In this licence "the Agreement" means the Agreement made on ____day of_____ between the Government of the United Republic of Tanzania, the Tanzania Petroleum Development Corporation and ABC Limited.

Unless the context otherwise requires words and phrases in this Licence shall have the same meaning as those used in the Petroleum (Exploration and Production) Act, 1980.

IN WITNESS WHEREOF, I have granted the Licence aforesaid and set out my hand and seal this_____ day of_____ 20....

Minister for Energy and Minerals

_____

ANNEX "C"˙1: FIRST SCHEDULE

Coordinates of the cornerpoints of Exploration Licence Area

_____

Point Longitudes Latitudes Remarks

_____

ANNEX "C"•2: SECOND SCHEDULE

[Set out here for the Calendar Year in which this License is first issued the detailed Work Program and Budget submitted by ABC to TPDC pursuant to Article 7(a) of the Agreement].

ANNEX "D": ACCOUNTING PROCEDURE

This Annex is made a part of the Production Sharing Agreement (hereinafter referred to as the "Agreement") between the Government of the United Republic of Tanzania and Tanzania

Petroleum Development Corporation and Contractor made on the (…) day of (…), 20(…)

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SECTION 1: GENERAL PROVISIONS

1.1 Definitions

For the purpose of this Accounting Procedure the terms used herein which are defined in the Agreement shall have the same meaning when used in this Accounting Procedure.

1.2 Purpose

The purpose of this Accounting Procedure is to set out principles and procedures of accounting which will enable the Government and TPDC to monitor the costs, expenditures, production and receipts so that both TPDC's entitlement to Profit Oil/Gas and Government's revenues can be accurately determined on the basis of the Agreement.

1.3 Documentation Required to be Submitted by Contractor

(a) Within thirty (30) days of the Effective Date, the Contractor shall submit to and discuss with the Minister and TPDC a proposed outline of charts of accounts, operating records and reports, which outline shall reflect each of the categories and subcategories of costs and expenditures specified in Sections 2 and 3 below and shall be in accordance with generally accepted and recognized accounting systems and consistent with normal practice for joint venture operations of the international petroleum industry and the National Board of Accountants and Auditors. Within ninety (90) days of receiving the above submission the Minister in consultation with TPDC shall either indicate approval of the proposal or request revisions to the proposal. Within one hundred and eighty (180) days after the Effective Date Effective Date, the Contractor and the Minister in consultation with TPDC shall agree on the outline of charts of accounts, operating records and reports which shall describe the basis of the accounting system and procedures to be developed and used under the Agreement. Following such agreement, the Contractor shall expeditiously prepare and provide the Minister and TPDC with formal copies of the comprehensive charts of accounts related to the accounting, recording and reporting functions, and allows the Minister and TPDC to examine the

manuals and to review procedures which are, and shall be, observed under the Agreement.

(b) Notwithstanding the generality of the foregoing, the Contractor shall make regular

Statements to the Minister and TPDC relating to the Petroleum Operations. These Statements include:

(i) Production Statement (see Section 5 of this Annex).

(ii) Value of Production, Pricing and Royalty Payable Statement (see Section 6 of this Annex).

(iii) Statement of Receipts and Expenditures (see Section 7 of this Annex)

(iv) Cost Recovery Statement (see Section 8 of this Annex)

(v) APT Statement (see Section 9 of this Annex)

(iv)EndofYearStatement (see Section 10 of this Annex).

(v) Budget Statement (see Section 11 of this Annex).

(c) All reports and Statements shall be prepared in accordance with the Agreement, thelaws of Tanzania and, where there are no relevant provisions in either of these, in accordance with the normal practice of the international petroleum industry.

1.4 Language, Units of Account and Exchange Rates

(a) The Contractor shall maintain accounts in Tanzanian shillings and United States dollars; however, the United States dollar accounts will prevail in case of conflict. Metric units and barrels, British thermal units (Btu) shall be employed for measurements required under the Agreement and this Annex. The language employed shall be English.

(b) It is the intent of this Accounting Procedure that neither the Government nor TPDC nor the Contractor should experience an exchange gain or loss at the expense of, or to any of the benefit of, any of the other parties. However, should there be any gain or loss from exchange of currency, it will be credited or charged to the accounts under the Agreement.

(c) (i) Amounts received and costs and expenditures made in Tanzanian shillings or in United States dollars shall be converted from Tanzanian shillings into

United States dollars or from United States dollars into Tanzanian shillings on the basis of the monthly average of the mean of the daily official buying and selling exchange rates between the currencies in question as published by the Bank of Tanzania or failing such publication, any other publication as agreed by the parties for the Month in which the relevant transaction occurred.

(ii) Notwithstanding the general policy described in the preceding subparagraph, all transactions in excess of the equivalent of two hundred and fifty thousand United States dollars (US$ 250,000) shall be converted at the mean of the buying and selling exchange rates published by the Bank of Tanzania on the day the transaction occurred.

(iii) Amounts received and expenditures made in currencies other than United States dollars and Tanzanian shillings shall be converted into United States dollars or Tanzanian shillings on the basis of the monthly average of the mean of the daily buying and selling exchange rates between the currencies in question as published by the Bank of Tanzania or, failing such publication, as published in the Financial Times (London edition) for the Month in which the relevant transaction occurred.

(iv) The average monthly exchange rate calculated in accordance with subsection 1.4 (c) (i) above and, where relevant, the exchange rates employed pursuant to subsections 1.4 (c) (ii) and (iii) above, shall be identified in the relevant Statements required under subsection 1.3 (b) of this Annex.

1.5 Payments

(a) Subject to Article 11 (c) (iii) of the Agreement, all payments between the parties shall, unless otherwise agreed, be in United States dollars and through a bank designated by each receiving party no later than the 1st day of each Quarter for which development costs have been budgeted.

(b) Discharge of the Contractor's obligation with respect to TPDC's share of Profit Oil/Gas shall be made in accordance with the Agreement.

(c) All sums due from one party to the other under the Agreement during any Calendar `quarter shall, for each day such sums are overdue during such quarter, bear interest compounded daily at an annual rate equal to the average

London Interbank Offer Rate (LIBOR) for six (6) months US dollars as quoted at 11.00 a.m. London time on the first business day of such Quarter by the London office of National Westminster Bank, or such other bank as the parties may agree, plus one (1) percentage point.

1.6 Audit and Inspection Rights of Government

(a) Without prejudice to statutory rights, TPDC shall have the right to cause to audit to each Calendar year within two (2), years (or such longer period as may be required in exceptional circumstances) from the end of each such year. Notice of any exception to the accounts for any Calendar Year shall be submitted to the Contractor within ninety (90) days of receipt by TPDC of the report of its auditors. For purposes of auditing, TPDC may examine and verify, at reasonable times, all charges and credits relating to the Contractor's activities under the Agreement and all books of account, accounting entries, material records and inventories, vouchers, payrolls, invoices and any other documents, correspondence and records necessary to audit and verify the charges and credits. Furthermore, the auditors shall have the right in connection with such audit to visit and inspect at reasonable times all sites, plants, facilities, warehouses and offices of the Contractor directly
or indirectly serving its activities under the Agreement and to visit and inquire from personnel associated with those activities. Where TPDC requires verification of charges made by an Affiliate Company it shall have the right to obtain an audit certificate from a recognized firm of public accountants acceptable to both TPDC and the Contractor.

(b) The Contractor shall answer any notice of exception under subsection 1.6 (a) (c) Within sixty (60) days of its receipt of such notice, where the Contractor has after the said sixty days' period failed to answer a notice of exception made by TPDC, TPDC's exception shall be deemed as accepted by Contractor and the account$_s$ shall be adjusted accordingly.

SECTION 2: CLASSIFICATION, DEFINITION AND ALLOCATION OF COSTS AND EXPENDITURES

Expenditures shall be segregated in accordance with the objectives for which such expenditure was made. The objectives which shall qualify are those which have been approved and included in the approved Work Program and Budget for the Year in which the expenditure is made and other items which have been agreed by the parties from time to time. All expenditures allowable under Section 3 relating to Petroleum Operations shall be classified, defined and allocated as set out herein below. In the event of a discovery, expenditure records shall be maintained in expenditures to each Development Area.

2.1 **Exploration Expenses** are all direct and allocated indirect expenditures incurred in the search for Petroleum in an area which is or was, at the time when such expenses were incurred, part of the Contract Area including:

(a) aerial, geophysical, geochemical, palaeontological, geological, topographical and seismic surveys and studies and their interpretation;

(b) Deep well and core hole drilling and water well drilling;

(c) labour, materials and services used in drilling wells with the object of finding new Petroleum Reservoirs, or for the purposes of appraising the extent of Petroleum provided such wells are not completed as producing wells;

(d) facilities used solely in support of the purposes described (a), (b) and

(e) above including access roads, fixed assets and purchased geological and geophysical, all identified separately;

(f) any General and Administrative Costs and Service Costs directly incurred on Exploration Operations and identifiable as such; and a portion of the remaining General and Administrative Costs and Service Costs allocated to the Exploration Operations, determined by the proportionate share of total Contract Expenses (excluding unallocated General and Administrative Costs and Service Costs) represented by all other Exploration Expenses;

(g) any other Contract Expenses specifically incurred in the search for Petroleum after the Effective Date and not covered under subsection 2.2, 2.3, 2.4 and 2.5.

2.2 **Development Expenses** shall consist of all expenditures incurred in:

(a) studies of the subsurface for the purpose of determining the best manner of recovering hydrocarbons, which include geological and geophysical surveys, production geology, modeling and simulation of reservoir as an integral part of economic reservoir exploitation and conservation;
(b) drilling wells which are completed as producing wells and drilling wells for purposes of producing from a Petroleum Reservoir already discovered whether these wells are dry or producing, and drilling wells for the injection of water or gas to enhance recovery of Petroleum;
(c) completing wells by way of installation of casing or equipment or otherwise, after a well has been drilled for the purpose of bringing the well into use as a producing well, or as a well for the injection of water or gas to enhance recovery of Petroleum;
(d) the cost of petroleum production, storage and transport facilities such as pipelines, flow lines, production and treatment units, wellhead equipment, subsurface equipment, enhanced recovery systems, offshore platforms, petroleum storage facilities and access roads for production activities;
(e) the costs of engineering and design studies for facilities referred to in subsection 2.2. (d);
(f) any General and Administrative Costs and Service Costs directly incurred on development activities and identifiable as such; and a portion of the remaining General and Administrative Costs and Service Costs allocated to development activities, determined by the proportionate share of total Contract Expenses (excluding unallocated General and Administrative Costs and Service Costs) represented by all other Development Expenses.

2.3 Operating Expenses are all expenditures incurred in the Petroleum Operations after the start of commercial production which are other than Exploration Expenses, Development Expenses, General and Administrative Costs and Service Costs directly incurred on operating activities and identifiable as such, as well as the balance of General and Administrative Costs and Service Costs. General and Administrative Costs and Service Costs not allocated to

Exploration Expenses or Development Expenses shall be allocated to Operating Expenses.

2.4 Service Costs are direct and indirect expenditures in support of the Petroleum Operationsincluding warehouses, export terminals, harbors, piers, marine vessels, vehicles, motorized rolling equipment, aircraft, fire and security stations, workshops, water and sewage plants, power plants, housing, community and recreational facilities and furniture, tools and equipment used in these activities. Service Costs in any Calendar Year shall include costs incurred in such Year to purchase and/or construct said facilities as well as the annual costs to maintain and operate the same, each to be identified separately. All Service Costs shall be regularly allocated as specified in subsections 2.1(e), 2.2(e) and 2.3 to Exploration Expenses, Development Expenses and Operating Expenses and shall be separately shown under each of these categories.

2.5 **General and Administrative Costs are:**

(a) all main office, field office and general administrative expenses in the United Republic of Tanzania including but not limited to supervisory, accounting and employee relations services, but excluding commissions paid to intermediaries by the Contractor;

(b) an annual overhead charge for services rendered outside the United Republic of Tanzania and not otherwise charged under this Accounting Procedure, for managing the Petroleum Operations and for staff advice and assistance including financial, legal, accounting and employee relations services. For the period from the Effective Date Effective Date until the date on which the first Development License under the Agreement is granted by the Minister this annual charge shall be itemized and verifiable costs but in no event greater than one percent (1%) of the Contract Expenses; including those covered in subsection 2.5(a) incurred during the Calendar Year. From the date of grant of the Development License the charge shall be at an amount or rate to be agreed between the parties and stated in the Development Plan approved with the grant of the said License. The annual overhead charge shall be separately identified in all reports to the Government and TPDC;

(c) all General and Administrative Costs will be regularly allocated as specified in subsections 2.1(e), 2.2. (e) and 2.3. to Exploration Expenses, Development Expenses and Operating Expenses and shall be separately shown under each of these categories.

SECTION 3: COSTS, EXPENSES, EXPENDITURES AND CREDITS OF THE CONTRACTOR

3.1 Recoverable Costs

Subject to the provisions of the Agreement, the Contractor shall bear and pay all costs and expenses in respect of Petroleum Operations. These costs and expenses will be classified under the headings referred to in Section 2. The following costs and expenses are recoverable out of Cost Oil and/or Cost Gas by the Contractor under the Agreement:

(a) Labour and Associated Costs

(i) Gross salaries and wages of the Contractor's employees directly and necessarily engaged in the Petroleum Operations in Tanzania, it being understood that in case of those personnel only a portion of whose time is wholly dedicated to Petroleum Operations, only that prorata portion of applicable wages and salaries will be charged. For purposes of cost recovery, gross salaries and wages for the Contractor's employees shall not exceed commercial obtainable salaries and wages in Tanzania and shall be reviewed and approved by TPDC on annual basis.

(ii) Cost to the Contractor of established plans for employees' group life insurance, hospitalization, company pension, retirement and other benefits of a like nature customarily granted to the employees and the costs regarding holiday, vacation, sickness and disability payments applicable to the salaries and wages chargeable under subsection (i) above shall be allowed at actual cost, provided however that such total costs shall not exceed twentyfive percent (25%) of the total labor costs under subsection (i) above.

(iii) Expenses or contributions made pursuant to assessments or obligations imposed under the laws of the United Republic of Tanzania which are applicable to the cost of salaries and wages chargeable under (i) above.

(iv) Reasonable travel and personal expenses of employees of the Contractor including those made for travel and relocation of the expatriate employees assigned to the United Republic of Tanzania all of which shall be in accordance with the normal practice.

(v) Any personal income taxes of the United Republic of Tanzania incurred by employees of the Contractor and paid or reimbursed by the Contractor. (vi)

(b) Transportation

The cost of transportation of; employees, equipment, materials and supplies necessary for the conduct of the Petroleum Operations and not provided for elsewhere.

(c) Charges for Services

(i) Third Party Contracts

The actual costs of contracts, for technical and other services entered into by the Contractor for Petroleum Operations, made with third parties other than Affiliate Companies are recoverable; provided that the costs paid by the Contractor are no higher than those generally charged by other international or domestic suppliers for comparable work and services.

(ii) Affiliate Companies

Without prejudice to the charges to be made in accordance with subsection 2.5, in the case of general services, advice and assistance rendered to the Petroleum Operations by any Company, the charges will be based on actual costs without profits and will be competitive. The charges will be no higher than the most favorable prices charged by the Affiliate Company to third parties for comparable services under similar terms and conditions elsewhere. The Contractor will, if requested by TPDC, specify the amount of charges which constitutes an allocated proportion of the general material, management, technical and other costs of the Affiliate Company, and the amount which is the direct cost of providing the

services concerned. If necessary, certified evidence regarding the basis of prices charged may be obtained from the recognized auditors of the Affiliate Company.

(iii) *In the event that the prices and charges referred to in subparagraphs (i) and (ii) above are shown to be uncompetitive then TPDC will have the right to disallow that portion as it deems fit for cost recovery purposes.*

(d) Exclusively Owned Property

For services rendered to Petroleum Operations through the use of property exclusively owned by the Contractor, the accounts shall be charged at rates, not exceeding those prevailing in the region, which reflect the cost of ownership and operation of such property, or at rates to be agreed.

(e) Material and Equipment

(i) General

So far as is practicable and consistent with efficient economical operation, only such material shall be purchased or furnished by the Contractor for use in the Petroleum Operations as may be required for use in the reasonably foreseeable future and the accumulation of surplus stocks shall be avoided.

(ii) Warranty of Material

The Contractor does not warrant material beyond the supplier's or manufacturer's guarantee and, in case of defective material or equipment, any adjustment received by Contractor from the suppliers/manufacturers or their agents will be credited to the accounts under the Agreement.

(f) Value of Material Charged to the Accounts under the Agreement

(a) Except as otherwise provided in (b) below, material purchased by the Contractor for use in Petroleum Operations shall be valued to include invoice price less trade and cash discounts (if any), purchase and procurement fees plus freight and forwarding charges between point of supply and point of shipment, freight to port of destination, insurance, taxes, custom duties consular fees, other items chargeable against imported material and, where applicable, handing and transportation expenses from point of importation to warehouse or operating site, and its costs shall not exceed those currently prevailing in normal arm's length transactions on the open market.

(b) Material purchased from or sold to Affiliate Companies or transferred to or from activities of the Contractor, other than Petroleum Operations under this Agreement, shall be priced and charged or credited at the prices specified in (1) and (2) below:

(1) New Material (Condition "A") shall be valued the current international price which shall not exceed price prevailing in normal arm's length transactions on the open market.

(2) Used Material (Conditions "B" and "C")

(i) Material which is in sound and serviceable condition and is suitable for reuse without reconditioning shall be classified as Condition "B" and priced at not more than seventyfive percent (75%) of the current price of new materials defined in (1) above.

(ii) Material which cannot be classified as Condition "B" but which:

(a) after reconditioning will be further serviceable for original function as good second hand material Condition 'B", or

(b) is serviceable for original function but substantially not suitable for reconditioning, shall classified as Condition "C" and priced at not more than fifty percent (50%) of the current price of new material (Condition "A") as defined in (1) above. The cost of reconditioning shall be charged to reconditioned material provided that the Condition "C" material value plus the cost or reconditioning does not exceed the value of Condition "B" material.

(iii) Material which cannot be classified as Condition "B" or Condition "C" shall be priced at a value to be agreed between TPDC and the Contractor.

(iv) Material involving erection costs shall be charged at applicable condition percentage of the current knockeddown price of new material as defined in (1) above.

(v) When the use of material is temporary and its service to Petroleum Operations does not justify the reduction in prices as provided for in subparagraph (2) (ii) above, such material shall be priced on a basis that will result in a net charge to the accounts under the Agreement consistent with the value of the service rendered.

(g) Rentals, Duties and Other Assessments

All rentals, taxes (other than income tax, withholding tax, remittance tax and Additional Profits Tax), levies, charges, fees, contributions and any other assessments and charges levied by the Government in connection with Petroleum Operations and paid directly by the Contractor. For the avoidance of doubt annual charges for licenses shall not be recovered.

(h) Insurance and Loses

Insurance premiums and the costs incurred for insurance pursuant to and in accordance with Article 21 shall be recoverable provided they are incurred in accordance with TPDC approved process and losses incurred as a consequence of events which are, and in so far as, not made good by insurance are recoverable unless such costs have resulted from the Contractor's failure to follow the terms, clauses, conditions or warranties of the insurance policy(s) and/or the Contractor negligence and/or the gross negligence of the Contractor or subcontractors.

(i) Legal Expenses

All reasonable costs and expenses of litigation and legal or related services necessary or expedient for the procuring, perfecting, retention and protection of the Contract Area, and in defending or prosecuting lawsuits involving the Area or any third party claim arising out of activities under the Agreement, or sums paid in respect of legal services necessary or expedient for the protection of the joint interest of Government, TPDC and the Contractor are recoverable. Where legal services are rendered in such matters by salaried or regularly retained lawyers of the Contractor or an Affiliate Company, such compensation shall be included instead under subsection 3.1(b) or 3.1(d) above as applicable.

(j) Training Costs

All costs and expenses incurred by the Contractor in training of Tanzanian employees engaged in Petroleum Operations and such other training as is required under Article 21 of the Agreement.

(k) General and Administrative Costs

The costs described in subsection 2.5(a) and the charge described in subsection 2.5(b).

3.2 Costs not Recoverable under the Agreement

The following costs shall not be recoverable for the purposes of Profit Oil/Gas sharing:

(a) **Annual charges:** This covers all direct costs attributable to the acquisition, renewal, or relinquishment of surface rights acquired and maintained in force for the purposes of this Agreement.

(b) all costs incurred before the Effective Date including charges incurred by Contractor for copying and shipping of data relating to the Contract Area;

(c) petroleum marketing or transportation costs of Petroleum beyond the Delivery Point;

(d) the costs of any bank guarantee or letter of guarantee required under the agreement (and any other amounts spent on indemnities with regard to nonfulfillment of contractual obligations);

(e) costs of arbitration and the sole expert in respect of any dispute under the Agreement;

(f) fines and penalties imposed by courts of law in the United Republic of Tanzania;

(g) costs incurred as a result of willful misconduct or negligence of the Contractor;

(h) donations and contributions made by the Contractor;

(i) Signature bonus and production bonus;

(j) any costs which, by reference to the **Best International Petroleum Industry Practices**, can be shown to be excessive;

(k) expenditure on fundamental research into development of new equipment, materials and techniques for use in search for, developing and producing petroleum except to the extent that such research and development is directly carried out in support of Petroleum Operations in the United Republic of Tanzania whereby such a research is conducted in collaboration with TPDC; and (l) interest and financial charges paid to the creditors of the Contractor, (m)bonuses paid to employees and directors.

3.3 Other costs and Expenses

Any other costs and expenses not covered or dealt with in the foregoing provisions of this

Section 3 and which are incurred by Contractor for the necessary and proper conduct of Petroleum Operations are recoverable only with the prior approval in writing of TPDC.

3.4 Credits under the Agreement

The net proceeds received from Petroleum Operations (other than the proceeds from the sale of Crude Oil and Natural Gas), including but not limited to the transactions listed below, will be credited to the accounts under the Agreement. For Profit Oil/Gas sharing purposes such credits shall be offset against Recoverable Contract Expenses:

(a) the net proceeds of any insurance or claim in connection with Petroleum Operations or any assets charged to the accounts under the Agreement when such operations or assets were insured and the premiums charged to the accounts under the Agreement;

(b) legal expenses charged to the accounts under Section 3.1 (i) and subsequently recovered by the Contractor;

(c) revenue received from third parties including Affiliate Companies for the use of property or assets charged to the accounts under the Agreement;

(d) any adjustment received by the Contractor from the suppliers manufacturers or their agents in connection with defective material, the cost of which was previously charged by the Contractor to the accounts under the Agreement;

(e) rentals, refunds or other credits received by the Contractor which apply to any charge which has been made to the accounts under the Agreement but excluding any award granted to the Contractor under arbitration or sole expert proceedings;

(f) the net proceeds for material originally charged to the accounts under the Agreement and subsequently exported from the United Republic of Tanzania without being used in Petroleum Operations;

(g) the net proceeds from the sale or exchange by the Contractor of materials, equipment, plant or facilities, the acquisition costs of which have been charged to the accounts under the Agreement;

(h) the proceeds from the sale of any petroleum information which relates to the Contract Area provided that the acquisition costs of such rights and information have been charged to the accounts under the Agreement;

(i) the proceeds derived from the sale or license of any intellectual property the development costs of which were incurred under this Agreement.

3.5 Duplication of Charges and Credits

Notwithstanding any provision to the contrary in this Accounting procedure, it is agreed that there shall be no duplication of charges or credits to the accounts under the Agreement.

SECTION 4: RECORDS AND VALUATION OF ASSETS

The Contractor shall maintain detailed records of property and assets in use for Petroleum Operations in accordance with normal practice in exploration and production activities of the international petroleum industry. At six (6) monthly intervals the Contractor shall notify TPDC in writing of all assets acquired during the preceding six (6) months indicating the quantities, costs and location of each asset. At reasonable intervals but at least once a year with respect to movable assets and once every four (4) years with respect to immovable assets, inventories of the property and assets under the Agreement shall be taken by the Contractor. The Contractor shall give TPDC at least thirty (30) days written notice of its intention to take such inventory is taken. The Contractor will clearly state the principles upon which valuation of the inventory has been based. When an assignment of rights under the Agreement takes place a special inventory may be taken by the Contractor at the request of the assignee provided that the costs of such inventory are borne by the assignee.

SECTION 5: PRODUCTION STATEMENT

5.1 Upon commencement of production from the Contract Area, the Contractor shall submit a monthly Production Statement to TPDC showing the following information for each Development Area and for the Contract Area:

(a) the quantity and quality of Crude Oil/Natural Gas produced and saved;
(b) the quantity and composition of Natural Gas produced and saved;
(c) the quantities of Petroleum used for the purposes of carrying on drilling and production operations and pumping to field storage as well as quantities injected into the formation;
(d) the quantities of Petroleum unavoidably lost;
(e) the size of Petroleum stocks held at the beginning of the Month in question;
(f) the size of petroleum stocks held at the end of the Month in question;
(g) the number of days in the Month during which Petroleum was produced from each Development Area within the Contract Area;

5.2 At the end of each Calendar Quarter aggregated statements in respect of the three Months comprising that Quarter shall be submitted for each of the items (a) to (g) in subsection 5.1 above. Additionally, the average daily production rate for the Quarter shall be calculated in accordance with Article 12 of the Agreement.

5.3 The Production Statement for each Month or quarter shall be submitted Government and TPDC not later than seven (7) days after the end of such Month or quarter.

SECTION 6:VALUE OF PRODUCTION, PRICING AND ROYALTY STATEMENT

6.1 The Contractor shall, for the purposes of Article 13 and 14 of the Agreement, prepare a Statement providing calculations of the value of Crude Oil/Natural Gas produced and saved during each Calendar Quarter. This Statement, which shall be prepared for each Quality of Tanzanian Crude Oil /Natural Gas produced and saved from the Contract Area, shall contain the following information:

(a) the quantities, prices and receipts realized therefore by the Contractor in Third Party
(b) Sales of Tanzanian Crude Oil/Natural Gas during the Calendar Quarter in question;

(c) the quantities, prices and receipts realized therefore by the Contractor in sales of Tanzanian Crude Oil/Natural Gas during the Calendar Quarter in question, other than in Third Party Sales;

(d) the value of stocks of Crude Oil/Natural Gas held at the beginning of the Calendar Quarter in question;

(e) the value of stocks of Crude Oil/Natural Gas held at the end of the Calendar Quarter in question;

(f) the percentage volume of total sales of Tanzanian Crude Oil/Natural Gas made by the Contractor during the Calendar Quarter that are the Third Party Sales;

(g) all information available to the Contractor, if relevant for the purposes of Article 13 of the Agreement, concerning the prices of the selection of major competitive crude oils/gas, including contract prices, discounts and premiums, and prices obtained on the spot markets;

(h) the statement of Royalty payable.

6.2 The Value of Production and Pricing Statement for each Calendar Quarter shall be submitted to Government and TPDC not later than twenty (20) days after the end of such Calendar Quarter.

SECTION 7: STATEMENT OF RECEIPTS AND EXPENDITURE

7.1 The Contractor shall prepare with respect to each Calendar Month a Statement of Receipts and Expenditure under the Agreement. The Statement will distinguish between Exploration Expenses, Development Expenses and Operating Expenses and will separately identify all significant items of expenditures within these categories. If TPDC is not satisfied with the degree of desegregation within the categories it shall be entitled to ask for a more detailed breakdown. The statement will show the following:

(a) actual receipts and expenditure (including all credits pursuant to Section 3.4 of this Accounting Procedure) for the Month in question showing variances from the budget and explanations thereof;

(b) cumulative receipts and expenditure (including all credits pursuant to Section 3.4 of this Accounting Procedure) for the budget year in question;

(c) latest forecast of cumulative expenditure at the Yearend; and

(d) variations between budget forecast and latest forecast, with explanation thereof.

7.2 At the end of each Calendar Quarter aggregated Statements in respect of the three Months comprising that Quarter shall be submitted for each of the items (a) to (d) in subsection

7.1 above.

7.3 The Statement of receipts and expenditure for each Calendar Month or Quarter shall be submitted to Government and TPDC not later than twentyone (21) days after the end of such Month or Quarter.

SECTION 8: COST RECOVERY STATEMENT

8.1 The Contractor shall prepare with respect to each Calendar Quarter a Cost Recovery Statement containing the following information:

(a) Recoverable Contract Expenses carried forward from the previous Quarter, if any;

(b) Recoverable Contract Expenses for the Quarter in question;

(c) total Recoverable Contract Expenses for the Quarter in question (subsection

8.1(a) plus subsection 8.1(b);

(d) quantity and value of Cost Oil and/or Cost Gas taken and disposed of by the Contractor for the Quarter in question;

(e) Contract Expenses recovered for the Quarter in question;

(f) total cumulative amount of Contract Expenses recovered up to the end of the Quarter in question;

(g) amount of Recoverable Contract Expenses to be carried forward into the next Quarter.

(h) proceeds and balance of the Decommissioning Fund pursuant to Article 22

8.2 The cost recovery information required pursuant to subsection 8.1 above shall be presented in sufficient detail so as to enable Government and TPDC to identify how the cost of assets are being recovered for the purposes of Article 21 of the Agreement.

8.3 The Cost Recovery Statement for each Quarter shall be submitted to Government and TPDC not later than twentyone (21) days after the end of such Quarter.

SECTION 9: ADDITIONAL PROFIT TAX STATEMENT

(details for parameters required to calculate the APT as per Article 17 are being drafted)

SECTION 10: ENDOFYEAR STATEMENT

The Contractor shall prepare a definitive EndofYear Statement. The Statement will contain aggregated information for the Year in the same format as required in the Value of Production, Pricing Statement, Royalty payable Statement, Abandonment Cost Reserve Fund Statement, Cost Recovery Statement and Statement of Receipts and Expenditure to be based on the actual quantities of Petroleum produced and the costs and expenses incurred. The EndofYear Statement for each Calendar Year shall be submitted to Government and TPDC within sixty (60) days of the end of such Calendar Year.

1: BUDGET STATEMENT

10.1 The Contractor shall prepare an Annual Budget Statement. This Statement shall set out separately Exploration Expenses, Development Expenses and Operating Expenses and shall show the following:

(a) forecast expenditure and receipts for the budget year under the Agreement;

(b) cumulative expenditures and receipts to the end of the said budget year; and

(c) a schedule showing the most important and individual items of Development Expenses for the said budget year;

10.2 The Budget Statement shall be submitted to Government and TPDC with respect to each budget year no less than ninety (90) days before the start of the year except in the case of the year in which the Effective Date falls, when the Budget Statement shall be submitted within thirty (30) days of the Effective Date.

2: REVISION OF ACCOUNTING PROCEDURE

11.1 The provisions of this Accounting Procedure may be amended by agreement between the Contractor, the Government and TPDC The amendments shall be made in writing and shall state the date upon which the amendments shall become effective.

11.2 In the event, and at the time, that TPDC elects to participate in Joint Operations as defined in Article 10 of this Agreement the parties shall modify this Accounting Procedure to reflect TPDC's status as a party to the Operating Agreement.

11.3 Following any second discovery in the Contract Area the parties will meet in order to establish specific principles and procedures for identifying all costs, expenditures and credits, and for allocating Cost Oil and/or Cost Gas and Profit Oil and/or Profit Gas, on a Development Area basis, it being understood that costs, expenditures and credits which do not uniquely arise in respect of any one Development Area shall be apportioned between Development Areas in a reasonable, equitable and consistent manner.

3: CONFLICT WITH THE AGREEMENT

In the event of any conflict between the provisions of this Accounting Procedure and the Agreement the provisions of the Agreement shall prevail.

ANNEX "E": APT SAMPLE CALCULATION METHODOLOGY

Hard data input per Petroleum Agreement

1. First Account Percent 25.00%
2. Second Account Tax Rate Percent 40.00%
   Percent 35.00%
3. First Account Real Rate of Return
4. First Account APT Taxes are Deductible when calculating Second Account Balances

Assumptions

1. Assumed Annual Change in USIGPPI = Two (2) Percent (Added to Account Rates of Return to reflect the "Real" nature of these ROR's).
2. Cash Flow is for illustrative purposes only; data entirely assumed.

Calculation Methodology

Year	Assumed Pretax Cash Flow US$MM	FANCP First Account Balance	First Account APT Payable	SANCP Second Account Balance US$MM	Second Account APT Payable	Total APT Payable US$MM
1	3.00	3.00	0.00	3.00	0.00	0.00
2	10.00	13.81	0.00	14.11	0.00	0.00
3	40.00	57.54	0.00	59.33	0.00	0.00
4	10.00	63.08	0.00	71.28	0.00	0.00
5	40.00	40.11	0.00	57.65	0.00	0.00
6	80.00	29.06	7.27	6.25	0.00	7.27
7	100.00	100.00	25.00	66.44	26.58	51.58
8	100.00	100.00	25.00	75.00	30.00	55.00
9	60.00	60.00	15.00	45.00	18.00	33.00
10	20.00	20.00	5.00	15.00	6.00	11.00
11	20.00	20.00	0.00	20.00	0.00	0.00
12	10.00	15.00	0.00	17.40	0.00	0.00
13	20.00	0.44	0.11	3.95	0.00	0.11
14	30.00	30.00	7.50	17.09	6.84	14.34
15	20.00	20.00	5.00	15.00	6.00	11.00

ANNEX "F": PARENT COMPANY GUARANTEE

Tanzania Petroleum Development Corporation

P. O. Box 2774,

DAR ES SALAAM

We, the UNDERSIGNED hereby DECLARE that:

A. The obligations set forth in Article 3(d)(ii) and Article 5 and reflected in the Guarantee shall be continuing and absolute guarantees, and the obligations set forth in Article 3(d)(ii) and Article 5 shall remain in full force and effect unless and until a Notice of

Termination has been issued (subject to any rights to rectify being exhausted), provided, however, that ABC's obligations pursuant to 3(d)(ii) Article 5 shall survive only with respect to such obligations that occurred or arose prior to such termination if, within six (6) months from any such termination, TPDC or the United Republic of Tanzania shall have notified the Guarantor in writing of such a Loss and that it is demanding or will be demanding payment pursuant to Article 3(g).

B. If ABC shall fail to make any required payment guaranteed pursuant to Article 3(g) following demand thereof, the ABC Parent shall, within ten (10) days following the giving of notice of such failure and the demand by TPDC or the United Republic of Tanzania for payment, promptly and fully make such payment. If such payment is not made within ten (10) days of such demand, ABC Parent shall pay all reasonable costs and expenses, including reasonable legal fees and expenses, paid or incurred by TPDC or the United Republic of Tanzania in connection with the enforcement of the obligations under Article 3. Each default in any obligation shall give rise to a separate cause of action hereunder, and separate suits may be brought hereunder as each cause of action arises.

C. The obligations of the ABC Parent under the Guarantee shall not be impaired, modified, released or limited by any occurrence or condition whatsoever, including any compromise, settlement, release, waiver, renewal, extension, indulgence, impairment, limitation of liability, change in or modification of any of the obligations and liabilities, either original or assumed, of ABC. No invalidity, irregularity or unenforceability of any obligation of ABC shall affect, impair, or be a defence to the obligations of ABC under Article 3.

D. No lawful act of commission or omission of any kind or at any time upon the part of TPDC or the United Republic of Tanzania in respect of any matter

whatsoever shall in any way affect or impair either Party's rights to enforce any right, power or benefit under

Article 3, and no setoff, claim, reduction or diminution of any obligation or any defence of any kind or nature which ABC has or may have against TPDC or the United Republic of Tanzania shall be available against TPDC or the United Republic of Tanzania, respectively, in any suit or action brought by TPDC or the United Republic of Tanzania, as the case may be, to enforce any right, power or benefit under Article 3(g).

E. In the event that any payment pursuant to their obligations under Article 3(g) should give rise to a right of subrogation, the Guarantor will waive any and all rights of subrogation with respect to TPDC or the United Republic of Tanzania until such time as TPDC and the United Republic of Tanzania's obligations for any indebtedness have been satisfied in full.

Signed for and on behalf of ABC Parent

President/CEO

ABC Parent

Name:.……

Signed: ……..…….

Date: ……..…….

Witnessed:

Title: ……..…….

Name:. ……..……..

Signed: ……...

Date: ……...

CC:The Hon. Minister

Ministry of Energy and Minerals

P.O. Box 2000,

DAR ES SALAAM

Appendix 2: Uganda Model1999

UGANDA

Model Contract

1999 Model Production Sharing Contract

UGANDA

Model Production Sharing Agreement of August 1999

For Petroleum Exploration, Development & Production in

Uganda

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THIS AGREEMENT is made and entered into this day of
,200_ by and between the Government of the Republic of Uganda, acting through the Ministry of Energy and Mineral Development, of P.O Box 7270 Kampala, Uganda
(hereinafter referred to as "Government") and
a company duty organised and existing under the laws of _____.

WHEREAS, Petroleum in or under any land or water in Uganda is the property of the Republic of Uganda;

WHEREAS, the Petroleum (Exploration and Production) Act 1985 makes provision with respect to exploring for and producing Petroleum and authorises the Minister of Natural Resources to grant Exploration and Production Licences to any person or entity, subject to certain limitations and conditions;

WHEREAS, Section 2 of the Act authorises the Government to enter into an agreement, not inconsistent with the Act, with any person or entity in respect of, inter alia, the terms and conditions of the grant of a Licence under the Act;

WHEREAS, Licensee has applied for an Exploration Licence over the area described in, and shown on the map in Annex A hereof aflame Minister, in accordance with Section 9 of the Act, intends to grant the said Licence and

WHEREAS, Licensee intends, on terms and conditions set out under this Agreement and has represented that he/she has or can obtain resources, to undertake Petroleum Operations in the area aforesaid and has for that purpose the necessary financial capacity, technical competence and professional skill to carry out such Operations; NOW, THEREFORE, the parties hereto agree as follows:

ARTICLE 1 Definitions

1.1. In this Agreement, unless the context otherwise requires:

1.1.1 "Act" means the Petroleum (Exploration and Production) Act of 1985 as amended and in effect from time to time.

1.1.2 "Advisory Committee" means the Committee constituted pursuant to Article 5.

1.1.3 "Affiliated Company" means any entity directly or indirectly effectively controlling, or effectively controlled by, or under direct or indirect effective common control with a specified entity. For the purposes of this definition, "Control", when used with respect to any specified entity, means the power to direct, administer and dictate policies of such entity (it being understood and agreed that it is not necessary to own directly or indirectly fifty percent (50%) or more of such entity's voting securities to have control over such entity, but ownership, direct or indirect, of fifty percent (50%) or more of such entity's voting securities shall automatically indicate control), and the terms "controlling" and "controlled" have meanings corresponding to the foregoing.

1.1.4 "Agreement" means this instrument and the annexes attached hereto, including any extensions, renewals or amendments thereof agreed to in writing by the parties.

1.1.5 "Albertine Graben" means that geological entity within the Republic of Uganda together with such contiguous area or areas of the Democratic Republic of Congo which together are known collectively as the Albertine Graben and recognised as such by the international geological profession.

1.1.6 "Allowable Contract Expenditures" means those expenditures as so categorised in the Accounting and Financial Procedure described in Annex "C".

1.1.7 "Appraisal Programme" means a programme carried out following one or more Discovery (ies) of Petroleum for the purpose of delineating the Petroleum Reservoirs) to which that discovery or these discoveries relate(s) in terms of thickness and lateral extent and estimating the quantity of recoverable Petroleum therein.

1.1.8 "Appraisal Well" means any Well drilled for purposes of an Appraisal Programme.

1.1.9 "Associated Gas" means Natural Gas which is produced in association with Crude **Oil,** and includes solution gas or gas cap gas, from a Petroleum Reservoir recovered as gas at the surface by separation or other primary field processes.

1.1.10 "Barrel" means a quantity consisting of fortytwo (42) United States gallons, liquid measure, corrected to a temperature of sixty degrees (60°) Fahrenheit.

1.1.11 "Calendar Month" means any of the twelve (12) months of a Calendar Year.

1.1.12 "Calendar Quarter" means a period of three (3) consecutive Calendar Months commencing with first day of January, April, July and October of each Calendar Year.

1.1.13 "Calendar Year" means a period of twelve (12) Calendar Months according to the Gregorian Calendar starting with January 1st and ending with December 31st.

1.1.14 "Commercial Production" means production of Crude Oil or Natural Gas or both and delivery of the same at the Delivery Point under a programme of regular production and sale.

1.1.15 "Contract Area" means (a) on the Effective Date, the area described in Annex A and shown on the map in Annex A; and (b) thereafter, the whole or any parrot such area which, at any particular time, remains subject to an Exploration Licence granted to Licensee pursuant to Article 3 and/or subject to a Production Licence granted to Licensee pursuant to Article 7.

1.1.16 "Contract Expenses" means Exploration Expenditures, Development and Production Expenditures and Operating Expenses incurred by Licensee in Conducting Petroleum Operations hereunder determined in accordance with the Accounting and Financial Procedure described in Annex "C".

1.1.17 "Contract Revenues" means the sum of all proceeds of sales of Petroleum and monetary equivalent to the value of other dispositions of Licensee's share of Petroleum produced and saved and not used in Petroleum Operations and any other proceeds from Petroleum Operations hereunder.

1.1.18 "Contractor" means any person, company or entity employed by or on behalf of the Licensee for the purpose of carrying out petroleum operations.

1.1.19 "Crude Oil" means any hydrocarbon which at atmospheric pressure and a temperature of 60° Fahrenheit is in a liquid state at the well head or gas/oil separator or which is extracted from Natural Gas in a plant, including distillate and condensate and has been produced from the Contract Area.

1.1.20 "Delivery Point" means the point at which Crude Oil passes through the intake valve of the pipeline or tanker (truck, aeroplane or rail wagon) at the terminal in Uganda, or such other point which may be agreed to in writing by the Parties. In respect of Natural Gas, the Delivery Point shall be such point as may be agreed to in writing by the Parties.

1.1.21 "Development and Production Expenditures" means those expenditures as so categorised in the Accounting and Financial Procedure described in Annex "C".

1.1.22 "Development Operations" has the meaning ascribed to it in the Act but does not include operations beyond the Delivery Point.

1.1.23 "Development Plan" means a development plan referred to in Section 20(3) of the Act.

1.1.24 "Discovery" means a Discovery of Petroleum within the meaning of the Act.

1.1.25 "Effective Date" means the date on which this Agreement is signed by all Parties hereto.

1.1.26 "Exploration Licence" means the petroleum exploration licence referred to in paragraph 3.1 and granted pursuant to Section 8 of the Act.

1.1.27 "Exploration Expenditures" are all necessary, appropriate and economical, direct and allocated indirect costs incurred in the search for petroleum and appraisal of Discoveries in the Contract Area as so categorised in the Accounting and Financial Procedures described in Annex C.

1.1.28 "Exploration Period" means the First, Second and Third Exploration Periods referred to in paragraph 3.1.

1.1.29 "Exploration Well" means a Well, other than an Appraisal Well, drilled in the course of Exploration Operations conducted hereunder.

1.1.30 "Good Oilfield Practices" means all of those things that are generally accepted in the international petroleum industry as good, safe and efficient in the carrying out of Exploration or, as the case may be. Development operations and that an experienced, reasonable and prudent operator, engaged in a similar activity under similar circumstances elsewhere, would use.

1.1.31 "Government" means the Government of the Republic of Uganda.

1.1.32 "Government Production Share" has the meaning ascribed to it in Article 10.

1.1.33 "Income Tax Act" means the Income Tax Act of 1997 as amended and in effect from time to time.

1.1.34 "Joint Venture Agreement" means an agreement, not inconsistent herewith, between Licensee and the Nominee of the Government to be negotiated and executed pursuant to paragraph 9.4.

1.1.35 "Joint Operations" means operations in or relating to a Development Area carried out under a Joint Vulture Agreement.

1.1.36 "Joint Venture Assets" has the meaning ascribed to it in paragraph 9.4.

1.1.37 "Joint Venture Interest" has the meaning ascribed to it in paragraph 9.4

1.1.38 "Licence Area" means an area over which an exploration or production licence has been issued.

1.1.39 "Licensee" means any person, company or entity and includes any other person, company or entity to whom the said companies or any of their approved assignees or successors assign directly their Participating Interest in whole or in part in any Exploration Licence or Production Licence.

1.1.40 "Market Price" has the meaning ascribed to it in paragraph 12.1.1.

1.1.41 "Maximum Efficient Rate" means the maximum rate of production of Crude Oil from a Development Area, without excessive decline of production or excessive loss of reservoir pressure, in accordance with good oilfield practice and the provisions of paragraph 7.8.

1.1.42 "Natural Gas" means both Associated and Nonassociated Gas and all its constituent elements produced from any Well in the Contract Area and all nonhydrocarbon substances therein.

1.1.43 "Nominee" means a body corporate established by or under a law in force in the Republic of Uganda wholly owned or controlled by the Government pursuant to Article 9, designated for the purpose of holding Joint Venture Interest in the Joint Venture Assets attributable to a Development Area, and includes an approved assignee, of such body corporate provided such assignee satisfies the requirements of Article 9.

1.1.44 "NonAssociated Gas" means Natural Gas other than Associated Gas.

1.1.45 "Operating Expenses" means those expenses as so categorised in the Accounting Procedure described in Annex "C".

1.1.46 "Operatorship" means responsibility assigned to any person, company or entity to conduct petroleum operations on behalf of the Licensee in the Licence Area.

1.1.47 "Participating Interest" in relation to any Licence held by Licensee hereunder means an undivided and unencumbered interest in the rights and obligations under the Licence.

1.1.48 "Participation Share of Production" has the meaning ascribed to it in paragraph 9.4 (c).

1.1.49 "Party", or "Parties" means the signatories to this Agreement and any successors or assignees thereof, either individually or collectively, as the case may be.

1.1.50 "Petroleum Operations" means Exploration Operations and Development Operations.

1.1.51 "Pipeline Company" means the company referred to in Article 13.

1.1.52 "Production Licence" means a petroleum production licence granted pursuant to Section 21 of the Act and the provisions of this Agreement.

1.1.53 "Seaboard Terminal" means a terminal at Mombasa, Kenya or any other sea port agreed to by the parties at which crude oil is lifted into the tankers for export.

1.1.54 "Subcontractor" means any person, company or entity employed by or on behalf of a Contractor for the purpose of carrying out petroleum operations.

1.1.55 "Tax Year" shall mean a period of twelve (12) consecutive calendar months commencing on 1st January and ending on the following 31st December, according to the Gregorian Calendar.

1.1.56 "Venture Assets" means the property whether real or personal owned or acquired by Licensee in connection with Petroleum Operations hereunder and includes the Exploration Licence and any Production Licences granted hereunder.

1.1.57 "Work Programme and Budget" means an itemised statement of Petroleum Operations to be carried out in the Contact Area and a detailed breakdown of the Contract Expenses associated therewith, including both capital and operating budgets, all in a form acceptable to the Government.

1.2 The following words when used in this Agreement have the meanings ascribed to them in the Act:

"Block"

"Commissioner"

"Development Area"

"Discovery Area"

"Exploration Operations"

"Licence"

"Minister"

"Petroleum"

"Petroleum Production Licence"

"Petroleum Reservoir"

"Well"

ARTICLE 2 Agreement

This Agreement constitutes an agreement made under Section 2 of the Act.

This Agreement supersedes and replaces any provisions on the same subject to any other agreement, whether written or oral, prior to the date of this Agreement.

ARTICLE 3 Responsibilities and Grant of Rights

3.1. Contemporaneously herewith. Licensee is granted, under and in accordance with the Act, an Exploration Licence in respect of the Contract Area in the form set forth in Annex "B1". The said Exploration Licence shall have a term not

exceeding four (4) years ("First Exploration Period"), counted from the first day of the First Calendar Month following the Effective Date. Not less than ninety (90) days prior to the expiration of the First Exploration Period, Licensee may apply to the Government for renewal of the Exploration Licence covering the Contract Area. Such renewal shall be granted to Licensee subject to Licensee having (i) fulfilled its obligations under the Act and this agreement, including its relinquishment obligations under paragraph 3.5, during the First Exploration Period, and (ii) submitted with such application an undertaking to comply with the minimum work and expenditure obligations for the Second Exploration Period specified in Article 4. A maximum two (2) successive renewals of said Exploration Licence not exceeding (2) years each ("Second Exploration Period" and "Third Exploration Period") shall, subject to the requirements of the Act, be granted to Licensee upon application by Licensee to the Government in the prescribed manner.

3.2 Notwithstanding the provisions of the preceding paragraph and without prejudice to the provisions of paragraph 3.4.2., in the event that on the ninetieth day before the date on which an Exploration Licence is due to expire Licensee is in the process of completing seismic or drilling operations under this Agreement, or the processing or interpretation of data resulting therefrom, and provided that said operations are being conducted diligently and starting in good time and in accordance with Good Oilfield Practices, Licensee may apply for the renewal of any Exploration Licence pursuant to paragraph 3.1 before but in no case later than fifteen (15) days prior to the date of expiry of the then current period of validity of said Licence.

3.3 Licensee shall, subject to the Act and Regulations and the terms and conditions herein set forth, have the exclusive right to conduct Petroleum Operations within the Contract Area for the term of the Exploration Licences and any Production Licence granted to it in accordance with all applicable legislation and provisions of this Agreement.

3.4 Licensee, on giving to the Government not less than ninety (90) days notice in writing (the "Surrender notice"), may:

3.4.1 Surrender its rights and be relieved of its obligations in respect of the whole of the Contract Area if its minimum work and financial obligations under Article 4 hereof in respect of the relevant Exploration Period have been fulfilled in accordance with Section 51 of the Act;

3.4.2 in respect of the Exploration Licence or any renewal thereof, elect to surrender its rights in respect of the whole of the Contract Area and be relieved of its minimum work and financial obligations under Article 4 in respect of the then current Exploration Period at any time within sixty (60) days following the date on which Licensee completes:

a. the interpretation of seismic works exceeding those provided under paragraph 4.2.1 (i) and actually being executed at the end of the preceding Exploration Period; or
b. the drilling, testing or plugging of any Exploration Well actually being executed at the end of the preceding Exploration Period in which event(s) the Surrender Notice shall be reduced to thirty (30) days; and

3.4.3 at any time after the grant of the Exploration Licence, surrender its rights and be relieved of its obligations in respect of any block or blocks forming part of the Contract Area provided, however, that no surrender by Licensee of its rights over any part of the Contract Area shall relieve Licensee of its obligation to satisfy the minimum work and financial obligations referred .to in Article 4 hereof in respect of the Exploration Period during which it gives the Surrender Notice.

3.5 Notwithstanding the provisions of Section 15 of the Act, the following mandatory relinquishment provisions shall apply:

3.5.1 if Licensee applies for a renewal of the Exploration Licence on or before the end of the First Exploration Period, Licensee shall relinquish the number of blocks constituting in total area not less than fifty percent (50%) of the original Contract Area;

3.5.2 if Licensee applies for the second renewal of the Exploration Licence on or before the end of the Second Exploration Period, Licensee shall relinquish an additional number of blocks constituting in total area not less than twenty five percent (25%) of the original Contract Area;

3.5.3 the Licensee shall relinquish land within the Contract Area so as to comply to the satisfaction of the Minister with the following requirements:

a. no relinquishment of a part only of a Block shall be permitted;
b. the area(s) to be relinquished shall consist of a number of contiguous Blocks so arranged that so far as possible:

i. each Block other than the Blocks defining the boundaries of such shall be contiguous on all sides with other Blocks;
ii. the shape of the relinquished area should be approximately rectangular;
iii. the direction of its boundaries should be roughly northsouth and eastwest; and
iv. its longer boundaries should not be more than three times the length of its shorter boundaries.

3.5.4 Any areas which Licensee elects to surrender pursuant to paragraph 3.4.3 shall be credited against the area which Licensee is next required to relinquish pursuant to this paragraph 3.5. Licensee shall not be required to relinquish pursuant to this paragraph 3.5 any area which constitutes a discovery or Development Area or any part thereof and said Discovery or Development Area shall be subtracted from the original Contract Area for the purpose of calculating the area to be relinquished pursuant to paragraph 3.5.1 to 3.5.2.

3.6 The Government reserves the right to grant licences to other legal persons to prospect for, explore for and mine minerals within the Contract Area, and further reserves to itself the right to so prospect, explore and mine directly. Licensee shall use its best efforts to avoid obstruction or interference with such Licensees' or Government operations and similarly the Government shall use its best efforts to ensure that its own operations or those of third parties do no obstruct or interfere with Licensee's Petroleum Operations within the Contract Area.

3.7 In the event that Licensee discovers minerals other than Petroleum in the Contract Area which may be of economic value, it shall report such discovery to the government within thirty (30) days of the making of such discovery and shall supply a sample of such minerals to the Government

3.8 If more than one person or entity comprises Licensee, the duties and obligations of the persons or entities constituting Licensee hereunder shall be joint and several.

3.9 The Government shall in as far as is permitted by the law assist the Licensee to obtain rights of ingress to and egress from the Contract Area and any petroleum facilities used in Petroleum Operations and to obtain rights of way and rights to construct related Petroleum Operations facilities as may be reasonably required by the Licensee. The Licensee shall meet all the associated costs and expenses.

ARTICLE 4 Programme

4.1 Licensee shall commence Exploration Operations in Uganda within four (4) calendar months of the Effective Date.

4.2 In discharge of its obligation to carry out Exploration Operations in the Contract Area, Licensee shall, in accordance with the provisions of this Article, carry out the following minimum work programmes and shall expend not less than the corresponding sums specified as adjusted pursuant to paragraph 4.5:

4.2.1 First Exploration Period

Commencing on the day on which the Exploration Licence becomes effective pursuant to Article 3 and terminating on the fourth anniversary of such date:

(a) Exploration Area [_____]

Undertake geological, geochemical, geophysical and related studies and review all existing gravity data, maps, reports, publications, research papers and other data and information available.

The acquisition, processing and interpretation of not less than [_____] line kilometres of seismic data; and the drilling of one exploration well whose location and depth Government and Licensee shall agree on. The seismic data shall be acquired in such a manner as to adequately sample the entire Contract Area.

(b) Minimum Exploration Expenditure US$ [_____] million

Preliminary Geological, Geophysical and other studies US$ [_____] Seismic Data US$ [_____] Drilling US$ [_____]

4.2.2 Second Exploration Period.

Commencing on the day on which the Exploration Licence is renewed pursuant to Article 3 hereof and terminating on the second anniversary of such date.

Exploration Area [_____]

(i) Minimum Work Programme:

The acquisition, processing and interpretation of not less than [ ] line kilometres of seismic data, and the drilling of two exploration wells whose location and depth Government and Licensee shall agree on. The seismic data shall be acquired in such a manner as to adequately sample the remaining Contract Area.

(ii) Minimum Exploration Expenditure US$ [_____] million Seismic Data US$ [_____] million Drilling US$ [_____] million.

4.2.3 Third Exploration Period.

Commencing on the day on which the Exploration Licence is renewed pursuant to Article 3 hereof and terminating on the second anniversary of such date.

4.2.4 Exploration Area

(i) Minimum Work Programme:

The acquisition, praising and interpretation of not less than [_____] line kilometres of seismic data, and the drilling of [_____] exploration wells whose location and depth Government and Licensee shall agree on. The seismic data shall be acquired in such a manner as to adequately sample the remaining Contract Area.

(ii) Minimum Exploration Expenditure US$ [_____] million

Seismic Data US$ [_____] million Drilling US$ [_____] million

4.3 For the purpose of this Article, Exploration Wells shall, except as provided in Article 42, be drilled on a location determined by Licensee and the Government and to a depth necessary for the evaluation of the sedimentary section established by the available data as the deepest objective formation and consistent with good oil industry practices, unless before reaching the aforementioned depth:

a. basement is encountered;
b. further drilling would present a foreseeable danger which cannot reasonably be contained;

c. impenetrable formations are encountered;
d. significant hydrocarbonbearing formations are encountered which require protecting, thereby preventing such depth from being reached.

In such circumstances, the drilling of any Exploration Well may be terminated at a lesser depth and such Well shall, except where the circumstances described in subparagraphs (a), (b) and (c) immediately above occur. In all other circumstances in which a Well is terminated at a lesser depth, Licensee shall have the option to either (i) drill a substitute Exploration Well or (ii) pay to the Government the amount by which the drilling budget for such well on a dry hole basis, pursuant to paragraph 4.2 exceeds actual expenditures incurred in the drilling thereof.

For the purpose of this paragraph 4.3, the term "Basement" shall mean the geological basement below which hydrocarbons cannot be found and produced.

4.4 Compliance with the required minimum Exploration Expenditures in any Exploration Period shall not relieve Licensee of its obligation to comply with the required minimum Work Programme for such Exploration Period nor shall compliance with the required minimum Work Programme for any Exploration Period relieve Licensee of its obligation to comply with the required minimum Exploration Expenditures for such Exploration Period.

4.5. The required minimum Exploration Expenditure stipulated in paragraph 4.2 for each Exploration Period (other than the First Exploration Period), shall be adjusted at the end of (i) the first Exploration Licence, in the case of the minimum Exploration Expenditures for the Second Exploration Period, (ii) the Second Exploration Period, in the case of the minimum Exploration Expenditures for the Third Exploration Period, as follows:

$$I' = I \times \frac{B}{A}$$

I' = minimum Exploration Expenditures for the First Exploration Period or Second and Third, as the case may be,

I = minimum Exploration Expenditures stipulated in paragraph 4.2 for the period in question;

A = "U.S. Industrial Goods Wholesale Price Index" as first reported in

"International
Financial Statistics" as published by the International Monetary Fund for the Calendar Month of the Effective Date;

B = "U.S. Industrial Goods Wholesale Price Index" as first reported in "InternationalFinancial Statistics" as published by the International Monetary Fund of the Calendar Month in which the period in question commences.

4.6 The Exploration Licences issued to Licensee pursuant to Article 3 and any available renewal thereof shall be on terms and conditions relating to minimum work Programmes and Exploration Expenditures which correspond to the obligations of Licensee under this Article and it is accordingly understood and agreed that any discharge by Licensee of its obligations under this Article in respect of any Exploration Period will discharge for that period the minimum work and expenditure obligations of Licensee in respect of the Exploration Licences issued pursuant to Article 3 and the terms and conditions of such Licences and any renewal thereof shall be drawn accordingly.

a. On or before the Effective Date, the Licensee shall provide a Bank Guarantee in the form set forth in Annex D, and amounting to the minimum expenditure of the work program to be undertaken by Licensee in the Contract Area during the First Exploration Period pursuant to paragraph 4.2.1. which shall, inter alia, guarantee the payment by Licensee of the sums, if any due and payable to the Government pursuant to paragraph 4.7(b) and (c) hereunder.

b. If, upon the expiration of the Exploration Licences, or upon the date of termination of this Agreement, or upon surrender of the entire Contract Area by Licensee pursuant to paragraph 3.4, whichever first occurs, Licensee has not expended for Exploration Operations sums (including any sums previously paid pursuant to paragraph 4.7(c)) at least equal to the total minimum Exploration Expenditures (as adjusted pursuant to paragraph 4.5) required hereunder for the period in question, the shortfall amount

corresponding to the unexpended minimum Exploration Expenditures, as adjusted, shall be paid by Licensee to the Government.

c. If, at the end of the initial term of the First Exploration Licence or any Exploration Period, Licensee has not expended for Exploration Operations sums at least equal to the minimum Exploration Expenditures, (as adjusted), required hereunder for such period, the shortfall amount corresponding to the unexpended minimum Exploration Expenditures (as adjusted pursuant to paragraph 4.5) for such period shall be paid by Licensee to the Government.

4.8 For the purpose of this Act, and without prejudice to their recoverability as Contract Expenses for other purposes under this Agreement, expenditure by Licensee on the following shall not be treated as Exploration Expenditures for the purpose of satisfying the minimum Exploration Expenditure obligations set out in paragraph 4.2:

a. any Appraisal Programme required to discharge Licensee's obligations under Section 17(1)(b) of the Act;

b. the value of stock items listed in inventory; provided, however, that any loss on the disposal of any such stock item, as well as the book value of those stock items (if any) which become the property of the Government pursuant to paragraph 19.2, shall be treated as Exploration Expenditure obligations set forth in paragraph 4.2;

c. travel expenses in connection with Petroleum Operations;

d. property purchase or rental in connection with Petroleum Operations;

e. the training of Ugandan nationals pursuant to Article 18 of this Agreement; and

f. any annual charges in respect of surface rentals due in accordance with Article 26 of this Agreement.

ARTICLE 5 Advisory Committee

5.1 Not later than ninety (90) days after the Effective Date, a Committee shall be established by the Government and Licensee to be known as the Advisory Committee. The Advisory Committee shall consist of four (4) members, two (2) of whom shall be appointed by the Government and two (2) by Licensee. The Chairman of the Advisory Committee shall be designated by the Government from

among the members it has appointed. The Government and Licensee shall also designate alternate members and shall have the right to designate an alternate member at any time, which right shall be exercised by written or telexed notification addressed to the other party hereto. In the case of absence or incapacity of a member of the Committee, his alternate shall automatically assume the rights and obligations of the absent or incapacitated member.

5.2 All meetings of the Advisory Committee shall be held in Kampala or such other place in Uganda or elsewhere as may be unanimously agreed by the members of the Committee. Ordinary Meetings of the Advisory Committee shall be held at least twice a year during the Exploration Period and at least once a Calendar Quarter following the grant of the first Production Licence. Special meetings of the Advisory Committee may be called on reasonable notice by either party for the purposes of reviewing any major development or problems in Petroleum Operations, and recommending appropriate action to be taken. Meetings of the Committee shall require a quorum of three (3) members. The Secretaryship of the Advisory Committee shall be entrusted to Licensee. Votes at the Advisory Committee meetings shall only be made on matters included in the respective agenda, unless the members of the Advisory Committee unanimously agree otherwise. Any member of the Committee may vote by written and signed proxy held by another member. The Government and Licensee shall have the right to bring expert advisers to any meeting of the Committee to assist in the discussions of technical and other matters requiring expert advice.

5.3 Without prejudice to the rights and obligations of Licensee for the conduct of the Petroleum Operations carried out hereunder, the Advisory Committee shall have the following functions:

5.3.1 to review and approve:

i. any proposed Exploration Operations contained in the annual Work Programmes and Budgets, or any amendment thereto, presented thereto by Licensee under Article 6; and ii. any Appraisal Programmes, or any amendment thereto, presented thereto by Licensee under Article 7 until such time as the provisions of paragraph 5.3.2 are applicable;

5.3.2 at any time after the date on which an application for a Production Licence is made by Licensee in respect of any part of the Contract Area, and for as long as there is production from the Contract Area, to review and approve, subject to such reasonable modifications as the Advisory Committee may consider necessary, any Appraisal Programmes, or any material amendments thereto, presented to the Committee by Licensee under Article 7;

5.3.3 to review and approve:

i. the annual Work Programmes and Budgets, or any material amendment thereto, presented to the Committee by Licensee which relate to Development Operations; and
ii. drilling programmes and related budgets submitted to the Committee by Licensee pursuant to, and subject to the conditions provided in Article 4 in respect of Exploration Wells;

5.3.4 to review and improve the production forecast statements prepared by Licensee

prior to their presentation to the Government pursuant to paragraph 7.8;

5.3.5 to ensure that the accounting of costs and expenses and the maintenance of operating records and reports for the Petroleum Operations are made in accordance with this Agreement and the accounting principles and procedures generally accepted in the international petroleum industry; and

5.3.6 to review and make recommendations to Licensee with respect to any proposals made by Licensee concerning the application for renewal of the Exploration Licence, or the surrender or relinquishment of any part of the Contract Area.

5.4 Decisions of the Advisory Committee pursuant to paragraph 5.3 shall be made unanimously through consultation. All decisions made unanimously shall be equally binding upon the Government and Licensee. Without limitation to the foregoing, any Development Plan recommended by the Advisory Committee shall be deemed to have met the requirements of Section 22 (1) of the Act. Regarding the matters on which agreement cannot be reached, the Government and Licensee may convene another meeting and shall attempt, in good faith, to find another

solution. However, if the Advisory Committee fails thereafter to reach a decision on the matters specified in paragraph 5.3 above;

i. within thirty (30) days of the date of the Advisory Committee meeting at which Licensee's first submission in respect of the matters specified in paragraphs 5.3.1,5.3.5 and 5.3.6 above is considered;
ii. within fortyfive (45) days of the date of the Advisory Committee meeting at which Licensee's first submission in respect of the matters specified in paragraphs 5.3.2,5.3.3 and 5.3.4; is considered;

the parties may refer the matter for determination in accordance with paragraph 23.3. The determination in accordance with paragraph 23.3 shall be final and with this determination the programme, budget or forecast shall be deemed to have been approved by the Advisory Committee as determined, except that Licensee, may, in the case of a determination made concerning matters specified in paragraph 5.3.2, within thirty (30) days of receipt of such determination notify the Government that the Discovery to which such programme relates is no longer considered to be of commercial or potential commercial interest, as the case may be, within the meaning of proviso A to Section 17(1)(b) of the Act. If Licensee so notifies the Government, the provisions of Section 18 of the Act shall apply.

Licensee's proposal shall prevail provided that such proposal is not inconsistent with the relevant provisions of this Agreement and in particular, the minimum work and expenditure obligations specified in Article 4.

5.5. All costs and expenses associated with the activities of the Advisory Committee which are borne by Licensee may be treated as Contract Expenses.

ARTICLE 6 Work Programmes and Budgets

6.1 So long as any Exploration Licence or Production Licence issued to Licensee herein remains in force, at least sixty (60) days prior to the beginning of each Calendar Year, Licensee shall prepare and submit to the Advisory Committee for its review and, where required pursuant to Article 5, approval, a detailed annual Work Programme and Budget, setting forth the Exploration Operations and/or

Development Operations which Licensee proposes to carry out in the ensuing Calendar Year and the estimated cost thereof. An annual Work Programme and Budget for the period from the date of effectiveness of the First Exploration Licence to the end of the Calendar Year in which such date falls shall be presented to the Advisory Committee within ninety (90) days of the Effective Date for review in accordance with paragraph 5.3.1.,

6.2 Every Work Programme and Budget submitted to the Advisory Committee during the Exploration Period pursuant to this Article and every revision or amendment thereof shall be consistent with the requirements set out in Article 4 relating to minimum work and expenditure for the Exploration Period within which the Work Programme and Budget will fall.

6.3 After giving notice to the Advisory Committee, Licensee may amend any aspect of the annual Work Programme or Budget relating to Exploration Operations submitted to the Advisory Committee provided such amendment is consistent with Licensee's obligations under Article 4. Any notice given pursuant to this paragraph shall state reasons why, in the opinion of Licensee, an amendment is necessary or desirable and the views and recommendations of the Advisory Committee with respect to any such amendment shall be given due consideration by Licensee. In all other cases where Licensee wishes to amend the annual Work Programme and Budget, the amendment shall be referred to the Advisory Committee for its review and approval, which approval shall not be unreasonably withheld, before Licensee may proceed with its operations on the basis of such amended Work Programme and Budget.

ARTICLE 7 Discovery, Development and Production

7.1 Where, pursuant to Section 17 of the Act, notice has been given to the Government of a Discovery in the Contract Area, Licensee shall forthwith inform the Government of the steps it proposes to take to satisfy the requirements of Section 17(1)(a)(iii) of the Act.

7.2 Unless, following a Discovery by Licensee in the Contract Area, Licensee gives in respect of such Discovery a notice to the Minister for the purpose of paragraph A of the provision to section 17 (1) (b) of the Act or unless the

provisions of paragraph B of that Proviso are otherwise applicable. Licensee shall promptly after the technical evaluation of the test results relating to such Discovery has been completed, prepare and submit for the consideration of the Advisory Committee its proposals for an Appraisal Programme to meet its obligations as Licensee under the Act. Notwithstanding the foregoing, in the event that Licensee notifies the Government within thirty (30) days following the date on which its technical evaluation of the test results relating to a Discovery has been submitted to the Government, the said Discovery does not in and of itself warrant immediate appraisal and provides reasonable justification therefor, an exemption from the requirements of Section 17 (1)(b) of the Act may be granted by the Minister, pursuant to paragraph B of the proviso to that Section, for so long thereafter as Licensee is carrying out continuous Exploration Operations in the Contract Area.

7.3 As soon as the Advisory Committee has, pursuant to paragraph 5.3.2, reviewed and approved an Appraisal Programme submitted by Licensee as aforesaid, Licensee shall promptly thereafter commence implementation thereof.

i. If during the; term of any Exploration Licence or renewals thereof granted pursuant to this Agreement, Licensee makes a Discovery of Petroleum in the Contract Area which alone, or in conjunction with other discoveries previously made in the Contract Area might be developed and brought into early production with a view to satisfying the internal consumption requirements of Uganda, the Government may notify licensee accordingly upon which the parties shall meet to determine whether the development of the said Discovery or Discoveries would be economically and technically feasible.

ii. In determining whether the Discovery or Discoveries as the case may be is (are) economically and technically feasible, the parties shall consider whether an early production scheme would, inter alia, jeopardise the subsequent recovery of Petroleum from the Petroleum reservoir(s), create a health or safety risk or would otherwise involve a departure from the standards of Good Oilfield Practice.

iii. In the event that the parties determine the Discovery or Discoveries as the case may be to be economically and technically feasible and agree upon the terms and conditions for the implementation of an early production scheme (including offtake arrangements), a Production Licence shall be granted to Licensee in respect of the Discovery Area(s) subject thereto and thereafter Licensee shall complete the facilities necessary for the Government to take delivery of production from the said Discovery Area(s) exfield and all costs associated with the taking of delivery therefrom shall be for the Government's account.

It is understood, however, that Licensee shall not be required to produce crude oil at a rate higher than the Maximum Efficient Rate in connection with the scheme.

iv. Any crude oil production delivered to the Government pursuant to the provisions of this Article 7.4 (iii) shall serve to reduce Licensee's obligation to otherwise supply crude oil for the internal consumption requirements of Uganda pursuant to Paragraph 15.1 and will not prejudice Licensee's rights under paragraph 7.8 thereafter in respect of the subsequent grant of a Production Licence in relation to a wider Discovery Area(s) which includes the said Discovery Area(s). It is understood, however, that crude oil production shall continue to be made available to the Government in accordance with the terms and conditions agreed to in 7.4 (iii) above.

v. Nothing in this Article shall require Licensee to undertake the completion of the field facilities required for the early production scheme in the event that Licensee reasonably determines that such scheme (including the terms and conditions for the implementation thereof) is not economically or technically feasible.

7.5 Before applying for a Production Licence pursuant to Section 19 of the Act, Licensee shall consult with the Advisory Committee in connection with the preparation of a Development Plan to be submitted by Licensee to the Minister in accordance with Section 20 of the Act.

7.6 If the parties are unable to settle amicably any dispute or difference as to whether the Development Plan meets the requirements of Section 22 of the Act within twelve (12) calendar months of the date of the Minister's aforesaid notification, either party may refer the matter to a sole expert pursuant to Article 23.

If, as a consequence of the said award. Licensee determines that the development project (in respect of which the Development Plan was submitted) ceases to be commercially attractive. Licensee may so notify the Government in writing within six (6) Calendar Months of the date of said award, whereupon the Government shall have the right to require Licensee to relinquish its rights with respect to the Discovery Areas which are the subject of such Development Plan and to forfeit its rights to any subsequent production therefrom.

7.7 Upon submission by Licensee of a Development Plan that meets the requirements of Section 22 of the Act together with the application for a Production Licence, the Minister shall promptly issue to Licensee a Production Licence in the form attached hereto in Annex "BII covering the Development Area for a period not exceeding twenty five (25) years counted from its date of issuance.

A production Licence shall be renewable, upon application, by Licensee in the prescribed manner, for a term equal to the period between the initial grant of such Production Licence and the commencement of Commercial Production, but in no event exceeding five (5) years. The Minister shall not impose conditions for the granting or renewal of a Petroleum Production Licence under Sections 21(a) and 27 of the Act which are inconsistent with the terms of this Agreement or the requirements of the Act.

7.8 Licensee shall use its best efforts to produce Crude Oil from each Development Area at the Maximum Efficient Rate. The Maximum Efficient Rate of production for Crude Oil and the production rate for Nonassociated Gas shall be estimated in the Development Plan for each such area. Such rates shall be reviewed annually at the time of submission by Licensee of the annual Work Programme and Budget to

the Advisory Committee pursuant to paragraph 5.3.3 and revised, if necessary, by mutual agreement.

7.9 Not less than sixty (60) days prior to the beginning of each Calendar Year following the commencement of Commercial Production, Licensee shall prepare and furnish to the Government for its review and approval (which approval shall not be unreasonably withheld) a forecast statement setting forth by Calendar Quarter, the total quantity of Crude Oil (by quality, grade and gravity) and Natural Gas that Licensee estimates can be produced, saved and transported hereunder from each

Development area during such Calendar year in accordance with Good Oilfield Practices. Licensee shall endeavour to produce in each Calendar Year the forecast quantity.

7.10 In the event that Licensee wishes to establish a refinery to refine the crude oil and natural gas that the Licensee estimates can be produced. Government may grant the Licensee the right to establish such refinery.

ARTICLE 8 Records, Reports, Data and Inspection

8.1 Licensee shall prepare and maintain accurate and current records of Petroleum Operations and its activities in the Contract Area hereunder. The accounting records will be maintained in accordance with accepted international petroleum industry practices and standards. Licensee shall furnish the Government in conformity with the Act and this Agreement, and as the Government may reasonably require, information, reports and data concerning its activities and operations under this Agreement.

8.2 The Government and its duly authorised representatives shall have full and complete access to the Contract Area at all reasonable times with a right to observe Petroleum Operations and upon at least thirty (30) days advance written notice to the Licensee shall have the right to inspect all assets, records and Data owned or maintained by Licensee relating to Petroleum Operations and this Agreement. In doing so, the Government and its representatives shall not unduly interfere with Licensee's Petroleum Operations. Licensee shall provide the Government, on daily basis where applicable, with copies of any Data acquired in the Petroleum

Operations (include geological and geophysical reports, logs and well surveys) arid information and final interpretations of such Data in the Licensee's possession that are acquired during Petroleum Operations. However, the Government and its representatives may make a reasonable number of surveys, drawings, tests and copies for the purpose of implementing this Agreement. In so doing, the Government and its representatives shall be entitled to make reasonable use of the equipment or instruments of Licensee provided that no damage to the equipment or instruments or interference with the Petroleum Operations hereunder shall result from such use. The Government and its representatives shall be given reasonable assistance by Licensee for such functions, and Licensee shall afford to the Government and its representatives all facilities and privileges afforded to its own personnel in the field including the use of office space and housing free of charge.

8.3 Licensee shall save and keep for the duration of this contract a representative portion of each sample of cores, cuttings and fluids taken from the Exploration Wells drilled which shall be forwarded to the Government or its representatives at such time and in the manner directed by the Government. All cores and samples acquired by Licensee shall be available for inspection by the government or its representatives at all reasonable times. Notwithstanding the above. Operator will supply to the Government (Permanent Secretary, Ministry of Energy and Mineral Development/copy to Commissioner, Petroleum Exploration and Production Department) a telefaxed summary of field geological, and/or geophysical operations from any field geological or geophysical survey being carried out including but not limited to: details of locations sampled, foot traverses measured, kilometres of aeromagnetic, gravity/seismic data acquired, etc.; and on a daily basis a telefax containing details of drilling operations carried out during the previous 24 hours including but not limited to a summary of lithologies penetrated, tops encountered, gas and oil shows, tests, cores and logging runs, future plans (including abandonment plans at least 24 hours prior to inception) and on a regular basis, and at any rate not later than four months after the conclusion of any geological, geophysical or drilling operation, reproducible copies and digital tapes of all surface logs, airmag, gravity, seismic and other records as well as processed

data, and all subsurface information including but not limited to geological, electrical, mechanical and other logs, surveys, reports, records, from a well on the geology and drilling operations carried out as well as final well reports and final completion logs, together with one envelope of washed and dried ditch cuttings and one cloth bag of unwashed ditch cuttings at all sampling intervals and one vertical half of all cores cut.

8.4 Notwithstanding paragraph 8.3 above. Licence shall be freely permitted to export samples for purposes of testing and analysis. Originals of technical data and records can be exported with the permission of the Government provided that an exact copy of that data, on a storage media similar to that being exported, is maintained in the Republic of Uganda and provided that such exported records and data shall be repatriated to the Republic of Uganda.

8.5 In addition to the material stipulated in paragraph 8.3, supra. Licensee shall provide, in accordance with the standards and practice of the Petroleum Industry, at no cost to the Government, in an appropriate and reproducible form and in a promptand timely manner all maps, sections, profiles and other representative original and interpretational geophysical, geological or engineering data ("Data"), Such Data (which shall include all magnetic tapes and any other storage media, whether raw, processed or reprocessed) shall be forwarded to the Government or its representatives in the prescribed manner or otherwise at such time and in the manner directed by the Government.

Subject to the provisions of paragraph 8.6, all original data resulting from Petroleum Operations are the property of the Republic of Uganda, including, but not limited to, geological, geophysical, petrophysical, engineering, well logs, magnetic tapes, cuts of core and cutting samples, production data and completion status reports and any other data which the Licensee may compile during the term hereof, including all reports, analyses, interpretations, maps and evaluations thereof prepared by the Licensee and any sublicensees or consultants to the Licensee or by Affiliated Companies, and cuttings of all samples that have been obtained or compiled during the term hereof (in this Agreement referred to as "Data").

8.6 Except as provided in paragraphs 8.7 and 8.8, all Data submitted to the Government by Licensee shall be kept confidential and not reproduced or disclosed to third parties by any party to this Agreement except, in the case of disclosure by the Licensee, with the prior written consent of the Government or, in the case of disclosure by the Government prior to the relinquishment of the area to which they relate, with the prior written consent of Licensee, which consents (whether of the Government or Licensee) shall not be unreasonably withheld or delayed.

8.7 The provisions of paragraph 8.6 shall not prevent disclosure by:

i. Licensee to an Affiliated Company, its home government or any department, agency or instrumentality thereof if required by law, recognised stock exchanges on which shares of the Licensee or its Affiliated Companies are traded, financial institutions and professional advisers and arbitrators and experts appointed pursuant to Article 23 of this Agreement;

ii. Licensee to bona fide prospective assignees of a Participating Interest or to a corporation with which Licence is conducting bona fide negotiations directed towards a merger or consolidation, upon fifteen (15) days prior written notice to the Government identifying the parties to which disclosure will be made; provided, however, that the Government may veto any such disclosure where a party to which such disclosure is proposed is in bona fide discussions with the Government regarding rights to conduct Petroleum Operations Uganda;

iii. the Government to any agency of the Government, financial institution or person acting as a consultant or professional adviser to the Government, and arbitrators and experts appointed pursuant to Article 23 of this Agreement; and

iv. the Government for statistical purposes or in connection with award of new acreage.

All Data disclosed to third persons shall be disclosed on terms which to the extent possible ensure that the same are treated as confidential by the

recipient for so long as such Data remains subject to the confidentiality undertakings specified in paragraph 8.6.

8.8 Without prejudice to the above provisions, the Government may provide data and information that may come into its possession and may be relevant to enable the Licensee carry out its exploration activities under this Agreement. The Data shall be treated with confidentiality and shall not be disclosed to third parties without the written consent of Government.

8.9 None of the Parties hereto shall be bound by the confidentiality undertaking set forth in paragraph 8.6 with respect to any Data which are or become in the public domain through no fault of such Party or which were already known by such Party before the Effective Date or which became known to such Party other than by reason of a breach of the undertakings in paragraph 8.6.

8.10 Licensee, its Affiliated Companies, Contractor or SubContractors shall disclose to Government the technology necessary for the evaluation and understanding of any raw data or processed data resulting from Licensee's work in the Contract Area.

ARTICLE 9 Royalty and State Participation.

9.1 In respect of the requirements of Section 46 of the Act, Licensee shall pay to Government the following Royalty on the gross total daily production in barrels of oil per day (bopd) for each Contract Area.

Gross Total Daily Production (BOPD)	**Royalty**
Where the production does not exceed 2,500	5.0%
Where the production is higher than not exceed 5,000	2,5007.5% but does
Where the production is higher than exceed 7,500	5,00010% but does not
Where the production exceeds 7,500	12.5%

9.2. The Royalty stipulated in paragraph 9.1 shall be received by Government on a monthly basis whether in kind or in cash depending on government's preference.

9.3. The bopd calculation shall be done monthly on the basis of monthly production.

9.4 The Government or its Nominee may elect to enter into a Joint Venture Agreement with Licensee thereby allowing for State Participation for no more than twenty percent (20%) and the Government shall inform the Licensee of its decision in writing within 120 days of the receipt of the application for a Production Licence. Government (or it's Nominee) shall be entitled to participate Development Area by

Development Area. The Licensee agrees to carry the costs of the Government or its Nominee through development to production. These costs are recoverable including interest at the London Inter Bank Offer Rate (LIBOR) quoted at or about 11:00 am on the date next to when they were incurred by the Licensee. These costs will be repaid out of sixty (60%) percent of Government's share of cost recovery oil. Government will be responsible for any taxes arising out of its share of the Joint Venture

a. For purposes of this provision the Venture Assets attributable to a Development Area (hereinafter called the "Joint Venture Assets") are:

i. in case of the first Production Licence granted, the Production Licence and any real or personal property wherever the same may be situated, acquired for the purpose of carrying on Joint Operations in the Development Area subject thereto or acquired for the purpose of carrying on Petroleum Operations in the Contract Area where such property was acquired before the grant of the first Production Licence;

ii. in the case of a second or subsequent Production Licence granted, that Production Licence and any real or personal property acquired for the purpose of carrying on Joint Operations in that Development Area or acquired for the purpose of carrying on Petroleum Operations or Joint Operations in the Contract Area where such property was acquired after the date on which a

Production Licence was last granted and before the grant of the second or, as the case maybe the next subsequent Production Licence.

b. Immediately following the grant of each Production Licence, Licensee, or each entity comprising Licensee at that time, will promptly take such action as may be necessary to assign to the nominee of the Government, an undivided proportionate share in the Venture Assets equal to the Nominee of the Government's Participating Percentage Interest with effect that thereafter, Licensee, or each such entity, shall have an interest in the Joint Venture Assets (hereinafter referred to as its "Joint Venture Interest") equal to its Participating Interest in those Assets immediately before the grant of such Production Licence reduced by the product of that interest and the Joint Venture Interest acquired by the Nominee of the Government.

c. "Participation Share of Production" means a proportion of the Petroleum produced and saved from the Contract Area and not used or lost in Joint Operations and such proportion attributable to Licensee and the Nominee of the Government shall be equal to their respective Joint Venture Interests in Joint Venture Assets.

d. Gas Royalties will be negotiated upon the discovery of gas.

ARTICLE 10 Cost Recovery and Production Sharing

10.1 For purposes of Cost Recovery and Production Sharing, ring fencing around each contract Area shall apply. In the event that a Licensee has more than one Contract Area, the calculations shall be done on a contract by contract basis. There shall be no consolidation.

10.2 All exploration, development, production and operating expenditures, as defined in Annex C, incurred by the Licensee shall be recovered from 50% of gross oil production after deduction of the Royalty specified in paragraph 9.1. Cost recovery in respect of gas production will be negotiated upon the discovery of gas.

10.3 After the cost recovery specified in paragraph 10.2 the following Government/Licensee split will apply on the remaining total daily production (profit

oil),

	Production BOPD	Government Production Share	Licensee Production Share
	Where production does not exceed (i)50%50% 5.000		
	Where production is higher than (ii)55%45% but does not exceed	5000 10,000	
	Where production is higher than (iii)60%40% 10,000 but does not exceed 20,000		
(iv)	Where production is higher than 20.000 but does not exceed 30.000	65%	35%
	Where production is higher than (v)75%25% 30.000 but does not exceed 40.000		
(vi)	Where production is higher than 40,000	85%	15%

10.4 The Government/Licensee profit oil split is based on total production and not on incremental production.

10.5 The calculation for the Government/Licensee split shall be based on monthly production.

10.6 The Government shall receive its share of profit oil in kind or in cash depending on its (Government) preference. The valuation shall be in accordance with Article 12.1.1.

10.7 The Licensee shall carry forward to subsequent years all unrecovered costs until full recovery is completed

10.8 Not less than thirty (30) days. prior to the beginning of each Calendar Year, Licensee shall prepare and furnish to the Government for approval, which approval

shall not be unreasonably withheld, an estimate by Quarters for the forthcoming Calendar Year of (i) all Contract Revenues and Contract Expenses to be incurred, (ii) Income Tax of Licensee (or each entity comprising Licensee, as the case may be) in respect of taxable income derived from Petroleum Operations carried out hereunder, for such Calendar Year. Such estimate shall be consistent with the forecast statement furnished pursuant to paragraph 7.8 and the annual Work Programme Budget approved by the Advisory Committee pursuant to Article 5. and shall set forth the other assumptions and projections upon which it is based. Quarterly updates of such estimate shall be submitted by Licensee to the Government for approval (which approval shall not be unreasonably withheld) within thirty (30) days after the end of each Quarter.

ARTICLE 11 Taxation

All central, local district administrative, municipal or other taxes, duties, levies or other lawful impositions applicable to Licensee shall be paid by the Licensee in accordance with the laws of Uganda in a timely fashion.

ARTICLE 12 Valuation and Measurement of Petroleum

12.1 Crude Oil shall, for all purposes of this Agreement, be valued at the end of each Calendar Quarter as follows:

12.1.1 Except as provided in paragraph 12.1.2, the market price ("Market Price") used to value Crude Oil shall, where arm's length sales transactions in freely convertible currencies of Crude Oil to third parties have been made during the preceding month, be the weighted average of the per Barrel net realised price obtained FOB the seaboard terminal point of export for such arm's length third party sales less, in the event that a separate pipeline company is formed pursuant to paragraph 13.2 the average tariff charge per Barrel for such month imposed by the pipeline company for transporting the oil from the Delivery Point to the seaboard terminal point of export.

12.1.2 If less than fifty percent (50%) by volume, of Crude Oil sales from the Contract Area during such month fall under paragraph 12.1.1, the Market Price for such month shall be the simple arithmetical average of the prevailing per Barrel selling prices in such quarter of a basket of the three (3) most similar

internationally traded crude oils listed by the American Petroleum Institute (API) and chosen from the major crude oil producing countries in the Arabian Gulf and Africa, taking into account differences in point of sale, quality, grade, gravity or sulphur content and any special terms and conditions relating to the sale of such crude oils, less, in the event that a separate pipeline company is formed pursuant to paragraph 13.2, the average tariff charge per Barrel for that month imposed by the pipeline company for the transportation of Crude Oil hereunder from the Delivery Point to the FOB seaboard terminal point of export.

12.1.3 For the purposes of determining the Market Price as described above, no account shall be taken of Crude Oil sales to Affiliated Companies or restricted or distress transactions or any transactions not at arm's length including government to government, barter or discount deals.

12.1.4 The Market Price shall be determined at the end of each month in United States Dollars in accordance with paragraph 12.1.

12.2 Any disagreement concerning the determination of Market Price under paragraph 12.1 shall be first considered by a pricing committee composed of two (2) representatives from the Government and two (2) representatives from Licensee. In the event the pricing committee cannot reach a unanimous decision within thirty (30) days of the end of the relevant month, either party may refer the matter for determination by an expert in accordance with paragraph 23.2. During such referral, which shall in no event take longer than thirty (30) days, the Market Price for the preceding month shall apply and adjustments, if any, shall be made in the following month based on the decision of the expert.

12.3 Natural Gas shall be valued in accordance with the provisions of paragraph 16.4.

12.4 Licensee shall install, operate and maintain at the Delivery Point equipment for measuring the volume and quality of the Petroleum produced and save hereunder, including gravity, density, temperature and pressure measuring devices and any other devices that may be required for the purposes of implementing this Agreement. All measurement equipment and devices shall, prior to their installation or usage, be approved by the Government, which approval shall not be

unreasonably withheld or delayed. The Government or its authorised representatives, at its own expense and risk (save where injury or damage results from the Gross Negligence or Willful Misconduct of Licensee), shall have the right to inspect and require Licensee to test in its presence such equipment and devices at all reasonable times. The equipment and devices used or installed pursuant to this paragraph shall not be replaced or altered without the prior approval of the Government, which approval shall not be unreasonably withheld or delayed; provided, however, that in the case of urgency or so as to prevent the interruption of ongoing production, Licensee may proceed with such replacement or alteration without the prior approval of the Government but shall immediately thereafter notify the Government of such replacement or alteration.

12.5 Licensee shall undertake to measure the volume and quality of the Petroleum produced and saved hereunder, consistent with generally accepted practices in the international petroleum industry, with the frequency and according to procedures which shall be approved by the Government, which approval shall not be unreasonably withheld or delayed.

12.6 If it is determined, following an inspection or test carried out or witnessed by the Government or its representatives, that the equipment, devices or procedures used for measurement are inaccurate and exceed the permissible terances, which shall be established by agreement between the Government and Licensee with reference to normal international oil industry standards, and such determination is verified by an independent surveyor of international repute acceptable to both parties, such inaccuracy shall be deemed to have existed for onehalf of the period since the last previous such inspection or test, unless it is proved that such inaccuracy has been in existence for a longer or shorter period. Appropriate adjusting payments or refunds covering such period shall be made within thirty (30) days from the date of such determination.

ARTICLE 13 Pipeline Transportation

13.1 Licensee shall have the right to take and transport to an ocean port of loading for export all Petroleum to which it is entitled hereunder and, in connection therewith, shall have the right to construct, operate and maintain an export

pipeline, pumping stations, storage and related seaboard terminal facilities. The Government shall assist Licensee on matters involving rights of way, licences or other authorisations required under Uganda law in connection with such facilities and shall assist Licensee in its negotiations with neighbouring countries regarding rights of way and other conditions relating to the construction, operation and maintenance of such facilities in such countries.

13.2 It is understood by the Parties hereto that the construction, financing, operation and maintenance of an export pipeline, pumping stations and related seaboard terminal facilities shall be carried on through separate pipeline company ("the Pipeline Company") which shall be responsible for the handling and transportation of Petroleum from the Delivery Point in Uganda to the ocean port of loading. In such event, the operations of the Pipeline Company will not be included within the meaning of Petroleum Operations under this Agreement and any related Licences.

13.3 Any Development Plan submitted to the Minister by Licensee pursuant to Section 20 of the Act shall include Licensee's proposals with regard to the arrangements for the transportation to the terminal of each of the Parties' production entitlements hereunder.

In the event said transportation arrangements involve the formation of a separate Pipeline Company pursuant to paragraph 13.2, such proposals shall, unless otherwise agreed, be consistent with the following principles:

a. each Party shall assume and pay the transportation tariffs charged by the Pipeline Company related to their respective shares of the Petroleum transported, which obligation may, in the case of the Nominee or the Government, be discharged by each of the Nominee and the Government foregoing in favour of the Pipeline Company a portion of their respective production entitlements so transported equal in value to the tariffs due in respect of the transportation of such production entitlements from the Delivery

Point to the FOB seaboard terminal point of export;

b. the transportation tariff charged, to the extent that the Parties hereto are able to determine the same, shall be set at a level at which the Pipeline Company will

cover the costs of constructing, financing, operating and maintaining the export pipeline and related facilities together with a reasonable return thereon; such return will be determined having regard to the risks assumed by shareholders of the Pipeline Company in outlaying the funds for the construction, operation and maintenance of such facilities and the cost of borrowing such funds as are required; and

c. in the case of proposals by Licensee for the initial construction of the export pipeline, such proposals shall ensure that the pipeline and related facilities are of sufficient design capacity to handle and transport to the seaboard terminal the estimated production entitlements of all Parties hereto from the Contract Area. If at any time, the throughput capacity of such facilities should be insufficient to handle and transport the respective production entitlements of such Parties, available capacity shall be shared between the Parties in the proportion which each Party's production entitlement bears to the total quantity of production which would otherwise be available for transportation hereunder.

13.4 The Government or its Nominee shall be fully involved in the determination of the tariff charges for the pipeline.

13.5. Transportation tariff charges of the Pipeline Company, and any costs incurred beyond the Delivery Point shall not be allowable Contract Expenses hereunder.

ARTICLE 14 Marketing and Lifting

14.1 It is understood that Licensee may itself purchase the Nominee's production entitlement made available pursuant to this paragraph in lieu of disposal of same to third parties, in which event the price at which any such purchase by Licensee shall be effected shall be determined pursuant to Article 12. In the event that Licensee elects not to exercise its rights under paragraph 14.2, the Government may, at any time by notice in writing to Licensee, also require Licensee to assist the Government in the sale of all or part of the Government Production Share attributable to Government pursuant to Article 10. The terms and conditions on which Licensee will so assist the Nominee and/or the Government to any such

disposal will be agreed between the Government and/or the Nominee, as the case may be, and Licensee.

14.2 Licensee shall have the right to purchase all or any part of the Government Production Share attributable pursuant to Article 10 upon giving written notice to the Government not less than ninety (90) days prior to the commencement of each six (6) Calendar Months of each Calendar Year, specifying the quantity which it elects to purchase, provided, however,; that such right of purchase shall not apply in respect of all or any part of the Government Production Share which may be required to satisfy the requirements of internal consumption of Uganda or in connection with government to government sales or with barter transactions and provided further that the price at which any such purchase by Licensee shall be effected shall be determined pursuant to Article 12. The Licensee's right to purchase any part of Government's Production Share should not be used in such a manner as to leave Government with only a small volume of production that is unnecessarily difficult and expensive to dispose of.

14.3 Not less than twelve (12) Calendar Months prior to the commencement of Commercial Production from any Development Area, Licensee shall submit to the Government for approval proposed procedures and related operating regulations and financial terms covering the scheduling, storage and lifting of Crude Oil from each such Development Area.

The procedures, regulations and terms shall comprehend the subjects necessary to efficient and equitable operations including, but not limited to: rights of parties, notification time, maximum and minimum quantities, duration of storage, scheduling, conservation, spillage, liabilities of the parties and penalties for overand underlifting, safety and emergency procedures. To the extent that such procedures, regulations and terms are consistent with generally accepted practices in the International Petroleum Industry, the Government may not unreasonably withhold such approval.

ARTICLE 15 Domestic Requirements

15.1 Out of the total quantity of Crude Oil production to which the Licensee is entitled in each Calendar Quarter, the Government may elect to take a quantity of

Crude Oil, of the gravity, grade and quality of its choice, that the Government requires to satisfy the requirements of internal consumption in Uganda for such Calendar Year. The Government shall reimburse the Licensee for such quantity in United States Dollars at the price as calculated pursuant to paragraph 12.1 hereof within thirty (30) days after the end of the Calendar Month in which such delivery takes place, unless otherwise agreed between the parties. The maximum quantity of Crude Oil that the Government may take to satisfy the internal consumption requirements of the country shall be calculated by multiplying the total quantity of Crude Oil produced from the Contract Area during the period under consideration, less consumption of Crude Oil incidental to Petroleum Operations, by a fraction, the numerator of which is the internal consumption requirements of Uganda during the period, and the denominator of which is the volume of Crude Oil produced in Uganda by all Licensees (including Licensee). Any Crude Oil production dedicated to an early production scheme in any such Calendar Year pursuant to paragraph 7.4 shall be deducted from the maximum quantity so determined for such Calendar Year.

15.2 If the Government elects to exercise its rights under paragraph 15.1, it shall notify Licensee in writing not less than ninety (90) days prior to the commencement of each six (6) Calendar months of each Calendar Year specifying the quantity, and designating the grade and quality, that it elects to take in kind based upon the production forecasts and annual and quarterly estimates, famished to the Government pursuant to paragraphs 7.8 and 11.5. Any adjusting payments or refunds shall be made within ninety (90) days of the end of each Calendar Year on the basis of actual quantities.

ARTICLE 16 Natural Gas

16.1 licensee shall have the right to use Associated Gas for Petroleum Operations, including, but not limited to, reinjection for pressure maintenance, power generation and recycling operations.

16.2 Where Nonassociated Gas has been discovered in the Contract Area and Licensee has not pursuant to paragraph 7.2 given in respect of the Discovery a notice to the Minister for (he purpose of paragraph A of the proviso to Section

17(1)(b) of the Act, the Parties shall, unless the provisions of paragraph B of such proviso are otherwise applicable, as soon as possible after completion by Licensee of an appraisal programme, or sooner if so agreed, meet together with a view to reaching an agreement on the development, production, processing and sale of such gas.

16.3 Associated Gas which is not used in Petroleum Operations, and the processing and utilisation of which, in the reasonable opinion of Licensee is not economical, shall be returned to the subsurface structure or may be flared with the consent of the Government In the event that Licensee chooses to process and sell Associated Gas,

Licensee shall notify the Government of the same and upon such notification, the Government and Licensee shall, as soon as practicable thereafter, meet together with a view to reaching an agreement on the processing and sale of such gas. In the event Licensee chooses not to process and sell Associated Gas, the Government may elect to offtake at the outlet flange of the gasoil separator and use such Associated Gas which is not required for Petroleum Operations, in which event. Licensee may flare such gas until such time as the faculties are in place to enable the Government to take delivery (hereof. There shall be no charge to the Government for such Associated Gas, provided that the cost to gather such Associated Gas at the point of being flared and to process and utilize it shall be for the account of the Government.

16.4 The value to be attributed to Natural Gas shall:

16.4.1 For arm's length sales to third parties, be equal to the net realised price obtained for such Natural Gas at the Delivery Point;

16.4.2 For sales other than at aim's length to third parties, be determined by agreement between the Government and Licensee, provided, however, that such price or value shall reflect the following:

i. the quantity and quality of the Natural Gas;
ii. the price at which arms length sales of Natural Gas from other sources in Uganda, if any, are then being made; iii. the price at which arms length sales, if any, of Natural Gas imported into Uganda are being made;

iv. the purpose for which the Natural Gas is to be used; and
v. the international market price of competing or alternative fuels or feedstocks.

16.4.3 Arm's length third party sales shall not include sales to Affiliated Companies of Licensee or to the Government, any Ugandan public authority or any other entity controlled directly or indirectly by the Government.

ARTICLE 17 Purchases in Uganda

17.1 In procurement. Licensee shall give preference to goods which are produced or available in Uganda and services which are rendered by Ugandan citizens and companies, unless such goods and services are offered on terms which are not equal to or better than imported goods and services with regard to quality, price and availability at the time and in the quantities required.

17.2 The Licensee shall establish appropriate procedures, including tender procedures, for the acquisition of goods and services which shall ensure that the suppliers and SubContractors in Uganda are given adequate opportunity to compete for the supply of goods and services. The tender procedures shall include, inter alia. the financial amounts or value of contracts which will be awarded on the basis of selective bidding or open competitive bidding, (the procedure for such bidding, and the exception to bidding in cases of emergency, and shall be subject to the approval of the Advisory Committee.

17.3. Within sixty (60) days after the end of each Calendar Year, the Licensee shall provide the Government with a report outlining its achievements in utilising Uganda during that Calendar Year.

17.4. Goods shall include equipment, materials and supplies.

ARTICLE 18 Training and Employment

18.1 Licensee agrees to train and employ suitably qualified Ugandan citizens in its Petroleum Operations and, following the commencement of Commercial Production, to undertake the schooling and training of Ugandan citizens for staff positions, including administrative and executive management positions. Licensee will also require its Contractors to do the same. Licensee undertakes to gradually replace its expatriate staff with suitably qualified and experienced Ugandan

citizens as are then available but, if the Licensee satisfies the Advisory Committee that no suitably qualified and experienced Ugandan citizens are available who are capable of filling key senior management or technical positions. Licensee shall employ expatriate staff in such positions. An annual programme for training and phasing in of Ugandan citizens shall be established by Licensee and shall be submitted for approval to the Advisory Committee, along with the annual Work Programmes and Budgets referred to in Article 6. Within thirty (30) days of the end of each Calendar Year, Licensee shall submit a written report to the Government describing the number of personnel employed, their nationality, their positions and the status of training programmes for Ugandan citizens.

18.2 Licensee shall also be required to establish an annual programme, satisfactory to the Government, to train personnel of the Government to undertake skilled and technical jobs in Petroleum Operations.

18.3 Licensee shall deposit with government, or its Nominee, upon the delivery of the Bank Guarantee and each anniversary of the Effective Date thereafter, the following amounts for training of Government personnel selected by the Government and other associated costs for each twelve (12) Calendar Months periodFirst Exploration Period US $ 200,000.00 per 12 months. Second Exploration Period US $ 200,000.00 per 12 months. Third Exploration Period US $ 200,000.00 per 12 months. Following commercial production US $ 400,000.00 per 12 months.

18.4 Subject to the provisions of paragraph 18.1, Licensee shall be free to employ foreign nationals to the extent that suitably qualified and experienced Ugandan nationals cannot be found to fill a position.

Upon application in the prescribed manner by Licensee, the Government shall expeditiously provide the necessary work permits and other approvals required for the employment and residence of expatriate personnel and their families in Uganda by Licensee or its Contractors for the purposes of this Agreement.

ARTICLE 19 Title to Assets

19.1 All land shall become the property of the Government as soon as it is acquired by the licensee, subject to its continued use rentfree (save in respect of

surface rentals payable pursuant to Article 26) by Licensee until the date upon which this Agreement is terminated.

19.2 All equipment and other assets, whether fixed or movable, acquired and owned by Licensee for use in the Petroleum Operations hereunder shall become the property of the Government (or the Nominee of the Government), if the Government so desires, free from all mortgages and other encumbrances upon the earlier of the date upon which:

i. such equipment and assets have been fully depreciated for Income Tax purposes, or the costs thereof have otherwise been fully recovered, pursuant to Article 10 hereof; or ii.this Agreement is terminated.

19.3 Licensee shall have unlimited and exclusive use of such equipment and assets where ownership thereof is transferred pursuant to paragraph 19.2(i) and shall not be obligated to make any payment for the use of the same during the term of this Agreement. Licensee, so long as such equipment and assets are used exclusively for Petroleum Operations and are in its custody, shall be liable to keep the same in good repair and working order, normal wear and tear excepted.

19.4 The provisions of this Article shall not apply to assets and equipment used in the Petroleum Operations and owned by third parties, which assets may be freely exported from Uganda.

ARTICLE 20 Foreign Exchange Control

20.1 Licensee shall comply with the procedures and formalities required by the laws and regulations relating to foreign exchange in force from time to time in Uganda.

ARTICLE 21 Assignment

21.1 Licensee (which for the purposes of this Article shall include any person or entity comprising Licensee) may not assign to any person. Affiliated Company, firm or corporation not party hereto, in whole or in part, any of its rights, privileges, duties or obligations under this Agreement without the prior written consent of the Minister. The assignee shall undertake to the Government to be bound by the terms and conditions of this Agreement. Any change of operatorship shall also require the prior written consent of the Minister.

21.2 In the event that Licensee wishes to assign, in whole or in part, any of its rights, privileges, duties or obligations hereunder or proposes a change of operatorship as aforesaid, the written consent thereto of the Minister shall not be unreasonably withheld or delayed.

21.3 Notwithstanding the provisions of paragraph 21.1, if Licensee assigns in whole or in part to any Affiliated Company, Licensee, as assignor and the assignee, shall be fully jointly and severally liable for the performance of all rights, duties and obligations under this Agreement and any related Licences and shall be fully liable for the performance of any such assignee unless the parties otherwise agree.

21.4 In the case of an assignment to a nonAffiliated Company, the assigning party shall provide to the Government an unconditional undertaking by the assignee to assume all obligation of Licensee under this Agreement, including a Bank Guarantee substantially in the form set forth in Annex "D".

21.5 The application for assignment shall be made by the Licensee in accordance with the Act and shall give fall information on the proposed assignee as required in respect of an applicant for an Exploration Licence and such additional information as the Minister may require.

ARTICLE 22 Danger to Persons, Property or Environment

22.1 If any works or installations erected by Licensee or any operations conducted by Licensee endanger or may endanger persons or third party property or cause pollution or harm wildlife or the environment to a degree unacceptable to Government in accordance with international environmental standards and local circumstances, the Licensee shall take appropriate remedial measures approved by Government within a reasonable period and to repair as far as it is reasonably possible any damage to the environment so caused. If, and to the extent necessary for this purpose. Licensee shall discontinue Petroleum Operations in whole or in part until Licensee has taken such remedial measures or has repaired any damage. In the event that Licensee fails to take the appropriate remedial measures within a reasonable time period, the Government may after consultation with Licensee, carry out such remedial measures for Licensee's account.

22.2 Before commencing any works or operations hereunder, or recommencing any works or operations which have been discontinued for more than three (3) Calendar Months, in any part of the Contract Area which includes the area of a National Park or Game Reserve (as so designated under applicable Uganda law), Licensee shall consult with the Government regarding the nature and extent of the work or operations to be conducted in such areas taking into consideration Good Oilfield Practices. In carrying out such works and operations in such areas, Licensee shall give disregard to the importance of minimising the damage and disturbance to the environment and wildlife and, where any damage or disturbance would result, shall take all reasonable steps to limit the extent of the damage or disturbance so caused.

22.3 hi the event of protest from responsible concerned third parties within or outside

Uganda regarding the conduct of Petroleum Operations in any National Park or Game Reserve and the consequent effects upon the environment or wildlife, the Government and Licensee shall meet to determine what if any action should be taken.

22.4 The Licensee shall:

a. conduct the Petroleum Operations in a manner likely to promote the conservation of the natural resources of Uganda and the protection of its environment;
b. employ the most advanced techniques for the prevention of environmental damage which may be caused by Petroleum Operations, and for the minimisation of the effect of Petroleum Operations on adjoining or neighbouring lands; and
c. implement the proposals contained in its Development Plan regarding the prevention of pollution and take any further action as may be necessary for the treatment of wastes, the safeguarding of natural resources and the progressive reclamation and rehabilitation of lands disturbed by petroleum production.

22.5 The Licensee undertakes, for the purposes of this Agreement, to take all necessary and adequate steps

a. to ensure adequate compensation for injury to persons or damage to property caused by the effect of the Petroleum Operations; and

b. to avoid irremediable environmental damage to the Contract Area and adjoining or neighbouring lands.

22.6 If the Licensee fails to comply with the terms of paragraph (b) of Clause 22.5 or contravenes any law on the prevention of environmental damage and such failure or contravention results in any environmental damage, the Licensee shall take all necessary and reasonable measures to remedy such failure or contravention and the effects hereof.

22.7 The measures and methods to be used by the Licensee for purposes of complying with the terms of paragraph (b) of Clause 22.5 shall be determined in timely consultation with the Minister upon the commencement of Petroleum Operations or whenever there is a significant change in the scope or method of carrying out Petroleum Operations, and the Licensee shall take into account the international standards applicable in similar circumstances and the relevant environmental impact study carried out in accordance with Clause 22.8. The Licensee shall notify the Minister in writing of the nature of the measures and methods finally determined by the Licensee and shall cause such measures and methods to be reviewed from time to time in view of prevailing circumstances, provided however, that any consultations or approval given pursuant to this Agreement shall not be deemed to limit the obligations of the Licensee as provided herein or the right of the Minister to take appropriate regulatory or other action where Petroleum Operations pose a material danger to public health and safety or may result in significant irreversible damage to the environment.

22.8 The Licensee shall cause a consulting firm or individuals of international standing to carry out two environmental impact studies (together with the updating of the latter referred to in Clause 22.11), in order

a. to determine the prevailing situation relating to the environment, human beings, wildlife or marine life in the Contract Area and in the adjoining or neighbouring areas at the time of the studies; and

b. to establish what the effect will be on the environment, human beings, wildlife or marine life in the Contract Area in consequence of the Petroleum Operations to be undertaken under this Agreement, and to submit for consideration by the Parties measures and methods contemplated in paragraph 22.7 for minimising environmental damage and carrying out site restoration in the Contract Area.

22.9 The timing of the above studies shall be determined by the Minister.

22.10 Such studies shall be updated and submitted the Minister.

i. with each application for a subsequent Production Licence (such updated study to form part of its Development Plan relating thereto);

ii. with each application for a renewal of the Exploration Licence under Article 3.2, or for relinquishment under Article 3.5; iii. not less than three months prior to the termination of the Exploration Licence; and

iv. on such other occasion as the Minister or the Commissioner or a government environmental protection agency may request in the light of actual or threatened environmental damage resulting from or relating to the Petroleum Operations.

22.11 The studies mentioned in Clause 22.8 shall contain proposed environmental guidelines to be followed in order to avoid irremediable environmental damage and shall include, but not be limited to

a. access cutting;
b. cleaning and timber salvage;
c. wildlife and habitat protection;
d. fuel storage and handling;
e. use of explosives;
f. camps and staging areas;
g. liquid and solid waste disposal;
h. cultural and archaeological sites;

i. selection of drilling sites;
j. terrain stabilisation;
k. protection of freshwater horizons;
l. blowout prevention plan;
m. flaring during completion and testing of gas and oil wells;
n. well abandonment;
o. rig dismantling and site completion;
p. reclamation for abandonment; and
q. noise control.

22.12 In addition to the studies mentioned in paragraph 22.8, the Licensee shall include in each Work Programme and Budget to be submitted annually to the Minister in accordance with Article 6, and in any amendment thereto, an environmental impact statement relating to the work to be undertaken as provided in that document and reporting on work undertaken in accordance with the preceding Work Programme.

22.13 The Licensee shall ensure that:

a. Petroleum Operations are carried out in an environmentally acceptable and safe manner consistent with good international industry practice and applicable laws and that such operations are property monitored;
b. the pertinent completed environmental impact studies are made available to its employees and to its Contractors to develop adequate and proper awareness of the measures and methods of environmental protection to be used in carrying out the Petroleum Operations; and
c. any agreement entered into between the Licensee and its Contractors relating to the Petroleum Operations shall include the terms set out in this Agreement and any established measures and methods for the implementation of the Licensee's obligations in relation to the environment under this Agreement.

22.14 The Licensee shall, before carrying out any drilling, prepare and submit for review by the Minister an oil spill and fire contingency plan

designed to achieve rapid and effective emergency response in the event of an oil spill or fire.

22.15 In the event of

a. an emergency or accident arising from Petroleum Operations affecting the environment, the Licensee shall forthwith notify the Minister accordingly;

b. any fire or oil spill, the Licensee shall promptly implement the relevant contingency plan; and

c. any other emergency or accident arising from the Petroleum Operations affecting the environment, the Licensee shall take such action as may be prudent and necessary in accordance with good international petroleum industry practice in such circumstances.

22.16 If the Licensee fails to comply with any terms contained in this Article within a period determined by the Minister under any such terms, the Minister may, after giving the Licensee reasonable notice, take any action which may be necessary to ensure compliance with such term, and recover, immediately after having taken such action, all expenditure incurred in connection with such action from the Licensee together with such interest as may be determined in accordance with Section 1.4(c) of Annex C to this Agreement.

22.17 The Licensee shall on the expiration or termination of this Agreement or on relinquishment of part of the Contract Area

a. remove all equipment and installation from the Contract Area or relinquished area in a manner agreed with the Minister in terms of an abandonment or decommissioning plan;

b. take all action necessary to prevent hazards to human life or to property of others or the environment; and

c. take all action necessary in accordance with Good Oilfield Practice to reclaim and rehabilitate all lands disturbed by Petroleum development and production.

ARTICLE 23 Arbitration

23.1 Except as otherwise provided in paragraph 23.2, any dispute, controversy or claim arising out of or relating to this Agreement shall be settled by arbitration by submission to the International Centre for Settlement of Investment Disputes ("the

Centre") pursuant to the convention on the Settlement of Investment Disputes between States and Nationals or other States and the arbitration rules promulgated thereunder. Pursuant to said convention and arbitration rules, the Parties hereby consent to arbitration thereunder. For the purposes of Article 23(1) of said Convention, the Parties agree that any dispute, controversy or claim arising out of or relating to this Agreement is a legal dispute arising directly out of an investment. The arbitration award may take the form of an order to pay a sum of money, or an order to perform an act, or an order to refrain from an act, or any combination of such orders. The place of arbitration shall be London, England. Arbitrators who are nationals of Uganda or of any of the countries from which any of the entities comprising Licensee originate may not be appointed to the arbitration panel. The award rendered shall be final and conclusive. Judgement on the award rendered may be entered in any court having jurisdiction or application may be made in such court for a judicial acceptance of the award and an order of enforcement, as the case may be. As far as practicable, the Parties shall continue to implement this Agreement during the pendency of any dispute.

23.2 If for any reason the requestor arbitration proceedings is not registered by the Centre, or if the Centre fails or refuses to take jurisdiction over a dispute submitted to it pursuant to the passions of paragraph 23.1, such dispute shall be finally settled by arbitration under the Rules of Arbitration of the United Nations Centre for International Trade Law by three (3) arbitrators appointed in accordance with the said Rules, the said arbitration shall take place in London, England. Judgement on the award rendered may be entered in any court having jurisdiction or application may be made in such court for a judicial acceptance of the award and an order of enforcement, as the case may be. The Arbitration award shall be final and binding on the Parties to this Agreement.

23.3 Any matter in dispute between the Government and Licensee arising under paragraphs 5.4, 7.6, 9.3(2), 12.2 and 32.2 may, at the election of either of such parties by written notice to the other, be referred for determination by a sole expert to be appointed by agreement between the Government and Licensee.

If the Government and Licensee fail to appoint the expert within sixty (60) days after receipt of such written notice, either of such parties may have such expert appointed by the then President of the Institute of Petroleum (London). If the aforesaid President shall be disqualified to act by reason of professional, personal or social interest or contract with the parties in dispute or their Affiliated Companies, the next highest officer for the time being of said Institute of Petroleum, who is not disqualified shall act in lieu of said President. No person shall be appointed to act as an expert under this section:

i. unless he shall be qualified by education, experience and training to determine the subject matter in dispute; or
ii. if at the time of his appointment or at any time before he makes his determination under such an appointment, he has or may have some interest of duty which conflicts or may conflict with his function under such appointment.

The expert shall render his decision within (60) days after the date of this appointment, unless the Parties otherwise agree. In rendering his decision, the expert shall do so within the context of the provisions of this Agreement, the Act and the standards of Good Oilfield Practices. The decision of the expert shall be final and binding on both Licensee and the Government. The expert's fees and expenses, and the costs associated within appointment, if any, made by the President of the Institute of Petroleum (or the next highest officer thereof), shall be allocated to the Parties in dispute in such manner as the expert may determine.

ARTICLE 24 Insurance and Indemnification

24.1 To ensure that Licensee, its Contractors and SubContractors shall meet their obligations to third parties, or to the Government, that might arise in the event of damage, loss or injury (including environmental damage or injury, removal of wrecks and cleaning up caused by accidents) caused by Petroleum Operations, Licensee shall maintain in force an insurance policy through an international insurance company of good financial standing covering the activities of itself, its Contractors and SubContractors and the employees of all such parties. Such

insurance policy shall waive subrogation against the Government, and shall provide that it may not be cancelled except upon thirty (30) days' prior written notice to the Government. A certificate giving evidence of such insurance policy shall be furnished to the Government within ninety (90) days of the Effective Date. The limits, coverage, deductibles and other terms shall be consistent with accepted practices in the international petroleum industry. the event that no response is received by Licensee from the Governing within fifteen (15) days of the submission by Licensee of such insurance terms to the Government for approval, such approval shall be deemed granted. To the extent that such third party liability insurance is unavailable or is not opined, or does not cover part or all of any claims for damage, loss or injury caused by or resulting from Petroleum Operations, Licensee shall remain fully responsible and shall defend, indemnify and hold the Government harmless against all such claims by the Government arising from any such damage, loss or injury.

24.2 Licensee shall indemnify, defend and hold the Government harmless against all third party claims for damage, loss or injury, including, without limitation, claims for loss or damage to property or injury or death to persons, caused by or resulting from any Petroleum Operations conducted by or on behalf of Licensee.

ARTICLE 25 Force Majeure

Except as otherwise provided in this Article, each party shall be excused from complying with the terms of this Agreement, except for the payment of monies due, for so long as such compliance is prevented or delayed by strikes, wars (declared or undeclared), hostilities, blockade, embargo, unavailability or rationing of supplies, materials and/or equipment imposed by law, decree, regulation and/or instruction at the insistence or request of any Government authority, insurrection, civil disorder, terrorist acts, sabotage, quarantine restrictions, epidemics, accidents, riots, labour disturbance, any act or failure to act of a Governmental agency or local body, acts of God, perils of navigation, storm, flood, earthquake, lightning and other exceptional adverse weather condition, explosion, fire or by any act or cause that is reasonably beyond the control of such party, such causes, whether similar or dissimilar to the events listed above, being herein called "Force

Majeure". In the event that either party hereto is rendered unable, wholly or in part, by any of these causes to carry out its obligations under this agreement, such party shall give notice and details of Force Majeure in writing to other party within seven (7) days after its occurrence. In such cases, the obligations of the party giving the notice shall be suspended during the continuance of any inability so caused. Such party shall do all reasonably within its power to remove such cause. If through Force Majeure, the fulfilment by the parties of any of the obligations under this Agreement shall be delayed, the period of such delay, shall be added to the time allowed under this Agreement for the fulfilment of such obligations or the exercise of any right dependent thereon, provided however, where an event of Force Majeure is likely to exceed thirty (30) days, or where the total period of the Force Majeure event exceeds ninety (90) days in any Calendar Year, the Parties shall meet to discuss the consequences of the Force Majeure and the course of action to be taken to mitigate the effects thereof and to be adopted in the circumstances, and in such event, the additional period for fulfilment of obligations and the extension of the term of the Exploration Licence, or the Petroleum Production Licence, as the case may be, shall be agreed between the Parties.

ARTICLE 26 Annual Surface Rentals

26.1 Licensee shall pay an annual charge in respect of surface rentals for the area subject to an Exploration Licence or any Production Licence granted hereunder as follows:

a. annual surface rental for the area which remains subject to an Exploration Licence:
   i. First Exploration Period:
      US$2.50 per square kilometre or part thereof;
   i. Second Exploration Period:
      US$5.00 per square kilometre part thereof,
   i. Third Exploration Period:
      US$7.50 per square kilometre or part thereof.
b. Annual surface rental in respect of a Development Area subject to a

Production Licence: US$500.00 per square kilometre or part thereof.

26.2 Annual surface rentals payable pursuant to this Article shall be paid to the Government in advance and without demand commencing with the date on which the Licence or any renewal thereof is granted and thereafter on each anniversary of such date during the term of said Licence. No rebates of surface rentals shall be made by the Government in respect of any area that ceases to be subject to a Licence midyear.

26.3 Annual surface rentals do not replace other charges that may be levied for entry in parts of the Licence Area arising out of specialised land use such as national parks or nature reserves.

ARTICLE 27 Termination

27.1 This Agreement shall be deemed to have been terminated if the Exploration Licence granted to Licensee pursuant to Article 3 and any Production Licence granted to Licensee under Article 7 have either expired, or have under and in accordance with the Act, or any relevant provision of this Agreement, been surrendered by the Licensee or been lawfully cancelled or terminated by the Government, but save as aforesaid shall continue in fall force and effect so long as Licensee continues to hold, or has a pending application for, any of the said Licences.

27.2 The Government shall have the right to terminate this Agreement and any Exploration Licence and Production Licences granted hereunder, upon giving thirty (30) days written notice of its intention to do so, if Licensee:

27.2.1 fails to make any monetary payment required by law or under this Agreement for a period of thirty (30) days after the due date for such payment unless Licensee is contesting the obligation to make such payment and has commenced arbitration proceedings in respect thereof pursuant to paragraph 25.1 in which case the period of thirty (30) days after notice shall be counted from the date of issuance of an arbitration award requiring Licensee to pay the amount in dispute;

27.2.2 has otherwise committed a material breach of the terms and conditions of this Agreement or any Licence granted pursuant to Articles 3 and 7;

27.2.3 fails to comply with the Act or any lawful acts. Regulations, orders or instruction? issued by the Government or the terms of this Agreement; or

27.2.4 becomes bankrupt, or goes into liquidation because of insolvency or makes a composition with its creditors;

27.3 If the circumstances that would result in termination under paragraph 27.2.1 and 27.22 are remedied by Licensee within the thirty (30) day period following the notice of termination as aforesaid, such termination shall not become effective.

27.4 If the circumstance or circumstances that would result in termination under paragraph 27.2.3 and 27.2.4 are remedied by Licensee within the sixty (60) day period following the notice of termination as aforesaid or where the breach cannot be remedied within a sixty (60) day period. Licensee has commenced the works or steps necessary to remedy such breach during such period and is diligently continuing such works thereafter, or, where it is otherwise impossible to remedy such breach, adequate compensation has been offered to and accepted by the Government in respect thereof within such sixty (60) day period, such termination shall not become effective.

27.5 If the circumstance or circumstances that would otherwise result in termination under paragraph 27.2.3 or 27.2.4 are the result of Force Majeure, then termination shall not take place so long as such Force Majeure continues and for such period thereafter as provided in Article 25.

27.6 Where two or more persons constitute Licensee, this Agreement may not be terminated:

27.6.1 pursuant to paragraphs 27.2.1,27.2.2 or 27.2,3 above where, in respect of a liability which is a several liability, one or some only of the persons constituting Licensee is in breach of the provisions hereof or has so failed in compliance provided that the Petroleum Operations continue in accordance with the provisions of this agreement; or

27.6.2 pursuant to paragraph 27.2.4 above, where the bankruptcy, liquidation or composition relates to one or some only of the persons constituting Licensee provided that the Petroleum Operations continue in accordance with the provisions of this Agreement.

27.7 In any case felling under paragraph 27.6 above, the Government, subject to paragraphs 27.3,27.4 and 27.5 may, upon giving thirty (30) days written notice of its intention to do so, terminate the Participating or Joint Venture Interest herein, and in any related Licences, of the person or persons in breach, or which have failed in compliance, or, as the case may be, have become bankrupt, gone into liquidation or made a composition as aforesaid ("the Defaulting Party") but nothing in this paragraph shall affect the rights and obligations of any other person who constitutes Licensee which shall remain in fall force and effect.

In such event, the Defaulting Party shall forthwith assign, unconditionally and without consideration, to the other persons constituting Licensee and, in respect of any Licence in which the Nominee of the government has a Joint Venture Interest, to (he Nominee of the Government its entire Participating or Joint Venture Interest under this Agreement and any related Licences.

Such assignment will be made in undivided proportionate shares corresponding to the undivided proportionate shares in which such other persons and, in respect of any Licence in which the Nominee has a Joint Venture Interest, the Nominee hold Participating or Joint Venture Interests in the subsisting Licences.

27.8 On termination of this Agreement and any related Licences or of an interest therein, the rights thereunder of Licensee or the Defaulting Party, as the case may be, shall cease but the termination shall not affect any liability incurred before the termination, and any legal proceedings that might have been commenced or continued against Licensee or such Defaulting Party may be commenced or continued against him.

ARTICLE 28 Accounting and Audits

28.1 Licensee shall be responsible for maintaining complete accounts, books and records reflecting all revenues, costs and expenses associated with Petroleum Operations under this Agreement in accordance with the Accounting Procedure set out in Annex "C* of this Agreement and accepted international petroleum industry accounting standards and procedures. The said accounting records shall be kept in Uganda in US Dollars and in Uganda Shillings.

28.2 Within ninety (90) days after the expiration of each Calendar Year, Licensee shall submit to the Government detailed accounts showing all Contract Expenses and Contract Revenues during the past Calendar Year. Before submission to the Government, the accounts shall be audited and certified by an independent chartered accountant or certified public accountant of international standing acceptable to both parties, at the expense of Licensee. It is understood that the Government retains the authority to review and audit Licensee's books, at Licensee's expense, and records, with respect to Petroleum Operations conducted hereunder, either directly or through an independent accountant of international standing designated by the Government. Subject to the provisions of the Accounting procedure set forth in Annex "C", such audit right will terminate twentyfour (24) Calendar Months after the closure of the subject year's accounts or such longer period as may be required in exceptional circumstances. Any exceptions to Licensee's accounts must be officially communicated to Licensee within thirty (30) Calendar Months of the closure of the subject year's accounts.

28.3 "Nothing in this Article shall be construed as limiting the right of Government or any Officer of Government pursuant to any statutory power to audit or cause to be audited the books of any Company.

ARTICLE 29 Notices

All notices and other communications required or permitted hereunder or any notices that one Party may desire to give to the other Party shall be in writing in the English language and deemed to have been properly delivered if personally handed to an authorised representative of the Party for whom intended or sent by registered airmail or by cable, telex, or telefax, except as otherwise provided herein, at or to the address of such Party for whom intended as indicated below, or such other addresses as any Party may from time to time designate by notice in writing to the other Party:

a. Government:

Ministry of Energy and Mineral Development
P. 0 Box 7270 Kampala UGANDA
Attention: Commissioner for Petroleum Exploration and Production

Telephone No.25641320714 Telefax No. 25641320437

a. Licensee:

_____
_____
_____
_____
_____

ARTICLE 30 Applicable Law

This agreement shall be governed by, interpreted and construed in accordance with the laws of Uganda.

ARTICLE 31 Entire Agreement and Amendments

This Agreement embodies the entire agreement and understanding between Licensee and the Government relative to the subject matter hereof and supersedes and replaces any provisions on the same subject in any other agreement between the Parties, whether written or oral, prior to the date of this agreement. This Agreement may not be amended, modified, varied or supplemented except by an instrument in writing signed by Licensee and the Government.

ARTICLE 32 Waiver

32.1 The performance of any condition or obligation to be performed under this Agreement shall not be deemed to have been waived or postponed, except by an instrument in writing signed by the Party which is claimed to have granted such waiver or postponement.

32.2 No delay, inaction, omission or other failure of either Party to act upon or enforce any right, or to seek redress from the other Party of any breach or alleged breach of any obligation, shall be deemed a waiver of such rights or acceptability of such breach.

32.3 No waiver by any Party of any one or more obligations or defaults by any other Party in the performance of this Agreement shall operate or be construed as a waiver of any other obligations or defies whether of a like or a different character,

ARTICLE 33 Confidentiality

33.1 This Agreement and any confidential information of any Party hereto which becomes known to the other Party in connection with the performance of this Agreement shall not be published or disclosed to third parties without the former Party's written consent, except as otherwise provided herein, and provided however that such other Party may communicate confidential information to legal counsel, accountants, other professional consultants, underwriters, lenders, agents, licensees or shipping companies to the extent necessary in connection with this Agreement, with the obligation of the parties receiving such information to maintain confidentiality, or to an agency of the government of the country of Licensee having authority to require such disclosure.

33.2 The terms "confidential information" as used herein shall mean information identified as "confidential" by the Party originally in possession of it and disclosed to the other Party, excluding information previously known to the other Party or information which is publicly known except through disclosure of the other Party in violation of this Article) or information that comes into the possession of such other Party other than through a breach of this confidentiality undertaking.

33.3 Except as otherwise provided in Article 8, the confidentiality obligations of this Article shall expire upon relinquishment of the area to which the information relates.

ARTICLE 34 Disclaimer

34.1 Any reviews, provision of data or requests for information, data or otherwise from the Licensee by the Government or approvals by the Government or its Nominee under this Agreement is solely for the information of the Government and its satisfaction that the requirements of the Government as set forth herein have been satisfied by the Licensee. By making such reviews, requests or approvals, the Government makes no representation and the Licensee shall in no way so represent to third parties that such reviews, requests, approvals or otherwise are proof of the economic and technical viability of the Petroleum Operations to be undertaken by the Licensee.

34.2 The Government shall not be liable to the Licensee for and the Licensee shall defend and indemnify the Government from any claim, cost, loss, damage or liability arising out of any contrary representation by the Licensee.

34.3 The Licensee is solely responsible for the economic and technical feasibility, reliability or in case of discovery, realisation of the viability of the petroleum production and production activities.

IN WITNESS HEREOF, the Parties hereto have caused this Agreement to be executed by their respective duty authorised representatives as of the day and year first above written.

Signed for and on behalf of The Government of Uganda

By:_____

Minister for Energy and Mineral Development

In the presence of _____

Signed for and on behalf of Licensee

By;_____

Managing Director

In the presence of_____

ANNEX A Description of Contract Area [_____]

Contract Area [_____] comprises some [_____] square kilometres, is of polygonal shape and is bounded along its outer margin by a continuous line which runs through the following geographical points and coordinates:

ANNEX B1 Form of Exploration Licence

I,_____, Minister of Energy and Mineral Development, pursuant to the powers conferred upon me by Section 8 of the Petroleum (Exploration and Production) Act 1985 ("the Act") hereby grant to[_____] a company duly organised and existing under the laws of _____, ("Licensee") this Exploration Licence to conduct Exploration Operations within and with respect to the Contract Area described in the Production Sharing Agreement entered into by and between the Government of the Republic of Uganda and Licensee, dated ___, 200_ ("the

Agreement"), hereby conferring upon Licensee the exclusive right to explore for petroleum in the said Contract Area and to carry on such operations and execute such works as necessary for that purpose for a term of [_____] years from the Effective Date hereof [subject to renewal] in accordance with the provisions of the Act and the terms and conditions of said Agreement, which forms an integral part of this Licence.

IN WITNESS WHEREOF, I have granted the licence aforesaid with effect from _____ 200 and set out my hand and seal this ___ day of _____ 200 __.

Minister of Energy and Mineral Development.

Attachments:

- Description of Exploration Area(s)
- Map of Exploration Area(s)

ANNEX BII

Form of Production Licence

I, _____, Minister of Energy and Minerals, pursuant to the powers conferred upon me by Section 21 of The Petroleum (Exploration and Production) Act 1985 ("the Act") hereby grant to _____, a corporation duty organised and existing under the laws of _____, ("Licensee") this Petroleum production licence to conduct Development Operations within and with respect to the Discovery Area(s) described and shown on the map in the attachment to this licence hereby conferring upon Licensee the exclusive right to develop said areas and produce petroleum therefrom, and to carry on such operations and execute such works as are necessary for that purpose for a term of [_____] (____) years from the effective date hereof in accordance with the provisions of the Act, the Development Plan adopted in connection therewith and the terms and conditions of the Production Sharing Agreement entered into by and between the Government of the Republic of Uganda and Licensee, dated _____, 200 which form an integral part of this Licence. The subsequent execution of a Joint Operating Agreement by Licensee and [the Nominee of the Government] in relation to the

Discovery Area(s) subject hereto in accordance with the terms of said Production Sharing Agreement, is a requirement of this Licence.

IN WITNESS WHEREOF, I have granted the licence aforesaid with effect from _____, 200__ and set out my hand and seal this ___ day of_____ 200 .

Minister of Energy and Minerals Attachments:

- Description of Discovery Area(s)
- Map of Discovery Area(s)

ANNEX C Accounting and Financial Procedure

SECTION 1 General Provisions

1.1 Definitions

For the purposes of this Accounting and Financial Procedure the terms used herein which are defined in the Agreement shall have the same meaning when used in this Accounting and Financial Procedure.

1.2 Statements required to be submitted by Licensee

a. Within ninety (90) days of the Effective Date, Licensee shall submit to and discuss with the Government a proposed outline of charts of accounts, operating records and reports, which outline shall be in accordance with generally accepted and recognised accounting systems and consistent with normal practice of the international petroleum industry and the requirements of this Agreement. Within ninety (90) days of receiving the above submission, the Government shall either indicate its approval of the proposal or may request revisions to the proposal to the extent that such outline is not in accordance with generally accepted and recognised accounting systems and consistent with the normal practices of the international petroleum industry and the requirements of this Agreement. In the event that revisions are so requested by the Government, Licensee and the Government shall within one hundred and eighty (180) days after the Effective Date of the Agreement agree on the outline charts of accounts, operating records and reports which shall describe the basis of the accounting system and procedures to be developed and used under the Agreement. Following such agreement. Licensee shall expeditiously prepare and provide the Government with formal

copies of the comprehensive charts of accounts related to the accounting, recording and reporting functions and allow the Government to examine Licensee's manuals and to review procedures which are, and shall be, observed under the Agreement.

b. All reports, books, accounts and records of Licensee will be prepared and maintained in accordance with this Agreement and, where there are no relevant provisions in the Agreement, in accordance with normal practices in the international petroleum industry and generally accepted and recognised accounting standards.

c. All accounts, books, records and reports of Licensee required hereunder shall be maintained at Licensee's business office in the Republic of Uganda and will be available for the inspection and use of the Government and its representatives in carrying out its supervisory function under this Agreement.

d. The licensee shall report to Government on a monthly basis, all expenditures, production, prices, sales, receipts, cost recovery and production sharing related to Petroleum Operations in the Licence area.

1.3 Language and Units of Account

a. Accounts shall be maintained in Uganda Shillings and in United States Dollars; however, the United States Dollar accounts will prevail in case of conflict. Metric units and Barrels shall be employed for measurements required under this Annex. The language employed shall be English, Where necessary for clarification. Licensee may also maintain accounts and records in other languages, units of measurement and currencies.

b. It is the intent of this accounting and Financial Procedure that neither the Government nor Licensee should experience an exchange gain or loss at the expense of or to the benefit of, the other. However, any gain or Joss resulting from the exchange of currency, will be credited or charged to the accounts.

i. Amounts received and costs and expenditures made in Uganda Shillings, United States Dollars or any other currency shall be converted into Uganda Shillings or United States Dollars, as the case may be, on the basis of the average of the buying and selling exchange rates between the currencies in question as published by Bank of Uganda, prevailing on the last Business

Day of the Calendar Month preceding the Calendar Month in which such amounts are received and costs and expenditures are paid.

ii. In the event of an increase or decrease, one time or accumulative, often percent (10%) or more in the rates of exchange between the Uganda Shilling, the United States Dollar or the currency in question, during any given Calendar Month, the following rates will be used:

1. For the period from the first of the Calendar Month to the day when such increase or decrease is first reached, the average of the official buying and selling exchange rates between the United States Dollar, Uganda Shilling or the currency in question as issued, on the last day of the previous Calendar Month.
2. For the period from the day on which such increase or decrease is first reached to the end of the Calendar Month, the average of the official buying and selling exchange rates between the United States Dollar, the Uganda Shilling or the currency in question as issued on the day on which such increase or decrease is reached.

3. A record of the exchange rates used in converting Uganda Shillings, Unitedstates Dollars or any other currency hereunder shall be maintained by Licensee.

1.4 Payments

a. AH payments between the Parties shall, unless otherwise agreed, be in United States Dollars and through a bank designated by each receiving party. Payments between the Parties may be effected by way of setoff between mutual and undisputed liabilities as and when such liabilities accrue.

b. Discharge of Licensee's obligation with respect to Income Tax, the Nominee of the Government's Participation Share of Production and the Government's Production Share shall be made in accordance with the Agreement.

c. All sums due by one party to the other under the Agreement during any Calendar Month shall, for each day such sums are overdue during such month, bear interest compounded daily at an annual rate equal to the average London Interbank Offered Rate for six (6) months as quoted at 11.00 a.m. London time

on the first business day of such month by the London Office of Citibank N.A plus five (5) percentage points.

1.5 Audit and Inspection Rights of Government

a. The Government shall have the right, upon fifteen (15) days' prior written notice to Licensee, to audit directly or through an independent accountant, at its own cost. Licensees' accounts and records maintained in relation to the Petroleum Operations carried out hereunder with respect to each Calendar

Year within twenty four (24) Calendar Months after the closure of the subject year's accounts. Notice of any exception to Licensee's accounts of any Calendar Year must be notified to Licensee within thirty (30) Calendar Months of the closure of the subject year's accounts.

For purposes of auditing, the Government may examine and verify at reasonable times all charges and credits relating to the Petroleum Operations such as books of account, accounting entries, material records and inventories, vouchers, payrolls, invoices and any other documents, correspondence and records necessary to audit and verify the charges and credits. Furthermore, the auditors shall have the right in connection with such audit to visit and inspect at reasonable times all sites, plants, facilities, warehouses and offices of Licensee directly or indirectly serving the Petroleum Operations including visiting personnel associated with those operations.

If the Government desires verification of charges representing a proportionate share in the cost of Licensee's activities other than those carried out hereunder, it may require such verification to the extent Licensee is able to present the required information without infringing the confidential or proprietary nature of such information, hi the event that such infringement would occur, the Government may require Licensee (at Licensee's expense) to obtain an audit certificate from an independent external auditor of international standing (selected by Licensee and acceptable to the Government) verifying such charge(s). If Government desires verification of charges from Affiliates of Licensee, Licensee shall, upon the Government's request and at Licensee's expense, obtain an audit certificate to such

effect from the statutory auditors of the Affiliate concerned attesting that such rates do not include a profit element and have been consistently and reasonably applied.

b. The Government shall make every reasonable effort to conduct audits in a manner which will result in the minimum of inconvenience to Licensee. Licensee shall make every reasonable effort to cooperate with the Government and its statutory auditors or the independent auditors, as the case may be, will provide reasonable facilities and assistance. Subject to the provisions of paragraph 1.5(c) hereunder, only one audit may be carried out by the Government in respect of the accounts for any single Calendar Year.

c. Any Government audit shall be completed within (6) Calendar Months of its commencement. At the conclusion of each audit, the Government and Licensee shall endeavour to settle outstanding matters and a written report will be circulated to all parties within three (3) Calendar Months of the conclusion of each audit. The report shall include all claims arising from such audit together with comments pertinent to the operation of the accounts and records. Licensee shall reply to the report in writing as soon as possible and in any event not later than three (3) Calendar Months following receipt of the report. Should the Government consider that the report or reply requires further investigation of any items therein, the Government shall have the right to conduct further investigations in relation to such item notwithstanding that the said period of twentyfour (24) Months may have expired.

Such further investigation shall be commenced within thirty (30) days and be concluded within sixty (60) days of the receipt of such reply and the report related to such further investigation shall be circulated within ninety (90) days of the conclusion of such father investigation. All adjustments resulting from an audit, as agreed between Licensee and the Government, shall be made promptly by Licensee and be reported to the Government Any unresolved dispute arising in connection with an audit shall be referred to the Advisory Committee and if not resolved thereby shall be referred for expert determination pursuant to paragraph 23.3 of the Agreement.

d. Without prejudice to the finality of matters as described in subsection 1.5(a), all documents referred to in that subsection shall be maintained by the Licensee and made available for inspection by Government for five (5) Calendar Years Showing their date of issue.

e. All information obtained by the Government pursuant to the provisions of this paragraph 1.5 shall be subject to the confidentiality requirements specified in paragraphs 33.1 and 33.2 of this Agreement.

1.6 Accrual Basis

All books, accounts and records shall be prepared on an accrual basis. Contract Revenues shall be attributed to the accounting period in which they are earned, and costs and expenses to the accounting period in which they are incurred, without the need to distinguish whether cash is received or disbursed in connection with a particular transaction. Costs and expenses shall be deemed to have been incurred, in the case of physical items, in the accounting period when Licensee acquires title thereto, and in the case of services, in the accounting period when such services are performed.

1.7 Arms Length Transactions

Except as may be otherwise agreed in writing between the Government and Licensee or as may be provided in Article 12 of the Agreement, all transactions giving rise to revenues, costs or expenses under this Agreement which will be credited or charged to the books, accounts, records and reports prepared, maintained or submitted hereunder shall be conducted at arm's length or on such a basis as will assure that all such revenues, costs or expenses will not be materially higher or lower, as the case may be, than would result from a transaction conducted at arms length on a competitive basis with third parties.

1.8 Allocation of Shared Costs

To the extent that costs and expenses are incurred by Licensee in respect of activities which would only in part qualify as Contract Expenses hereunder, such costs and expenses shall be allocated to the books, accounts, records and reports maintained hereunder in such a manner as to avoid any duplication of cost, to fairly and equitably reflect the costs attributable to Petroleum Operations carried

out hereunder and to exclude any costs and expenses which should otherwise be allocated to those activities which would not constitute Petroleum Operations hereunder.

It is understood, however, that any Exploration or Development and Production Expenditures associated with a unit development involving a Discovery Area which extends into a neighbouring country shall be allocated on the basis of the petroleum reserves attributable to that portion of the Discovery Area located in each country.

SECTION 2 Classification, Definition and Allocation of Costs and Expenditures

Contract Expenses incurred in connection with Petroleum Operations carried out hereunder shall be classified, deemed and allocated as follows:

2.1 Exploration Expenditures are all necessary, appropriate and economical direct and allocated indirect costs incurred in the search for Petroleum and the appraisal of Discoveries in the Contract Area, including:

a. aerial, geophysical, geochemical, palaeontological, geological, topographical and seismic surveys and studies and their interpretation;

b. core hole drilling and water well drilling;

c. labour, materials and services used in drilling wells with the object of finding new Petroleum Reservoirs or for the purpose of appraising the extent of or subsequently producing Petroleum Reservoirs already discovered provided such wells are dry or are otherwise not completed as producing wells;

d. facilities used solely in support of these purposes including access roads and purchased geological and geophysical information;

e. a portion of all Service Costs (as hereinafter defined) allocated to Exploration Operations on an equitable basis and consistently applied;

f. a portion of all General and Administrative Expenses (as hereinafter defined) allocated to Exploration Operations based on projected budget expenditures subject to adjustment on the basis of actual expenditure at the end of the Calendar year concerned; and

g. any other Contract Expenses incurred prior to the commencement of Commercial Production in a Development Area and not otherwise covered by paragraph 2.2 below subject to paragraph 4.2.

2.2 Development and Production Expenditures shall consist of all necessary, appropriate and economical expenditures (other than those referred to in paragraph 2.3) incurred in Development Operations in relation to a Development Area including:

a. drilling wells which are completed as producing wells and drilling wells for purposes of producing a Petroleum Reservoir already discovered provided such wells are completed as producing wells;

b. completing those wells described in paragraph 2.1 (c) by way of installation of casing or equipment or otherwise after a well has been drilled for the purpose of bringing the well into use as a producing well;

c. the costs of field facilities including field gathering systems, field production and treatment units, wellhead equipment, subsurface equipment. Natural Gas separation facilities, enhanced recovery systems, offshore platforms. Petroleum storage facilities in the field and related facilities, and field access roads for production activities;

d. the costs of transportation facilities installed up to the Delivery Point, including but not limited to pipelines, compressors, and storage facilities;

e. engineering and design studies for field facilities;

f. a portion of all Service Costs allocated to the Development Operations on an equitable basis and consistently applied;

g. a portion of all General and Administrative Expenses allocated to the Development Operations based on projected budget expenditures which will be adjusted to actual expenditures at Calendar Year end; and

h. any other expenditure incurred in Development Operations prior to the commencement of Commercial Production in a Development Area, other than those incurred in respect of operations carried out beyond the Delivery Point.

2.3 Operating Expenses are all necessary, appropriate and economical expenditures incurred in the Petroleum Operations hereunder after the start of the

Commercial Production (but including intangible drilling costs such as, but not limited to, labour, consumable material and services having no salvage value which are incurred in the drilling operations related to the drilling or deepening of producing wells whether incurred before or after the start of Commercial Production) which are other than Exploration Expenditures, Development and Production Expenditures and general administrative expenses and service costs otherwise allocated to Exploration Expenditures or Development and Production Expenditures pursuant to subparagraphs 2.1(e) and (f) and 2.2(f) and (g) above; Operating Expenses shall not, however, include tariff charges, if any, imposed by the Pipeline Company associated with the transportation of Petroleum from the Delivery Point to the seaboard terminal point of export.

2.4 Service Costs are all necessary, appropriate and economical direct and indirect expenditures in support of the Petroleum Operations including, but not limited to, warehouse, piers, marine vessels, vehicles, motorised rolling equipment, aircraft, fire and security stations, workshops, water and sewage plants, power plants, housing, community and recreational facilities and furniture, tools and equipment used in these activities. Service Costs in any Calendar Year shall include the total costs incurred in such year to purchase and/or construct said facilities as well as annual costs to maintain and operate the same. All Service Costs will be regularly allocated as specified in subparagraphs 2.1(e), 2.2(f) and 2.3 to Exploration Expenditures, Development and Production Expenditures and Operating Expenses.

2.5 General and Administrative Expenses

a. All main office, field office and associated general and administrative costs incurred in relation to Petroleum Operations, including, but not limited to, supervisory, accounting and employee relations services carried out by Licensee in Uganda.

b.

i. Licensee's Affiliated Companies' personnel and services costs (other than those otherwise provided for in paragraph 4.1(e)(ii) of this Annex) incurred in connection with the Petroleum Operations carried out hereunder, and

ii. Reasonable travel expenses of such Affiliated Companies* personnel in the general and administrative category listed in subparagraph (i) above in connection with the Petroleum Operations carried out

c. All General and Administrative Expenses shall be necessary, appropriate and economical and will be regularly allocated as specified in subsection 2.1(f), 2.2(g) and 23 to Exploration Expenditures, Development and Production Expenditures and Operating Expenses.

SECTION 3 Income Tax and Allowable Contract Expenditures

3.1 Tax Accounting Principles

The following tax accounting principles shall apply:

3.1.1 Taxable Parties

Income Tax shall be assessed on the basis of the Taxable Income of all corporations, individuals, partners, joint ventures, associates or other entities comprising Licensee from Petroleum Operations hereunder in accordance with the laws of Uganda.

3.1.2 Consolidation Principles

Income Tax in each Tax Year shall be assessed on the basis of the Aggregate Contract Revenues derived from, and allowable Contract Expenditures incurred in, the Petroleum Operations carried out hereunder.

3.1.3 Carry Forward of Losses

Commencing in the Tax Year in which initial Commercial Production commences, any deductions for Income Tax purposes in respect of allowable Contract Expenditures which remain unrecovered in any Tax Year from Contract Revenues shall be treated as an operating loss and may be carried forward as an allowable deduction to subsequent Tax Years until fully recovered from Contract Revenues.

3.2 Classification of Expenditures for Income Tax Purposes

Contract Expenses shall be classified as follows for Income Tax purposes:

3.2.1 Petroleum Capital Expenditures

Petroleum capital Expenditures are those Contract Expenses which fall within the category of Development and Production Expenditures as described in paragraph 2.2 of this Annex "C".

3.2.2 Petroleum Operating Expenditures

Petroleum Operating Expenditures are those Contract Expenses that fall within the categories of Exploration Expenditure and Operating Expenses as described in paragraphs 2.1 and 2.3 of this Annex "C".

3.3 Capital Allowances

Petroleum Capital Expenditures, as defined in paragraph 3.2.1 of this Annex "C", shall be depreciated for Income Tax purposes. In determining the amount of depreciation that is allowable as a deduction in any Tax Year, the following principles shall apply:

3.3.1 Petroleum Capital Expenditures will be depreciated using the straight line method over six (6) years, save in respect of those expenditures referred to in subparagraph 2.2(d) of this Annex "C" which will be depreciated on a "unit of production" basis. The "unit of production" depreciation charge in each Tax Year shall be determined by dividing the total expenditure referred to in subparagraph 2.2(d) which remains unrecovered at the beginning of each such year by the then recoverable reserves (in barrels of oil or barrels of oil equivalent) in the Contract Area and multiplying the resulting figure by the total number of barrels of oil produced in the Tax Year in question.

3.3.2 Deductions with respect to the depreciation of Petroleum Capital Expenditures shall be allowable commencing with (a) the Tax Year in which the capital asset is placed into service or if the Capital Expenditure does not relate to an asset which normally has a useful life beyond the year in which it is placed in service, the Tax Year in which the capital expenditure is incurred or (b) the Tax Year in which Commercial Production commences from the Contract Area, whichever is later.

3.4 Definition of Allowable Contract Expenditures

For each Tax year, commencing with the Tax Year in which Commercial Production commences from the Contract Area, Allowable Contract Expenditures which shall be deductible for the purpose of the calculation of Income Tax payable by Licensee shall consist of the sum of:

3.4.1 the current Tax Year's Petroleum Operating Expenditures as determined pursuant to paragraph 3.2.2 of this Annex "C"; plus

3.4.2 the current Tax Year's allowable deductions for depreciation of Petroleum Capital Expenditures as determined pursuant to paragraph 3.3 of this Annex "C" plus

3.4.3 an amount with respect to any operating loss from prior Tax Years, determined in accordance with paragraph 3.1.3 of this Annex "C".

SECTION 4 Costs, Expenses, Expenditures and Credits of the Licensee

4.1 Costs Recoverable Without Further Approval of the Government

Subject to the provisions of the Agreement, Licensee shall bear and pay the following costs and expenses in respect of the Petroleum Operations. These costs and expenses will be classified under the headings referred to in paragraph 2 of this Annex. They are recoverable Contract Expenses by Licensee under the Agreement.

(a) Surface Rights

This covers all direct costs attributable to the acquisition, renewal or relinquishment of surface rights acquired and maintained in force for the Contract Area.

(b) Labour and Associated Labour Costs

i. gross salaries and wages including bonuses and cost of living, housing and drifter customary allowance afforded to expatriate employees in similar operations elsewhere of Licensee's employees directly engaged in the Petroleum Operations, irrespective of the location of such employees;
ii. Licensee's costs regarding sickness and disability payments applicable to the salaries and wages chargeable under subparagraph (i) above;
iii. expenses or contributions made pursuant to assessments or obligations imposed under the laws of the Republic of Uganda which are applicable to Licensee's cost of salaries and wages chargeable under (i) above;
iv. Licensee's cost of established plans for employees' life insurance, hospitalisation, pensions, stock purchase and thrift plans and other benefits of a like nature customarily granted to Licensee's employees;

v. reasonable travel and personnel expenses of employees of Licensee and their families including those made for travel and relocation of the expatriate employees assigned to the Republic of Uganda, all of which shall be in accordance with Licensee's normal practice, provided such is consistent with generally accepted practices in the international petroleum industry; and

vi. any personal income taxes of the Republic of Uganda incurred by employees of Licensee and paid or reimbursed by Licensee.

(c) Offices, Camps, Warehouses and other facilities

The cost of establishing, maintaining and operating any offices, camps, warehouses, workshops, housing, water systems and other facilities for the purpose of carrying out the Petroleum Operations. The costs of those facilities, which are not used for the exclusive purpose of carrying out the Petroleum Operations, shall be apportioned on a consistent and equitable bias between the Petroleum Operations and the Licensee's other operations and those of its Affiliates.

(d) Transportation

The cost of transportation of employees, equipment, materials and supplies necessary for the conduct of the Petroleum Operations.

(e) Charges for Services

i. **Third Party Costs**

The actual costs of contracts for technical and other services entered into by Licensee the Petroleum Operations, made with third parties other than Affiliated Companies of Licensee are recoverable, provided that the prices paid by Licensee are in line with those generally charged by other international or domestic suppliers for comparable work and services.

ii. **Affiliated Companies of Licensee**

Without prejudice to the charges to be made in accordance with paragraph 2.5 of this Annex, in the case of specific services rendered to the Petroleum Operations under contract with, and invoiced to. Licensee by an Affiliated Company of Licensee, the allowable charges will be based on actual costs without profits, will

be no higher than the most favourable prices charged by the Affiliated Company to third parties for comparable services under similar terms and conditions elsewhere, will be included in any budget submitted to the Advisory Committee pursuant to Article 5 of the Agreement and will not exceed the charges billed to any Joint Operations in respect of such services pursuant to any Joint Operating Agreement relating to the Petroleum Operations carried out hereunder. The Licensee will, if requested by Government, specify the amount of such charges which represents an allocated proportion of the general material, management, technical and other costs of the Affiliated Company, and the amount which is the direct cost of providing the services concerned. If necessary (but subject to the provision of paragraph 1.5(a) of this Annex), certified evidence regarding the basis of prices charged may be obtained from the auditors of the Affiliated Company.

(f) Material

i. **General**

So far as is practicable and consistent with efficient and economical operation, only such material shall be purchased or furnished by Licensee for use in the Petroleum Operations as may be required for use in the reasonably foreseeable future and the accumulation of surplus stocks will be avoided.

ii. **Warranty of Material**

Licensee does not warrant material beyond the supplier's or manufacturer's guarantee and, in case of defective material or equipment, any adjustment received by Licensee from the suppliers/manufacturers or their agents will be credited to the accounts under the Agreement.

iii. **Value of Material Charged to the Accounts Under the Agreement**

a. Except as otherwise provided in subparagraph (b) below, material purchased by Licensee for use in the Petroleum Operations shall be valued to include the invoice price less trade and cash discounts (if any), purchase and procurement fees plus freight and forwarding charges between point of supply and point of shipment, loading and unloading fees, dock charges, forwarding and documentation fees, packing costs, freight to port of destination, insurance, taxes, customs duties, consular fees, other items chargeable against imported

material and where practicable handling and transportation expenses from point of importation to warehouse or operating site, and its costs should not exceed those currently prevailing in normal arms length transactions on the open market.

b. Materials purchased from Affiliated Companies of Licensee shall be charged at prices not higher than the following:

1. New Material (Condition "A") shall be valued at the current international price which should not exceed the price prevailing in normal arms length transactions on the open market.
2. Used Material (Conditions "B" and "C")
    i. Material which is in sound and serviceable condition and is suitable for reuse for its original function without reconditioning shall be classified as Condition "B" and priced at seventyfive percent (75%) of the current price of new material defined in subparagraph (1) above.
    ii. Material which cannot be classified as Condition "B" but which after repair and reconditioning will be further serviceable for original function as good used material (Condition "B") shall be classified as Condition "C" and priced at fifty percent (50%) of the current price of new material as defined in subparagraph (1) above.
    iii. Material which cannot be classified as Condition "B" or condition "C" shall be priced at a value commensurate with its use.
    iv. Material involving erection costs shall be charged at the applicable condition percentage of the current knockeddown price of new material as defined in subparagraph (1).
    v. When the use of material is temporary and its service to the Petroleum Operations does not justify the reduction in price as provided for in subparagraph (2)(ii) hereof, such material shall be priced on a basis that will result in a net charge to the accounts under the Agreement consistent with the value of the service rendered. vi. Stocks and consumables costs shall be charged to the accounts pursuant to the "Average Cost" method.

(g) Rentals, taxes, duties, and Other Assessments

All rentals, levies, charges, fees, compensation or other charges in respect of rights of way, contributions and any other assessment and charges levied by the Government or any Government or foreign public authority in connection with the Petroleum Operations, and paid directly or indirectly by Licensee, other than Income Tax imposed on Licensee (except as provided in Article 11 of the Agreement) and the Government Production Share attributable pursuant to Article 11 of the Agreement.

(h) Insurance and Losses

Insurance premia and costs incurred for insurance, provided that if such insurance is wholly or partly placed with an Affiliated Company of Licensee, such premia and costs shall be recoverable only to the extent generally charged by competitive insurance companies other than an Affiliated Company of Licensee. Costs and losses incurred as a consequence of events which are, and in so far as, not made good by insurance obtained under the Agreement are recoverable under the Agreement unless such costs have resulted solely from an act of wilful misconduct or negligence of Licensee.

(i) Legal Expenses

All costs and expenses of litigation and legal or related services necessary or expedient for the producing, perfecting, retention and protection of the Contract Area, and in defending or prosecuting lawsuits involving the Area or any third party claim arising out of activities under the Agreement, or sums paid in respect of legal services necessary or expedient for the protection of the interest of Licensee are recoverable. Where legal services are rendered in such matters by salaried or regularly retained lawyers of Licensee or an Affiliated Company of Licensee, such compensation will be included instead under subparagraph 4.1(b) or 4.1(d) above, as applicable.

(j) Training Costs.

Except where otherwise provided herein, all costs and expenses incurred by Licensee in training of its Ugandan employees engaged in the Petroleum Operations and such other training as required under Article 18 of the Agreement.

(k) General and Administrative Expenses

The costs described in subparagraph 2.5(a) and the charge described in subsection 2.5(b).

(1) Interest and other financial charges incurred on loans raised by Licensee to finance Development Operations provided that such interest rates and charges do not exceed prevailing commercial rates and only to the extent that such interest and financial charges relate to debt raised by Licensee to finance such operations (including loans from both Affiliates and NonAffiliates) do not exceed fifty per cent (50%) of the total financing requirement. All loans from Affiliated Companies shall be subject to review and approval of the Government, which approval shall be given provided that the terms of such loans are comparable to those which could be obtained on an arms length basis from a nonAffiliated Company lender.

(m) Commissions paid to intermediaries by Licensee unless such commissions exceed the levels usually paid in the international oil industry under similar conditions in which event the approval of the Government shall be required, which approval shall not be unreasonably withheld.

(n) Expenditure on research into and development of new equipment, material and techniques for use in searching for development and producing Petroleum directly related to the conduct of Petroleum Operations carried out under this Agreement.

(o) Ecological and environmental charges: Costs for all measures taken to avoid waste and prevent damage or pollution in the conduct of the Petroleum Operations.

(p) Leasing expense Costs incurred in connection with the leasing of property and equipment provided that such costs do not exceed prevailing commercial rates and that any such leasing arrangements are concluded with parties which are not Affiliated Companies of Licensee.

(q) Communication charges: Costs of acquiring, leasing, operating and maintaining communication systems including, but not limited to, radio, telephone, email, telecopier and telex systems.

4.2 Costs not Recoverable under the Agreement

a. Costs incurred before the Effective Date.
b. Petroleum marketing or transportation tariff charges incurred beyond the Delivery Point.
c. The costs associated with the provision of the Bank Guarantee pursuant to paragraph 4.7 of the Agreement and any payments made thereunder in respect

of failure by Licensee to comply with its contractual obligations under the Agreement (and any other amounts spent on indemnities with regard to fulfilment of contractual obligations by Licensee).

d. Legal and other costs of arbitration and the independent expert in respect of any dispute referred for determination pursuant to Article 23 of the Agreement.
e. Income Tax imposed on Licensee in accordance with the laws of Uganda.
f. The Government Production Share determined pursuant to Article 10 of the Agreement.
g. Fines and penalties imposed by Courts of Law of the Republic of Uganda.
h. Costs incurred as a result of Wilful Misconduct or Gross Negligence of Licensee; and
i. Interest incurred on loans raised by Licensee to finance Exploration Operations.

4.3 Other Costs and Expenses

Other costs and expenses not covered or dealt with in the provisions of this paragraph and which are incurred by Licensee for the necessary and proper conduct of Petroleum Operations are recoverable.

4.4 Credits Under the Agreement

The net proceeds of the following transactions will be credited to the accounts under the Agreement:

a. The net proceeds of any insurance or claim in connection with the Petroleum Operations or any assets charged to the accounts under the Agreement when such operations or assets were insured and the premia charged to the accounts under the Agreement.
b. Revenue received from outside for the use of property or assets charged to the accounts under the Agreement.
c. Any adjustment received by Licensee from the suppliers/manufacturers or their agents in connection with a defective material the cost of which was previously charged by Licensee to the accounts under the Agreement.
d. Rebates, refunds or other credits received by Licensee which apply to any charge which has been made to the accounts under the Agreement, but excluding any awards granted to Licensee, under the arbitration or independent expert proceedings referred to in Subsection 4.2(d) above.

e. The actual net proceeds of sale realised from the disposal on an arms length basis of inventory materials under the Agreement and subsequently exported from the Republic of Uganda without being usedin inventory materials that are disposed of other than on an be valued as used material and the value so determined shall be credited to the Accounts.

4.5 Duplication of Charges and Credits

Notwithstanding any provision to the contrary in this Accounting and Financial Procedure, it is the intention that there shall be no duplication of charges or credits in the accounts under the Agreement.

SECTION 5 Records and Valuation of Assets

Licensee shall maintain detailed records of property and assets in use for the Petroleum Operations in accordance with the normal practice in exploration and production activities in the international petroleum industry. At reasonable intervals but at least once a year with respect to movable assets and once every five (5) years with respect to immovable assets, inventories of the property under the Agreement shall be taken by Licensee. Licensee shall give Government at least thirty (30) days written notice of its intention to take such inventory and Government shall have the right to be represented when such inventory is taken. Licensee will clearly state the principles upon which valuation of the inventory has been based. When an assignment of rights under the Agreement takes place, a special inventory may be taken by Licensee at the request of the Assignee provided that the costs of such inventory are borne by the Assignee and not charged to Contract Expenses hereunder.

SECTION 6 Revision of Accounting and Financial Procedures and Conflicts

6.1 The provisions of this Accounting and Financial Procedure may be amended by Agreement between Licensee and the Government. The amendments shall be made in writing and shall state the date upon which the amendments shall become effective.

6.2 In the event of any conflict between the provisions of this Accounting and Financial Procedure and the Agreement the provisions of the Agreement shall prevail.

ANNEX D

Bank Guarantee (Date)

Ministry of Energy and Mineral Development PO Box 7270 Kampala Republic of Uganda

Gentlemen:

RE: OUR IRREVOCABLE LETTER OF GUARANTEE NO.

In compliance with the request of ____ ("Licensee"), we, (Name of bank), issue this unconditional irrevocable letter of guarantee in favour of the Government of the Republic of Uganda ("the Government") for a sum not exceeding _____United

Dollars (US$_____), as set forth in paragraph 4.7 of the Production Sharing Agreement ("Agreement"), dated _____, 200__, by and between Licensee and the government, relating to Petroleum exploration, development and production in Uganda, to guarantee Licensee's faithful performance of its minimum exploration expenditure obligations as provided for in the Agreement. The said sum of _____ United States Dollars (US$_____) will be released in favour of Licensee on presentation to the bank of a certificate from the Government that the obligation of the Licensee has been fulfilled.

The terms and conditions of this Letter of Guarantee are as follows:

1. The said amount, or any part thereof, shall be paid to you upon our receipt of your written statement that the claimed sum is duly payable under the Agreement.
2. We hereby waive diligence, presentment, demand for payment, protest, any requirement that the Government exhaust any right or power or take any action against Licensee, all notices (whether of nonpayment by Licensee, dishonour, protest or otherwise) and all demands whatsoever. Our obligations hereunder are continuing, absolute and unconditional, and will not be in any way affected by giving of time or any forbearance by the Government, the waiver or consent by the Government with respect to any provision of the Agreement, and irrespective of the validity, regularity, enforceability or value of the Agreement, or by any other circumstances which might otherwise constitute a legal or equitable discharge or defence of a surety or guarantor, all of which are hereby expressly waived.

3. Our obligations hereunder shall be paid in United States Dollars to the bank account designated by you, free and clear of and without reduction by reason of any and all present and future taxes, levies, imposts, deductions, assessments, charges or withholdings whatsoever levied, assessed, imposed or collected with respect thereto by the government of_____ or any political subdivision or taxation authority thereof or therein. We shall bear - and pay any and all fees and expenses in relation to or in connection with this Letter of Guarantee.
4. In order to give effect to this letter of Guarantee, we hereby declare that the Government shall be at liberty to act as though we are the principal debtor, and we hereby waive all and any of the right as surety which may at any time be inconsistent with any of the above provisions.
5. Any claim or demand under this Letter of Guarantee shall be presented to us on or before the expiration of the date of the validity of this Letter of Guarantee.
6. This Letter of Guarantee shall be effective immediately and expire on _____, 200_, [being the date ninety (90) days after the end of the Initial Exploration Period as defined in the Agreement], and thereafter automatically without any formality become null and void for all its effects and this Letter of Guarantee shall be returned to us immediately.

   Yours very truly,

   (Name of Bank)

Appendix 3. Uganda Model 2016

[MODEL]

PRODUCTION SHARING AGREEMENT

FOR

[PETROLEUM EXPLORATION, DEVELOPMENT AND PRODUCTION] or [PETROLEUM DEVELOPMENT AND PRODUCTION]

IN THE

REPUBLIC OF UGANDA

BY AND BETWEEN

THE GOVERNMENT OF THE REPUBLIC OF UGANDA

AND

COMPANY X
COMPANY Y
COMPANY Z

CONTRACT AREA Y
DAY……..MONTH……YEAR…….

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THIS AGREEMENT is made and entered into this _____day of _____,20____ by and between the Government of the Republic of Uganda, acting through the Ministry of Energy and Mineral Development, of P.O Box 7270 Kampala, Uganda (hereinafter referred to as "Government") and

[X], a company duly organized and existing under the laws of [●], having its registered office at [●] and of P.O. Box [●] (hereinafter referred to as ("X") and herein represented by its duly appointed and authorised representative [●]; and
[Y], a company duly organized and existing under the laws of [●] and of P.O. Box [●] in [●] registered under the Companies Act, 2012 hereinafter referred to as ("Y") and herein represented by its duly appointed and authorised representative [●]; and
[Z], a company duly organized and existing under the laws of [●] and of P.O. Box [●] in [●] registered under the Companies Act, 2012 hereinafter referred to as ("Z") and herein represented by its duly appointed and authorised representative [●] (hereafter collectively referred to as the “Licensee”),
The Government and the Licensee shall individually be referred to as a "Party" and collectively as the "Parties".
WHEREAS, Petroleum in or under any land or water in Uganda is the property of the Republic of Uganda;

WHEREAS, the Petroleum (Exploration, Development and Production) Act, 2013 makes provision with respect to exploration, development and production of petroleum and authorises the Minister responsible for Petroleum Activities to grant Petroleum Exploration and Petroleum Production Licences to any person or entity, subject to such conditions as the Minister may determine;

WHEREAS, Section 6 of the Act authorises the Government to enter into an agreement relating to Petroleum Activities consistent with the Act, with any person;

WHEREAS, the Licensee has duly applied for a [Petroleum Exploration Licence under Section 56 (1)] a [Petroleum Production Licence under Section 69 (4)], *[Delete as appropriate]*, over the area described herein, and shown on the map in Annex A hereof and the Minister, in accordance with [Section 58 of the Act] [Section 75 of the Act] *[Delete as appropriate]*, shall therefore, following the signing of this Agreement, grant the said Licence to Licensee; and

WHEREAS, the Licensee, having represented that it has and can obtain required resources to undertake Petroleum Activities in the

Contract Area and has to this end the necessary financial capacity, technical competence, appropriate experience, and professional skills to carry out such activities on terms and conditions set out under this Agreement and the Licence, all subject to the laws of Uganda;

NOW, THEREFORE, the Parties hereto agree as follows:

ARTICLE 1

Definitions

1.1.1 In this Agreement, unless the context otherwise requires:

1.1.2 Act" means the Petroleum (Exploration, Development and Production) Act, 2013 as amended and in effect from time to time.

1.1.3 "Affiliated Company" means any entity directly or indirectly controlling, or controlled by, or under direct or indirect common control with a specified entity. For the purposes of this definition, "Control", when used with respect to any specified entity, means the power to direct, administer and dictate policies of such entity (it being understood and agreed that it is not necessary to own directly or

indirectly fifty percent (50%) or more of such entity's voting securities to have control over such entity, but ownership, direct or indirect, of fifty percent (50%) or more of such entity's voting securities shall automatically indicate control), the power to appoint, or prevent the appointment of half, or more than half, of the directors of the body corporate or the power to exercise, or control the exercise of, the right to cast votes in respect of not less than two fifths of the total number of votes in respect of issued equity shares in the body corporate; and the terms "controlling" and "controlled" have meanings corresponding to the foregoing.

1.1.4 "Agreement" means this instrument and the annexes attached hereto, including any extensions, renewals or amendments thereof agreed to in writing by the Parties.

1.1.5 "Appraisal Programme" means a programme carried out following one or more Discovery(ies) of Petroleum for the purpose of delineating the Petroleum Reservoir(s) to which that Discovery or these Discoveries relate(s) in terms of thickness and lateral extent and determining the characteristics thereof and estimating the quantity of recoverable Petroleum therein.

1.1.6 "Appraisal Well" means any Well drilled as part of an Appraisal Programme.

1.1.7 "Associated Natural Gas" means Natural Gas which is extracted from a Petroleum Reservoir in association with Crude Oil, and includes solution gas or gas cap gas, and recovered as gas at the surface by separation or other primary processing.

1.1.8 “Available Natural Gas” means Natural Gas produced and saved in the Contract Area, minus Royalty on Natural Gas as provided for in Article **9**.

1.1.9 “Available Petroleum” means Available Crude Oil or Available Natural Gas or both.

1.1.10 “Available Crude Oil” means Crude Oil produced and saved in the Contract Area, minus Royalty on Crude Oil as provided for in Article **9**.

1.1.11 "Barrel" means a quantity consisting of fortytwo (42) United States gallons, liquid measure, corrected to a temperature of fifteen point six degrees (15.6°) Celcius and under one (1) atmosphere pressure.

1.1.12 "Calendar Month" means any of the twelve (12) months of a Calendar Year.

1.1.13 “Calendar Quarter" means a period of three (3) consecutive Calendar Months commencing with first day of January, April, July or October of each Calendar Year.

1.1.14 “Calendar Year" means a period of twelve (12) Calendar Months according to the Gregorian Calendar, starting with January 1st and ending with December 31st.

1.1.15 "Commercial Production" means Production of Petroleum and delivery of the same at the Delivery Point under a programme of regular Production and sale.

1.1.16 "Contract Area" means (a) on the Effective Date, the area described in Annex A and shown on the map in Annex A; and (b) thereafter, the whole or any part of such area which, at any particular time, remains subject to Petroleum Exploration Licence and/or subject to a Petroleum Production Licence or Licences.

1.1.17 “Contract Expenses” means Exploration Expenditures, Development Expenditures and Operating Expenses incurred by the Licensee in conducting Petroleum Activities hereunder determined in accordance with the Accounting and Financial Procedure as set forth in Annex "B".

1.1.18 "Contract Revenues" means the sum of all proceeds of sales of Petroleum and monetary equivalent to the value of other dispositions of Licensee's Cost Petroleum entitlement, Profit Petroleum entitlement, credits and any other proceeds from Petroleum Activities hereunder.

1.1.19 “Contractor” means any person, company or entity contracted by or on behalf of the Licensee for the purpose of carrying out Petroleum Activities.

1.1.20 “Cost Gas” means, the portion of the total value of Available Natural Gas from the Contract Area which the Licensee is entitled to take in a particular period, for the recovery of Contract Expenses as set out in Article **11**.

1.1.21 “Cost Oil” means, the portion of the total value of Available Crude Oil from the Contract Area which the Licensee is entitled to take in a particular period, for the recovery of Contract Expenses as set out in Article **11**.

1.1.22 “Cost Petroleum” means Cost Oil or Cost Gas or both.

1.1.23 “Cost Recovery” has the meaning ascribed to it in Article 11.

1.1.24 “Crude Oil” means any naturally occurring liquid consisting of a mixture of hydrocarbons and other organic compounds found beneath the earth’s surface and includes liquids obtained from Natural Gas by condensation or extraction.
1.1.25 “Delivery Point” means the point at which petroleum passes through the intake valve of the pipeline, vessel, vehicle or craft at a terminal or refinery, in Uganda.
1.1.26 "Development Expenditures" means those expenditures as so categorised in the Accounting and Financial Procedure in Annex "B".
1.1.27 "Development” means the planning, placement, construction and installation of Facilities needed for Production of Petroleum but does not include operations beyond the Delivery Point.
1.1.28 "Effective Date" means the date on which this Agreement is signed by all Parties hereto.
1.1.29 "Exploration Expenditures" means those expenditures incurred in carrying out Exploration as so categorised in the Accounting and Financial Procedure described in Annex "B"
1.1.30 "Exploration Period" means the duration of a Petroleum Exploration Licence as set forth in section 61 of the Act and further detailed in Article 3 of this Agreement.
1.1.31 "Exploration Well" means a Well, other than an Appraisal Well, drilled in the course of Exploration activities conducted hereunder.
1.1.32 "Government” has the meaning as set forth in the preamble.
1.1.33 "Government’s Share of Profit Petroleum" has the meaning ascribed to it in Article **12**.
1.1.34 "Joint Activities" means Petroleum Activities pursuant to this Agreement carried out under a Joint Venture Agreement.
1.1.35 "Joint Venture Agreement" means an agreement, not inconsistent herewith, between Licensee and the Nominee of the Government to be negotiated and executed pursuant to paragraph 10.1

1.1.36 "Joint Operating Agreement" means the contract between the parties constituting the Licensee, and its appendices and amendments, relating to the joint conduct of Petroleum Activities within the Contract Area.
1.1.37 "Joint Venture Assets" has the meaning ascribed to it in paragraph 10.2 .a.
1.1.38 "Joint Venture Interest" has the meaning ascribed to it in paragraph 10.2 .b.
1.1.39 “LIBOR” means the London InterBank Offer Rate for sixmonth maturates of USD as quoted by the International Swaps and Derivative Association or such other bank being an ICE LIBOR contributor panel bank as the Parties may agree.
1.1.40 “Licensee” has the meaning set forth in the preamble and shall be construed to include the permitted successors and assignees under Article 22 hereof.
1.1.41 "Market Price" has the meaning ascribed to it in Article 14.
1.1.42 "Nominee" means a body corporate established by or under a law in force in the Republic of Uganda wholly owned or controlled by the Government pursuant to Article 10 of this Agreement, designated for the purpose of holding any State Participation interest under this Agreement pursuant to the procedure set forth in Article 10, and includes any approved assignee of such body corporate provided such assignee satisfies the requirements of Article 10 of this Agreement and applicable law.
1.1.43 "NonAssociated Natural Gas" means Natural Gas other than Associated Natural Gas.
1.1.44 "Operating Expenses" means those expenses as so categorised in the Accounting and Financial Procedure described in Annex "B".
1.1.45 “Operating Committee” means the Committee established in the Joint Operating Agreement pursuant to Article 2.
1.1.46 "Participating Interest" means, in relation to any Licence an undivided and unencumbered interest in rights and obligations under the Licence.
1.1.47 "Party", or "Parties" has the meaning set forth in the preamble.
1.1.48 “Petroleum Activity” means planning, preparation, installation or execution of activities related to Petroleum including Reconnaissance, Exploration, Development, Production, Transportation of Petroleum, storage, and cessation of activities or decommissioning of Facilities, not beyond the Delivery Point;

1.1.49 "Petroleum Exploration Licence" means the Petroleum Exploration Licence granted in accordance with section 58 of the Act.
1.1.50 “Petroleum Produced and Saved” means gross Petroleum produced minus impurities such as water or solids produced along with Petroleum, Petroleum recycled to the Petroleum Reservoir, Petroleum used in Petroleum Activities or flared or otherwise unavoidably lost under the provisions of this Agreement.
1.1.51 "Petroleum Production Licence" means a Petroleum Production licence granted in accordance with Section 75 of the Act.
1.1.52 “Pipeline Company” means the company referred to in Article **15**.
1.1.53 “Profit Petroleum” has the meaning ascribed to it in Article 12.
1.1.54 “Royalty” has the meaning ascribed to it in Article 9.
1.1.55 “Seaboard Terminal” means a terminal at any seaport agreed to by the parties at which Crude Oil is lifted into the tankers for export.
1.1.56 “Signature Bonus” means a single, nonrecoverable lump sum payment by the Licensee to Government upon the granting of a Petroleum Exploration Licence or Petroleum Production Licence.
1.1.57 “Subcontractor” means any person, company or entity contracted by or on behalf of a Contractor for the purpose of carrying out Petroleum Activities.
1.1.58 “State Participation” means the involvement of the Government or its Nominee in Petroleum Activities in accordance with section 124 (1) of the Act and Article 10 of this Agreement.
1.1.59 “USD” means “United States Dollars”
1.1.60 "Venture Assets" means the property whether movable, immovable, tangible or intangible real or personal owned or acquired by Licensee in connection with Petroleum Activities hereunder and includes the Petroleum Exploration Licence and any Petroleum Production Licences granted hereunder.
1.1.61 "Work Programme and Budget" means an itemised statement of Petroleum Activities to be carried out pursuant to this Agreement and a detailed breakdown of the Contract Expenses associated therewith, including both capital and operating budgets, all in a form acceptable to the Government.
1.1.62 For the avoidance of doubt, unless the context otherwise requires, any term that is not defined in this Agreement but is defined in the Act shall have the same meaning as in the Act.

ARTICLE 2

Participating Interests

2.1 Subject to Article **10** of this Agreement, the initial Participating Interest of the Parties comprising the Licensee shall be as follows:

[X Company]_____ : [%]

[Y Company]_____ : [%]

[Z Company]_____ : [%]

2.2 The Licensee shall enter into and submit a duly executed Joint Operating Agreement acceptable to the Government, between the Parties comprising the Licensee within thirty (30) days of its execution date and in any case not later than ten (10) days from the Effective Date or such longer period as may be agreed to by the Government. The said Joint Operating Agreement shall be consistent with the provisions of this Agreement, the Act and Regulations and shall provide for, among other things:

(a) the appointment, resignation, removal and responsibilities of the Operator;

(b) the establishment of an Operating Committee comprising of an agreed number of representatives of Parties comprising the Licensee and chaired by the Operator;

(c) functions of the said Operating Committee taking into account the provisions of this Agreement, conditions and procedures for decision making, frequency and place of meetings;

(d) contribution to costs, default, sole risk, withdrawal, disposal of Petroleum, the joint venture accounting procedures and assignment as between the parties to the Joint Operating Agreement; and

(e) the rights and obligations of the parties comprising the Licensee.

2.3 Notwithstanding the provisions of this Article 2, where more than one party comprise the Licensee, liability for the parties shall be joint and several.

ARTICLE 3

Responsibilities and Grant of Rights

3.1. Contemporaneously herewith, the Licensee is granted, under and in accordance with the Act and Regulations, a [Petroleum Exploration Licence under Section 58 of the Act] [Petroleum Production Licence under section 75 of the Act] *[Delete as appropriate]* in respect of the Contract Area in the form set forth in the Regulations.

[The Petroleum Exploration Licence shall have a term of ……. years ("First Exploration Period"), counted from the Effective Date subject to renewal in accordance with the Act, Regulations and this Agreement. A maximum of two successive renewals of said Petroleum Exploration Licence not exceeding two (2) years each ("Second Exploration Period" and "Third Exploration Period") shall, subject to the requirements of the Act and Regulations, be granted to Licensee upon application by Licensee to the Government in the prescribed manner.][1390]

[The Petroleum Production Licence shall have a term of … years, counted from the Effective Date subject to renewal in accordance with the Act, Regulations and this Agreement. A maximum of two successive renewals of said Petroleum Production Licence not exceeding five (5) years each shall, subject to the requirements of the Act and Regulations, be granted to Licensee upon application by Licensee to the Government in the prescribed manner.][1391]

3.2 Notwithstanding the provisions of the preceding paragraph and without prejudice to Sections 62 and 63 of the Act, in the event that on the ninetieth day before the date on which a Petroleum Exploration Licence is due to expire, the Licensee is in the process of completing acquisition of seismic or drilling operations under this Agreement, or the processing or interpretation of data resulting therefrom, and provided that the said operations are being

[1390] This text applies to an Petroleum Exploration Licence
[1391] This text applies for a direct application for a Petroleum Production Licence

conducted diligently and started in good time and in accordance with Best Petroleum Industry Practices , the Licensee may apply for the renewal of any Petroleum Exploration Licence pursuant to paragraph 3.1 before but in no case later than fifteen (15) days prior to the date of expiry of the then current period of validity of said Licence.

3.3 Licensee shall, subject to the Act and Regulations and the terms and conditions herein set forth, have the exclusive right to conduct Exploration Activities within the Contract Area for the term of the Petroleum Exploration Licence and /or Development and Production Activities in respect of any Production Licence granted to it in accordance with all applicable legislation and provisions of this Agreement.

3.4 The Government reserves the right to grant licences to other legal persons to prospect for, explore for and mine minerals other than Petroleum within the Contract Area, and further reserves the right to prospect, explore and mine directly. The Licensee shall use its best efforts to avoid obstruction or interference with such Licensee's or Government operations and similarly the Government shall use its best efforts to ensure that its own operations or those of third parties do no obstruct or interfere with Licensee's Petroleum Activities within the Contract Area

3.5 In the event that Licensee discovers natural resources other than Petroleum in the Contract Area, it shall report such discovery to the Government within thirty (30) days of the making of such discovery and shall supply a sample of such minerals to the Government.

ARTICLE 4

Exploration Work Programme

4.1 The Licensee shall commence Exploration in Uganda within two (2) Calendar Months of the Effective Date.

4.2 In discharge of its obligation to carry out Exploration in the Contract Area, the Licensee shall, in accordance with the Act, Regulations and this Agreement, carry out the following minimum work programmes and shall expend not less than the corresponding sums specified as adjusted pursuant to paragraph 4.5:

4.2.1 **First Exploration Period**

Commencing on the Effective Date and terminating on the [second anniversary] of such date:

(a) Minimum Work Programme [*Biddable item***]**

Undertake geological, geochemical, geophysical and related studies and, where available review relevant existing data including seismic, gravity and magnetic, maps, reports and publications on the Contract Area.

[The acquisition, processing and interpretation of not less than XXX line kilometres
of 2D seismic data].

[The acquisition, processing and interpretation of not less than XXX square kilometres of 3D seismic data].

[The drilling of XXX Exploration Wells whose location and depth Government and
Licensee shall agree on].

(b) Minimum Exploration Expenditure [*Biddable item***] USD million**

Preliminary geological, geochemical and geophysical studies USD
[2D Seismic data USD]
[3D Seismic data USD]
[Drilling of wells USD]

4.2.2 **Second Exploration Period.**

Commencing on the day on which the Petroleum Exploration Licence is renewed pursuant to the Act and in accordance with Article 3 of this Agreement and terminating on the [second anniversary] of such date.

(a) **Minimum Work Programme [***Biddable item***] :**

[Acquisition, processing and interpretation of additional XXX line kilometres of 2D seismic data]

[Acquisition, processing and interpretation of additional XXX square kilometres of 3D seismic data],

[The drilling of XXX exploration wells whose locations and depths Government and the Licensee shall agree on].

(ii) **Minimum Exploration Expenditure** **USD million**

[*Biddable item***]**

[2D Seismic data USD]

[3D Seismic data USD]

[Drilling of wells USD]

4.2.3 Third Exploration Period

Commencing on the day on which the Petroleum Exploration Licence is renewed for the second time pursuant to the Act and Article 3 hereof and terminating on the [second anniversary] of such date.

(a) Minimum Work Programme [*Biddable item***]:**

[Acquisition, processing and interpretation of additional XXX line kilometres of 2D seismic data],

[Acquisition, processing and interpretation of additional XXX square kilometres of 3D seismic data],

[Drilling of XXX Exploration Wells whose locations and depths Government and Licensee shall agree on].

(b) Minimum Exploration Expenditure **USD million [***Biddable item***]**

[2D Seismic data USD]

[3D Seismic data USD]

[Drilling of wells USD]

4.3 For the purpose of this Article, Exploration Wells shall, except as provided in Article 4.2, be drilled on a location determined by the Licensee and the Government and to a depth necessary for the evaluation of the sedimentary section established by the available data as the deepest objective formation and consistent with Best Petroleum Industry Practices, unless before reaching the aforementioned depth:

(a) further drilling would present a foreseeable danger which cannot reasonably be contained;

(b) basement or impenetrable formations are encountered;

For the purpose of this paragraph 4.3, the term "Basement" shall mean the geological basement below which Petroleum cannot be found and produced.

4.4 In such circumstances, the drilling of any Exploration Well may be terminated at a lesser depth and such Well shall, except where the circumstances described in subparagraphs (a), and (b) immediately above occur before the Licensee has attained two thirds of the target depth provided for in the drilling programme, relating to such well, be deemed to have satisfied the minimum depth criteria provided for hereunder. In all other circumstances in which a Well is terminated at a lesser depth, the Licensee shall have the option to either:

(a) drill a substitute Exploration Well; or

(b) pay to the Government the amount by which the drilling budget for such well on a dry hole basis, pursuant to paragraph 4.2 exceeds actual expenditures incurred in the drilling thereof.

4.5 Compliance with the required minimum Exploration Expenditures in any Exploration Period shall not relieve the Licensee of its obligation to comply with the required minimum Work Programme for such Exploration Period however, compliance with the required minimum Work Programme for any Exploration Period may relieve the Licensee of its obligation to comply with the required minimum Exploration Expenditures for such Exploration Period.

4.6. The required minimum Exploration Expenditure stipulated in paragraph 4.2 for each Exploration Period (other than the First Exploration Period), shall be adjusted at the end of (i) the First Exploration Period, in the case of the minimum Exploration Expenditures for the Second Exploration Period, (ii) the Second Exploration Period, in the case of the minimum Exploration Expenditures for the Third Exploration Period, as follows:

$$I' = \frac{I \times B}{A}$$

I' = minimum Exploration Expenditures for the Second or Third Exploration Period, as the case may be;

I = minimum Exploration Expenditures stipulated in paragraph 4.2 for the period in question;

A = "U.S. Industrial Goods Producer Price Index" as first reported in "International Financial Statistics" as published by the International Monetary Fund for the Calendar Month of the Effective Date; and

B = "U.S. Industrial Goods Producer Price Index" as first reported in "International Financial Statistics" as published by the International Monetary Fund of the Calendar Month in which the period in question commences.

4.7 The Petroleum Exploration Licence issued to the Licensee pursuant to Article 3 and any available renewal thereof shall be on terms and conditions relating to Minimum Work Programmes and Exploration Expenditures which correspond to the obligations of Licensee under this Article and it is

accordingly understood and agreed that any discharge by Licensee of its obligations under this Article in respect of any Exploration Period will discharge for that period the minimum work and expenditure obligations of Licensee in respect of the Petroleum Exploration Licences issued pursuant to Article 3 and the terms and conditions of such Licences and any renewal thereof shall be drawn accordingly:

(a) On or before the Effective Date, the Licensee shall provide a Performance Guarantee in the form set forth in Annex C, and amounting to percent (%) of the minimum Exploration Expenditure which shall, inter alia, guarantee the payment by Licensee of the sums, if any, due and payable to the Government pursuant to paragraph 4.7(b) and (c) hereunder.

(b) If, subject to paragraph 4.4, upon the expiration of the Petroleum Exploration Licences, or upon the date of termination of this Agreement, or upon surrender of the entire Contract Area by Licensee, whichever first occurs, the Licensee has not expended for Exploration sums (including any sums previously paid pursuant to paragraph 4.7(c)) at least equal to the total minimum Exploration Expenditures (as adjusted pursuant to paragraph 4.5) required hereunder for the period in question, the shortfall amount corresponding to the unexpended minimum Exploration Expenditures, as adjusted, shall be paid by Licensee to the Government.

(c) If, subject to paragraph 4.4, at the end of the initial term of the First Petroleum Exploration Licence or any Exploration Period, the Licensee has not expended for Exploration sums at least equal to the minimum Exploration Expenditures, (as adjusted), required hereunder for such period, the shortfall amount corresponding to the unexpended minimum Exploration Expenditures (as adjusted pursuant to paragraph 4.5) for such period shall be paid by the Licensee to the Government.

4.8 For the purpose of this Agreement, and without prejudice to their recoverability as Contract Expenses for other purposes under this Agreement, expenditure by the Licensee on the following shall not be treated as Exploration

Expenditures for the purpose of satisfying the minimum Exploration Expenditure obligations set out in paragraph 4.2:

(a) any Appraisal Programme required to discharge Licensee's obligations under Section 66(2) of the Act;

(b) the value of stock items listed in inventory; provided, however, that any loss on the disposal of any such stock item, as well as the book value of those stock items (if any) which become the property of the Government pursuant to paragraph 21.2, shall be treated as Exploration Expenditure obligations set forth in paragraph 4.2,

(c) property purchase or rental in connection with Petroleum Activities;

(c) the training of Ugandan nationals pursuant to the Act, Regulations and Article 19 of this Agreement;

(d) any annual fees in accordance with section 155 of the Act; and

(e) Bonuses payable in accordance with the Act and Article 8 of this Agreement.

ARTICLE 5

Work Programmes and Budgets

5.1 So long as any Petroleum Exploration Licence or Petroleum Production Licence issued to Licensee herein remains in force, at least sixty (60) days prior to the beginning of each Calendar Year, the Licensee shall prepare and submit to the Authority for its review and, approval, a detailed annual Work Programme and Budget, setting forth the Exploration Activities and/or Development which the Licensee proposes to carry out in the ensuing Calendar Year and the estimated cost thereof. Where the Petroleum Exploration Licence or Petroleum Production Licence commences in the middle of a Calendar Year, an annual Work Programme and Budget for the period from the date of effectiveness of the First Petroleum Exploration Licence or the date of effectiveness of a Petroleum Production Licence to the end of the Calendar Year in which such date falls shall be presented to the Authority for its review and approval in

accordance with section 10 (2) of the Act within ninety (90) days of the Effective Date for review.

5.2 Every Work Programme and Budget submitted to the Authority during the Exploration Period pursuant to this Article and every revision or amendment thereof shall be consistent with the requirements set out in the Act, Regulations and Article 4 relating to Minimum Work Programme and Expenditure for the Exploration Period within which the Work Programme and Budget will fall.

5.3 With the approval of the Authority, the Licensee may amend any aspect of the annual Work Programme or Budget relating to Exploration Activities submitted to the Authority provided such amendment is consistent with the Licensee's obligations under Article 4.

6 Discovery, Development and Production

Early Production of Petroleum

6.1

(a) If during the term of a Petroleum Exploration Licence or renewals thereof granted pursuant to the Act and Regulations, the Licensee makes a Discovery of Petroleum in the Contract Area which alone, or in conjunction with other Discoveries previously made in the Contract Area might be developed and brought into early production with a view to satisfying the internal consumption requirements of Uganda, the Government may notify the Licensee accordingly upon which Government and Licensee shall meet to determine whether the Development of the said Discovery or Discoveries would be economically and technically feasible.

(b) In determining whether the Discovery or Discoveries as the case may be is (are) economically and technically feasible, Government and the Licensee shall consider whether an early production scheme would, inter alia, jeopardise the subsequent recovery of Petroleum from the Petroleum Reservoir(s), create a

health or safety risk or would otherwise involve a departure from the standards of Best Petroleum Industry Practices.

(c) In the event that Government and the Licensee determine the Discovery or Discoveries, as the case may be, to be economically and technically feasible and agree upon the terms and conditions for the implementation of an early production scheme, a Petroleum Production Licence may be granted to the Licensee in accordance with the Act and the Regulations in respect of the Discovery(ies) subject thereto and thereafter the Licensee shall complete the facilities necessary for the Government to take delivery of production from the said Discovery(ies) exfield and all costs associated with the taking of delivery therefrom shall be for the Government's account.

(d) The production shall be sold at Market Price as computed in accordance with the Act and Regulation and payment shall be made in United States Dollars within 60 days following the end of the Calendar month in which deliveries are made.

Grant and Renewal of a Petroleum Production Licence

6.2 Upon application by the Licensee for a Petroleum Production Licence in accordance with the Act and Regulations, the Minister shall in accordance with the Act and Regulations issue to Licensee the Petroleum Production Licence over the extent of the Discovery that lies within the Contract Area in the form prescribed in the Regulations covering the Development Area for a period for which the application has been made but not exceeding twenty (20) years counted from its date of issuance.

6.3 A Petroleum Production Licence may be renewable twice in accordance with the Act and Regulations.

6.4 Not less than sixty (60) days prior to the beginning of each Calendar Year following the commencement of Commercial Production, the Licensee shall prepare and furnish to the Government for its review and approval (which approval shall not be unreasonably withheld) a forecast statement setting forth

by Calendar Quarter, the total quantity of Crude Oil (by quality, grade and gravity) and Natural Gas that the Licensee estimates can be produced, saved and transported hereunder from each Development Area during such Calendar year in accordance with Best Petroleum Industry Practices. The Licensee shall endeavour to produce in each Calendar Year the forecast quantity.

7 Records, Reports and Data

The Licensee shall submit to the Government Records, Reports, and Data in accordance with the Act and Regulations.

ARTICLE 8

Bonuses

8.1 Upon the signing of this Agreement, the Licensee shall pay to Government a sum of United States Dollars (USD) as Signature Bonus.

8.2 Production Bonuses, in the amount indicated hereunder, shall be due and paid by the Licensee to Government:

(a) When the cumulative production in the Contract Area, as from the Date of Commencement of Commercial Production, first reaches volumes of BOE, the Licensee shall pay to the Government USD as Production Bonus.
Thereafter on each additional BOE, the Licensee shall pay to the Government USD.
The above mentioned Production Bonuses shall be paid within thirty (30) days following the date on which each of the aforesaid cumulative production volumes are first achieved.

9 Royalty

9.1 In accordance with Section 154 of the Act, Government shall take the following Royalty on the Gross Total Daily Production in Barrels of Oil Per Day (BOPD) for each Contract Area, such Gross Total Daily Production

defined as the total output of Crude Oil less all water and sediments produced and all amounts of Petroleum reinjected into the Petroleum Reservoir;

Gross Total Daily Production (BOPD)	**Royalty**
(a) Where the production does not exceed 25,000	%
(b) Where the production is higher than 25,000 but does not exceed 50,000	%
(c) Where the production is higher than 50,000 but does not exceed 75,000	%
(d) Where the production is higher than 75,000 but does not exceed 100,000	%
(e) Where the production is higher than 100,000	%

9.2 The Royalty stipulated in paragraph 10.1 shall be received by government on a monthly basis whether in kind or in cash depending on Government's preference. Government shall have the right to receive Royalty in cash payable in US Dollars, on a Monthly basis, notifying the Licensee of its choice 90 days in advance. Once the Government has exercised its option, the same shall continue unless the Government informs the Licensee otherwise. If such notification is not made by Government, the Royalty shall be collected by Government in kind at the Delivery Point.

9.3 The BOPD calculation shall be done monthly on the basis of total daily production. For avoidance of doubt, the Royalty calculation above shall not be on an incremental basis.

9.4 Royalties on Natural Gas shall be negotiated by the Parties upon establishment of commerciality.

ARTICLE 10

State Participation.

10.1 Government or its Nominee may elect to enter into a Joint Venture Agreement with Licensee thereby allowing for State Participation for no more

than percent (%) and Government shall inform Licensee of its decision in writing within 120 days of the receipt of the application for a Petroleum Production Licence. The Licensee agrees to carry the costs of Government or its Nominee through Development to Production. These costs are recoverable and will be repaid out of the Government's or Government Nominee's share of Cost Petroleum.

10.2 (a) For purposes of this provision the Venture Assets attributable to a Contract

Area (hereinafter called the "Joint Venture Assets") are:

(i) In case of the first Petroleum Production Licence granted, the Petroleum Production Licence and any movable or immovable, tangible or intangible property wherever the same may be situated, acquired for the purpose of carrying on Joint Activities in the Contract Area subject thereto or acquired for the purpose of carrying on Petroleum Activities in the Contract Area where such property was acquired before the grant of the first Petroleum Production Licence;

(ii) In the case of a second or subsequent Petroleum Production Licence granted, that Petroleum Production Licence and any movable or immovable, tangible or intangible property acquired for the purpose of carrying on Joint Activities in that Contract Area or acquired for the purpose of carrying on Petroleum Activities or Joint Activities in the Contract Area where such property was acquired after the date on which a Production Licence was last granted and before the grant of the second or, as the case maybe the next subsequent Petroleum Production Licence.

(b) Immediately following the grant of each Petroleum Production Licence, the Licensee, or each entity comprising the Licensee at that time, will promptly take such action as may be necessary to assign to the Government or its Nominee, an undivided proportionate share in the Venture Assets equal to the Government or its Nominee's Participating Percentage Interest with effect that thereafter, the Licensee, or each such entity, shall have an

interest in the Joint Venture Assets (hereinafter referred to as its "Joint Venture Interest") equal to its Participating Interest in those Assets immediately before the grant of such Petroleum Production Licence reduced by the product of that interest and the Joint Venture Interest acquired by the Nominee of the Government.

ARTICLE 11

Cost Recovery

11.1 In case of a Commercial Discovery and subject to the auditing provisions set forth in this Agreement and the laws of Uganda, the Licensee shall be entitled to recover its Contract Expenses incurred in the carrying out of Petroleum Activities in accordance with the provisions of this Article 11.

11.2 For purposes of Cost Recovery, ring fencing around each Contract Area shall apply. In the event that a Licensee has more than one Contract Area, the calculations shall be done on a Contract Area by Contract Area basis. There shall be no consolidation.

11.3 Subject to the auditing provisions set forth in this Agreement and the laws of Uganda, the Licensee may freely retain in each Calendar Year a portion of the Available Crude Oil (hereinafter referred to as “Cost Oil”) and a portion of Available Natural Gas (hereinafter referred to as “Cost Gas”) in no event greater than percent (%) of each of the Available Crude Oil and/or the Available Natural Gas, as the case may be, or only any lesser percentage which would be necessary and sufficient. When in any Calendar Year, Contract Expenses are less than the maximum value of Cost Petroleum, the difference shall become part of, and included in the Profit Petroleum as provided for in Article 12.

11.4 Exploration Expenditures incurred by the Licensee in the Contract Area up to the date of first Commercial Production shall be aggregated, and the Licensee shall be entitled to recover the aggregate of such Exploration Expenditures out of the Cost Petroleum at the rate of one hundred percent (100%) per annum of such Exploration Expenditures beginning from the date of such Commercial Production.

11.5 The Licensee shall be entitled to recover out of the Cost Petroleum from the Contract Area the Exploration Expenditures which it has incurred in any Year after the date of Commercial Production at the rate of one hundred percent (100%) per annum of such Exploration Expenditures beginning from the date such Exploration Expenditures are incurred.

11.6 Development Expenditures incurred by the Licensee in the Contract Area up to the date of first Commercial Production shall be aggregated, and the Licensee shall be entitled to recover out of the Cost Petroleum the aggregate of such Development Expenditures at the rate of one hundred percent (100%) per annum of such Development Expenditures beginning from the date of such Commercial Production.

11.7 The Licensee shall be entitled to recover out of the Cost Petroleum from the Contract Area the Development Expenditures which it has incurred after the date of first Commercial Production at the rate of one hundred percent (100%) per annum of such Development Expenditures beginning from the date such Development Expenditures are incurred.

11.8 The Licensee shall be entitled to recover in full during any Calendar Year the Operating Expenses incurred in that Calendar Year out of the Cost Petroleum.

11.9 If during any Calendar Year the Cost Petroleum is not sufficient to enable the Licensee to recover in full the Contract Costs due for recovery in that Calendar Year in accordance with the provisions of paragraphs 11.4 to 11.8 then

(a) recovery shall first be made of the Operating Expenses;
(b) recovery shall next be made of interest charges on Development Expenditures;
(c) recovery shall next be made of the Development Expenditures; and
(d) recovery shall then be made of the Exploration Expenditures.

11.10 The unrecovered portions of Contract Expenses shall be carried forward to the following Calendar Year and the Licensee shall be entitled to recover such Contract Expenses in such Calendar Year or the subsequent Calendar Years as if such Contract Expenses were due for recovery in that Calendar Year, or the

succeeding Calendar Years, until the unrecovered Contract Expenses have been fully recovered subject to the limitation set out in Article 11.3 or until termination of the Contract, where such termination occurs earlier, whatever the reason thereof. Any unrecovered cost shall not be recovered by the Licensee after such termination.

11.11 For the purposes of this Article, as well as Article 12, costs, expenditure, sales and income shall be converted into production unit equivalents, and vice versa both in physical and monetary terms, using the relevant prices established pursuant to Article 15 for Crude Oil and Article 18 for Natural Gas.

11.12 The Licensee's Cost Petroleum entitlement to be lifted and disposed of under this Article 11 shall be determined for each Calendar Quarter and in respect of the unrecovered Contract Expenses cumulated up to the end of such Calendar Quarter. In respect of a given Calendar Quarter, the volume of Cost Petroleum to be lifted and disposed of by Licensee shall be provisionally calculated on the basis of the Contract Expenses and the relevant Cost Petroleum quarterly estimates provided for under paragraph 11.13 below. Within thirty (30) days of the end of the aforementioned Calendar Quarter, adjustments in respect thereto shall be made on the basis of the quarterly updates under paragraph 11.13 below, evidencing Contract Expenses actually incurred, the corresponding Cost Petroleum which should have been lifted by the Licensee and the balance thereof (positive or negative) with respect to the Cost Petroleum actually lifted in that Calendar Quarter. Within ninety (90) days of the end of each Calendar Year, final calculation shall be prepared based upon the detailed accounts submitted by Licensee for such Calendar Year pursuant to Article 28 and any necessary adjustments shall be made. Any discrepancy arising concerning the determination of Contract Expenses and Cost Petroleum, which cannot be resolved amicably between the Government and Licensee, shall be referred to and resolved pursuant to the provisions of paragraph 24.2

11.13 Not less than thirty (30) days prior to the beginning of each Calendar Year, Licensee shall prepare and furnish to the Authority an estimate by Calendar

Quarters for that Calendar Year of all Contract Expenses to be incurred and Licensee's Cost Petroleum entitlement thereof. Such estimates shall, as far as possible, be consistent with the Petroleum production forecast furnished pursuant to paragraph 6.4 and shall set forth the assumed Market Price under Article 14 upon which they are based. Quarterly updates of such estimates shall be submitted by the Licensee to the Authority for approval within thirty (30) days after the end of each Calendar Quarter. Such estimates, and the quarterly updates thereto, shall serve as the basis for the quarterly provisional calculations of Licensee's Cost Petroleum and the adjustments thereto, as required pursuant to paragraph 11.12.

11.14 Deposits in the Decommissioning Fund made in accordance with the Act and the Regulations shall be cost recoverable as Operating Expenses.

11.15 Where more than one Party constitutes the Licensee, the percentage of the total Cost Petroleum from the Contract Area which shall be available to each such Party in any Calendar Year for recovery of its share of Contract Costs shall be determined on the basis of the respective Participating Interest of each such Party.

ARTICLE 12

Production Sharing

12.1 The amount of the Available Petroleum remaining after the deduction of the Cost

Petroleum as provided for in Article 11, is hereinafter referred to as "Profit Petroleum". The Government and the Licensee shall share in the Profit Petroleum in each Calendar Year in accordance with the provisions of this Article.

A Party's share of Profit Petroleum in any Calendar Year, shall be calculated on the basis of the "RFactor" actually achieved by the Licensee at the end of the preceding Calendar Year for the Contract Area in accordance with paragraph 12.5.

12.2 To determine the percentage share of Profit Petroleum to which the Licensee is entitled, the "RFactor" shall be calculated each year in accordance with paragraph 12.3.

12.3 The "RFactor" shall be calculated as follows:

$R = X / Y$

Where:
X is equal to the "Cumulative Net Revenues" actually received by the Licensee; and
Y is equal to the "Cumulative Capital Expenditures" actually incurred by the Licensee.

"Cumulative Net Revenues" means total Net Revenues, as defined below, received by the Licensee from the Effective Date until the end of the Calendar Year immediately preceding the Calendar Year in question.
The Net Revenues of the Licensee from their Petroleum Activities in any particular Year is the Aggregate value for the Year of the following:

(i) Cost Petroleum entitlement of the Licensee as provided in Article 11;

plus

(ii) Profit Petroleum entitlement of the Licensee as provided in this Article 12;

plus

(iii)the Licensee's Credits of the type specified in the Accounting and Financial Procedure;

less

(iv)the Licensee's Operating Expenses incurred on or in the Contract Area.

"Cumulative Capital Expenditures" means total Capital Expenditures as defined below, incurred by the Licensee from the Effective Date until the end of the Calendar Year immediately preceding the Calendar Year in question.

Capital Expenditures incurred by the Licensee in the Contract Area in any particular Calendar Year is the aggregate value for the Calendar Year of:

(i) the Licensee's Exploration Expenditures incurred on or in the Contract Area pursuant to Article 11;

plus

(ii) the Licensee's Development Expenditures incurred on or in the Contract Area pursuant to Article 11.

12.4 For the purposes of the calculation of the RFactor, costs or expenditures which are not cost recoverable as provided in the Accounting and Financial Procedure shall be excluded from Contract Expenses and be disregarded.

12.5 The share of Profit Petroleum to which the Licensee and the Government shall be entitled (from the first day of production) is equal to the relevant percentage according to the value of the R–Factor as indicated in the table below:

RFactor	**Licensee's Share of Profit Petroleum (in percentage)**	**Government's Share of Profit Petroleum (in percentage)**
R ≤ 1.000		
1 < R ≤ 3.000	Z = __ [25*(R – 1)/2]	100Z
R > 3.000		

'R' denotes RFactor of Licensee at the end of preceding Year, rounded off to three decimal places.

12.6 Any discrepancy arising in the determination of the RFactor, which cannot be resolved amicably, shall be referred to and resolved in accordance with paragraph 24.2

12.7 The Government shall have the right to receive its share of Profit Petroleum in cash Dollars, on a Quarterly basis, notifying the Licensee of its choice 30 days in advance. If such notification is not made by Government, the Profit Petroleum shall be collected by Government in kind at the Delivery Point. Once the Government has exercised its option, the same shall continue unless the Government informs the Licensee otherwise. The valuation shall be in accordance with Article 14.

13.8 Where the Government has informed the Licensee of its intention to take its share in kind, the Parties shall mutually agree on a procedure for delivery of the Government's share of Profit Petroleum and, where relevant, the composition of the Petroleum which is to be delivered.

12.9 The determination of Profit Petroleum to be shared shall be provisionally determined for each Calendar Quarter based on provisional estimated figures of Contract Expenses, production, prices, income and any other Credits with the relevant Quarterly adjustment and on the basis of the value of the "RFactor" achieved at the end of the preceding Calendar Year. All such provisional estimates and adjustments shall be approved by the Authority.

12. 10 When it is necessary to convert monetary units into physical units of production equivalents or vice versa, the price or prices determined pursuant to Articles 14 for Crude Oil/Condensate and Article 18 for Natural Gas respectively shall be used.

12.11 Within ninety (90) days of the end of each Calendar Year, a final calculation of Profit Petroleum based on actual costs, quantities, prices and income for the entire Calendar Year shall be completed and any necessary adjustments to the sharing of Profit Petroleum shall be agreed upon between the Government and the Licensee and made within thirty (30) days thereafter.

12.12 The Profit Petroleum due to the Licensee in any Calendar Year from the Contract Area shall be divided amongst the Parties constituting the Licensee, in proportion to their respective Participating Interest.

ARTICLE 13

Taxation

13.1 All taxes, duties, levies or other lawful impositions applicable to Licensee shall be paid by the Licensee in accordance with the laws of Uganda.

13.2 Any tax dispute shall be handled in accordance with the objections and appeals mechanisms stipulated under the laws of Uganda.

ARTICLE 14

Valuation and Measurement of Petroleum

14.1 The Market Price for Crude Oil produced shall be determined by the Government at the end of each Calendar Month commencing with the Calendar Month in which Commercial Production begins in USD (hereafter referred to as Delivery Period) in accordance with the Regulations and this Article 14.

14.1.1 The Market Price used to value Crude Oil, where arm's length transactions have been made in freely convertible currencies in the preceding month, shall be the weighted average of the perBarrel net realised price obtained FOB the agreed point of export, and shall be less the average transport tariff per Barrel for that month for the transportation of Crude Oil from the Delivery Point to the point of export.

14.1.2 Each Company constituting the Licensee shall separately submit to the Authority, within fifteen (15) days of the end of each Delivery Period, a report containing the actual prices invoiced in their respective Arm's Length Sales for any Crude Oil. Such reports shall distinguish between term sales and spot sales and itemise volumes, customers, prices received and credit terms, and a Company shall allow the Authority to examine the relevant sales contracts.

14.1.3 For the purposes of determining the Market Price as described in paragraph 14.1.2, no account shall be taken of Crude Oil sales to Affiliated Companies or restricted or distress transactions or any transactions not at arm's length including government to government, barter or discount deals.

14.1.4 If less than fifty (50%) of the Crude Oil sales from the Contract Area have been executed at arm's length as provided for under paragraph

15.2, the Market Price shall be the weighted average of the prevailing perBarrel selling prices in such month of a basket of the three most similar internationally traded crude oils listed by the American Petroleum Institute (API) and chosen from the major crude oil producing countries in the Arabian Gulf and Africa, or other benchmarks as may be agreed by the parties, taking into account differences in point of sale, and quality, grade, total acid number, gravity or sulphur content and the average tariff charge per Barrel for that month imposed by the pipeline company for the transportation of Crude Oil hereunder from the Delivery Point to the FOB Seaboard Terminal or any other point of export. In the event that the API listing ceases to be published or is not published for a period of thirty (30) consecutive days, the Parties shall agree on an alternative daily publication.

14.1.5 Any disagreement concerning the determination of Market Price under this Article shall be first considered in a meeting convened by the Minister composed of two technical representatives from the Government and two technical representatives of the Licensee.

14.1.6 Where the meeting referred to under paragraph 14.1.5 cannot reach a unanimous decision within thirty (30) days of the end of the relevant month, either party may refer the matter for determination by an expert appointed by the parties, under paragraph 24.2. If the matter is referred to the sole expert, within ten (10) days of the said appointment, the Parties shall provide the expert with all information the expert may reasonably require. Within fifteen (15) days from the date of his appointment, the expert shall report to the Parties on the issue(s) referred to him for determination, applying the criteria or mechanism set forth herein and indicate his decision thereon to be applicable for the relevant Delivery Period for Crude Oil and such decision shall be accepted as final and binding by the Parties.

14.2 The provisions specified above for the determination of the price of sales of Crude Oil shall apply mutatis mutandis to Condensates.

14.3 The price of Natural Gas shall be determined as provided in Article 18.

14.4 Licensee shall, in accordance with Regulations and consistent with Best Petroleum Industry Practices, undertake to measure the volume and quality of the Petroleum Produced and Saved hereunder, and at such frequency as approved by the Authority.

14.4.1 Licensee shall install, operate and maintain at the Delivery Point equipment for measuring the volume and quality of the Petroleum including gravity, density, temperature and pressure measuring devices and any other devices that may be required for the purposes of implementing this Agreement. All measurement equipment and devices shall, prior to their installation or usage, be approved by the Authority. The Authority shall have the right to inspect and require Licensee to test in its presence such equipment and devices at any time. The equipment and devices used or installed pursuant to this paragraph shall not be replaced or altered without the prior approval of the Authority.

14.4.2 If it is considered by the Authority, following an inspection or test carried out, that the equipment, devices or procedures used for measurement are inaccurate and exceed the permissible tolerances with reference to normal international oil industry standards, such inaccuracy shall be deemed to have existed for onehalf of the period since the previous such inspection or test, unless it is proved that such inaccuracy has been in existence for a longer period.

Appropriate adjusting payments or refunds covering such period shall be made within thirty (30) days from the date of such determination.

14.4.3 The Licensee shall keep full and accurate accounts concerning all Petroleum measured and tests carried out on equipment, at a location in Uganda readily accessible to Government.

14.5 For purposes of valuation and measurement, the Licensee shall be required to submit to the Authority monthly information pertaining to transportation tariff beyond the Delivery Point to the Point of sale.

ARTICLE 15

Pipeline Transportation

15.1 Subject to Article 18 and the Laws of Uganda, the Licensee shall have the right to take and transport to an ocean port or other point of loading for export all Petroleum to which it is entitled hereunder and, in connection therewith, shall have the right to construct, operate and maintain an export pipeline, pumping stations, storage and related Seaboard Terminal or other facilities.

15.2 Subject to the Laws of Uganda, it is understood by the Parties hereto that the construction, financing, operation and maintenance of an export pipeline, pumping stations and related Seaboard Terminal or other facilities shall be carried on through a separate pipeline company ("the Pipeline Company") which shall be responsible for the handling and transportation of Petroleum from the Delivery Point in Uganda to the ocean port or other point of loading. In such event, the operations of the Pipeline Company will not be included within the meaning of Petroleum Activities under the Act and this Agreement and any related Licences.

15.3 Any Field Development Plan submitted to the Minister by the Licensee pursuant to Section 71 of the Act shall include the Licensee's proposals with regard to the arrangements for the transportation to the terminal of each of the Parties' production entitlements hereunder.

In the event the said transportation arrangements involve the formation of a separate Pipeline Company pursuant to paragraph 15.2, such proposals shall, unless otherwise agreed, be consistent with the following principles:

(a) each Party shall assume and pay the transportation tariffs charged by the Pipeline Company related to their respective shares of the Petroleum transported, which obligation may, in the case of the Nominee or the

Government, be discharged by each of the Nominee and the Government foregoing in favour of the Pipeline Company a portion of their respective production entitlements so transported equal in value to the tariffs due in respect of the transportation of such production entitlements from the Delivery Point to the FOB Seaboard Terminal point of export;

(b) the transportation tariff charged, to the extent that the Parties hereto are able to determine the same, shall be set at a level at which the Pipeline Company will cover the costs of constructing, financing, operating and maintaining the export pipeline and related facilities together with the return to be agreed on by the Parties. If within 90 days, the Parties are unable to agree on the return, either Party may refer the matter for determination in accordance with Paragraph 24.2.

15.4 The Government or its Nominee shall be fully involved in the determination of the tariff charges for the pipeline.

15.5 Any costs incurred beyond the Delivery Point and Transportation tariff charges of the Pipeline Company, shall not be recoverable under this Agreement.

ARTICLE 16

Marketing and Lifting

16.1 The Government or its Nominee shall have the right to receive its production entitlement pursuant to Articles 9, 10 and 12 in cash in USD, on a Quarterly basis, notifying the Licensee of its choice 30 days in advance. If such notification is not made by Government, the production entitlement shall be collected by Government in kind at the Delivery Point. Once the Government has exercised its option, the same shall continue unless the Government informs the Licensee otherwise. The valuation shall be in accordance with Article 14.

16.2 The Government or its Nominee may, at any time by notice in writing to the Licensee, require the Licensee to assist the Government in the sale of all or part of the Government's or its Nominee's production entitlement. The terms and conditions on which the Licensee will so assist the Nominee and/or the Government to any such disposal will be agreed between the Government and/or the Nominee, as the case may be, and Licensee.

16.3 The Licensee may, with prior agreement with the Government, purchase the Government's or its Nominee's production entitlement made available pursuant to this paragraph in lieu of disposal of the same to third parties, in which event, the price at which any such purchase by the Licensee shall be determined pursuant to Article 15 and the Regulations.

16.4 Not less than twelve (12) Calendar Months prior to the commencement of Commercial Production from any Development Area, the Licensee shall submit to the Government for approval proposed procedures containing operating regulations and financial terms covering the scheduling, storage and lifting of Crude Oil from each such Development Area. The procedures shall address the subjects and items required for efficient and equitable Activities including, but not limited to: rights of Parties, notification time, maximum and minimum quantities, duration of storage, scheduling, conservation, spillage, liabilities of the Parties and penalties for overand underlifting, safety and emergency procedures. The procedures shall be consistent with national standards and Best Petroleum Industry Practices.

16.5 The Parties shall consult together regularly in order to establish a provisional collection programme. The Parties shall draw up, before the commencement of any Commercial Production in the Petroleum Production Licence, a collection procedure laying down the methods for applying the present Article.

ARTICLE 17

Domestic Requirements

17.1 Out of the total quantity of Crude Oil production to which the Licensee is entitled in each Calendar Quarter, the Government may in accordance with Sections 121 and 122 of the Act elect to take a quantity of Crude Oil, of the gravity, grade and quality of its choice, that the Government requires to satisfy the requirements of internal consumption in Uganda for such Calendar Year in accordance with the Act and Regulations. The Government shall reimburse the Licensee for such quantity in USD at the price as calculated in accordance with Section 123 of the Act and paragraph 14.1 hereof within thirty (30) days after the end of the Calendar Month in which such delivery takes place, unless otherwise agreed between the Parties.

17.2 If the Government elects to exercise its rights under paragraph 17.1, it shall notify Licensee in writing not less than ninety (90) days prior to the commencement of each six (6) Calendar Months of each Calendar Year specifying the quantity, and designating the grade and quality, that it elects to take in kind based upon the production forecasts and annual and quarterly estimates, furnished to the Government pursuant to paragraphs 6.8 and 14.5. Any adjusting payments or refunds shall be made within ninety (90) days of the end of each Calendar Year on the basis of actual quantities.

17.3 The Parties hereby agree that the Refineries in Uganda shall have the right of first refusal on the Petroleum produced from the Contract Area provided that the Refineries are taking the Petroleum at the Market Price.

ARTICLE 18

Natural Gas

18.1 The Licensee shall have the right to use Associated Natural Gas for Petroleum Activities, including, but not limited to, reinjection for pressure maintenance, and improving the recovery of Petroleum, power generation and recycling operations.

(a) NonAssociated Natural Gas

18.2 In the event of a NonAssociated Natural Gas Discovery, the Licensee shall diligently engage in discussions with the Government with a view to determining whether the appraisal and exploitation of said Discovery of NonAssociated Natural Gas have a potentially commercial nature.

18.3 If, after the abovementioned discussions, the Licensee considers that the Non Associated Natural Gas Discovery merits appraisal, it shall undertake an appraisal work programmer with respect to such Discovery in accordance with section 66 (2) of the Act and Article 6.

18.4 For purposes of assessing the commerciality of the NonAssociated Natural Gas Discovery, the Licensee shall have the right, if it so requests at least two (2) months prior to the expiry of the second renewal of the Exploration Period to be granted the extension of the Exploration Period with respect to the Appraisal Area related to said Discovery, for a term of two (2) years starting from the expiry of the second renewal of the Exploration Period.

18.5 In addition, the Parties shall jointly assess the possible outlets for the Natural Gas from the Discovery in question, both on the local market and for export, together with the necessary means for its marketing, and they shall consider the possibility of a joint marketing of their shares of production in the event the Natural Gas Discovery would not otherwise be commercially exploitable.

18.6 Following completion of appraisal work, in the event that the Parties jointly decide that the exploitation of a Discovery is justified to supply the local

market, or to develop and produce that Natural Gas for export, the Licensee shall submit to the Minister, prior to the expiry of the abovementioned two (2) years' period, a Field Development Plan in accordance with the provisions of Section 71 (3) of the Act, Regulations and this Agreement.

18.7 The Licensee shall then proceed with the Development and Production of that Natural Gas in accordance with the approved Field Development Plan and the provisions of this Agreement applicable to Crude Oil shall apply, *mutatis mutandis*, to Natural Gas, unless otherwise specifically provided in this Agreement.

18.8 If the Licensee considers that the NonAssociated Natural Gas Discovery does not merit appraisal, the Minister may in accordance with the Act require the Licensee to relinquish its rights on the area encompassing said Discovery.

18.9 In the same manner, if the Licensee, after completion of appraisal work, considers that the NonAssociated Natural Gas Discovery is not commercial, the Minister may, with a three (3) months' prior notice, require the Licensee to relinquish its rights on the Appraisal Area related to said Discovery.

18.10 In both cases, the Licensee shall forfeit its rights on all Petroleum which could be produced from said Discovery, and the Minister may then carry out, or cause to be carried out, all the appraisal, development, production, treatment, transportation and marketing work relating to that Discovery, without any compensation to the Licensee, provided, however, that said work shall not cause prejudice to the performance of the Petroleum Activities by the Licensee.

(b) Associated Natural Gas

18.11 Associated Natural Gas which is not used in Petroleum Activities, and the processing and utilisation of which, the Parties agree is not economical, shall be returned to the subsurface structure, or may be flared subject to the Act. In the event that the Licensee chooses to process and sell Associated Natural Gas, the Licensee shall notify the Government of the same and upon such notification, the Government and the Licensee shall, as soon as practicable thereafter and subject to the Act meet with a view to reaching an agreement on the processing and sale of such gas. In the event Licensee chooses not to process and sell Associated Natural Gas, the Government may elect to offtake at the outlet flange of the gasoil separator and use such Associated Gas which is not required for Petroleum activities. There shall -be no charge to the Government for such Associated Natural Gas, provided that the cost to gather, process and utilize such Associated Natural Gas shall be for the account of the Government.

18.12 The Licensee shall have the right to extract Natural Gas liquids and condensate for disposition under the terms relating to Crude Oil.

18.13 The value to be attributed to Natural Gas shall be determined as follows:

18.13.1 Gas which is used as per paragraph 18.1 or flared with the approval of the Government and subject to the Provisions of the Act or re injected or taken by Government pursuant paragraph 18.11 shall be ascribed a zero value;

18.13.2 For arm's length sales to third parties, be equal to the net realised price obtained for such Natural Gas at the Delivery Point;

18.13.3 For sales other than at arm's length sales to third parties, be determined by agreement between the Government and Licensee, provided, however, that such price or value shall reflect the following:

(a) the quantity and quality of the Natural Gas;

(b) the price at which arm's length sales of Natural Gas from other sources in Uganda, if any, are then being made;

(c) the price at which arm's length sales to third parties, if any, of Natural Gas imported into Uganda are being made;

(d) the purpose for which the Natural Gas is to be used; and

(e) the international market price of competing or alternative fuels or feedstock.

18.13.4 Arm's length sales to third party shall not include sales to Affiliated Companies of the Licensee or to the Government, any Ugandan public authority or any other entity controlled directly or indirectly by the Government.

ARTICLE 19

Training, Research and Employment

19.1 Licensee shall train and employ suitably qualified Ugandan citizens in accordance with the Act and Regulations.

19.2 The Licensee shall, if so requested by the Government, provide opportunities for Government personnel to be seconded for onthejob training or attachment in all phases of its Petroleum Activities in the Contract Area, or elsewhere in the world where Licensee has operations. Such training or attachment shall include continuing education and short

industry courses mutually identified as beneficial to the secondee. Costs and other expenses connected with such secondment of Government personnel shall be borne by the Licensee and considered as Contract Expenses. The Licensee shall make proposals for the training of Government personnel under this paragraph and submit to the Authority as part of the work programme.

19.3 Licensee shall pay to Government, or its Nominee, on the Effective Date and each anniversary of the Effective Date thereafter, a training and research fee as follows:

First Exploration Period USD per 12 months. Second Exploration Period USD per 12 months. Third Exploration Period USD per 12 months. Development Period USD per 12 months.
Following commencement of production USD per 12 months, per Licence.

ARTICLE 20

Title to Assets

20.1 All land shall become the property of the Government as soon as it is acquired by the Licensee, subject to its continued use rentfree (save in respect of acreage rentals payable pursuant to Section 155 of the Act and Article 28 and or where applicable any fees that may be associated with leasehold tenure) by the Licensee until the date upon which this Agreement is terminated.

20.2 All equipment and other assets, whether fixed or movable, acquired and owned by the Licensee for use in the Petroleum Activities hereunder shall become the property of the Government (or the Nominee of the Government), if the Government so desires, free from all mortgages and other encumbrances upon the earlier of the date upon which:

(a) the costs thereof have otherwise been fully recovered, pursuant to Article 11 hereof or such equipment and assets have been fully depreciated for Income Tax purposes; or

(b) this Agreement is terminated.

20.3 The Licensee shall have unlimited and exclusive use of such equipment and assets where ownership thereof is transferred pursuant to paragraph 20.2 (a) and shall not be obligated to make any payment for the use of the same during the term of this Agreement. The Licensee, so long as such equipment and assets are used exclusively for Petroleum Activities and are in its custody, shall be liable to keep the same in good repair and working order, normal wear and tear excepted.

20.4 The provisions of this Article shall not apply to assets and equipment used in the Petroleum Activities and owned by third parties.

ARTICLE 21

Foreign Exchange Control Licensee shall comply with the procedures and formalities required by the laws and regulations relating to foreign exchange in force from time to time in Uganda.

ARTICLE 22

Assignment

22.1 The Licensee (which for the purposes of this Article shall include any person or entity comprising Licensee) may not assign to any person, Affiliated Company, firm or corporation, in whole or in part, any of its rights, privileges, duties or obligations under this Agreement without the prior written consent of the Minister.

22.2 Notwithstanding the provisions of paragraph 22.1, if the Licensee assigns in whole or in part to any Affiliated Company, the Licensee, as assignor and assignee, shall be fully jointly and severally liable for the performance of all rights, duties and obligations under this Agreement and any related Licences and shall be fully liable for the performance of any such assignee.

22.3 In the case of an assignment to a nonAffiliated Company, the assigning party shall provide to the Government an unconditional undertaking by the assignee to assume all obligations of the Licensee under this Agreement, including a Bank Guarantee, an Insurance Bond, and/or Parent Company Guarantee substantially in the form set forth in the Regulations.

22.4 The application for assignment shall be made by the Licensee in accordance with the Act and shall give full information on the proposed assignee as required in respect of an applicant for a Petroleum Exploration Licence or a Petroleum Production Licence and such additional information as the Minister may require.

22.5 Upon assignment of its interest in this Agreement, the assignor shall be fully released and discharged from its obligations hereunder to the extent that such obligations are assumed by the assignee.

ARTICLE 23

Danger to Persons, Property or Environment

23.1 The Licensee shall conduct all Petroleum Activities in accordance with the Act, Regulations, the National Environment Act, the Occupational Safety and Health Act, 2006 and other applicable laws in order to prevent or minimize danger human life or property or pollution or harm to wildlife or the environment.

23.2 If any works or installations erected by the Licensee or any Activities conducted by the Licensee endangers or may endanger persons or third party property or cause pollution or harm wildlife or the environment to a degree unacceptable to Government in accordance with applicable laws and international environmental standards and local circumstances, the Licensee shall in accordance with the laws of Uganda and this Agreement take appropriate remedial measures approved by Government within a reasonable period and to repair as far as it is reasonably possible any damage to the environment so caused. If, and to the extent necessary for this purpose, the Licensee shall in accordance with the Act discontinue Petroleum Activities in whole or in part until the Licensee has taken such remedial measures or has repaired any damage. In the event that the Licensee fails to take the appropriate remedial measures within a reasonable time period, the Government may, carry out such remedial measures for the Licensee's account.

23.3 Before commencing any works or activities hereunder, or recommencing any works or activities which have been discontinued for more than three (3) Calendar Months, in any part of the Contract Area which includes the area of a National Park or Game Reserve (as so designated under applicable Uganda law), the Licensee shall consult with the Government regarding the nature and extent of the work or activities to be conducted in such areas taking into consideration provisions of the law and Best petroleum industry practices .

23.4 The Licensee shall, in accordance with the laws of Uganda;

(a) conduct the Petroleum Activities in a manner that shall promote the conservation of the natural resources of Uganda and the protection of its environment; and

(b) employ the most advanced and best available techniques for the prevention of environmental damage which may be caused by Petroleum Activities, and for the minimisation of the effect of Petroleum Activities on adjoining or neighbouring lands.

23.5 The Licensee undertakes, for the purposes of this Agreement, to take all necessary and adequate steps to ensure adequate compensation for injury to persons or damage to property caused by the effect of the Petroleum Activities.

23.6 The measures and methods to be used by the Licensee for purposes of complying with the terms of paragraph 23.5 shall be determined in timely consultation with the Authority upon the commencement of Petroleum Activities or whenever there is a significant change in the scope or method of carrying out Petroleum Activities, and the Licensee shall take into account the international standards and Best Petroleum Industry Practices applicable in similar circumstances and the relevant environmental impact study carried out in accordance with paragraph 23.8.

23.7 The Licensee shall notify the Authority in writing of the nature of the measures and methods finally determined by the Licensee and shall cause such measures and methods to be reviewed from time to time in view of prevailing circumstances, provided however, that any consultations or approval given pursuant to this Agreement shall not be deemed to limit the obligations of the Licensee as provided herein or the right of the Authority to take appropriate regulatory or other action where Petroleum Activities pose a material danger to public health and safety or may result in significant irreversible damage to the environment.

23.8 The Licensee shall ensure that:

(a) Petroleum Activities are carried out in an environmentally acceptable and safe manner consistent with Best Petroleum Industry Practices and applicable laws and that such Activities are properly monitored;

(b) the required environmental impact studies are made available to its employees and to its Contractors and Subcontractors to develop adequate and proper awareness of the measures and methods of environmental protection to be used in carrying out the Petroleum Activities; and

(c) any agreement entered into between the Licensee and its Contractors and Subcontractors relating to the Petroleum Activities shall include the terms set out in this Agreement and any established measures and methods for the implementation of the Licensee's obligations in relation to the environment under this Agreement.

23.9 The Licensee shall, before carrying out any drilling, prepare and submit for review by Government an oil spill and fire contingency plan designed to achieve rapid and effective emergency response in the event of an oil spill or fire.

23.10 In the event of:

(a) an emergency or accident arising from Petroleum Activities affecting the environment, the Licensee shall forthwith notify the Minister and the Authority accordingly;

(b) any fire or oil spill, the Licensee shall promptly implement the relevant contingency plan; and

(c) any other emergency or accident arising from the Petroleum Activities affecting the environment, the Licensee shall take such action as may be

prudent and necessary in accordance with the applicable law and Best Petroleum Industry Practices in such circumstances.

23.11 If the Licensee fails to comply with any terms contained in this Article within a period determined by the Authority under any such terms, the Authority may, after giving the Licensee notice, take any action which may be necessary to ensure compliance with such term, and recover, immediately after having taken such action, all expenditure incurred in connection with such action from the Licensee together with interest determined at an annual rate equal to LIBOR plus five (5) percentage points.

ARTICLE 24

Dispute Resolution 24.1 Subject to Article 13 and paragraph 25.2, a dispute arising under this Agreement, except disputes relating to taxation, health, safety and environment, which cannot be settled amicably within one hundred and twenty (120) days, shall be referred to Arbitration in accordance with the United Nations Commission for International Trade Law (UNCITRAL) Arbitration Rules. The arbitration shall be conducted by three (3) arbitrators appointed in accordance with the said Rules. The said arbitration shall take place in London, a place agreed upon by the Parties. Judgement on the award rendered may be entered in any court having jurisdiction or application may be made in such court for a judicial acceptance of the award and an order of enforcement, as the case may be. The Arbitration award shall be final and binding on the Parties to this Agreement.

24.2 Any matter in dispute between the Government and Licensee arising under paragraphs 14.1 and 12.2, may, at the election of either of such parties by written notice to the other, be referred for determination by a sole expert to be appointed by agreement between the Government and the Licensee. If the Government and the Licensee fail to appoint the expert within sixty (60) days after receipt of such written notice, either of such parties may have such expert appointed by the then President of the Institute of Petroleum (London). If the aforesaid President shall

be disqualified to act by reason of professional, personal or social interest or contract with the parties in dispute or their Affiliated Companies, the next highest officer for the time being of said Institute of Petroleum, who is not disqualified shall act in lieu of said President. No person shall be appointed to act as an expert under this section:

(a) unless he or she shall be qualified by education, experience and training to determine the subject matter in dispute; or

(b) if at the time of his or her appointment or at any time before he or she makes his or her determination under such an appointment, he or she has or may have some interest of duty which conflicts or may conflict with his or her function under such appointment.

The expert shall render his or her decision within (60) days after the date of this appointment, unless the Parties otherwise agree. In rendering his or her decision, the expert shall do so within the context of the provisions of this Agreement, the Act, Regulations and the standards of Best petroleum industry practices. The decision of the expert shall be final and binding on both the Licensee and the Government. The expert's fees and expenses, and the costs associated with an appointment, if any, made by the President of the Institute of Petroleum (or the next highest officer thereof), shall be allocated to the Parties in dispute in such manner as the expert may determine.

ARTICLE 25

Force Majeure

25.1 Force Majeure shall be in accordance with Section 188 of the Act and this Article 25.

25.2 Any failure on the part of either the Licensee or Government to fulfil any of the conditions of this Agreement, , shall not constitute a breach of this Agreement, insofar as the failure results from an act of war, hostility, insurrection, storm, flood, earthquake or such other natural phenomenon beyond the reasonable control of the Licensee or Government. Force Majeure

shall not apply to the payment of monies due at the time of occurrence. No delay or default of a party in performing any of the obligations resulting from this Agreement shall be considered a breach of this Agreement if such delay or default is caused by a case of Force Majeure.

25.3 In the event that either party hereto is rendered unable or considers that it is prevented from performing any of its obligations, wholly or in part, by the occurrence of Force Majeure, such party shall give notice and details of Force Majeure in writing to the other Party within seven (7) days after its occurrence specifying the grounds for establishing Force Majeure, and take all necessary and useful steps to ensure the normal resumption of the performance of the concerned obligations upon termination of the event constituting the Force Majeure and do all reasonably within its power to remove such cause.

25.4 If in the event of Force Majeure the performance of any of the obligations under this Agreement is delayed, that delay extended by the period of time required to repair the damage caused during such delay and to resume the Petroleum Activities shall be added to the time allowed under this Agreement for the fulfilment of such obligations or the exercise of any right dependent thereon and the exclusive Exploration or exploitation authorizations shall be extended by that period as regards the area concerned by Force Majeure.

Obligations other than those affected by Force Majeure shall continue to be performed in accordance with the provisions of this Contract.

ARTICLE 26

Annual Acreage Rentals

26.1 Licensee shall pay an annual charge in respect of acreage rentals for the area subject to a Petroleum Exploration Licence or any Production Licence granted hereunder as follows:

(a) annual acreage rental for the area which remains subject to a Petroleum Exploration Licence:

First Exploration Period:

USD per square kilometre or part thereof;

(i) Second Exploration Period:

USD per square kilometre or part thereof;

(ii) Third Exploration Period:

USD per square kilometre or part thereof.

(b) Annual surface rental in respect of an Area subject to a Production Licence: USD per square kilometre or part thereof.

26.2 Annual acreage rentals payable pursuant to this Article shall be paid to the Government in accordance with the Act and Regulations in advance and without demand commencing with the date on which the Licence or any renewal thereof is granted and thereafter on each anniversary of such date during the term of said Licence. No rebates of acreage rentals shall be made by the Government in respect of any area which ceases to be subject to a Licence midyear.

26.3 Annual acreage rentals do not replace other charges that may be levied for entry into parts of the Contract Area arising out of specialized land use, such as national parks or nature reserves, for purposes other than Petroleum Activities.

ARTICLE 27

Termination

27.1 This Agreement shall be deemed to have been terminated if the Petroleum Exploration Licence granted to Licensee pursuant to the Act and Article 3 or any Petroleum Production Licence granted to Licensee pursuant to the Act and Article 6 have either expired, or have under and in accordance with the Act, Regulations, or any relevant provision of this Agreement, been surrendered by the Licensee in accordance with section 89 of the Act or been lawfully cancelled or terminated by the Government in accordance with

section 90 of the Act, but save as aforesaid shall continue in full force and effect so long as Licensee continues to hold, or has a pending application for, any of the said Licences.

27.2 The Government shall have the right to terminate this Agreement and any Petroleum Exploration Licence and Petroleum Production Licences granted hereunder, upon giving sixty (60) days written notice of its intention to do so for reasons prescribed under section 90 (3) of the Act and where the Licensee:

(a) fails to make any monetary payment required by law or under this Agreement for a period of thirty (30) days after the due date for such payment unless Licensee is contesting the obligation to make such payment and has commenced legal proceedings in respect thereof in which case the period of thirty (30) days after notice shall be counted from the date of issuance of a ruling, judgment or an award requiring
Licensee to pay the amount in dispute;

(b) has otherwise committed a material breach of the terms and conditions of this Agreement or any Licence granted under the Act pursuant to Articles 3 and 6.

(c) violates either materially or repeatedly any Uganda laws, Regulations, conditions of a Licence, orders or instructions issued by the Government or the terms of this Agreement; or

(d) becomes bankrupt, or goes into liquidation because of insolvency or makes a composition with its creditors.

27.3 If the circumstances that would result in termination under paragraph 27. 2. (a) and 27.2. (b) are remedied by Licensee within the sixty (60) day period following the notice of termination as aforesaid, such termination shall not become effective.

27.4 Where the breach cannot be remedied within a sixty (60) day period and the Licensee has commenced the works or steps necessary to remedy such breach

during the notice period and is diligently continuing such works thereafter, or, where it is otherwise impossible to remedy such breach, adequate compensation has been offered to and accepted by the Government in respect thereof within such sixty (60) day period, such termination shall not become effective.

27.5 If the circumstance or circumstances that would otherwise result in termination under paragraph 27.2. (a) or 27 .2. (b) are the result of Force Majeure, then termination shall not take place so long as such Force Majeure continues and for such period thereafter as provided in Article 25.

27.6 On termination of this Agreement and any related Licences or of an Participating Interest therein, the rights thereunder of Licensee or the defaulting Party, as the case may be, shall cease but the termination shall not affect any liability incurred before the termination, and any legal proceedings that might have been commenced or continued against Licensee or such defaulting Party may be commenced or continued against him.

ARTICLE 28

Accounting and Audits

28.1 Licensee shall be responsible for maintaining, in original, complete accounts, books and records reflecting all revenues, costs and expenses associated with Petroleum Activities under this Agreement in accordance with the Accounting Procedure set out in Annex "B" of this Agreement, International Financial Reporting Standards (IFRS) and Best Petroleum Industry Practices. The said accounting records shall be kept at an office in Uganda in USD and in Uganda Shillings and in case of inconsistencies, the accounts maintained in USD shall prevail.

28.2 The Licensee shall submit to the Government regular statements and reports relating to Petroleum Activities as provided in Annex “B”.

28.3 Nothing in this Agreement shall be construed as limiting the right of Government or any Officer of Government pursuant to any statutory power

to audit or cause to be audited the books or activities of the Licensee, its Contractors or Subcontractors.

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Notices

All notices and other communications required or permitted hereunder or any notices that one Party may desire to give to the other Party shall be in writing in the English language and deemed to have been properly delivered if physically delivered or sent by registered mail or by registered electronic mail, or telefax, except as otherwise provided herein, at or to the address of such Party for whom it is intended as indicated below, or such other addresses as any Party may from time to time designate by notice in writing to the other Party:

(a) Government:

Ministry of Energy and Mineral Development
P. O. Box 7270 Kampala
UGANDA

Attention: Permanent Secretary, Ministry of Energy and Mineral Development
Telephone No: MEMD
Telefax No: MEMD

(b) Licensee:

For COMPANY X PETROLEUM (UGANDA) LIMITED:
Company x Petroleum (Uganda) Limited
Tel:
Email:

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Applicable Law

30.1 This agreement shall be governed by, interpreted and construed in accordance with the laws of Uganda.

30.2 The Parties agree that the terms and conditions of this Agreement are based on the existing laws of the Republic of Uganda and the terms contained in this Agreement. If, following the Effective Date, there is a change in the laws of Uganda which substantially and adversely alters the economic benefits accruing to the Licensee, the Licensee may within thirty six (36) Calendar Months from the date on which any such change has legal effect, notify Government accordingly and thereafter the Parties shall negotiate to agree upon the effect of the changes in law and the necessary adjustments to the Agreement in order to maintain the economic benefit of the Licensee which existed at the Effective Date of this Agreement PROVIDED that the Licensee shall comply with the requirement of the law at all times.

30.3 In the event that within one hundred and twenty (120) days of receipt of the notification, the parties are unable to agree that the Licensee's economic benefits have been substantially and adversely affected and/or are unable to agree on the modifications required to maintain the economic benefits of the Licensee which prevailed at the Effective Date, then either Party may refer the matter for Arbitration pursuant to paragraph 24.1.

30.4 For the avoidance of doubt, the provisions of paragraph 30.2 above are intended for maintaining the original economic benefits under the Agreement as at the Effective Date and shall not prevent the Government from enacting laws intended to levy additional profit tax on additional profits.

30.5 The provisions of paragraph 30.2 above shall not apply to changes in the laws of Uganda regarding health, safety and environmental standards.

31

Entire Agreement and Amendments

31.1 This Agreement constitutes an agreement made under Section 6 of the Act.

31.2 This Agreement embodies the entire agreement and understanding between the Licensee and the Government relative to the subject matter hereof, and supersedes and replaces any provisions on the same subject in any other agreement between the Parties, whether written or oral, prior to the date of this Agreement. This Agreement may not be amended, modified, varied or supplemented except by an instrument in writing signed by Licensee and the Government which shall state the date upon which the amendment or modification shall become effective.

2

Waiver

32.1 Subject to the Act and Regulations, the performance of any condition or obligation to be performed under this Agreement shall not be deemed to have been waived or postponed, except by an instrument in writing signed by the Party, which is claimed to have granted such waiver or postponement.

32.2 No delay, inaction, omission or other failure of either Party to act upon or enforce any right, or to seek redress from the other Party of any breach or alleged breach of any obligation, shall be deemed a waiver of such rights or acceptability of such breach.

32.3 No waiver by any Party of any one or more obligations or defaults by any other Party in the performance of this Agreement shall operate or be construed as a waiver of any other obligations or defaults whether of a like or a different nature.

3

Confidentiality

33.1 Subject to the Constitution, the Act, Regulations, Access to Information Act, 2005, this Agreement and any confidential information of any Party hereto which becomes known to the other Party in connection with the

performance of this Agreement shall not be published or disclosed to third parties without the former Party's written consent, except as otherwise provided herein, and provided however that such other Party may communicate confidential information to legal counsel, Accountants, other professional consultants, underwriters, lenders, agents, licensees or shipping companies to the extent necessary in connection with this Agreement, with the obligation of the parties receiving such information to maintain confidentiality, or to an agency of the government of the country of Licensee having authority to require such disclosure.

33.2 The term "confidential information" as used herein shall mean information identified as "confidential" by the Party originally in possession of it and disclosed to the other Party, excluding information previously known to the other Party or information which is publicly known (except through disclosure of the other Party in violation of this Article) or information that comes into the possession of such other Party other than through a breach of this confidentiality undertaking.

33.3 Except as otherwise provided in the Act, Regulations and any other applicable law, the confidentiality obligations of this Article shall expire upon relinquishment of the area to which the information relates.

4

Disclaimer

34.1 Any reviews, provision of data or requests for information, data or otherwise from the Licensee by the Government or approvals by the Government or its Nominee under this Agreement is solely for the information of the Government and its satisfaction that the requirements of the Government as set forth herein have been satisfied by the Licensee. By making such reviews, requests or approvals, the Government makes no representation and the Licensee shall in no way so represent to third parties that such reviews, requests, approvals or otherwise are proof of the

economic and technical viability of the Petroleum Activities to be undertaken by the Licensee.

34.2 The Government shall not be liable to the Licensee for and the Licensee shall defend and indemnify the Government from any claim, cost, loss, damage or liability arising out of any contrary representation by the Licensee.

34.3 The Licensee is solely responsible for the economic and technical feasibility, reliability or in case of Discovery, realisation of the viability of the Petroleum Activities.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement prepared in the Republic of Uganda in the English language to be executed in …… originals by their respective duly authorised representatives as of the day and year first above written.

Signed for and on behalf of The Government of the Republic of Uganda

By:_____

(Specify name)

MINISTER OF ENERGY AND MINERAL DEVELOPMENT

In the presence of:_____

(Specify name and Title)

Signed for and on behalf of Licensee:

[X]

By:_____

(Specify name and Title)

In the presence of:_____

(Specify name and Title)

[Signed for and on behalf of Licensee:

[Y

By:_____

(Specify name and Title)

In the presence
of:_____]

(Specify name and Title)

[Signed for and on behalf of Licensee:

[Z]

By:_____

(Specify name and Title)

In the presence of:_____]

(Specify name and Title)

ANNEX A

Description and Map of Contract Area

Contract Area comprises some square kilometres, is of and is bounded along its outer margin by a continuous line which runs through the following geographical points and coordinates:

From the / border due east at ,

and thence to , and thence to , and thence to , and thence to , and thence to , and thence to , and thence to , and thence to , and thence to ,

and thence due …….. ,

All geographical references shall be in accordance with MAP DATUM WGS1984, Projection GCS –WGS 1984, zone 36N/zone 36S

ANNEX B

Accounting and Financial Procedure

SECTION 1

General Provisions

1.1 Definitions

For the purposes of this Accounting and Financial Procedure the terms used herein which are defined in the Agreement shall have the same meaning when used in this Accounting and Financial Procedure.

This Accounting and Financial procedure shall comply with the laws of Uganda.

1.2 Statements required to be submitted by Licensee

(a) Within ninety (90) days of the Effective Date, Licensee shall submit to and discuss with the Government a proposed outline of charts of accounts, operating records and reports, which outline shall be in accordance with generally accepted and recognized accounting systems and consistent with normal practice of the international petroleum industry and the requirements of this Agreement. Within ninety (90) days of receiving the above submission, the Government shall either indicate its approval of the proposal or may request revisions to the proposal to the extent that such outline is not in accordance with generally accepted and recognized accounting systems and consistent with the normal practices of the international petroleum industry and the requirements of this Agreement.

In the event that revisions are so requested by the Government, Licensee and the Government shall within one hundred and eighty (180) days after the Effective Date of the Agreement agree on the outline charts of accounts, operating records and reports which shall describe the basis of the accounting system and procedures to be developed and used under the Agreement. Following such agreement, Licensee shall expeditiously prepare and provide the Government with formal copies of the comprehensive charts of accounts related to the accounting, recording and reporting functions and allow the Government to examine Licensee's manuals and to review procedures which are, and shall be, observed under the Agreement.

Where the Government and the Licensee fail to agree within the 180 days, the Minister shall issue a format which shall be adopted by the Licensee.

(b) All reports, books, accounts and records of Licensee will be prepared and maintained in accordance with the laws of Uganda and this Agreement and, where there are no relevant provisions in the Agreement, in accordance with Best

Petroleum Industry Practices and International Financial Reporting Standards (IFRS)

(c) All accounts, books, records and reports of Licensee required hereunder shall be maintained in original at Licensee's business office in the Republic of Uganda and will be available for the inspection and use of the Government and its representatives in carrying out its functions under the laws of Uganda and this Agreement.

(d) The licensee shall report to Government on a quarterly basis, all expenditures, production, prices, sales receipts, Cost Recovery, production sharing and receipts of payments to the Government related to Petroleum Activities in the Contract Area.

(e) Within ninety (90) days after the expiration of each Calendar Year, Licensee shall submit to the Government detailed accounts showing all Contract Expenses and Contract Revenues during the past Calendar Year. Before submission to the Government, the accounts shall be audited and certified by an independent chartered accountant or certified public accountant of international standing, registered in Uganda and acceptable to both Parties, at the expense of Licensee. The scope of audit shall have prior approval of the Authority. It is understood that the Government retains the authority to review and audit Licensee's books and records, with respect to Petroleum Activities conducted hereunder, either directly or through an independent accountant of international standing designated by the Government..

(f) Notwithstanding the generality of the foregoing, the Licensee shall submit to the Authority statements relating to the Petroleum Activities as follows and in accordance with the laws and regulations of Uganda where other reporting requirements are established there:

(i) Production statement in accordance with the Regulations. The production statement shall be disaggregated into production per well, per producing field, per Petroleum Production Licence and per this Agreement's entire Contract Area

(ii) Value of production and pricing statement (see Section 6..1 of this Accounting and Financial Procedure). This statement shall be disaggregated per licence and accumulated to this Agreement's entire Contract Area

(iii)Statement of costs, expenditures and income (see Section 6.2 of this Accounting and Financial Procedure). This statement shall be disaggregated per licence and accumulated to this Agreement's entire Contract Area.

(iv)Cost Recovery statement (see Section 6.3 of this Accounting and Financial Procedure).

(v) Profit sharing statement (see Section 6.4 of this Accounting and Financial Procedure)

(vi)Local procurement statement (as specified in the Regulations). End of year statement (see Section 6.5 of this Accounting and Financial Procedure).

Budget statement (see Section 6.6 of this Accounting and Financial Procedure). This statement shall be disaggregated per licence and accumulated to this Agreement's entire Contract Area

1.3 Language and Units of Accounts

(a) Accounts shall be maintained in Uganda Shillings and in USD. However, the USD accounts will prevail in case of conflict. Metric units and Barrels shall be employed for measurements required under this Annex B. The language employed shall be English.

(b) It is the intent of this Accounting and Financial Procedure that neither the Government nor Licensee should experience an exchange gain or loss at the expense of, or to the benefit of, the other. However, any gain or loss resulting from the exchange of currency, will be credited or charged to the accounts as follows

(i) Amounts received and costs and expenditures made in Uganda Shillings, USD or any other currency shall be converted into Uganda Shillings or USD, as the case may be, on the basis of the average of the buying and selling exchange rates between the currencies in question as published by Bank of Uganda, prevailing on the last business **d**ay of the Calendar Month preceding the Calendar Month in which such amounts are received and costs and expenditures are paid.

(ii) In the event of an increase or decrease, one time or accumulative, of ten percent (10%) or more in the rates of exchange between the Uganda Shilling, the USD or the currency in question, during any given Calendar Month, the following rates will be used

(1) For the period from the first of the Calendar Month to the day when such increase or decrease is first reached, the average of the official buying and selling exchange rates between the USD, Uganda Shilling or the currency in question as issued on the last day of the previous Calendar Month.

(2) For the period from the day on which such increase or decrease is first reached to the end of the Calendar Month, the average of the official buying and selling exchange rates between the USD, the Uganda Shilling or the currency in question as issued on the day on which such increase or decrease is reached.

(c) A record of the exchange rates used in converting Uganda Shillings, USD or any other currency hereunder shall be maintained by Licensee.

1.4 Payments

(a) All payments between the Parties shall, unless otherwise agreed subject to the Act and Regulations, be in USD and through a bank designated by each receiving party.

(b) Discharge of Licensee's obligation with respect to Royalty, income tax, the Nominee of the Government's Participation Share of Production and the Government’s Share of Profit Petroleum or any other payment due to

Government shall be made in accordance with the laws of Uganda and this Agreement.

"Participation Share of Production" means a proportion of the Petroleum Produced and Saved from the Contract Area and not used or lost in Joint Activities and such proportion attributable to Licensee and the Government or its Nominee and shall be in accordance with their respective Joint Venture Interests in Joint Venture Assets.

1.5 Audit and Inspection Rights of Government

(a) The Government shall have the right, upon five (5) days' prior written notice to Licensee, to audit directly or through an independent accountant, at its own cost, Licensee's accounts and records maintained in relation to the Petroleum Activities carried out hereunder with respect to each Calendar Year within thirtysix (36) Calendar Months after the closure of the subject year's accounts. Notice of any exception to Licensee's accounts of any Calendar Year must be given to Licensee within sixty (60) Calendar Months of the closure of the subject year's accounts.

(b) For purposes of auditing, the Government may examine and verify at reasonable times all charges and credits relating to the Petroleum Activities such as books of account, accounting entries, material records and inventories, vouchers, payrolls, invoices and any other documents, correspondence and records necessary to audit and verify the charges and credits. The Licensee shall make available in original to the auditor all such books, records, accounts and other documents and information. Furthermore, the auditors shall have the right in connection with such audit to visit and inspect at reasonable times all sites, plants, facilities, warehouses and offices of the Licensee directly or indirectly serving the Petroleum Activities including visiting personnel associated with those Activities.

If the Government desires verification of charges representing a proportionate share in the cost of Licensee's activities other than those carried out hereunder, it may require such verification.

If Government desires verification of charges from Affiliated Companies of Licensee, Licensee shall, upon the Government's request take all measures to facilitate Government to undertake the necessary verification. The Government may require the Licensee to obtain an audit certificate to such effect from the statutory auditors of the Affiliated Company concerned attesting that such rates do not include a profit element and have been consistently and reasonably applied.

(c) The audit and inspection right shall extend to the operations beyond the Delivery Point which affect the measurement and valuation of Petroleum under Article 14.

(d) The Government shall conduct audits in accordance with the laws of Uganda. Licensee shall cooperate with the Government and its statutory auditors or the independent auditors, as the case may be, and will provide reasonable facilities and assistance.

(e) At the conclusion of each audit, the Government and Licensee shall endeavour to settle outstanding matters and a written report will be circulated to all parties within three (3) Calendar Months of the conclusion of each audit. The report shall include all claims arising from such audit together with comments pertinent to the operation of the accounts and records. Licensee shall reply to the report in writing as soon as possible and in any event not later than three (3) Calendar Months following receipt of the report. Should the Government consider that the report or reply requires further investigation of any items therein, the Government shall have the right to conduct further investigations in relation to such item

notwithstanding that the said period of thirty six (36) Months may have expired?

Such further investigation shall be commenced within thirty (30) days of the receipt of such reply and be concluded within ninety (90) days of investigation commencement and the report related to such further investigation shall be circulated within sixty (60) days of the conclusion of such further investigation. All adjustments resulting from an audit shall be made promptly by Licensee and be reported to the Government.

(f) Without prejudice to the finality of matters as described in subsection 1.5(a), all documents referred to in that subsection shall be maintained by the Licensee and made available for inspection by Government for at least ten (10) Calendar Years following their date of issue.

(g) Subject to the laws of Uganda, all information obtained by the Government pursuant to the provisions of this paragraph 1.5 shall be subject to the confidentiality requirements specified in paragraphs 35.1 and 35.2 of this Agreement.

1.6 Accrual Basis

All books, accounts and records shall be prepared on an accrual basis. Contract Revenues shall be attributed to the accounting period in which they are earned, and costs and expenses to the accounting period in which they are incurred, without the need to distinguish whether cash is received or disbursed in connection with a particular transaction. Costs and expenses shall be deemed to have been incurred, in the case of physical items, in the accounting period when Licensee acquires title thereto, and in the case of services, in the accounting period when such services are performed.

1.7 Arm's Length Transactions

Except as may be otherwise agreed in writing between the Government and Licensee or as may be provided in Article 14 of the Agreement, all transactions giving rise to revenues, costs or expenses under this Agreement which will be credited or charged to the books, accounts, records and reports prepared, maintained or submitted hereunder shall be conducted at arm's length or on such a basis as will assure that all such revenues, costs or expenses will not be materially higher or lower, as the case may be, than would result from a transaction conducted at arm's length on a competitive basis with third parties.

1.8 Allocation of Shared Costs

To the extent that costs and expenses are incurred by Licensee in respect of activities which would only in part qualify as Contract Expenses hereunder, such costs and expenses shall be allocated to the books, accounts, records and reports maintained hereunder in such a manner as to avoid any duplication of cost, to fairly and equitably reflect the costs attributable to Petroleum Activities carried out hereunder and to exclude any costs and expenses which should otherwise be allocated to those activities which would not constitute Petroleum Activities hereunder.

It is understood, however, that any Contract Expenses associated with a unit Development involving a Petroleum Reservoir which extends into a neighbouring country or Contract Area shall be allocated on the basis of the petroleum reserves attributable to that portion of the Petroleum Reservoir located in each country or Contract Area.

SECTION 2

Classification, Definition and Allocation of Costs, Expenditures and Income

Contract Expenses incurred in connection with Petroleum Activities carried out hereunder shall be classified, defined and allocated as follows:

2.1 Exploration Expenditure

Exploration Expenditures shall consist of all necessary, appropriate and economical direct and allocated indirect costs incurred in the search for Petroleum and the appraisal of Discoveries in the Contract Area and are expenditures in respect of:

(a) aerial, geophysical, geochemical, paleontological, geological, topographical and seismic surveys and studies and their interpretation;

(b) core hole drilling and water well drilling as part of Exploration activities;

(c) labour, materials and services used in drilling wells with the object of finding new Petroleum Reservoirs or for the purpose of appraising the extent of or subsequently producing Petroleum Reservoirs already discovered provided such wells are dry or are otherwise not completed as producing wells;

(d) facilities used solely in support of activities under this paragraph 2.1 including access roads and purchased geological and geophysical information acquired in connection with Exploration Activities;

(e) a portion of all Service Costs (as hereinafter defined) allocated to Exploration Activities on an equitable basis and consistently applied;

(f) a portion of all General and Administrative Expenses (as hereinafter defined) allocated to Exploration Activities based on projected budget expenditures subject to adjustment on the basis of actual expenditure at the end of the Calendar Year concerned.

(g) subject to agreement by the Parties, any other Contract Expenses incurred after the Effective Date prior to the commencement of Commercial Production in a Development Area and not otherwise covered by paragraph 2.2 below subject to paragraph 4.2.

2.2 Development Expenditures

Development Expenditures shall consist of all necessary, appropriate and economical expenditures (other than those referred to in paragraph 2.3) incurred in Development in relation to a Development Area and are expenditures in respect of;

(a) drilling wells which are completed as producing wells and drilling wells for purposes of producing a Petroleum Reservoir already discovered provided such wells are completed as producing wells;

(b) Drilling of wells for the injection of fluids into the Petroleum Reservoir to enhance recovery of Petroleum.

(c) Completing those wells described in this paragraph 2.2 by way of installation of casing or equipment or otherwise after a well has been drilled for the purpose of bringing the well into use as a producing or injection well;

(d) the costs of field facilities including field gathering systems, field production and treatment units, wellhead equipment, subsurface equipment, Natural Gas separation facilities, enhanced recovery systems, offshore platforms, Petroleum storage facilities in the field and related facilities, and field access roads for production activities;

(e) The costs of Petroleum transportation facilities installed up to the Delivery Point, including but not limited to pipelines, compressors, and storage facilities;

(f) Engineering and design studies for field facilities;

(g) A portion of all Service Costs (as hereinafter defined) allocated to the Development on an equitable basis and consistently applied;

(h) A portion of all General and Administrative Costs (as hereinafter defined) allocated to the Development based on projected budget expenditures which will be adjusted to actual expenditures at Calendar Year end.

(i) Subject to agreement by the Parties, any other expenditure incurred in Development prior to the commencement of Commercial Production in a Development Area, other than those incurred in respect of operations carried out beyond the Delivery Point, subject to paragraph 4.2.

2.3 Operating Expenses

Operating Expenses shall consist of all necessary, appropriate and economical expenditures incurred in the Petroleum Activities hereunder after the start of the Commercial Production (including intangible drilling costs which are labour, consumable material and services having no salvage value which are incurred in the drilling Activities related to the drilling or deepening of producing wells whether incurred before or after the start of Commercial Production) which are other than Exploration Expenditures and Development Expenditures and General and Administrative Expenses and Service Costs otherwise allocated to Exploration Expenditures or Development Expenditures pursuant to subparagraphs 2.1(e) and (f) and 2.2(g) and (h) above; Operating Expenses shall not, however, include tariff charges, if any, imposed by the Pipeline Company associated with the transportation of Petroleum from the Delivery Point to the Seaboard Terminal point of export.

2.4. Service Costs

Service Costs shall consist of all necessary, appropriate and economical direct and indirect expenditures in support of the Petroleum Activities in the Contract Area including, warehouses, piers, marine vessels, vehicles, motorised rolling equipment, aircraft, fire and security stations, workshops, water and sewage plants, power plants, housing, tools and equipment used in these activities. Service Costs in any Calendar Year shall include the total costs incurred in such year to purchase and/or construct said facilities as well as annual costs to maintain and operate the same. All Service Costs will be regularly allocated as specified in subparagraphs 2.1(e), 2.2(g) and 2.3 to Exploration Expenditures, Development Expenditures and Operating Expenses.

2.5 General and Administrative Expenses

(a) All main office, field office and associated general and administrative costs incurred in relation to Petroleum Activities in the Contract Area, including supervisory, accounting and employee relations services carried out by Licensee in Uganda.

(b) an annual overhead charge for services rendered by Licensee's Affiliated Companies to support and manage Petroleum Activities in the Contract Area, and for staff advice and assistance including financial, legal, accounting and employee relations services, but excluding any remuneration for services charged separately under this Accounting Procedure, provided that:

(i) For the period from the Effective Date until the date on which the first Field Development Plan under the Contract is approved by the Government, this annual charge shall be Licensee’s verifiable expenditure limited to 1% of Contract Costs.

(ii) From the date on which the first Field Development Plan is approved, the charge shall be verifiable expenditures restricted to an amount or rate to be agreed on between the Parties and stated in the Field Development Plan.

(c) All General and Administrative Expenses shall be necessary, appropriate, economical and verifiable and will be regularly allocated as specified in subsection 2.1(f), 2.2(g) and 2.3 to Exploration Expenditures, Development Expenditures and Operating Expenses.

2.6. Income

Petroleum Produced and Saved shall be classified to segregate income from Natural Gas, Crude Oil and condensate and shall include closing stock. Petroleum Produced and Saved shall be valued as per Article 15 and 19. Other categories of income shall be appropriately classified so as to calculate the Profit Petroleum correctly.

SECTION 3

Costs, Expenses, Expenditures and Credits of the Licensee

3.1 Recoverable Costs

Subject to the provisions of this Agreement, Licensee shall bear and pay the following costs and expenses in respect of the Petroleum Activities. These costs and expenses will be classified under the headings referred to in Section 2 of this Annex. They are recoverable Contract Expenses by Licensee under the Agreement.

(a) Surface Rights

This covers all direct costs attributable to the acquisition, renewal or relinquishment of surface rights acquired and maintained in force for the Contract Area.

(b) Labour and Associated Labour Costs

(i) gross salaries and wages including bonuses, and other customary allowance afforded to expatriate employees in similar Activities elsewhere of Licensee's employees directly engaged in the Petroleum Activities;

(ii) Licensee's costs regarding sickness and disability payments applicable to the salaries and wages chargeable under subparagraph (i) above;

(iii) expenses or contributions made pursuant to assessments or obligations imposed under the laws of the Uganda which are applicable to Licensee's cost of salaries and wages chargeable under (i) above;

(iv) Licensee's cost of established plans for employees' life insurance and hospitalisation;

(v) Reasonable travel and personnel expenses of employees of Licensee and their families including those made for travel and relocation of the expatriate employees assigned to the Republic of Uganda, all of which shall be in accordance with Licensee's normal practice, provided such is consistent with the laws of Uganda.

(c) Offices, Camps, Warehouses and other facilities. The cost of establishing, maintaining and operating any offices, camps, warehouses, workshops, housing, water systems and other facilities for the purpose of carrying out the Petroleum Activities. The costs of those facilities, which are not used for the exclusive purpose of carrying out the Petroleum Activities, shall be apportioned on a consistent and equitable basis between the Petroleum Activities and the Licensee's other operations and those of its Affiliated Companies.

(d) Transportation

The cost of transportation of employees, equipment, materials and supplies necessary for the conduct of the Petroleum Activities.

(e) Charges for Services

(i) Third Party Contracts

The actual costs of contracts for technical and other services entered into by Licensee for the Petroleum Activities, made with third parties other than Affiliated Companies of Licensee are recoverable, provided that the prices paid by Licensee are in line with those generally charged by other international or domestic suppliers for comparable work and services.

(ii) Affiliated Companies of Licensee

Without prejudice to the charges to be made in accordance with paragraph 2.5 of this Annex, in the case of specific services rendered to the Petroleum Activities under contract with, and invoiced to, Licensee by an Affiliated Company of Licensee, the allowable charges will be based on actual costs without profits, will be no higher than the most favourable prices charged by the Affiliated Company to third parties for comparable services under similar terms and conditions elsewhere, will be included in any budget submitted to the Authority and will not exceed the charges billed to any Joint Activities in respect of such services pursuant to any Joint Operating Agreement relating to the Petroleum Activities carried out hereunder. The Licensee will, if requested by Government, specify the amount of such charges which represents an allocated proportion of the general material, management, technical and other costs of the Affiliated Company, and the amount which is the direct cost of providing the services concerned.

(f) Material

(i) **General**

So far as is practicable and consistent with efficient and economical operation, only such material shall be purchased or furnished by Licensee for use in the Petroleum Activities as may be required for use in the reasonably foreseeable future and the accumulation of surplus stocks will be avoided.

(ii) **Warranty of Material**

In case of defective material or equipment, any adjustment received by Licensee from the suppliers/manufacturers or their agents will be credited to the accounts under the Agreement.

(iii)**Value of Material Charged to the Accounts under the Agreement**

(g) Except as otherwise provided in subparagraph (b) below, material purchased by Licensee for use in the Petroleum Activities shall be valued to include the invoice price less trade and cash discounts (if any), purchase and procurement fees plus freight and forwarding charges between point of supply and point of shipment, loading and unloading fees, dock charges, forwarding and documentation fees, packing costs, freight to port of destination, insurance, taxes, customs duties, consular fees, other items chargeable against imported material and where practicable handling and transportation expenses from point of importation to warehouse or operating site, and its costs should not exceed those currently prevailing in normal arm's length transactions on the open market.

(h) Materials purchased from Affiliated Companies of Licensee shall be charged at prices not higher than the following:

(1) New Material (Condition "A") shall be valued at the current international price which should not exceed the price prevailing in normal arm's length transactions on the open market.

(2) Used Material (Conditions "B" and "C"):

(f) Material which is in sound and serviceable condition and is suitable for reuse for its original function without reconditioning shall be classified as Condition "B" and priced at seventyfive percent (75%) of the current price of new material defined in subparagraph (1) above.

(g) Material which cannot be classified as Condition "B" but which after repair and reconditioning will be further serviceable for original function as good second hand material (Condition "B") shall be classified as Condition "C" and priced at fifty percent (50%) of the current price of new material as defined in subparagraph (1) above.

(h) The cost of reconditioning shall be charged to the reconditioned material, provided that the condition C material value plus the cost of reconditioning does not exceed the value of condition B material.

(i) Material which cannot be classified as Condition "B" or condition "C" shall be priced at a value commensurate with its use.

(3) Material involving erection costs shall be charged at the applicable condition percentage of the current knocked down price of new material as defined in subparagraph (1) above.

(4) When the use of material is temporary and its service to the Petroleum Activities does not justify the reduction in price as provided for in subparagraph (2)(ii) hereof, such material shall be priced on a basis that will result in a net charge to the accounts under the Agreement consistent with the value of the service rendered.

(iv) Stocks and consumables costs shall be charged to the accounts pursuant to the "Average Cost" method.

(j) Rentals, taxes, duties, and Other Assessments

All rentals, levies, charges, fees, compensation or other charges in respect of rights of way, contributions and any other assessment and charges levied by the Government or any Local Government in connection with the Petroleum Activities, and paid directly or indirectly by Licensee, other than Royalty, Income Tax imposed on Licensee, State Participation and

Government's Share of Profit Petroleum attributable pursuant to Article 12 of the Agreement.

(k) Insurance and Losses

Insurance premia and costs incurred for insurance, provided that if such insurance is wholly or partly placed with an Affiliated Company of Licensee, such premia and costs shall be recoverable only to the extent generally charged by competitive insurance companies other than an Affiliated Company of Licensee.

(l) Legal Expenses

Subject to paragraph 3.2(h) below, all reasonable costs and expenses of litigation and legal or related services necessary or expedient for the producing, perfecting, retention and protection of the Contract Area, and in defending or prosecuting lawsuits involving the Contract Area or any third party claim arising out of Petroleum Activities under the Agreement or sums paid in respect of legal services necessary or expedient for the protection of the joint interest of Government and Licensee are recoverable but excluding claims arising out of issues relating to health, safety and environment and environmental damage or pollution. Where legal services are rendered in such matters by salaried or regularly retained lawyers of Licensee or an Affiliated Company of Licensee, such compensation will be included instead under subparagraph 3.1(b) or 3.1(e) above, as applicable.

(m) Training Costs.

Except where otherwise provided herein, all costs and expenses incurred by Licensee in training of its Ugandan employees engaged in the Petroleum Activities and such other training as required under Article 21 of the Agreement.

(n) General and Administrative Expenses.

The costs described in subparagraph 2.5(a) and the charge described in subsection 2.5(b).

(o) Interest and other financial charges incurred on loans raised by Licensee to finance Development provided that such interest rates and charges do not

exceed LIBOR and only to the extent that such interest and financial charges relate to not more than fifty per cent (50%) of the total financing requirement of such activities (including loans from both Affiliated Companies and NonAffiliated Companies).

(n) Subject to approval of Government, expenditure on research into and development of new equipment, material and techniques for use in searching for development and producing Petroleum directly related to the conduct of Petroleum Activities carried out under this Agreement.

(o) Ecological and environmental charges: Costs for all measures taken to avoid waste and prevent damage or pollution in the conduct of the Petroleum Activities.

(p) Leasing expenses: Costs incurred in connection with the leasing of property and equipment provided that such costs do not exceed prevailing commercial rates; and that any such leasing arrangements are concluded with parties which are not Affiliated Companies of Licensee; and that the cost of leasing is not more than that of purchasing the same equipment.

(q) Communication charges: Costs of acquiring, leasing, operating and maintaining communication systems including, but not limited to, radio, telephone, telecopier and email systems.

(r) Payments into the Decommissioning Fund.

3.2 Costs not Recoverable under the Agreement

The following costs and expenses shall not be recoverable (whether directly as such or indirectly as part of any other charges or expense) for Cost Recovery and profit sharing purposes under the Agreement;

(a) Costs incurred before the Effective Date.

(b) Costs incurred in acquiring or transferring any interest in the Agreement or Licence issued under the Act and the Agreement.

(c) Signature and other Bonuses

(d) Costs incurred beyond the Delivery Point, including but not limited to petroleum marketing charges and transportation tariff charges

(e) The costs associated with the provision of the Bank Guarantee pursuant to paragraph 4.7 of the Agreement and any payments made thereunder in respect of failure by Licensee to comply with its contractual obligations under the Agreement and any other amounts spent on indemnities with regard to fulfilment of contractual obligations by Licensee.

(f) Legal and other costs incurred in resolving any dispute between the Parties including litigation under the laws of Uganda and any dispute resolution pursuant to Article 24 of this Agreement.

(g) Royalty.

(h) Income Tax imposed in accordance with the laws of Uganda.

(i) The Government's Share of Profit Petroleum determined pursuant to Article 13 of the Agreement.

(j) Fines and penalties imposed under the laws of Republic of Uganda or elsewhere.

(k) Costs incurred as a result of noncompliance by the Licensee with the legislation or the Contract, including costs incurred as a result of any negligent act or omission or wilful misconduct of the Licensee's Contractor, Subcontractors and agents.

(l) Interest incurred on loans raised by Licensee to finance Exploration Activities.

(m) Commissions paid to intermediaries by Licensee.

(n) Donations and charitable contributions.

(o) Any other expenses incurred without the approval of the Authority.

3.3 Credits under the Agreement

The net proceeds of the following transactions will be credited to the accounts under the Agreement:

(a) The net proceeds of any insurance or claim in connection with the Petroleum Activities or any assets charged to the accounts under the Agreement when such Activities or assets were insured and the premia charged to the accounts under the Agreement.

(b) evenue received from third parties for the use of property or assets charged to the accounts under the Agreement.

(c) Any adjustment received by Licensee from the suppliers/manufacturers or their agents in connection with a defective material the cost of which was previously charged by Licensee to the accounts under the Agreement.

(d) Rebates, refunds or other credits received by Licensee which apply to any charge which has been made to the accounts under the Agreement, but excluding any awards granted to Licensee
under the arbitration or independent expert proceedings referred to in Subsection 3.2(d) above.

(e) The actual net proceeds of sale realised from the disposal on an arm's length basis of inventory materials originally charged to the accounts under the Agreement and subsequently exported from the Republic of Uganda without being used in the Petroleum Activities. In the event that such inventory materials are exported but not sold by Licensee, or, if sold, are disposed of other than on an arm's length basis, such materials will be valued as used material pursuant to paragraph 3.1(f)(iii) of this Annex and the value so determined shall be credited to the Accounts.

(f) The actual net proceeds from the sale or exchange by the Licensee of assets, plant or facilities, the acquisition costs of which have been charged to the accounts under the Agreement.

(g) Gains resulting from foreign currency exchange.

(h) Legal costs charged to the accounts under Section 3.1(i) of this Accounting Procedure and subsequently recovered by the Licensee; or

(i) Proceeds of any interest received from Bank on the account maintained by Joint Venture for the Petroleum Activities.

3.4 Duplication of Charges and Credits

Notwithstanding any provision to the contrary in this Accounting and Financial Procedure, it is the intention that there shall be no duplication of charges or credits in the accounts under the Agreement and/or the tax laws of Uganda.

SECTION 4

Records, data and Valuation of Assets

Licensee shall maintain detailed records of property and assets in use for the Petroleum Activities in accordance with the Act, Regulations and normal practice in Exploration, Development and Production activities in the international petroleum industry. At reasonable intervals but at least once a year with respect to movable assets and once every five (5) years with respect to immovable assets, inventories of the property under the Agreement shall be taken by Licensee. Licensee shall give Government at least thirty (30) days written notice of its intention to take such inventory and Government shall have the right to be represented when such inventory is taken. Licensee will clearly state the principles upon which valuation of the inventory has been based. When an assignment of rights under the Agreement takes place, a special inventory may be taken by Licensee at the request of the assignee provided that the costs of such inventory are borne by the assignee and not charged to Contract Expenses hereunder.

SECTION 5

Revision of Accounting and Financial Procedures and Conflicts

5.1 The provisions of this Accounting and Financial Procedure may be amended by agreement between Licensee and the Government. The amendments shall be made in writing and shall state the date upon which the amendments shall become effective.

5.2 In the event of any conflict between the provisions of this Accounting and Financial Procedure and the Articles of Agreement, the Articles of the Agreement shall prevail.

SECTION 6

Reporting Statements

6.1 **Value of Production and Pricing Statement**

6.1.1 The Licensee shall, for the purposes of Article 14 of the Agreement, prepare a Statement providing calculations of the value of Petroleum Produced and Saved during each Calendar Month. This Statement shall contain the following information:

(a) The quantities, and prices of sales of Crude Oil to third parties made during the Calendar Month in question.
(b) The quantities and prices of sales of Crude Oil made during the Month in question, other than to third parties, if any.
(c) The quantities of Crude Oil appropriated by the Licensee to refining or other processing without otherwise being disposed of in the form of Crude Oil..
(d) The value of stocks of Crude Oil on the first day of the Calendar Month in question.
(e) The value of stocks of Crude Oil on the last day of the Calendar Month in question.
(f) The percentage volume of total sales of Crude Oil made by the Licensee during the Calendar Month that are arm's length sales to third parties.
(g) The quantities and tariffs pertaining to Petroleum transported beyond the Delivery Point.
(h) Information available to the Licensee, insofar as required for the purposes of Article 14 of the Agreement concerning the prices of competitive crude oils produced by the main petroleum producing and exporting countries including contract prices, discounts and premia, and prices obtained on the spot markets.

6.1.2 The Licensee shall, for the purpose of Article 18 of the Agreement prepare a statement providing calculations of the value of Associated Natural Gas and Non Associated Natural Gas produced, flared, internally used, saved and sold during each Calendar Month. This statement shall contain all information of the type specified in Section 6.1.1 for Crude Oil as is applicable to Natural Gas and such other relevant information as may be required by Government.

6.1.3 The Statements required pursuant to Sections 6.1.1 and 6.1.2 shall include a detailed breakdown of the calculation of the prices of Crude Oil, Associated Natural Gas and Non Associated Natural Gas pursuant to the provisions of Articles 14 and 18.

6.1.4 The value of production and pricing statement for each Calendar Month shall be submitted to Government not later than thirty (30) days after the end of such Calendar Month.

6.2 **Statement of Costs, Expenditures and Income**

6.2.1 The Licensee shall prepare with respect to each Calendar Quarter a statement of costs, expenditures and income under the Agreement using mercantile basis of accounting. The Statement shall distinguish between Exploration Expenditures, Development Expenditures and Operating Expenses and shall separately identify all significant items of costs and expenditure as itemised in Section 3 of this Accounting and Financial Procedure within these categories. The statement of income shall distinguish between income from the sale of Petroleum and incidental income of the sort itemised in Section 3.3 of this Accounting and Financial Procedure. If the Government is not satisfied with the degree of disaggregation within the categories, it shall be entitled to a more detailed breakdown. The Statement shall show the following:

(a) Actual costs, expenditures and income for the Calendar Quarter in question;
(b) Cumulative costs, expenditures and income for the Calendar Year in question;
(c) Latest forecast of cumulative costs, expenditures and income at the Calendar Year end; and
(d) Variations between budget forecast and latest forecast and explanations thereof.

6.2.2 The statement of costs, expenditures and income of each Calendar Quarter shall be submitted to Government not later than thirty (30) days after the end of such Calendar Quarter.

6.2.3 An annual statement of costs, expenditures and income shall be submitted as part of end of year statement under Section 6.5 of this Accounting and Financial Procedure within ninety (90) days after the end of each Calendar Year.

6.3 **Cost Recovery Statement**

6.3.1 The Licensee shall prepare with respect to each Calendar Quarter a Cost Recovery statement containing the following information:

(a) Recoverable Contract Expenses carried forward unrecovered from the previous Calendar Quarter, if any.
(b) Recoverable Contract Expenses for the Calendar Quarter in question.
(c) Cumulative recoverable Contract Expenses for the Calendar Quarter in question (i and ii above).
(d) Quantity and value of Cost Petroleum taken and disposed of by the Licensee for the Calendar Quarter in question.

(e) Contract Expenses recovered during the Calendar Quarter in question as per Article 11.

(f) Cumulative amount of Contract Expenses recovered up to the end of the Calendar Quarter in question.

(g) Amount of balance recoverable Contract Expenses to be carried forward into the next Calendar Quarter.

6.3.2 The Cost Recovery statement for each Calendar Quarter shall be submitted to Government not later than thirty (30) days after the end of such Calendar Quarter.

6.3.3 An annual Cost Recovery statement shall be submitted as part of end of year statement under Section 6.5 of this Accounting and Financial Procedure within ninety (90) days after the end of each Calendar Year.

6.4 **Profit Sharing Statement**

6.4.1 The Licensee shall prepare with respect to each Calendar Quarter a profit sharing statement containing the following information:

(a) The total amount of Profit Petroleum to be shared between the Government and the Licensee in the Calendar Quarter in question.

(b) The amount of Profit Petroleum due to the Government and the Licensee as well as to each constituent of the Licensee in the Calendar Quarter in question.

6.4.2 The profit sharing statement shall be submitted to Government not later than thirty (30) days after the end of such Calendar Quarter.

6.4.3 The Licensee shall prepare an annual profit sharing statement containing the following information:

(a) The calculation of the applicable net income as defined in Article 12 for the Calendar Year.

(b) The RFactor at the end of the Calendar Year.

(c) The total amount of Profit Petroleum to be shared between the Government and the Licensee for the Calendar Year.

(d) The amount of Profit Petroleum due to the Government and the Licensee as well as to each constituent of the Licensee for the Calendar Year.

(e) The annual statement shall be submitted as part of end of year statement under Section 6.5 of this Accounting and Financial Procedure within ninety (90) days after the end of each Calendar Year.

6.5 **End of Year Statement**

6.5.1 The Licensee shall prepare a definitive end of year statement. The statement shall contain aggregated information in the same format as required in the production statement, value of production and pricing statement, statement of costs, expenditures and income, Cost Recovery statement and profit sharing statement, but shall be based on actual quantities of Petroleum produced, income accrued and costs and expenditures incurred. Based upon this statement, any adjustments that are necessary shall be made to the transactions concerned under the Agreement.

6.5.2 End of year statement shall further contain the itemwise justification for the variation between the actual costs, expenditure and income incurred and included in the statement of costs, expenditure and income visàvis the budgets for corresponding line items.

6.5.3 The Licensee shall prepare and submit joint venture accounts to indicate the recoverable costs, value of Petroleum Produced and Saved, Cost Petroleum, Profit Petroleum, etc.

6.5.4 The end of year statement for each Calendar Year shall be duly audited under Article 30 and submitted to Government within ninety (90) days of the end of such Calendar Year.

6.6 Budget Statement

6.6.1 For the purpose of this Accounting and Financial Procedure, the Licensee shall prepare a budget statement for each Calendar Year. This Statement shall distinguish between budgeted Exploration Expenditures, Development Expenditures and Operating Expenses and shall show the following:

(a) Forecast costs, expenditures and income for the Calendar Year in question;

(b) A schedule showing the most important individual items of total costs, expenditures and income for the said Calendar Year; and

(c) Estimated amounts to be spent in the Calendar Year on procuring goods and services in Uganda.

6.6.2 The budget statement shall be submitted to Government with respect to each Calendar Year not less than ninety (90) days before the start of the said Year provided that in the case of the Calendar Year in which the Effective Date falls, the budget statement shall be submitted within ninety (90) days of the Effective Date.

6.6.3 If the Government is not satisfied with the degree of disaggregation within the categories in 6.6.1 above, it shall be entitled to a more detailed breakdown.

Annex C

Form of the Performance Guarantee (the "Guarantee")

1. We understand that, on [insert date][3], the Government of the Republic of Uganda (the "**Government**") and [insert name of Licensee], hereinafter referred to as the "**Company**", entered into a Production Sharing Agreement for [insert contract area or other specification as appropriate] in Uganda, (the "**PSA**").
2. Definitions set forth in applicable Ugandan Petroleum Law and the PSA, shall apply to this Guarantee, unless otherwise stipulated or the context otherwise requires.
3. We, the undersigned [insert the legal name of the bank], hereinafter referred to as the "**Bank**", hereby unconditionally and irrevocably on first demand guarantee in favour of the Government the punctual payment by the Company of all sums owed to the Government by the Company in relation to the Company's failure to fulfil the Minimum Work Program and minimum Exploration Expenditures pursuant to the PSA, in relation to the [[1392][....] Exploration Period / the initial term of the corresponding Petroleum Exploration License], up to a maximum of [.....] United States dollars (US$ ……) (the "**Guaranteed Amount**").
4. The Government may make multiple demands under this Guarantee up to the Guaranteed Amount.

[1392] Insert the relevant period/term.

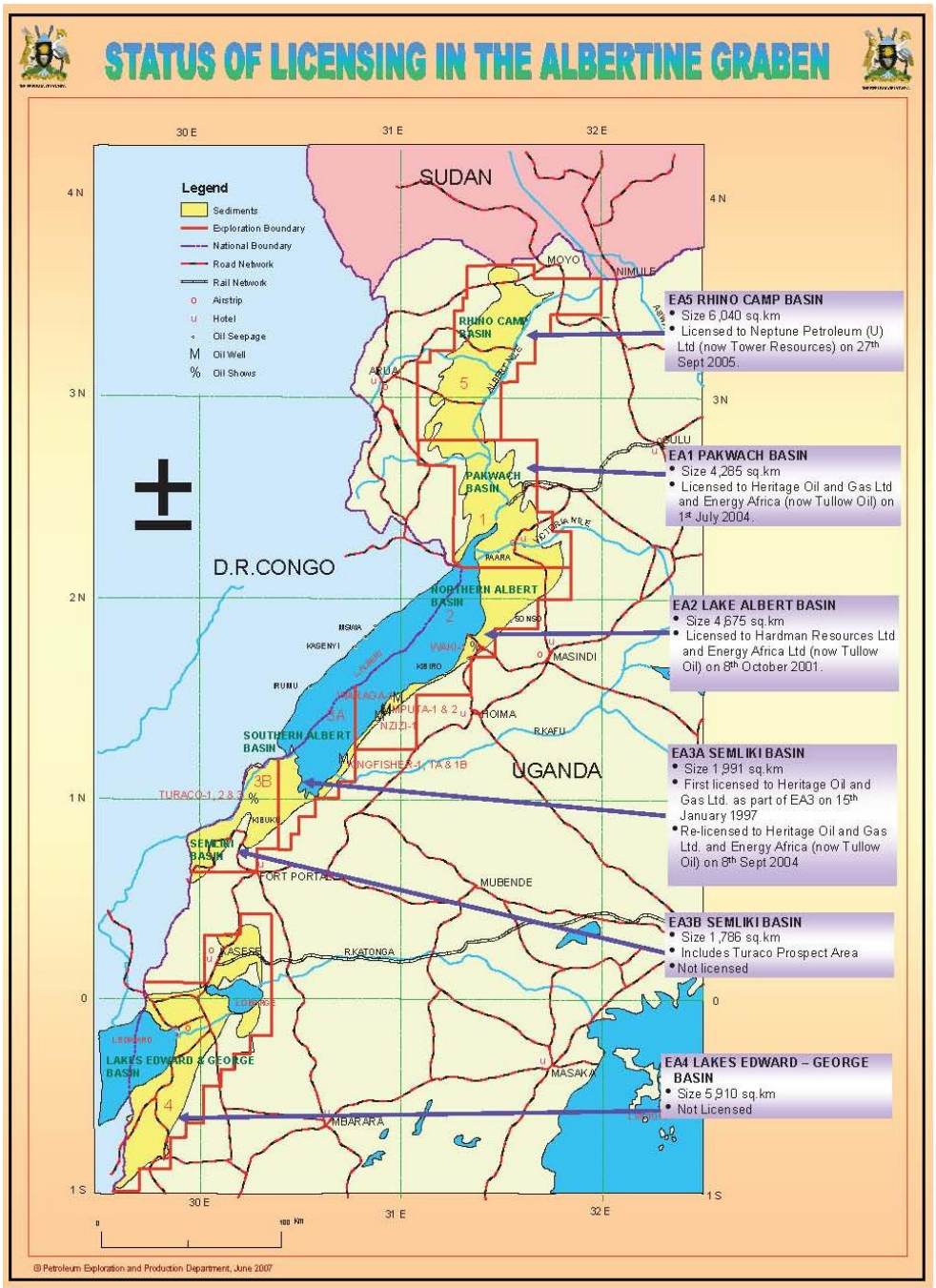
5. Any claim by the Government under this Guarantee will be honoured within three banking days from the Bank's receipt of a first demand in writing stating that the Company has not fulfilled its obligations under the PSA and in what respect the Company is in breach of its obligations under the PSA.
6. Any demand hereunder shall be addressed to [bank + address + attention].
7. This Guarantee shall become effective upon its signature and shall expire [[1393] upon notice issued by the Government stating that the Company's obligations under the PSA has been completed to the satisfaction of the Government / [6]on [●] (the "**Expiration Date**") at the latest and any demand hereunder must be received by us on or before the Expiration Date.]
8. This Guarantee shall be binding on the Bank and its successors and assignees and shall be irrevocable.
9. This Guarantee shall be governed by and construed in accordance with [Ugandan law] without regard to the conflict of law provisions thereof. We, the undersigned, agree that [the courts of Uganda] shall have [non]exclusive jurisdiction to settle any dispute or claim arising out of or in connection with this Guarantee or its subject matter or formation (including noncontractual disputes or claims).

The duly authorised representative of the Bank has executed this Guarantee on this the …… day of …….

Very truly yours, for and on behalf of [the bank's legal name]

[1393] Depending on the required duration of the Guarantee – this clause may be reworded to refer to the expiry of the Company's obligations relating to a specified term, such as the relevant Exploration Period. [6] We expect that the Banks would prefer a pre-set expiration date whereafter their obligations will terminate.

Appendix 4. Status of licensing in the Albertine Graben



Source: Ministry of Energy and Mineral Development, Petroleum Exploration and Production Department

Appendix 5. Kenya Model Psa

REPUBLIC OF KENYA

MODEL PRODUCTION SHARING CONTRACT

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PRODUCTION SHARING CONTRACT

BETWEEN

THE GOVERNMENT OF THE REPUBLIC OF KENYA

AND ……

This CONTRACT, is made and entered into on the ….....……..., 19 …….....by and between the Government of the Republic of Kenya (hereinafter referred to as the "Government") represented for the purpose of this contract by the Minister for the time being responsible for energy (hereinafter referred to as the "Minister") and

……. , incorporated under the laws of ……..and having established a place of business at ……., Kenya (hereinafter referred to as the "Contractor").

(Note: to be amended in case of a contractor consisting of several entities)

The Government and the Contractor herein are referred to either individually as "Party" or collectively as "Parties".

WITNESSETH:

WHEREAS the title to all petroleum resources existing in their natural conditions in Kenya is vested in the Government; and

WHEREAS the Government wishes to promote and encourage the exploration

and the development of petroleum resources in and throughout the Contract Area; and

WHEREAS the Contractor desires to join and assist the Government in accelerating the exploration and development of the potential petroleum resources within the contract area: and

WHEREAS the Contractor has the financial ability, technical competence and professional skills necessary to carry out the petroleum operations hereinafter described; and

WHEREAS in accordance with the Petroleum (Exploration and Productio n) Act (Cap 308) laws of Kenya, 1986, enacted by the Parliament of the Republic of Kenya, agreements, in the form of production sharing contracts, may be entered between the Government and capital investors;

NOW THEREFORE in consideration of the undertaking and covenants herein contained, the Parties hereby agree as follows:

PART I

SCOPE AND INTERPRETATION

1 SCOPE

This contract is a production sharing contract, in accordance with the provisions herein contained.

The Contractor shall

(a) be responsible to the Government for the execution of the petroleum operations contemplated hereunder in accordance with the provisions of this contract and is hereby appointed and constituted the exclusive legal entity to conduct petroleum operations in the contract area for the term hereof;

(b) provide all capital, machinery, equipment, technology and personnel necessary for the conduct of petroleum operations;

(c) bear the risk of petroleum costs required in carrying out petroleum operations and shall therefore have an economic interest in the development of the petroleum deposits in the contract area. Such costs shall be included in petroleum costs recoverable as provided in clause 27 hereof.

During the term of this contract, the total production achieved in the conduct of the petroleum operations shall be divided between the parties hereto in accordance with the provisions of clause 27 hereof.

2. INTERPRETATION

In this contract, words in the singular include the plural and vice versa, and except where the context otherwise requires:

"accounting procedure" means the accounting procedures and requirements set out in Appendix "B" attached hereto and made an integral part hereof;

"the Act" means the Petroleum (Exploration and Production) Act;
"affiliate" means a person directly or indirectly controlling or controlled by or under direct or indirect common control with another person, and "control" means the ownership of at least fifty percent (50%) of voting rights in that person;

"barrel" means a quantity consisting of 158.987 litres at standard atmospheric pressure of 1.01325 bars and temperature of fifteen degrees centigrade (15 C);

"calendar quarter" or "quarter" means a period of three (3) consecutive months commencing with the first day of January, April, July and October;

"calendar year" means a period of twelve (12) consecutive months commencing with the first day of January in any year and ending the last day of December in that year, according to Gregorian calendar;

"commercial discovery" means a discovery of petroleum which has been duly evaluated in accordance with the provisions of clause 19, and which can be produced commercially according to good international petroleum industry practice, after the consideration of all pertinent technical and economic data;

"commercial production" means the quantity of petroleum produced on a regular basis from a commercial discovery, saved and not used in petroleum operations;

"Constitution" means the Constitution of the Republic of Kenya;

"contract area" means the area covered by this contract, and described in Appendix "A" and any part thereof not previously surrendered;

"contract year" means twelve (12) consecutive calendar months from the effective date or from the anniversary thereof;

"contractor" means the contractor, its successors or any assignee or assignees of any interest of the contractor under this contract, provided that the assignment of any such interest is accomplished pursuant to the provisions of clause 35 hereof;

"crude oil" means all hydrocarbons regardless of gravity which are produced at the wellhead in liquid state at atmospheric pressure, asphalt ozokerites and the liquid hydrocarbons known as distillates or natural gas liquids obtained from natural gas by condensation or extraction;
"development area" means the area delimited in a development plan adopted under clause 20 hereof;

"effective date" means the date falling ninety days after this contract is executed by the Government and the contractor;

"exploration operations" include geological and geophysical surveys and analyses, aerial mapping, investigations of subsurface geology, stratigraphic test drilling exploratory wells, and work necessarily connected therewith;

"exploratory well" means a well drilled in search of petroleum to test a geological feature which has not been determined to contain petroleum in commercial quantities;

"fiscal year" means a period of twelve (12) consecutive months corresponding to the year of income as defined in the Income Tax Act of Kenya;

"Income Tax Act" means the Income Tax Act, as from time to time amended;

"LIBOR" means London InterBank Offered Rate of interest on six (6) months United States dollars deposit quoted at 11 a.m. by the National Westminister Bank Plc, or any other bank agreed by the parties on the first banking day of each month for which interest is due;

"maximum efficient rate" means the rate at which the maximum ultimate economic petroleum recovery is obtained from a commercial field without excessive rate of decline in reservoir pressure, and consistent with good international petroleum industry practice;

"Minister" means the Minister for the time being responsible for energy or his designated representative;

"Ministry" means the Ministry for the time being responsible for energy or its designated representative;

"natural gas" means hydrocarbons that are in a gaseous phase at atmospheric conditions of temperature and pressure, including wet mineral gas, dry mineral gas, casinghead gas and residue gas remaining after the extraction or separation of liquid hydrocarbons from wet gas, and nonhydrocarbon gas produced in association with liquid or gaseous hydrocarbons;

"petroleum" means crude oil and natural gas;

"petroleum costs" means expenditure made and obligations incurred and paid by the contractor in carrying out petroleum operations hereunder, determined in accordance with the accounting procedure attached hereto in Appendix "B" and made a part hereof;

"petroleum operations" means all or any of the operations, authorised under this contract, related to the exploration for, development, extraction, production, separation and treatment, storage, transportation, and sale or disposal of, petroleum up to the point of export, or the agreed delivery point in Kenya or the point of entry into a refinery, and includes natural gas processing operations but does not include petroleum refining operations;

"Regulations" means the Petroleum (Exploration and Production) Regulations;

"semester" means a period of six (6) consecutive months, commencing with the first day of January or the first day of July of a calendar year.

PART II

TERM, EXPLORATION OBLIGATIONS AND TERMINATION

2. TERM

(1) The contractor is authorized to conduct exploration operations within the contract area during an initial exploration period of ……. contract years from the effective date.

(2) The contractor shall begin exploration operations within three (3) months of the effective date.

(3) Upon written application by the contractor made not later than one (1) month prior to the expiry of the initial exploration period, the Minister shall, if the contractor has fulfilled his work and expenditure obligations under this contract, grant a first additional exploration period of …… contract years.

(4) Upon written application by the contractor made not later than one (1) month prior to the expiry of the first additional exploration period hereof, the Minister shall, if the contractor has fulfilled its work and expenditure obligations under this contract, grant a second additional exploration period of ……. contract years.

(5) In order to enable the contractor to complete the drilling and testing of an exploratory well actually being drilled or tested at the end of the second additional exploration period, the Minister shall, on written application by the contractor made not later than three (3) months before the expiry of that exploration period, unless another period of notice is agreed, extend the period in which the work is to be expeditiously completed, which in any event shall not extend such period by more than four (4) months.

(6) This contract shall expire automatically at the end of the initial exploration period or of any additional exploration period, except as to any development area. If the contractor reports, pursuant to subclause 19 (6) hereof, that a commercial discovery has been made before the expiry of the initial exploration period stipulated in subclause 2 (1) hereof or any additional exploration period thereof, this contract shall not expire in respect to the relevant development area, but shall continue as to such development area for a term of …… years from the date the development plan for that development area is adopted under subclause 20 (3) hereof.

3. SURRENDER

(1) The contractor shall surrender:

(a) …per cent (……%) of the original contract area at or before the end of the initial exploration period

(b) ……. Per cent (…..%) of the original contract area at or before the end of the first additional exploration period.

(2) When calculating a surrender under subclause 3 (1), a development area shall be excluded from the original contract area.

(3) The contractor may surrender a part of the contract area and such a voluntary surrender shall be credited against the next surrender obligation of the contractor under subclause 3 (1).

(4) The shape and size of an area surrendered shall be approved by the Minister, which approval shall not be unreasonably withheld.

(5) The contractor shall give one (1) year's written notice of surrender in respect of a commercial discovery which is producing or has produced petroleum and one (1) month written notice of surrender in respect of any other part of the contract area. In case of a surrender of the entire contract area the contract shall terminate.

(6) No surrender shall reduce the minimum amount of exploration work and expenditure fixed in clause 4.

4. MINIMUM EXPLORATION WORK AND EXPENDITURE OBLIGATIONS

(1) The contractor shall carry out the following minimum work and expenditure obligations

(a) during the initial exploration period of ….. ….contract years

(i) .km of seismic with a minimum expenditure of U.S dollar

(ii) Drilling of …….exploratory wells to a minimum depth of … meters per well with a minimum expenditure of US dolar . for each well

(b) during the first additional exploration period of ……. contract years:

(i) drilling of …… exploratory well to a minimum depth of ……. meters per well with minimum expenditure minimum expenditure U.S dollars……. for each well;;

(c) during the second additional exploration period of …… contract years

(i) drilling of one ……. exploratory wells to a minimum depth of ……. meters per well with a minimum expenditure of U.S.

dollars …… for each well;

(2) The fulfillment of any minimum work obligation shall not relieve the contractor of the corresponding expenditure obligation therein and vice versa.

(3) If the drilling of an exploratory well is discontinued, prior to reaching the minimum depth herein specified, because that well has encountered the basement, an impenetrable substance or any condition which in accordance with the good international petroleum industry practice would make it unsafe or impractical to continue drilling, the minimum depth obligation in respect of that well shall be deemed to be fulfilled.

A well drilled to evaluate a discovery under an evaluation work programme pursuant to subclause 19 (2) and 19 (3) shall not have to satisfy the requirement to drill an exploratory well, except with the written consent of the Minister.

(4) The minimum exploration expenditure set forth in subclause 4 (1) is expressed in ……..U.S. dollars of the year of the effective date. In any contract year of either the initial exploration period or any additional exploration period, for the purpose of comparison of the actual costs incurred and paid by the contractor with the minimum exploration expenditure, the actual costs incurred and paid by the contractor for seismic operations and the drilling of exploratory wells during that contract year shall be converted into constant U.S. dollars by dividing the costs, by the number (hereinafter referred to as the "discount rate") which is the sum of one (1) and the decimal equivalent of the percentage increase in the United States Consumer Price Index, as reported for the first time in the monthly publication "International Finance Statistics" of the International Monetary Fund, between the month of the effective date and the month when such costs were incurred.

(5) If during either the initial exploration period or the first additional exploration period, the contractor exceeds the minimum work obligation or incurs expenditure in accordance with subclause 4 (4) exceeding the minimum expenditure obligations for such exploration period, then such excess may be credited toward the respective obligation of the next succeeding additional exploration period or periods.

(6) On or before the commencement of the initial exploration period or of any additional exploration period the contractor shall provide a security, in form acceptable to the Minister, guaranteeing the contractor's minimum work and expenditure obligations under subclause 4 (1) hereof.

(7) If at the end of either the initial exploration period or of any additional exploration period or upon the date of termination of this contract, whichever occurs first, the contractor has not fulfilled its minimum work obligations under subclause 4 (1) hereof, and/or its minimum expenditure obligations under subclause 4 (1) and 4 (4) hereof, the contractor shall pay the Government the minimum monetary obligation in respect of the work not carried out multiplied by the discount rate, as defined in subclause 4 (4) and calculated on the last month of that exploration period, and/or the shortfall, if any, between the amount expended, in accordance with subclause 4 (4) and the minimum monetary obligation for that exploration period, multiplied by the discount rate, as defined hereabove.

5. SURFACE FEES

(1) The contractor shall pay, on or before the beginning of the relevant contract year to the accounting officer of the Ministry, the following surface fees;

- U.S dollars …… per hectare per year for the initial exploration period
- U.S dollars ……. per hectare per year for the first additional exploration period; and

U.S dollars ……. per hectare per year for the second additional exploration period or any extension thereof

.

(2) The surface fees shall be calculated on the basis of the surface area of the contract area on the date those payment are due.

(3) A fee payable under subclause 5(1) is not refundable and a late payment shall attract interest in accordance with subclause 34(2)

6. TERMINATION

(1) The Minister may terminate this contract by giving the contractor written notice, if the contractor

(a) fails to make any payment to the Government or the Minister required under this contract for a period exceeding one (1) month;

(b) is in material breach of any other obligation under this contract; or

(c) becomes insolvent, makes a composition with creditors, or goes into liquidation other than for reconstruction or amalgamation.

(2) The period of notice in respect of subclause 6 (1) (a) hereof shall be one (1) month, and in any other case three (3) months, but if the contractor remedies the breach within the period of notice, the Minister shall withdraw the notice. Where the Minister reasonably believes the contractor is using its best efforts to remedy the default, the Minister may extend the notice, accordingly.

(3) When this contract is terminated or expires in whole or in part, the contractor shall conclude the petroleum operations in the area as to which this contract has

terminated or expired in an orderly manner minimising harm to the Government and third parties.

(4) Where control over one of the entities constituting the contractor is changed, the continuation of the contract shall be subject to the consent of the Minister, which shall not be unreasonably withheld, and for the purpose of this subclause 6 (4) the term "control" shall have the same meaning as set forth in the definition of an affiliate in clause 2.

PART III

RIGHTS AND OBLIGATIONS OF THE CONTRACTOR

7. RIGHTS OF THE CONTRACTOR

(1) The contractor shall have the right to carry out the petroleum operations within the contract area, subject to the provisions of this contract for the term hereof.

(2) The contractor is granted the right to enter upon the contract area and conduct petroleum operations there, but permission may be granted to other persons to search for and mine minerals, other than petroleum, so long as they do not unreasonably interfere with the petroleum operations, and easements and rights of way may be granted to other persons for the benefit of land adjacent to the contract area.

(3) The Minister shall obtain on behalf of the contractor any permit necessary to enable the contractor to use the water in the contract area for the purpose of the petroleum operations but the contractor shall not unreasonably deprive the users of land, domestic settlement or cattle watering place of the water supply to which they are accustomed.

(4) The contractor may, for the purpose of the petroleum operations, use gravel, sand, clay and stone in the contract area but not in

(a) Trust land without a licence granted under section 37 of the Trust Land Act.;

(b) other private land without the consent of the owner; and

(c) a beach, foreshore or reef without the consent of the Minister.

(5) Subject to the provisions of section 10 of the Act and of regulation 6 of the Regulations made thereunder, and subject to the provisions of sections 115 and 118 of the Constitution and Part IV of the Trust Land Act, the contractor may exercise all rights granted to him by this contract.

8. GENERAL STANDARDS OF CONDUCT

(1) The contractor shall carry out the petroleum operations diligently and in accordance with good international petroleum industry practice.

(2) In particular, the contractor shall

(a) ensure that all machinery, plant, equipment and installations used by the contractor in connection with the petroleum operations are of proper and accepted construction and are kept in good repair;

(b) use the resources of the contract area as productively as possible and ensure that petroleum discovered and produced, or mud or any other fluids or substances do not escape or waste;

(c) prevent damage to adjacent strata which bear petroleum or water, and prevent water entering through wells into strata bearing petroleum, except where water injection methods are used for secondary recovery operations;

(d) properly confine petroleum in receptacles constructed for that purpose, and not place crude oil in an earthen reservoir except temporarily in an emergency; and

(e) dispose of waste oil, salt water and refuse in accordance with good international petroleum industry practice, avoiding pollution.

9. JOINT LIABILITY AND INDEMNITY

(1) Where a contractor consists of more than one person their liability shall be joint and several.

(2) The contractor shall cause as little damage as possible to the surface of a contract area and to trees, crops, buildings and other property thereon, shall forthwith repair any damage caused, and shall pay reasonable compensation for any loss suffered.

(3) The Minister may, if he has reasonable cause to believe that the petroleum operations may endanger persons or property, cause pollution, harm marine life or interfere with navigation and fishing, order the contractor to take reasonable remedial measures or order the contractor to discontinue the relevant petroleum operations until such measures, or mutually agreed alternatives thereto, are implemented.

(4) The contractor shall maintain appropriate and adequate third party liability insurance and workmen's compensation insurance and shall provide the Minister with evidence of those insurances before the petroleum operations begin.

(5) The contractor shall indemnify, defend and render the Government harmless from all claims and damage which, but for the conduct of petroleum operations by the contractor or subcontractor, would not have arisen or occurred.

10. WELLS AND SURVEYS

(1) Unless such a notice is waived, the contractor shall not drill a well or borehole or recommence drilling after a six (6) months' cessation without thirty (30) days' prior notification to the Minister which notice shall set forth the contractor's reasons for undertaking such well and shall contain a copy of the drilling programme.

(2) The design of a well or borehole and the conduct of drilling shall be in accordance with good international petroleum industry practice.

(3) No borehole or well shall be drilled so that any part thereof is less than five hundred (500) metres from a boundary of the contract area, without the consent in writing of the Minister, which consent shall not be unreasonably withheld.

(4) The contractor shall not, except where there is danger or a risk of significant economic loss

(a) abandon a well or remove any permanent form of casing therefrom, without giving fortyeight (48) hours prior notification to the Minister, and an abandoned well shall be securely plugged to prevent pollution, subsea damage, or water entering or escaping from the strata penetrated; or

(b) commence drilling, reenter or plug a well unless a representative of the Minister has been given a reasonable opportunity to be present.

(5) The contractor shall state, in its application to abandon a well on land, whether that well is capable of providing a water supply.

(6) The contractor shall, within two (2) months of termination or expiry of this contract or the surrender of part of the contract area, deliver up all productive wells, in said surrendered area, in good repair and working order together with all casings and installations which cannot be moved without damaging the well, but the Minister may require the contractor to plug the well at the contractor's expense by notifying the contractor within thirty (30) days after such termination or expiry is effected or at least three (3) months prior to surrender of a development area.

(7) Where the contractor applies to permanently abandon an exploratory well in which petroleum of potentially commercial significance has not been found, the Minister may request the contractor to deepen or sidetrack that well and to test the formations penetrated as a result of such operations, or to drill another exploration well within the same prospect area, subject to the following provisions;

(a) Any such additional petroleum operations shall be at the sole cost, risk and expense of the Minister and shall be paid for in accordance with the accounting procedure. The Government shall advance to the contractor the funds necessary to conduct the operations.

(b) The contractor shall not undertake such additional work if it will interfere with the conduct of the contractor's petroleum operations or if it is not technically or operationally feasible.

(c) In the event that the petroleum operations undertaken under this subclause 10

(7) result in a discovery which the contractor elects to evaluate and/or develop as a

commercial field, the contractor shall reimburse the Government …….. per cent (……%) of the costs and expenses incurred by the Government for the conduct of the operations and such sum shall be paid within thirty (30) days of the notification made by the contractor. If the contractor does not make such election, the Government shall have the right to continue the petroleum operations on this discovery at the sole cost, risk and expense of the Government.

(8) The contractor shall give the Minister thirty (30) days; notice of any proposed geophysical survey, which notice shall contain complete details of the programme to be conducted. At the request of the contractor, the Minister may waive the notice period.

11. OFFSHORE OPERATIONS

(1) The contractor shall ensure that works and installations erected offshore in Kenya's territorial waters and exclusive economic zone shall be

(a) constructed, placed, marked, buoyed, equipped and maintained so that there are safe and convenient channels for shipping;

(b) fitted with navigational aids approved by the Minister;

(c) illuminated between sunset and sunrise in a manner approved by the managing director, Kenya Ports Authority; and

(d) kept in good repair and working order.

(2) The contractor shall pay compensation for any interference with fishing rights caused by the petroleum operations.

12. FIXTURES AND INSTALLATIONS

(1) With the written consent of the Minister, which consent shall not be unreasonably withheld, the contractor shall have the right to construct roads, drill water wells and to place fixtures and installations necessary to conduct the petroleum operations, including but not limited to storage tanks, shipment installations, pipelines, cables or similar lines, located inside or outside the contract area. The consent of the Minister may be conditional on the use by other producers of the excess capacity, if any, of those facilities. Where the Minister and contractor agree that a mutual economic benefit can be achieved by constructing and operating common facilities, the contractor shall use its best efforts to reach agreement with other producers on the construction and operation of such common facilities.

(2) Other producers may only use the facilities of the contractor where there exists excess capacity and on payment of a reasonable compensation which includes a reasonable return on investment to the contractor and provided the use does not unreasonably interfere with the contractor's petroleum operations.

(3) The Minister may consent to the laying of pipelines, cables and similar lines in the contract area by other persons, but those lines shall not unreasonably interfere with the petroleum operations of the contractor.

(4) On termination or expiration of this contract or surrender of part of the contract area, the contractor shall remove the aboveground plant, appliances and installations from the contract area or the part surrendered other than those that are situated in or related to a development area or, at the option of the Minister, the contractor shall transfer them, at no cost, to the Government, in the condition that they are then in.

(5) When the rights of the contractor in respect of a development area terminate, expire or are surrendered, the contractor shall transfer to the Government, at no

cost, the plant, appliances and installations that are situated in the development area or that are related thereto, unless such plant, appliances and installations are or may be utilised by the contractor in petroleum operations under this contract, but the Government may require the contractor to remove the surface installations at the cost of the contractor.

13. LOCAL EMPLOYMENT AND TRAINING

(1) The contractor, its contractors and subcontractors shall, where possible, employ Kenya citizens in the petroleum operations, and until expiry or termination of this contract, shall train those citizens. The training programme shall be established in consultation with the Minister.

(2) In addition to the obligation under subclause 13 (1) and commencing on the effective date, the contractor shall for the purposes of section 11 of the Act contribute or hold to the order of the Ministry a minimum of …….. thousand U.S dollars per year for the Ministry training fund established under section 11 (1) of the Act. The contractor's obligation hereunder shall be increased to a minimum of ……thousand U.S. dollars per year commencing with the adoption of the first development plan under subclause 20 (3).

14. DATA AND SAMPLES

(1) The contractor shall keep logs and records of the drilling, deepening, plugging or abandonment of boreholes and wells, in accordance with good international petroleum industry practice and containing particulars of

(a) the strata and subsoil through which the borehole or well was drilled;

(b) the casing, tubing and downhole equipment and alterations thereof, inserted in a borehole or well;

(c) petroleum, water, workable mineral or mine workings encountered; and
(d) any other matter reasonably required by the Minister.

(2) The contractor shall record, in an original or reproducible form of good quality, and on seismic tapes where relevant, all geological and geophysical information and data relating to the contract area obtained by the contractor and shall deliver a copy of that information and data, the interpretations thereof and the logs and records of boreholes and wells, to the Minister, in a reproducible form, as soon as practicable after that information, those interpretations and those logs and records come into the possession of the contractor.

(3) The contractor may remove, for the purpose of laboratory examination or analysis, petrological specimens or samples of petroleum or water encountered in a borehole or well and, as soon as practicable shall, without charge, give the Minister a representative part of each specimen and sample removed, but no specimen or sample shall be exported from Kenya without prior notification to the Minister.

(4) The contractor shall keep records of any supply information concerning the petroleum operations, reasonably requested by the Minister, if the data or information necessary to comply with the request are readily available.

15. REPORTS

(1) The contractor shall supply to the Minister daily reports on drilling operations and production operations, and weekly reports on geophysical operations.
(2) The contractor shall report in writing to the Minister the progress of the petroleum operations according to the following schedule
(a) within one (1) month of the last day of March, June, September and December, covering the previous three (3) months;
(b) within three (3) months of the last day of December, covering the

previous year;

(c) within three (3) months of the date of expiry or termination of this contract.

(3) A report under subclause 15 (2) shall contain, in respect of the period which it covers

(a) details of the petroleum operations carried out and the factual information obtained;

(b) a description of the area in which the contractor has operated;

(c) an account of the expenditure on petroleum operations in accordance with the accounting procedure;

(d) a map indicating all boreholes, wells and other petroleum operations;

(e) on expiry or termination of this agreement details of the petroleum operations including all the matters described in paragraphs (a) to (d); and

(f) all information required by clause 14 not hitherto supplied.

PART IV

RIGHTS AND OBLIGATIONS OF THE GOVERNMENT AND THE MINISTER

16. RIGHTS OF THE GOVERNMENT

(1) The Government may acquire a part of the contract area for a public purpose other than searching for or extracting petroleum but not to the extent that will prevent the carrying out of petroleum operations within the contract area, and the Government shall not, without good cause, acquire a part of the contract area on which petroleum operations are in progress.

The contractor shall not carry out petroleum operations on such an acquired part but may

(a) enter upon that part but not materially interfere with the public purpose; and

(b) carry out directional drilling from an adjacent part.

(2) The Minister, or a person authorized by him in writing, may at all reasonable times inspect any petroleum operations, and any records of the contractor relating thereto, and the contractor shall provide, where available, facilities similar to those applicable to its own or to subcontractors' staff for transport to the petroleum operations, subsistence and accommodation and pay all reasonable expenses directly connected with the inspection.

(3) The Minister may require the contractor to perform an obligation under this contract by giving reasonable written notice, and if the contractor fails to comply with the notice, the Minister may execute any necessary works for which the contractor shall pay forthwith. The Minister may give notice to execute works at any time but not later than three (3) months after the termination or
expiry of this contract or the surrender of a part of the contract area.

17. OBLIGATIONS OF THE GOVERNMENT

(1) The Government may, at the request of the contractor, make available to the contractor such land as the contractor may reasonably require for the conduct of petroleum operations and

(a) where the land is Trust Land, the Government shall, subject to sub clause 17 (2) set apart such Trust Land in the contract area in accordance with the Trust Land Act and Chapter IX of the Constitution;

(b) where the land is private land, the Government may, subject to section 10 of the Act, acquire the land in accordance with the applicable laws;

(c) the contractor shall pay or reimburse the Government any reasonable compensation that may be required for the setting apart, use or acquisition of any land for the petroleum operations.

(2) -Where the contractor has occupied Trust Land for the purpose of the petroleum operations before that land has been set apart, the contractor shall notify the Minister in writing of the need to set apart such land before the end of the twoyear period referred to in section 115 of the Constitution.

(3) The Government shall grant or cause to be granted to the contractor, its contractors and subcontractors such wayleaves, easements, temporary occupation or other permissions within and without the contract area as are necessary to conduct the petroleum operations and in particular for the purpose of laying, operating and maintaining pipelines and cables, and passage between the contract area and the point of delivery of petroleum.

(4) The Government shall at all times give the contractor the right of ingress to and egress from the contract area and the facilities wherever located for the conduct of petroleum operations.

(5) Subject to the usual national security requirements and the Immigration Act and Regulations of Kenya in particular, the Government shall not unreasonably refuse to issue and/or renew entry permits for technicians and managers employed in the petroleum operations by the contractor or its subcontractors and their dependants.

PART V

WORK PROGRAMME, DEVELOPMENT AND PRODUCTION

18. EXPLORATION WORK PROGRAMME

(1) The contractor shall submit and orally present to the Minister one (1) month after the effective date, detailed statement of the exploration work programme and budget for the first contract year.

(2) The contractor shall submit and orally present to the Minister three (3) months before the end of each contract year, a detailed statement of the exploration work programme and budget for the next contract year.

(3) The Minister may submit to the contractor, within thirty (30) days of the receipt* of the annual exploration work programme and budget, suggested modifications and revisions thereof. The contractor shall consider the inclusion of such suggested modifications and revisions in light of good international petroleum industry practice and shall provide the Minister with the exploration work programme and budget which the contractor has adopted.

(4) After the adoption of the annual exploration work programme and budget, the contractor may make changes to that annual exploration work programme and budget if those changes do not materially affect the original objectives of that exploration work programme and budget, and shall state the reasons for those changes to the Minister.

19. DISCOVERY AND EVALUATION WORK PROGRAMME

(1) The contractor shall in accordance with section 9 (b) of the Act, notify the Minister of a discovery of petroleum and shall report to the Minister all relevant information.

(2) If the contractor considers that the discovery merits evaluation, it shall submit and orally present to the Minister a detailed statement of the evaluation work programme and budget which shall provide for the expeditious evaluation of the discovery and the provisions of subclauses 18 (3) and 18 (4) shall apply to the evaluation work programme and budget.

(3) After the evaluation work programme and budget have been adopted, the contractor shall diligently evaluate the discovery without undue interruption.

(4) In the event of a discovery in the last year of the second additional exploration period, the Minister shall, at the request of the contractor, extend the term of the second additional exploration period in respect to the prospective area of the discovery and for the period of time reasonably required to expeditiously complete the adopted evaluation work programme and budget with respect to such discovery and to determine whether or not the discovery is commercial but in any event, such extension to the second additional exploration period shall not exceed …… months.

(5) The contractor shall, not more than three (3) months after the evaluation is completed, report to the Minister the commercial prospects of the discovery, including all relevant technical and economic data.

(6) If the contractor reports under subclause 19 (5) that the discovery is a commercial discovery, a development plan shall be submitted to the Minister within six (6) months of the completion of the evaluation work programme unless otherwise agreed, and upon written application of the contractor, the term of this contract shall be extended by the Minister, if necessary, in respect of the area of that commercial discovery, provisionally established in accordance the adaptation of a development plan.

20. DEVELOPMENT PLAN AND DEVELOPMENT WORK PROGRAMME

(1) The contractor shall prepare, in consultation with the Minister, the development plan based on sound engineering and economic principles and in accordance with good international petroleum industry practice and

considering the maximum efficient rate of production appropriate to the commercial discovery.

(2) The development plan submitted by the contractor to the Minister shall contain

(a) details of the proposed development area, relating to the commercial discovery which shall correspond as closely as possible to the extension of the discovered accumulation in the contract area, as determined by the analysis of all the relevant available information;

(b) proposals relating to the spacing, drilling and completion of the wells and the facilities and installations required for the production, storage and transportation of petroleum;

(c) a production forecast and an estimate of the investment and expenses involved; and

(d) an estimate of the time required to complete each phase of the development plan.

(3) The Minister and the contractor shall jointly consider the development plan within sixty (60) days of submission thereof and the Minister may within that period , unless otherwise agreed, submit suggested modifications and revisions thereof. The contractor shall consider the inclusion of such suggested modifications and revisions in the light of good international petroleum industry practice, and the development plan shall be adopted sixty (60) days after receipt by the contractor of those suggested modifications and revisions, unless another development plan is adopted by mutual agreement before that period has elapsed.

Where the Minister proposes no modifications and revisions, the development plan of the contractor shall be adopted sixty (60) days after its submission unless it is adopted by mutual agreement before that period has elapsed.

(4) After a development plan has been adopted, the contractor shall use its best efforts to proceed, promptly and without undue interruption, to implement the development plan in accordance with good international petroleum industry practice. Development work shall commence six (6) months of the date of adoption of the development plan.

In connection therewith, the contractor shall submit and orally present to the Minister, prior to the first day of October of each year following the adoption of the development plan, a detailed statement of the annual development work programme and budget for the next calendar year and the provisions of subclauses 18 (3) and 18 (4) shall apply to the development plan and to the annual development work programme and budget.

(5) Where the development operations result in an extension to the area to which the commercial discovery relates within the contract area, the Minister shall adjust the relevant development area to include that extension as determined by the analysis of all the relevant available information.

21. UNITISATION

(1) Where the recoverable reserves of a commercial discovery extend into an area adjacent to the contract area, the Minister may require the contractor to produce petroleum therefore in cooperation with the contractor of the adjacent area. Where noncommercial deposits of petroleum in the contract area if exploited with deposits in an area adjacent to the contract area, would be commercial, the Minister may make a similar requirement to the contractor of that adjacent area.

(2) If the Minister so requires, the contractor shall in cooperation with the contractor of the adjacent area, submit within six (6) months, unless otherwise agreed, a proposal for the joint exploitation of the deposits, for the approval of the Minister.

(3) If the proposal is not submitted or approved, the Minister may prepare his own proposal, in accordance with good international petroleum industry practice, for the joint exploitation of the recoverable reserves, the Minister's proposal unless another proposal is mutually agreed, shall be adopted by the contractor, subject to subclause 21 (4), and subject to the adjacent contractor's acceptance of the same proposal. The reasonable costs of preparing the proposal shall be divided equally between the contractor and the adjacent contractor.

(4) The provisions of the proposal for joint exploitation shall prevail over this contract, where those provisions do not reduce the financial benefits to the parties under this contract.

22. MARGINAL AND NONCOMMERCIAL DISCOVERIES

(1) Where a contractor determines that a discovery is marginal or non commercial, the contractor may propose a modification to this contract, based on an alternative economic evaluation and after consideration the Minister may accept or reject the proposed modification.

(2) Unless otherwise agreed, if the contractor fails to commence the evaluation of a discovery within …….. years following the notice of discovery, or if within ……year following the completion of an evaluation work programme the contractor considers the discovery does not merit development, the Minister may request the contractor to surrender the area corresponding to such discovery and the contractor shall forfeit any rights relating to any production therefrom. The area subject to such surrender shall not exceed the extension of the discovered accumulation as determined by the structural

closure of the prospective horizon and all other relevant available information. Any such surrender by the contractor shall be credited in accordance with subclause 3 (3) hereof.

23. NATURAL GAS

(1) Where natural gas is discovered and the contractor and the Minister agree that it may be economically processed and utilised other than in secondary recovery operations, that processing and utilisation shall follow a development plan approved in accordance with clause 20.

(2) The contractor shall return associated natural gas, not required for use in petroleum operations or sold, to the subsurface structure, but if such natural gas cannot be economically used or sold or returned to the subsurface structure, the contractor shall, after expiry of sixty (60) days' notice to the Minister giving reasons why such natural gas cannot be economically used or sold or returned to the subsurface structure, be entitled to flare such associated natural gas in accordance to good international petroleum industry practice. Notwithstanding anything in this clause to the contrary, associated natural gas may be flared at any time if necessary for the conducting of well and production tests and during any emergency.

(3) Where the contractor does not consider that it is economical to process and utilise associated natural gas and where that natural gas is not required for use in petroleum operations, the Minister may at the field separator, process and utilise that natural gas without compensation but the Government shall pay for all costs and expenses related thereto which shall include, but not be limited to, any engineering studies, new fixtures, equipment and installations required for the gathering, transport, processing and utilisation thereof and the operation and maintenance of same shall be at the sole risk, cost and expense of the Government.

(4) Where the contractor considers that it is economical to produce natural gas, the contractor agrees to sell all or part of its share of natural gas to the Government, provided that the parties agree upon the price, volume and terms of sale.

24. PRODUCTION LEVELS AND ANNUAL PRODUCTION PROGRAMME

(1) The contractor shall produce petroleum at the maximum efficient rate in accordance with good international petroleum industry practice.

(2) Prior to the first day of October of each year following the commencement of commercial production, the contractor shall submit and orally present to the Minister, a detailed statement of the annual production programme and budget for the next calendar year, and the provisions of subclause 18 (3) and (4) shall apply to the annual production programme and budget.

(3) The contractor shall endeavour to produce in each calendar year the forecast quantity estimated in the annual production programme.

(4) The crude oil shall be run to storage (constructed, maintained and operated by the contractor) and petroleum shall be metered or otherwise measured as required to meet the purpose of this contract in accordance with clause 25.

25. MEASUREMENT OF PETROLEUM

(1) The volume and quality of petroleum produced and saved from the contract area shall be measured by methods and appliances customarily used in good international petroleum industry practice and approved by the Minister.

(2) The Minister may inspect the appliances used for measuring the volume and determining the quality of petroleum and may appoint an inspector to supervise the measurement of volume and determination of quality.

(3) Where the method of measurement, or appliances used therefor, have caused an overstatement or understatement of a share of the production, the error shall be presumed to have existed since the date of the last calibration of the measurement devices, unless the contrary is shown, and an appropriate adjustment shall be made for the period of error.

(4) The Minister and the contractor shall determine the measurement point at which production shall be measured and the respective shares of petroleum allocated.

26. VALUATION OF CRUDE OIL AND NATURAL GAS

(1) The value of crude oil, for all purposes under this contract, shall be denominated in United States dollars and shall be calculated each calendar quarter as follows

(a) if there have been sales of crude oil produced from the contract area to third parties at arm's length during that calendar quarter, the value shall be the weighted average per unit price actually paid in those sales, at the F.O.B. point of export or at the point that title and risk pass to the buyer, adjusted for grade, gravity and quality of such crude oil as well as for transportation costs and other appropriate adjusted for grade, gravity, and quality of such crude oil saction where the seller and the buyer are independent of one another and do not have, directly or indirectly, any common interest;

(b) if there have been no sales of crude oil produced from the contract area to third parties at arm's length during that calendar quarter, the value shall be the "fair market value" determined as the average per unit prevailing market price, actually paid during that calendar quarter in arm's length sales for export under

term contracts of at least ninety (90) days between unrelated purchasers and sellers, for crude oil produced in Kenya and in the major crude oil producing countries, and adjusted for grade, gravity and quality of such crude oil as well as for transportation costs and any other appropriate adjustments.

If necessary, a value of crude oil shall be determined separately for each crude oil or crude oil mix and for each point of delivery.

The value of crude oil shall be mutually agreed at the end of each calendar quarter and applied to all transactions that took place during the quarter.
If the Minister and the contractor cannot reach agreement on the value of crude oil within thirty (30) days of the end of any calendar quarter, such determination shall be made by an internationally recognized expert appointed by the contractor and the Minister, but if they fail to agree within thirty (30) days on the appointment of such expert, then by the International Chamber of Commerce. The expert shall report his determination within twenty (20) days of his appointment and his determination shall be final and binding upon the Government and the contractor.

(2) Pending the determination of the value of crude oil for a calendar quarter, the value of crude oil determined for the preceding calendar quarter will be provisionally applied to make calculation and payment during such calendar quarter until the applicable value for that calendar quarter is finally determined pursuant to subclause 26 (1). Any adjustment to provisional calculation and payment, if necessary, will be made within thirty (30) days after such applicable value is finally determined.

(3) Natural gas shall be valued based on the actual proceeds received for sales, provided that, for sales of natural gas between the contractor and any affiliate, the value of such natural gas shall not be less than the then prevailing fair market value for such sales of natural gas taking into consideration, to the

extent possible, such factors as the markets, the quality and quantity of natural gas and other relevant factors reflected in natural gas pricing.

PART VI

COST RECOVERY, PRODUCTION SHARING, MARKETING AND PARTICIPATION

27. COST RECOVERY, PRODUCTION SHARING AND INCOME TAX

(1) Subject to the auditing provisions under clause 30, the contractor shall recover the petroleum costs, in respect of all petroleum operations, incurred and paid by the contractor pursuant to the provisions of this contract and duly entered in the contractor's books of account, by taking and separately disposing of an amount equal in value to a maximum of ……..per cent (…….%) per fiscal year of all crude oil produced and saved from the contract area during that fiscal year and not used in petroleum operations. Such cost recovery crude oil is hereinafter referred to as "cost oil".

(2) Petroleum costs may be recovered from cost oil in the following manner

(a) petroleum costs, with the exception of capital expenditures, incurred in respect of the contract area, shall be recoverable either in the fiscal year in which these costs are incurred and paid or the fiscal year in which commercial production occurs, whichever is the later; and

(b) capital expenditure incurred in respect of each development area shall be recoverable at a rate of twenty percent (20%) per annum based on amortization at that rate starting either in the fiscal year in which such capital expenditure are incurred and paid or the fiscal year in which commercial production from that development area commences, whichever is the later.

For the purpose of this clause, "capital expenditure" shall mean the qualifying expenditure, other than "intangible drilling costs", that is expenditure that has no salvage value, including expenditure on labour, fuel, repairs, maintenance, hauling, mobilization and supplies and materials, other than supplies and materials for well casings or other well fixtures, which is for or incidental to drilling, cleaning, deepening, completing or abandoning wells and is incurred in respect of

(i) the determination of well locations, geological and geophysical studies, and topographical and geographical surveys preparatory to drilling;

(ii) the drilling, shooting, testing, and cleaning of wells; and

(iii) the clearing, draining and leveling of land, roadbuilding and laying of foundations.

(c) To the extent that, in a fiscal year, the petroleum costs recoverable according to subclauses 27 (2) (a) and 27 (2) (b) exceed the value of all cost oil for such fiscal year, the excess shall be carried forward for recovery by the contractor in the next succeeding fiscal year or fiscal years until fully recovered, but in no case after the termination of this contract.

(d) To the extent that, in a fiscal year, the petroleum costs recoverable according to subclauses 27 (2) and 27 (2) (b) are less than the maximum value of the Cost Oil as specified in subclause 27 (1), the excess shall become part of, and be included in the profit oil as provided for in subclause 27 (3) hereafter.

(e) For the purpose of valuation of cost oil, the provisions of clause 26 hereof shall apply.

(3) The total crude oil produced and saved from the contract area and not used in petroleum operations less the cost oil as specified in subclauses 27 (1) and 27

(2), shall be referred to as the profit oil and shall be shared, taken and disposed of separately by the Government and contractor according to increments of profit oil as follows:

Increments of Profit Oil As to oil produced offshore	Government share	Contractor's share
First 20,000 Barrels per day	%	%
Next 30,000 Barrels per day	%	%
Next 50,000 Barrels per day	%	%
Any volume over first 100,000 Barrels per day	%	%

For the purpose of this subclause, increments of profit oil shall be calculated by considering the total crude oil produced and saved from the contract area less the quantity of cost oil required to satisfy recoverable costs, expenses and expenditures according to subclauses 27 (1) and 27 (2).

(4) With respect to subclauses 27 (1), 27 (2) and 27 (3), cost oil and profit oil calculations shall be done quarterly on an accumulative basis. To the extent that actual quantities, costs and expenses are not known, provisional estimates of such data based on the adopted annual production work programme and budget under clause 24 shall be used. Within sixty (60) days of the end of each fiscal year, a final calculation of cost oil and profit oil based on actual crude oil production in respect of that fiscal year and recoverable petroleum costs shall be prepared and any necessary adjustments shall be made.

(5) The contractor shall be subject to and shall comply with the requirements of the income tax laws in force in Kenya which impose taxes on or are measured by income or profits.

The portion of the crude oil which the Government is entitled to take and receive under subclause 27 (3) shall be inclusive of all taxes based on income or profits, including specifically tax payable under the Income Tax Act, and dividend tax imposed by Kenya on any distribution of income or profits by the contractor, but shall exclude the tax paid by the contractor on behalf of petroleum service subcontractors.

The Government agrees to pay and discharge as and when due such taxes for account of the contractor, and the Minister agrees to furnish the contractor with proper receipts from the Government evidencing the payment of all such taxes on contractor's behalf for each fiscal year. The contractor shall prepare and file a Kenya income tax return for each fiscal year within four (4) months after the close of each fiscal year. The receipts furnished by the Minister evidencing payment of such taxes shall correspond to the amount of taxes payable on behalf of the contractor by the Government. The receipts shall be issued by the duly constituted authority for the collection of Kenya income taxes and shall be furnished within three (3) months after the date the contractor files its Kenya income tax return for the fiscal year.

All taxes paid by the Government in the name and on behalf of the contractor shall be considered income to the contractor for the fiscal year to which the tax payments relate.

(6) The contractor, if so directed by the Minister, shall be obligated to lift and market part or all of the Government share of profit oil.

When the Minister elects not to take and receive in kind any part of the Government share of profit oil, the Minister shall notify the contractor three (3) months before the commencement of each semester of a calendar year, specifying the quantity of production and such notice shall be effective for the ensuing semester. Any sale by the contractor of the Government share of profit

oil shall not be for a term of more than one (1) year without the Minister's consent.

The price paid by the contractor for the Government share of profit oil shall be the price established according to clause 26. The contractor shall pay the Government on a monthly basis, such payments to be made within thirty (30) days after the end of the month in which the production occurred.

(7) At a reasonable time prior to the scheduled date of commencement of commercial production, the parties shall agree to procedures covering the scheduling, storage and lifting of petroleum produced from the agreed upon point of export or delivery.

(8) In the event that the contractor elects to produce a natural gas discovery, the petroleum costs incurred by the contractor and directly attributable to the discovery and production of such natural gas shall be recovered from part thereof. The parties agree that the Government and the contractor shall share the natural gas produced and saved and not used in petroleum operations in accordance and on an equivalent basis with the percentage allocations provided for cost recovery and production sharing of crude oil under this clause. For this purpose, six thousand (6000) cubic feet of natural gas at a temperature of 15 degrees centigrade and pressure of one atmosphere shall be deemed to be equivalent to one (1) barrel of crude oil.

28. GOVERNMENT PARTICIPATION

(1) The Government may elect to participate in the petroleum operations in any development area and acquire an interest of up to ……. Per cent (……%) (hereinafter referred to as "Participating Interest") of the total interest in that development area. The Government may participate either directly or through an appointee.

"Appointee" means a body corporate wholly owned or controlled by the Government, and appointed for the purposes of this contract.

(2) The Government shall exercise the right to participate by giving notice to the contractor within six (6) months from the date the development plan for a development area is adopted under subclause 20 (3). Such notice shall specify the Participating Interest that the Government has elected in that development area. If the Government exercises its option to participate, the contractor (or each entity constituting the contractor prorata) shall transfer to the Government that percentage interest specified by the Government.

The Government's participation shall be effective from the date the development plan hereof is adopted.

(3) If the Government exercises its right to participate in a development area, the Government and the contractor shall execute the Participation Agreement, attached hereto as Appendix "C" and made a part thereof, within three (3) months after notice to the contractor under subclause 28 (2).

(4) The Government shall, in exercise of its right to participate in a development area

(a) have a right to a vote in proportion to its participating interest with respect to all decisions taken under the participation agreement;

(b) own and separately take and dispose of its share in the petroleum produced and saved to which the contractor is entitled under this contract, corresponding to its participating interest in that development area. The Contractor shall not be obliged to market the Government's share of petroleum corresponding to the Government's participating interest in that development area;

(c) assume its share of costs, expenses and obligations incurred in respect of that development area, from the effective date of its participation as defined in subclause 28 (2), prorata to its participating interest;

(d) own a participating interest share in all assets acquired for petroleum operations in or related to the development area;

(e) reimburse the contractor, without interest, prorata to the Government participating interest, its share of all costs, expenses and expenditure incurred in respect of the development area from the date the development plan for that development area has been adopted to the date the Government exercises its right to participate in that development area.

This reimbursement shall be made within three (3) months after the Government exercises its right to participate.

29. DOMESTIC CONSUMPTION

(1) The contractor shall have the obligation to supply in priority crude oil for domestic consumption in Kenya and shall sell to the Government that portion of the contractor's share of production which is necessary to satisfy the domestic supply requirements in accordance with the following provisions.

(2) In each calendar year, the Minister shall notify the contractor not less than three (3) months prior to the beginning of that calendar year, of the domestic supply requirement. The maximum amount of crude oil that the Minister may require from the contractor's share of production shall be calculated each calendar quarter, and shall be equal to the excess of total crude oil domestic consumption in Kenya multiplied by a fraction, the numerator of which is the average crude oil production from the contract area and the denominator of which is the total crude oil production from all producers in Kenya, over the amount of crude oil available to the Government from the contract area as in

the form of Government share production under clause 27 and in the form of Government participation share under clause 28.

For the purpose of this subclause, "domestic consumption" does not include crude oil refined in Kenya for export.

(3) When the contractor is obligated to supply crude oil for domestic consumption in Kenya, the price paid by the Government shall be calculated in accordance with clause 26. Such sales to the Government shall be invoiced monthly and shall be paid within sixty (60) days of receipt of the invoice, unless other terms and conditions are mutually agreed.

(4) With the written consent of the Minister the contractor may comply with this clause by importing crude oil and exporting the same amount, but appropriate adjustments shall be made in price and volume to reflect transportation costs, differences in quality, gravity and terms of sale.

(5) In this clause, "Government" includes an Appointee as defined in subclause 28 (1) and "contractor" does not include the Government where the Government has participated under clause 28.

PART VII

BOOKS, ACCOUNTS, AUDITS, IMPORTS, EXPORTS AND FOREIGN EXCHANGE

30. BOOKS, ACCOUNTS AND AUDITS

(1) The contractor shall keep books and accounts in accordance with the accounting procedure and shall submit to the Minister a statement of those accounts, not more than three (3) months after the end of each calendar year.

(2) At the request of the Minister, the contractor shall appoint an independent auditor of international standing, approved by the Government to audit annually the books and accounts of the contractor and report thereon; and the cost of such audit shall be at the charge of the contractor.

(3) The Government may audit the books and accounts within two (2) calendar years of the period to which they relate, and shall complete that audit within one (1) calendar year.

(4) In the absence of an audit within two (2) calendar years or in the absence of notice to the contractor of a discrepancy in the books and accounts within three (3) calendar years of the period to which the audit relates the contractor's books and accounts shall be deemed correct.

31. PREFERENCE TO KENYAN GOODS AND SERVICES

(1) The contractor, its contractors and subcontractors shall give preference to Kenyan materials and supplies for use in petroleum operations as long as their prices, quantities and timeliness of delivery are comparable with the prices, quality, quantities and timeliness of delivery of nonKenyan materials and supplies.

(2) The contractor, its contractors and subcontractors shall give preference to Kenyan contractors for services connected with petroleum operations as long as their prices, performance and timeliness are comparable with the prices, performance and timeliness of nonKenyan service contractors.

(3) The contractor, its contractors and subcontractors shall provide supplies and services from bases in Kenya where practicable.

(4) The contractor shall

(a) on or before the beginning of each calendar year to which it applies, submit to the Minister a tentative schedule of the contemplated service and supply contracts with an estimated value exceeding the equivalent of …… U.S. dollars per contract, to be let during the forthcoming calendar year, showing the anticipated tender date and approximate value and the goods and services to be provided;

(b) for contracts with an estimated value exceeding the equivalent of …… U.S. dollars per contract, undertake to select its contractors and subcontractors from adequately qualified companies by means of competitive bidding or by another appropriate method in accordance with good international petroleum industry practice;

(c) as soon as practicable after their execution, provide to the Minister a copy of each contract, requiring a payment in a currency other than Kenya Shillings and a brief description of the efforts made to find a Kenyan supplier or service contractor;

(d) the minimum amount specified under this subclause 31 (4) may be changed from time to time by mutual agreement.

32. EXPORTS AND IMPORTS

(1) Except as to the petroleum to be delivered to the Government pursuant to the terms of this contract, the contractor shall own and receive its share of petroleum produced from the contract area and shall be entitled to export such petroleum without restriction and free of taxes, charges, fees, duties or levies of any kind or to otherwise freely dispose of the same.

(2) The contractor and its contractors and subcontractors engaged in carrying out petroleum operations under this contract shall be permitted to import into Kenya all the materials, equipment and supplies including but not limited to

machinery, vehicles, consumable items, movable property and any other articles, to be used solely in carrying out petroleum operations under this contract.

Such materials, equipment and supplies shall be exempt from all customs duties, the contractor and its contractors and subcontractors shall give preference to Kenyan goods and services in accordance with clause 31 hereof.

(3) In relation to materials, equipment and supplies imported or to be imported pursuant to subclause 32 (2), when a responsible representative of the Ministry has certified that they are to be used solely in carrying out petroleum operations under this contractor, the contractor and its contractors and subcontractors shall be entitled to make such imports without having to obtain

(a) any approval of import licence, provided, however, that an application has been duly made;

(b) Any exchange control approval, subject to the provision of clause 33 hereof; or.

(c) any inspection outside of Kenya by general superintendence or other inspecting body, acting for the time being, appointed by the government.

(4) The actual costs of contracts for technical and other services entered into by the contractor for petroleum operations and for materials purchased by the contractor for use in petroleum operations shall be recoverable, provided that those services and materials are reasonably required for petroleum operations and provided further that the prices paid by the contractor are no higher than those currently prevailing in normal arm's length transactions of the open market for comparable services and materials.

(5) Each expatriate employee of the contractor, its contractors and subcontractors shall be permitted to import and shall be exempt from all customs duties with

respect to the reasonable importation of household goods and personal effects, including one (1) automobile provided however that such properties are imported within three (3) months of their arrival or such longer period as the Government may in writing determine.

(6) The contractor and its contractor and subcontractors and their expatriate employees may sell in Kenya all imported items which are no longer needed for petroleum operations. However, if such imports were exempt from customs duties, the seller shall fulfil all formalities required in connection with the payment of duties, taxes, fees and charges imposed on such sales.

(7) Subject to subclauses 12 (4) and 12 (5), contractor and its contractors and subcontractors and their expatriate employees may export from Kenya, exempt of all export duties, taxes, fees and charges, all previously imported items which are no longer required for the conduct of petroleum operations under this contract.

(8) "custom duties", as that term is used herein, shall include all duties, taxes on imports (except those charges paid to the Government for actual services rendered), which are payable as a result of the importation of the item or items under consideration.

33. EXCHANGE AND CURRENCY CONTROLS

(1) As long as the Contractor meets its obligations to the Government in terms of tax payments or any other payment contemplated by this Contract, and as long as the Contractor complies with subclause 33(20 hereafter and is not in a material breach with this Contract, the Government shall by appropriate legal notice grant effective upon the effective date of this contract the contractor freedom to

(a) open and freely maintain external accounts inside Kenya and foreign bank accounts outside Kenya in accordance with Exchange Control Notice No.3 issued under the Exchange Control Act, chapter 113 of the Laws of Kenya:

(b) receive, retain outside Kenya and freely dispose of foreign currencies received by it outside Kenya, including the proceeds of sales of petroleum hereunder, and contractor shall not be obligated to remit such proceeds to Kenya with the exception of those proceeds as may be needed to meet in Kenya its expenses and payments to the Government.

(c) Pay directly outside Kenya for purchases of goods and services necessary to carry out petroleum operations hereunder:

(d) Pay it s expatriate employees working in Kenya in foreign currencies outside of Kenya. Such expatriate employees shall be only required to bring into Kenya such foreign exchange as required to meet their personal living expenses and to meet payments of Kenyan taxes;

(e) Freely repatriate abroad all proceeds from contractor's petroleum operations in Kenya, including but not limited to proceeds from the sale of assets and petroleum ; and

(f) Have rates of exchange for purchase or sale of currency in Kenya, not less favourable to the contractor than those granted to any investor in Kenya

(2) In order to keep the Government and the Central Bank of Kenya informed of its prospective and actual foreign exchange transactions, the contractor shall inform the Government and the Bank in writing and in such form and detail as the Government or the Bank may request

(a) of the location of the contractor's bank accounts in Kenya and abroad,which latter accounts shall be opened in banks approved by the Central Bank of Kenya;

(b) annually, before the commencement of each calender year, of the contractor's estimated receipts and disbursements of foreign exchange by principal headings during the year appears necessary); and

(c) quarterly, within thirty(30) days of the end of each calendar quarter, of the contractor's actual receipts and disbursements of foreign exchange by principal headings during the preceding quarter.

(3) Subject to the obligation to give preference to Kenyan goods and services as stipulated under clause 31, the contractor shall have the right to enter all contracts and subcontracts necessary to carry out petroleum operations, without prior approval by the Central Bank of Kenya or any other Government agency. The Government reserves the right to inspect the records or documentation related to such contracts and subcontracts and, in accordance with clause 30, to appoint independent auditors to examine the accounts of the contractor, and the contractor shall provide a copy of such contracts within thirty (30) days after their execution, provided however that where the Government disputes anything in the contracts, the value in dispute shall not be included, until, the dispute has been resolved, in

(a) the qualifying expenditure under the Income Tax Act;

(b) the Certificate of Approved Enterprise; and

© the qualifying payment under th Exchange Control Act

(4) The Government shall grant to the contractor a certificate of Approved Enterprise in accordance with the Foreign Investments Protection Act, Chapter 518 of the Law of Kenya. The amount recognized by the certificate as having been invested shall be the actual amount for the time being invested by the contractor as set forth in its books of account maintained and audited in accordance with this contract, provided however that the contractor shall not repatriate any proceeds of sale of an asset forming part of either –

(a) qualifying expenditure under the Income Tax Act;

(b) any asset subject to a Certificate of Approved Enterprise;

Without written approval and the necessary amendments to the relevant certificate. Proceeds arising from any other source may repatriate after a senior Officer of the Ministry, duly authorized in that behalf, has certified that such repatriation is in order.

PART VIII

GENERAL

34. PAYMENTS

(1) All sums due to the Government or the contractor shall be paid in United States dollars or other currency agreed to by the Government and the contractor.
(2) Any late payment shall attract interest at ….percent (……..%) per annum.

35. ASSIGNMENT

(1) After notice to the Minister the contractor may assign part or all of its rights and obligations under this contract to an affiliate without the prior approval of the Minister, provided such assignment shall result in the assignor and the assignee being jointly and severally liable for all of the assignor's obligations hereunder.

(2) The contractor may assign to a person other than an affiliate part or all of its rights and obligations under this contract with the consent of the Minister, which shall not be unreasonably withheld and which shall be granted or refused within thirty (30) days of receipt by the Minister of the notice from the contractor that it intends to make such an assignment, but the Minister may

require such an assignee to provide a guarantee for the performance of the obligations of the contractor.

(3) The contractor shall report to the Minister any material changes in the corporate structure, ownership and financial position of the contractor and its parent company.

36. MANAGER, ATTORNEY AND JOINT OPERATION AGREEMENT

(1) The contractor shall notify the Minister, before the petroleum operations begin, of the name and address of the person resident in Kenya who will supervise the petroleum operations, and prior notice of any subsequent change shall be given to the Minister.

(2) The contractor shall appoint an advocate resident in Kenya with the power of representation in all matters relating to this contract, of which appointment the Minister shall be notified before the petroleum operations begin, and prior notice of any subsequent change shall be given to the Minister.

(3) Where the contractor consists of more than one person, the contractor shall deliver to the Minister a copy of the joint Operating agreement between those persons, as soon as it is available.

37. CONFIDENTIALITY

(1) All the information which the contractor may supply to the
Government under this contract shall be supplied at the expense of the contractor and the Government shall keep that information confidential, and shall not disclose it other than to a person employed by or on behalf of the Government, except with the consent of the contractor which consent shall not unreasonably withheld.

(2) Notwithstanding subclause 37 (1), the Minister may use any information supplied, for the purpose of preparing and publishing reports and returns required by law, and for the purpose of preparing and publishing reports and surveys of a general nature.

(3) The Minister may publish any information which relates to a surrendered area at any time after the surrender, and in any other case, three (3) years after the information was received unless the Minister determines, after representations by the contractor, that a longer period shall apply.

(4) The Government shall not disclose, without the written consent of the contractor, to any person, other than a person employed by or on behalf of the Government, knowhow and proprietary technology which the contractor may supply to the Minister.

38. FORCE MAJEURE

(1) In this clause, “Force Majeure” means an occurrence beyond the reasonable control of the Minister or the Government or the contractor which prevents any of them from performing their obligation under this contract

(2) Where the Minister, the Government or the Contractor is prevented from complying with this contact by force majeure, the person affected shall promptly give written notice to the other and the obligations of the affected person shall be suspended, provided that the person shall do all things reasonably within its power to remove such cause of force majeure. Upon cessation of the force majeure event, the person no longer affected shall notify the other person.

(3) Where the person not affected disputes the existence of force majeure, that dispute shall be referred to arbitration in accordance with clause 41.

(4) Where an obligation is suspended by force majeure for more than one (1) year, the parties may agree to terminate this contract by notice in writing without further obligations.

(5) Subject to subclause 38 (4), the term of the contract shall be automatically extended for the period of the force majeure.

39. WAIVER

A waiver of an obligation of the contractor shall be in writing, signed by the Minister, and no waiver shall be implied if the Minister does not exercise a remedy under this contract.

40. GOVERNING LAW

(1) This contract shall be governed by, interpreted and construed in accordance with the Laws of Kenya.

(2) The contractor agrees that it will obey and abide by all laws and regulations in force in Kenya.

(3) If after the effective date of this contract the economic benefits of a party are substantially affected by the promulgation of new laws and regulations, or of any amendments to the applicable laws and regulations of Kenya, the parties shall agree to make the necessary adjustments to the relevant provisions of this contract, observing the principle of the mutual economic benefits of the parties.

41. ARBITRATION

(1) Except as otherwise provided in this contract, any question or dispute arising out of or in relation to or in connection with this contract shall, as far as

possible, be settled amicably. Where no settlement is reached within thirty (30) days from the date of the dispute or such a period as may be agreed upon by the parties, the dispute shall be referred to arbitration in accordance with the UNCITRAL arbitration rules adopted by the United Nations Commission on International Trade Law.

(2) The number of arbitrators shall be three (3) and shall be appointed as follows

(a) each party shall appoint one (1) arbitrator and so notify the other party of such appointment and those two (2) arbitrators shall appoint the third arbitrator.

(b) if any of the arbitrators shall not have been appointed within thirty (30) days, either party may request in writing the SecretaryGeneral of the International Centre for Settlement of Investment Disputes to appoint the arbitrator or arbitrators not yet appointed and to designate an arbitrator to be the Chairman of the arbitral tribunal. The SecretaryGeneral shall forthwith send a copy of that request to the other party.

The SecretaryGeneral shall comply with the request within thirty (30) days from the receipt thereof or such longer period as the parties may agree.

The SecretaryGeneral shall promptly notify the parties of any appointment or designation made by him pursuant to the aforesaid request.

(c) Arbitrators shall be chosen from countries other than those of which the parties are nationals.

(d) If an arbitrator fails or is unable to act, his successor will be appointed in the same manner as the arbitrator whom he succeeds.

(3) The arbitration shall take place in Nairobi, Kenya and shall be in English.

(4) The decision of the majority of the arbitrators shall be final and binding on the parties.

(5) Any judgement upon the award of the arbitrators may be entered in any court having jurisdiction in respect thereof.

42. NOTICES

(1) Any notice and other communication under this contract shall be in writing and shall be delivered by hand, sent by registered post, or by telegram or telex to the following address of the other.

To the Government:
To the Contractor:

(2) A notice shall be effective on receipt.

(3) Any notice given by telex or telegram shall be promptly confirmed by letter signed by the party giving the notice.

(4) The Government and the contractor may at any time and from time to time change its authorized representative or its address herein on giving the other ten (10) days notice in writing to such effect.

43. HEADING AND AMENDMENTS

(1) Headings are inserted in this contract for convenience only and shall not affect the construction or interpretation hereof.

(2) This contract shall not be amended, modified or supplemented except by an instrument in writing signed by the parties.

Signed on the day and year first before written:

For the government

.....

The Minister .....

.....

.....

For the Contractor: .....

.....

.....

Note: Appendices to each petroleum agreement relates will

(a) Identify the block to which the petroleum agreement related (Appendix "A")

(b) Provide for the accounting procedures to be followed by the contractor (appendix "B") ; and

(c) Specify the terms and conditions of participation (Appendix C")

APPENDIX “A”

THE CONTACT AREA

(The Area to which the Petroleum Agreement relates

APPENDIX "B"

ACCOUNTING PROCEDURE

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PART I GENERAL PROVISIONS

The purpose of this accounting procedure is to establish methods and rules of accounting for petroleum operations and the principles set forth herein shall apply to petroleum operations pursuant to the production sharing contract (hereinafter referred to as the "Contract"), to which this Appendix is attached.

1.1 INTERPRETATION

1.1.1 DEFINITIONS

"joint account" means the set of accounts maintained by the operator to record all expenditure and other transactions under the provisions of the contract. Such accounts will distinguish between exploration, evaluation, development and production costs. After adoption of a development plan a separate joint account shall be maintained for each development area.

"joint property" means all property acquired and held in connection with petroleum operations under the contract;

"material" means personal property, including supplies and equipment, acquired and held for use in petroleum operations;

"controllable material" means material which the operator subjects to record control and inventory. A list of types of such material shall be furnished to the Government and nonoperator(s);

"operator" means the party designated to conduct the petroleum operations;

"nonoperator(s)" means the entities constituting the contractor other than the operator, and the Government when it participates.

Words not defined herein, but which are defined in the contract, shall have the meanings ascribed to them therein.

1.1.2 PRECEDENCE OF DOCUMENT

In the event of conflict between the provisions of this accounting procedure and the provisions of the contract, the provisions of the contract shall prevail.

1.2 ACCOUNTING OBLIGATIONS OF THE CONTRACTOR

1.2.1. The contractor shall maintain financial accounts necessary to record in reasonable detail the transactions relating to petroleum operations which shall be prepared in accordance with generally accepted standards of the international petroleum industry, as more particularly, but not exclusively set out in this accounting procedure.

1.2.2. The contractor shall provide the Government with a description of its accounting classifications and the contractor shall use such classifications when preparing its accounts.

1.2.3. The contractor shall provide details of the financial accounts in the form of monthly statements which shall

(a) reflect all charges and credits related to petroleum operations;

(b) be prepared on accrual basis so that expenditure is recorded as incurred when title to goods passes or when work is executed; and

(c) present the total accounts for the contract area and each development area and the share of each nonoperator.

1.3. LANGUAGE AND UNITS OF ACCOUNTS

1.3.1. All books of account shall be maintained in the English language and in United States dollars. Where necessary for clarification, the contractor may also maintain accounts and records in other language and currencies.

1.3.2. It is the intent of this accounting procedure that neither the Government nor the contractor should experience an exchange gain or loss at the expense of, or to the benefit of, the other. However, should there be any gain or loss from exchange of currency, it will be credited or charged to the accounts under the contract.

1.4. AUDITS AND INSPECTION RIGHTS OF THE GOVERNMENT

1.4.1. The Government, upon at least thirty (30) days' advance written notice to the contractor, shall have the right at its sole expense to audit the joint account and related records for any calendar year or portion thereof within the twentyfour (24) month period following the end of such year. Notice of any exception to the contractor's accounts of any calendar year must be submitted to the contractor within three (3) years from the end of such year.

1.4.2. For the purposes of auditing, the Government may examine and verify, at reasonable times, all charges and credits relating to the petroleum operations such as books of account, accounting entries, material records and inventories, vouchers, payrolls, invoices and any other documents, correspondence and records necessary to audit and verify the charges and credits. Furthermore, the auditors shall have the right in connection with such audit, to visit and inspect at reasonable times, all sites, plants, facilities, warehouses and offices of the contractor directly or indirectly serving the petroleum operations including visiting personnel associated with those operations.

1.4.3. All adjustments resulting from an audit agreed shall be rectified promptly in the contractor's accounts. Any unresolved dispute arising in connection with an audit shall be referred to arbitration in accordance with clause 41 of the contract.

1.4.4. At the request of the Minister, the contractor shall appoint an independent auditor of international standing approved by the Minister to audit annually the accounts and records of the petroleum operations and report thereon, and the cost of such audit and report shall be chargeable to the joint account.

1.5. REVISION OF ACCOUNTING PROCEDURE

1.5.1. By mutual agreement between the Government and the contractor, this accounting procedure may be revised from time to time by an instrument in writing signed by the parties.

1.5.2. The parties agree that if any procedure established herein proves unfair or inequitable to any party, the parties shall meet and in good faith endeavour to agree on the changes necessary to correct that unfairness or inequity.

PART II COSTS, EXPENSES, EXPENDITURE AND CREDITS OF THE CONTRACTOR

Subject to the provisions of the contract, the contractor shall bear and pay the following cost and expenses necessary to conduct petroleum operations. Such petroleum costs are recoverable by the contractor in accordance with the provisions of the contract.

2.1. SURFACE RIGHTS

2.1.1. All direct costs necessary to acquire and to maintain surface right to the contract area when such costs are paid by the contractor according to the provisions of the contract.

2.2. LABOUR AND RELATED COST

2.2.1. Salaries and wages of employees of the operate and its affiliate(s) for portion of their time spent performing management, administrative, legal, accounting, treasury, tax, employee relations, computer services, engineering, geological, and all other functions for the benefit of petroleum operations, whether temporarily or permanently assigned to the contract area, as well as the cost of employee benefits, customary allowances and personal expenses incurred under the usual practice of the operator and its affiliate(s) and amount imposed by governmental authorities, which are applicable to such employees.

2.3. MATERIAL

2.3.1. Value of material charged to the accounts contract. The cost of material, equipment and supplies purchased or furnished by the operator for use in petroleum operations shall be charged to the joint account on the basis set forth below. So far as it is reasonably practical and consistent with efficient and economical operations, only such material shall be purchased for or transferred to

the joint property as may be required for immediate use and /or for approved work programmes and the accumulation of surplus stock shall be avoided.

2.3.1.1. Except as otherwise provided in subpart 2.3.1.2 below, material purchased, leased or rented shall be charged at the actual net cost incurred by the operator. "Net cost" shall include, but shall not be limited to, such items as vendor's invoice price, transportation, duties, fees and applicable taxes less all discounts actually received.

2.3.1.2. Material purchased or transferred from the contractor or its affiliate(s) shall be charged at the prices specified herebelow:

(a) New material (condition "A") shall be valued at the current international net cost which shall not exceed the price prevailing in normal arm's length transactions on the open market.

(b) Used material (conditions "B", "C" and "D").

(i) Material which is in sound serviceable condition and is suitable for reuse without reconditioning shall be classified as condition "B" and priced at seventyfive percent (75%) of the current price of new material defined in (a) above.

(ii) Material which cannot be classified as condition "B" but which after reconditioning will be further serviceable for its original function shall be classified as condition "C" and priced at fifty per cent(50%) of the current price of new material as defined in (a), above. The cost of reconditioning shall be charged to the reconditioned material provided that the value of condition "C" material plus the cost of reconditioning do not exceed the value of condition "B" material.

(iii)Material which cannot be classified as condition "B" or condition "C" shall be classified as condition "D" and priced at a value commensurate with its use.

2.3.2. INVENTORIES

2.3.1.1. At reasonable intervals, inventories shall be taken by the operator of all controllable material. The operator shall give ninety (90) days' written notice of intention to take such inventories to allow the Minister and nonoperator(s) to be represented when any inventory is taken. Failure of any party to be represented after due notice given shall bind such party to accept the inventory taken by the operator.

2.3.2.2. The operator shall clearly state the principles upon which valuation of the inventory has been based.

2.3.2.3. Whenever there is a sale or change of interest in the joint property, a special inventory may be taken by the operator, provided the seller and/or purchaser of such interest to bear all of the expense thereof. In such cases, both the seller and the purchaser shall be entitled to be represented and shall be governed by the inventory so taken.

2.4. TRANSPORTATION AND EMPLOYEE RELOCATION COSTS

2.4.1. Transportation of material and other related costs such as origin services, expediting, crating, dock charges, forwarder's charges, surface and air freight, and customs clearance and other destination services.

2.4.2. Transportation of employees as required in the conduct of petroleum operations, including employees of the operator's affiliate(s) whose salaries and wages chargeable under subparts 2.2.1 and 2.5.2.

2.4.3. Relocation costs of the contract area vicinity of employees permanently or temporarily assigned to petroleum operations. Relocation costs from the contact area vicinity, except when an employee is reassigned to another location classified as a foreign location by the operator. Such costs include transportation of employee' families and their personal and household effects and all other relocation cost in accordance with the usual practice of the operator and its affiliate(s).

2.5. SERVICES

2.5.1. The actual cost of contract services, professional consultants, and other services performed by third parties other service provided by the contractor or its affiliate(s), but the prices paid by the contractor shall not be higher than those generally charged for comparable services.

2.5.2. Costs of technical services, such as but not limited to, engineering, and related data processing, performed by the contractor and its affiliate(s) for the direct benefit of petroleum operations, engineering, and related data processing, performed by the contractor provided such cost shall not exceed those currently prevailing if performed by third parties in normal arm's length transaction for like services.

2.5.3. Costs of use of equipment and facilities for the direct benefit of the petroleum operations, furnished by contractor or its affiliate(s) at rate commensurate with the costs of ownership, or rental , and the cost of operation thereof , but such rates shall not exceed those currently prevailing in the general vicinity of the contract area in normal arm's length transactions on the open market for like services and equipment.

2.6. DAMAGES AND LOSSES TO JOINT PROPERTY

2.6.1. All costs or expenses necessary for the repair or replacement of joint property resulting from damages or losses incurred by fire, flood, storm, theft, accident, or any other cause, except insofar as those costs and expenses are caused by the wilful misconduct of the operator. The --operator shall furnish the Government and nonoperator(s) written notice of damages or losses for each damages or loss in excess of fifty thousand U.S. dollars (U.S. $50,000) as soon as after the loss as practicable.

2.7. INSURANCE

2.7.1. Premia for insurance required under the contract, provided that a party not participating in such insurance shall not share in the cost unless such insurance is compulsory under the laws of Kenya and provided further that if such insurance is wholly or partly paced with an affiliate of the contractor such premia shall be recoverable only to the extent generally charged by competitive insurance companies other than an affiliate of the contractor.

2.7.2. Actual expenditure incurred in the settlement of all losses, claims, damages, judgments, and other expenses for the benefit of the petroleum operations.

2.8. LEGAL EXPENSES

2.8.1. All costs or expenses of litigation or legal service otherwise necessary or expedient for the protection of the joint property or other interest in the contract area, including but not limited to legal counsel's salaries and fees, court costs, cost of investigation or procuring evidence and amounts paid in settlement or satisfaction of any such litigation or claims. These services may be performed by the operator's legal staff or an outside firm as necessary.

2.9. DUTIES AND TAXES

2.9.1. All duties, taxes (except taxes based on income), fees, and governmental assessments of very kind and nature which have been paid by the operator with respect to the contract.

2.10. OFFICE, CAMPS AND ADMINISTRATIVE EXPENSES

2.10.1. Cost of establishing, maintaining and operating any offices, suboffices, camps, warehouse, housing and other facilities directly serving petroleum operations. The cost shall be allocated to the operations served on an equitable basic.

2.11. GENERAL AND ADMINISTRATIVE EXPENSES

2.11.1. This charges shall be made monthly for services of all personnel and offices of the operator and its affiliate(s) outside Kenya and those not otherwise provided herein. It shall include service and related office cost of personnel performing management, administrative, legal, accounting, treasury, tax, employee relations, computer service, purchasing, engineering, geological, geophysical, and all other functions for the direct benefit of petroleum operations. The charge shall be made as follows:

This charge will be at the provisional rate of ……. percent (……%) of total costs per month during any period in which exploration operations are being conducted. For the period commencing on the date that the contractor reports a commercial discovery to the Government as required in clause 19(5) of the contract until the contract is terminated the provisional rate shall be …….. pe rcent (……%) of total costs per month.

The provisional charges for such costs are based upon operator's cost experience and estimates of cost to be incurred in conduct of the petroleum operations, and

are subject to quarterly adjustment as operator's costs indicate are necessary and equitable. Within ninety (90) days following the end of each quarter, the operator shall determine the actual cost incurred in performing such services, and shall charge or credit the joint account for the difference between the actual cost incurred for the quarter and the provisional rate charge during the quarter.

On request of the Government or a nonoperator, the operator shall make available at its home offices all supporting documents used for the determination of the charges. Such documents shall include but shall not be limited to time allocation reports prepared by employees providing services described in subpart 2.11.1., cash vouchers supporting cash expenses included in overhead pool, intercompany billing supporting charges for services provided by operator's affiliates (e.g. building rentals, telecommunications paid by the operator's parent company), summary or impersonalized computer run supporting salaries, wages and employee benefits and other such documents as
may be mutually agreed.

2.12. OTHER EXPENDITURE

2.12.1. Other reasonable expenditure not covered or dealt with in the forgoing provisions which are incurred by the operator and its affiliate(s) for the necessary, proper, economical and efficient conduct of petroleum operations.

2.12.2. Interest incurred on loans raised by the contractor for capital expenditure in petroleum operations under the contract at rate not exceeding prevailing commercial rates may be recoverable as petroleum costs.

2.13. CREDITS UNDER THE CONTRACT

The net proceeds of the following transaction will be credited to the
account under the contract
(a) the net proceeds of any insurance or claim in connection with the

petroleum operations or any assets charged to the accounts under the contract;

(b) revenue received from outsiders for the use of property or assets charged to the accounts under the contract;

(c) any adjustment received by the contractor from the suppliers/manufactures or their agents in connection with defective equipment or material the cost of which was previously charged by the contactor under the contract;

(d) rentals, refunds or other credits received by the contractor which apply to any charge which has been made to the accounts under the contract;

(e) proceeds from all sales of surplus material or assets charged to the account under the contract; and

(f) the prices originally charged to the accounts under the contract for inventory materials subsequently exported from Kenya.

2.14. NO DUPLICATION OF CHARGES AND CREDITS

Notwithstanding any provision to the contrary in this accounting procedure, it is the intention that there shall be no duplication of charges or credits in the accounts under the contract.

PART III FINANCIAL REPORTS TO THE MINISTER

3.1. The reporting obligations provided for in this Part shall, unless the country is stated, apply to the operator.

3.2. The operator shall submit annually to the Minister the following:

3.2.1. The annual work programme and budget three(3) months before the beginning of the year to which they apply and the budget shall be analyzed by item within the exploration programme, evaluation programme, development programme and production programme and show for each major budget item, with reasonable detail, the following:

(a) latest forecast cumulative costs anticipated at the start of the budget year;

(b) cumulative expenditure anticipated at the end of each quarter of the budget year; and

(c) expenditure anticipated in future years to complete the budget item.

3.2.2. A schedule of the service and supply contracts, to be let during the forthcoming year which require payment in foreign currency exceeding the equivalent of …….. U.S. dollars (U.S. $ ……..) per contract, showing the anticipated tender date and approximate value and the goods or services to be provided;

3.2.3 The audit report required by subpart 1.4.4. of this accounting procedure, stating whether in the opinion of the auditors of the contract

(a) the last annual expenditure report records the expenditure of the contractor truly and fairly in accordance with the provisions of the contract;

(b) the reports on petroleum revenue submitted truly and fairly determined the arm's length value of disposals of petroleum during the year.

3.3. The operator shall submit quarterly within thirty (30) days of each quarter to the Minister:

3.3.1. a report of expenditure and receipts under the contract analyzed by budget item showing

(a) actual expenditure and receipts for the quarter in question;

(b) actual cumulative cost to date;

(c) latest forecast cumulative cost at the year end;

(d) variations between budget costs and actual costs, and explanations thereof; and

(e) with effect from adoption of the development plan, the total payroll costs segregated between Kenyan and nonKenyan personnel and the total expenditure segregated between Kenyan and nonKenyan goods and services.

3.3.2. a cost recovery statement containing the following information

(a) recoverable petroleum costs carried forward from the previous quarter, if any;

(b) recoverable petroleum costs incurred and paid during the quarter;

(c) total recoverable petroleum costs for the quarter (a) plus (b) above);

(d) quantity and value of cost oil taken and separately disposed of by the contractor for the quarter;

(e) amount of petroleum recovered for the quarter;

(f) amount of recoverable petroleum costs to be carried forward into the

next quarter, if any; and

(g) value of Government's share of production taken by the contractor pursuant to clause 27 of the contract.

3.4. A copy of each contract for goods or services, requiring a foreign currency payment, shall be provided to the Minister as soon as practicable after its execution, together with a contract summary containing

(a) a description of the goods or services to be provided;

(b) the approximate consideration for the contract;

(c) the names of proposed bidders, contractors or suppliers; and
(d) a brief description of the efforts made to find a Kenyan supplier or contractor including the names of businesses considered and the reasons for rejecting them.

3.5. After the commencement of production the operator shall, within fifteen (15) days after the end of each month, submit a production report to the Minister showing for each development area the quantity of petroleum

(a) held in stocks at the beginning of the month

(b) produced during the month

(c) lifted, and by whom;

(d) lost and consumed in petroleum operations; and

(e) held in stocks at the end of the month.

3.6. A lifting party shall submit, within fifteen (15) days after the end of each month, a report to the Minister stating

(a) the quantities and sales value of arm's length petroleum sales made in that month;

(b) the quantities, sales value and arm's length value of disposals of petroleum other than by sale at arm's length during the month; and

(c) the total petroleum revenue for that month.

APPENDIX "C"

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PARTICIPATION AGREEMENT

This Participation Agreement, made and entered into on this .....day of....., by and between the Government of the Republic of Kenya (hereafter referred to as the "Government") represented for the purpose of this agreement by the Minister for the time being responsible for energy (hereinafter referred to as the "Minister") and

……..…. Incorporated under the laws of .....and having established a place of business at ……., Kenya (hereinafter referred to as the Contractor").

WHEREAS the Government and the Contractor have entered into a production sharing contract (referred to as the "Contract"), to which this Appendix is attached;

WHEREAS the Government may decide to exercise its option under clause 28 of the Contract; and

WHEREAS the Parties wish to set forth the terms and conditions under which the Government has agreed to participate in the Petroleum Operations in each case such as option is exercise;

NOW, THEREFORE, the Parties agree as follows:

1. INTERPRETATION

1. In this participation Agreement, words in the singular include the plural and vice versa, and except where the context otherwise requires:

"AFE" means an authorization for expenditure;

"Government" includes an appointee as defined in subclause 28 (1) of the Contract;

"Joint account" means the accounts maintained by the operator to record all transactions related to operations in the participation area under this Participation Agreement;

"Joint property" means all property acquired and held for use in connection with operations under this Participation Agreement;

"Nonoperator" means a party other than the operator;
"Operating committee" means the committee established by Article 4 hereof;

"Operator" means the party designated to conduct the petroleum operations, pursuant to Article 3 hereof and its successors;

" Participating interest" means the respective undivided interest of each of the parties as it may exist at any given time in the participation area and under this Participation Agreement;

"Participation area" means a development area in which the Government elects to participate under the Contract;

"Participation dates" means the effective date of participation by the Government as defined in subclause 28 (2) of the Contract;

"Participation work programme" means a programme of the petroleum operations under this Participation Agreement;

"Parties" means, collectively, the Government and the entities consulting the Contractor, their respective successors or assignees."party" means anyone of the parties;

"Year" means calendar year.

2. Words not defined in this Participation Agreement but which are defined in the Contract have the meanings given to the in the Contract.

3. In the event of any conflict between the Contract and this Participation Agreement, Contract shall prevail and this Participation Agreement shall be deemed amended accordingly.

2. PARTICIPATING INTERESTS

1. When and if the Government elects, pursuant to clause 28 of the contract, to participate in petroleum operations in a participation area, each entity constituting the contractor shall assign proportionately to the Government a part of its interest in the development area so that the rights, interest and obligations of the contractor and the Government in such area shall be owned and borne as of the participation date in undivided interests as follows:

Government.....per cent (.....%) or such lesser 28 of the Contract;

amount as may be elected in accordance with clause

Contractor: .....per cent (.....%) or such greater amount as may remain after the Government's election.

2. In the event a party shall transfer in whole or in part its Participating interest pursuant to clause 35 of the Contract and Article 9 of this Participation Agreement, the participating interest of the parties therein shall be revised accordingly.

3. OPERATOR AND DUTIES OF OPERATOR

1. The operator shall be the party acting as operator on the participation date and the operator shall have the rights and obligations of a nonoperator in respect of its participating interest.

2. The operator shall serve as operator until it resigns or is removed pursuant to the provisions of this Article, or until it ceases to hold a participating interest hereunder. In the event that an operator assigns the whole of its participating

interest hereunder to one of its affiliates, such affiliate shall become operator hereunder in the former's place.

3. Upon the affirmative vote of all the nonoperators, the operator, the operator shall be removed as operator in case of any one of the following

(a) bankruptcy of the operator or its parent company;

(b) assignment for the benefit of the operator's creditors;

(c) appointment of a receiver or manager with respect to the whole or any part of the property or assets of the operator;

(d) entitlement of any person other than an affiliate of the operator to appoint a majority of the members of the board of directors of the operator by the reason of any act, default or neglect of the operator;

(e) failure without justification by the operator to pay a sum due to or in the name of the joint account for more than sixty (60) days;

(f) the operator's material breach of this Participation Agreement which remains unremedied for more than thirty (30) days after the operator is notified by nonoperators of such breach; or

(g) reduction in the operator's participating interest to.....per cent (.....%) or less.

4. An operator may at any time resign as operator by giving to the other parties notice in writing of such resignation. Such resignation shall be effective one hundredeighty (180) days after the date of notice thereof or on the date on which a successor operator appointed by the parties (other than the operator)

shall be ready and able to assume the obligations of operator in accordance with all the provisions of this Participation Agreement, whichever shall first occur.

5. Should an operator so resign or be removed, a successor operator shall immediately be appointed by the operating committee. A party having been removed as operator may not vote to succeed itself as operator. Such appointment parties holding not less than the percentage figure of the remaining participating interests set out in Article 4 (6). For the purpose of this Article, operator includes any of its affiliates holding a participating interest in this Participation Agreement.

6. Removal or resignation of an operator shall not in any way affect its rights or obligations as nonoperator party to this Agreement. On the effective date of removal or resignation, the operator shall deliver to the successor operator any and all funds, equipment, materials, appurtenances, books, records, data, interpretations, information and rights acquired by and in the custody of the operator for the joint account of the parties (including available petroleum not delivered to the parties), shall, with the successor or operator, prepare an inventory of joint property, adjusting the joint account accordingly, and shall cooperate as far as possible in effecting a smooth transfer of operating responsibilities.

7. An operator that is removed under Article 3 (3) (g) hereof may charge to the joint account all reasonable and necessary expenditure incurred in demobilizing and repatriating personnel and equipment.

8. The operator shall have control of the petroleum operations in the participation area and shall exclusive custody of all materials, equipment and other property acquired therefor, and shall perform the duties under this Participation Agreement diligently and in accordance with good international petroleum

industry practice, and sound and accepted engineering, management and accounting principles.

The operator shall not be liable to any nonoperator for any acts or omissions, claims, damages, losses or expenses, in connection with or arising out of this Participation Agreement or the contract or petroleum operations save those caused by gross negligence or willful misconduct of the operator.

9. The operator shall

(a) consult with nonoperators and advise them of all matters arising from the petroleum operations;

(b) comply with the decisions of the operating committee;

(c) keep the participating interests and all property acquired or used free from liens, except for those authorized by Article 6 hereof; and

(d) pay the costs of the petroleum operations under this Participation Agreement promptly and make proper charges to nonoperators.

10. The operator shall submit a copy of an AFE to the nonoperators for each budget item of capital expenditure in the approved participation work programme and budget that costs more than .....U.S. dollars (U.S $.....).

Where it is necessary to complete an expenditure in a budget item in the approved participation work programme, the operator may exceed the budget for the budget item by the lesser of ten per cent (10%) thereof or.....U.S. $.....) and shall report promptly such excess expenditure to the nonoperators.

The operator may spend not more than .....U.S. dollars (U.S. $.....) on petroleum operations in the participation area not included in an approved

participation work programme, provided that such expenditure shall not be for items previously rejected by the operating committee. The operator shall report promptly that expenditure to the nonoperators and, if it is approved in accordance with Article 4 (6), the operator may make further expenditure thereon or on other items not exceeding U.S. dollars (U.S.$.....) in that year.

The limits in this Article 3(10) may be changed from time to time by the operating committee.

In the case of emergency, the operator may make such immediate expenditure and take such immediate action as may seem necessary for the protection of life or property or the prevention of pollution and such emergency expenditure shall be reported promptly to the parties by the operator.

11. A nonoperator may inspect the participation area, the petroleum operations, and the books, records and other information of the operator pertaining thereto.

The operator shall supply to a nonoperator by telephone, telefax, telegraph or telex, daily reports on drilling and such other reports in writing normally provided by an operator to a nonoperator in the international petroleum industry, including but not limited to reports on well tests and core analysis, and copies of drilling logs, well surveys and velocity surveys. The operator shall furnish any other information reasonably requested by nonoperator, if such information is readily available.

12. The operator shall obtain and maintain all insurance required by law and such other insurance as the operating committee may time to time determine, provided that, in respect of such other insurance, any party may elect not to participate provided such party gives notice to that effect to the operator. The cost of insurance in which all the parties are participating shall be for the joint account and the cost of insurance in which less than all the parties are

participating shall be charges to such parties individually. The operator shall, in respect of any insurance

(a) promptly inform the parties participating therein when it is taken out and supply them with copies of the relevant policies when the same are issued;

(b) arrange for the parties participating therein, according to their respective participating interests, to be named as coinsureds on the relevant policies with waiver of subrogation in favour of the parties; and

(c) duly file all claims and take all necessary and proper steps to collect any proceeds and, if all the parties are participating therein, credit them to the joint account or, if less than all the parties are participating therein, credit them to the participating parties.

Subject as stipulated above, any of the parties may obtain such insurance as it deems advisable for its own account at its own expense providing such insurance is acceptable under the applicable law.

If the operator is unable to obtain such other insurance required by the operating committee, it shall so advise the parties and thereafter, it shall be discharged of its obligation to obtain such insurance.
The operator shall take all reasonable steps to ensure that all contractors (including subcontractors) performing work in respect of the petroleum operations and the joint property obtain and maintain all insurance required by the law and obtain from their insurers a waiver of subrogation in favour of the parties.

13. The operator may prosecute, defend and settle claims and litigations arising out of the petroleum operations and may compromise or settle such claims or litigations which involve an amount not exceeding the equivalent of on

hundred thousand U.S. dollars (U.S. $100,000) without the approval of the operating committee. Any claim or litigation involving an amount in excess of the equivalent of one hundred thousand U.S. dollars (U.S. $100,000) shall be reported promptly to the nonoperators and a nonoperator shall have the right to be represented by its own counsel at its expense in the compromise, settlement or defence of such claims or litigation.

14. The operator shall fulfil the reporting obligations of the Contractor unless otherwise stipulated in this Participation Agreement and the Contract.

4. OPERATING COMMITTEE AND WORK PROGRAMMES

1. The parties shall establish an operating committee to supervise and control the petroleum operations. The operating committee shall consist of one representative appointed by each of the Parties provided always that more than one of the Parties may appoint the same representative who shall represent them separately.

   Each party shall, as soon as possible after the date of this Participation Agreement, give notice to all the other parties of the name of its representative and of an alternate on the operating committee. Such representative may be replaced, from time to time, by like notice. Representatives may bring to meetings of the operating committee such advisers as they consider necessary. The representative of a Party or, in the absence of the representative, his alternate, shall be deemed authorized to represent and bind such party with respect to any matter which is within the powers of the operating committee. The representative of the party which is the operator shall be the chairman of the operating committee and shall report the proceedings.

2. Except as otherwise provided in this Participation Agreement the powers and duties of the operating committee shall include

(a) the consideration and determination of all matters relating to general policies, procedures and methods of operation hereunder;
(b) the approval of any public announcement or statement regarding this Participation Agreement or the petroleum operations;

(c) the consideration, revision and approval or disapproval, of all proposed participation work programmes, budgets and AFE's prepared and submitted to it pursuant to the provisions of this Participation Agreement;

(d) the determination of the timing and location of all wells drilled under this Participation Agreement and any change in the use or status of a well;

(e) the determination of whether the operator will represent the parties regarding any matters or dealings with the Minister, any other governmental authorities or third parties in so far as the same relate to the petroleum operations, provided that there is reserved to each party the unfettered right to deal with Minister or any other government authorities in respect of matters relating to its own participating interest; and

(f) the consideration and, if so required, the determination of any other matter relating to the petroleum operations which may otherwise designated under this Participation Agreement for reference to it.

3. The operator shall, when requested by a representative of any party, call a meeting of the operating committee. The operator may do so at any time to keep the parties informed on the petroleum operations.

4. A request to call a meeting of the operating committee shall state the purpose of that meeting and, except in an emergency, the operator shall give the parties at least fifteen (15) days' written notice with an agenda of the meeting, but

where a meeting is called in an emergency, the operator shall give as much notice thereof as possible by telephone, telex or telegraph and except with the consent of all the parties, the business of a meeting shall be only that for which it was called.

5. The operator may, instead of calling a meeting, submit matters to the parties by written notice, upon which each party may vote within the period prescribed in the notice which shall not be less than three (3) days or more than fifteen (15) days from the date notice is received. Failure of a party to vote within the above time limits shall be deemed a negative vote.

6. Each party shall have a voting interest equal to its participating interest. Unless otherwise provided in this Participation Agreement, all decisions of the operating committee shall be made by the affirmative vote of al least two (2) parties holding not less than .....per cent (.....%) of the participation interests.

7. The operator shall, at least four (4) months before the end of each year, submit to the parties for approval a participation work programme and budget, which shall contain details of the petroleum operations to be carried out in the next year and allocation of funds therefore including administrative overheads and third party expenditure, in accordance with the accounting procedure attached to this Participation Agreement as exhibit "A".

8. Unless unanimously agreed at least sixty (60) days prior to the beginning of the year, the operator shall call a meeting of the operating committee to discuss and approve a participation work programme and budget for the ensuing year and such work programme and budget shall be approved not later than thirty (30) days prior to the commencement of such year and the decision of the operating committee shall bind the parties. Upon approval of such work

programme and budget the operator is hereby authorized and obliged to proceed with it in accordance such approval.

9. Such approved participation work programme and budget may be reviewed and revised from time to time by the operating committee. Any party may in writing request a review of an approved participation work programme or budget, or of a project within a programme, if that project costs more than .....U.S. dollars (U.S. $.....), and the request shall state the objections of the party, which shall be considered by the operating committee, who may amend the participation work programme or budget.

5. COST AND EXPENSES.

1. Except as otherwise specifically provided in the Contract and this Participation Agreement, all costs and expenses incurred by the operator in the conduct of operations hereunder shall be borne by the parties in proportion to their respective Participating Interests set forth in Article 2.

2. All costs and expenses incurred by the operator in the conduct of petroleum operations hereunder shall be determined and settled in accordance with good internationally accepted accounting practice consistent with the provisions of the Contract and its accounting procedure as complemented by the provisions of exhibit "A" to this Participation Agreement, and the operator shall keep its records of costs and expenses in accordance therewith.

6. PAYMENTS TO OPERATOR

1. A nonoperator shall pay its share of an expenditure relating to the petroleum operations, within fifteen (15) days of receipt of the account of the operator.
2. The operator may, upon twenty (20) days' written notice, request a nonoperator to advance a share of the estimated expenditure for the following month,

stipulating the due date of payment, provided however that such due date of payment shall not be before the first banking day of that month and the operator shall include with such notice an estimate of the cash calls for the next three (3) months. Operator's estimate of expenditure shall not exceed the approved year's budget. The operator may, at any time upon fifteen (15) days' written notice, request additional advances to cover unforeseen expenditure.

3. Cash requirements shall be specified by the operator in the currencies required for the petroleum operations and the nonoperators shall advance their shares in the currencies so specified.

4. If any nonoperator's advances for a given month exceed its share of cash disbursements for the same month, the next succeeding cash advance, after such determination, shall be reduced accordingly.

   However, nonoperator(s) may request that excess advances be refunded. The operator shall make such refund within fifteen (15) days after date of such notice.

5. Where a party is in default of payment, the operator and the nondefaulting parties shall have, as security for amounts due hereunder from a defaulting nonoperator, a lien on the participating interest share, the interest in material and equipment acquired for the petroleum operations and upon the proceeds from the sale of petroleum, of that nonoperator, and a nonoperator shall have for amounts due hereunder, a similar lien on the same interests and property of the operator.

6. A lien may be exercised by a nondefaulting party by collecting the amount due from a purchaser of petroleum and the statement of the operator of the amount due shall be proof thereof.

7. A late payment shall attract interest at LIBOR plus.....per cent (.....%) or.....per cent (.....%), whichever is the greater, compounded monthly and calculated from the due date of payment. A payment not received within seventytwo (72) hours of the due date shall accrue interest from the due date and the nonpaying party shall be deemed to be in default from the due date of the payment.

8. A party which remains in default for five (5) days shall have no right to vote at any operating committee meeting held during the period of the default but shall be bound by all decisions of the operating committee made during such period, and the defaulting part's participating interest shall be deemed to be vested prorata in the nondefaulting parties for voting purpose during the continuation of the default.

9. Where a party fails to pay an amount required to be paid hereunder, and remains in default for ninety (90) days, the participating interest share of the defaulting party may be declared forfeit by the nondefaulting parties, unless the amount due is an advance and the defaulting party provides an irrevocable letter of credit or other security, acceptable to the operator, for the amount due.

10. When the participating interest share of a defaulting party is declared forfeit, the operator shall give notice thereof to all the parties, and that share shall vest rateably, unless otherwise agreed, in the nondefaulting parties without payment of compensation and the defaulting party shall at its sole expense take all steps necessary to vest that share accordingly, and the defaulting party hereby appoints the operator to act as its attorney to execute any and all documents required to effect such transfer. Notwithstanding the transfer of a defaulting party's participating interest share in accordance with the foregoing, the defaulting party shall remain liable for its proportionate share of the commitments incurred before its rights lapsed.

11. Where a party is in default of payment, the remaining parties shall advance the operator on demand a share of that payment, in proportion to the participating interests of those parties. Any payments received from a defaulting party shall be credited to the accounts of the nondefaulting parties who advanced funds on behalf of the defaulting party.

7. MATERIAL AND EQUIPMENT

1. All material and equipment acquired by the operator for petroleum operations hereunder shall be owned by the parties in undivided shares in the proportion of their respective participating interests.

2. Except as may be otherwise approved by the operating committee, the operator shall purchase for the joint account of the parties only such material and equipment as are reasonably required in the conduct of operation provided for in approved participation work programmes or revisions thereof, the operator shall not stockpile material or equipment for future use without the approval of the operating committee.

3. Jointly acquired material or equipment declared by operator to be surplus shall be disposed of in such manner as the operating committee may direct; or, if the book value thereof does not exceed.....U.S. dollars(U.S. $.....), the operator shall dispose of same in such manner as the Operator shall deem appropriate; provided, however, that each Party may, if practicable, separately take or sell and dispose of its interest in such material or equipment or may by notice in writing, and subject to revocation at will, authorize the operator, for a period or periods of not more than one (1) year each, to sell such material and equipment for the account of the party or parties giving such authorization. Each party shall have the right to purchase, at the prevailing market price in the area, material or equipment which operator has declared to be surplus and which operator intends to dispose of on the open market.

4. Subject to the provision of clause 12 of the Contract, upon termination of this Participation Agreement the operator shall salvage for the jointlyowned material and equipment which can reasonably be salvaged, to be disposed of as provided in Article 7 (3) hereof.

8. RELATIONSHIP OF THE PARTIES AND TAX PROVISIONS

1. The parties declare that it is not their intention by entering into this Participation Agreement to create or be considered as a partnership or any other similar entity.

2. Each party shall be responsible for and shall pay its own taxes to the Kenyan authorities on its operations hereunder.

3. It is recognized that a party hereunder may be subject to the laws of its place of incorporation in addition to the laws of Kenya. For United States Federal income tax purposes, each of the parties hereto which is subject to United States Income Tax laws ("U.S. Party") hereby elects to be excluded from the application of all of the provisions of Subchapter "K", chapter 1, Subtitle "A", of the United States Internal Revenue Code of 1954, as permitted and authorized by Section 761 of that Code and the regulations promulgated thereunder. Should there be any requirement that each U.S. Party evidence this election, each U.S. Party agrees to execute such documents and furnish such other evidence as may be required by the United States Federal Internal Revenue Service. Upon the request of any U.S. Party, the Operator shall provide data necessary for filing United States tax returns.

9. SURRENDERS AND TRANSFERS

1. Any party desiring that all of the participation area be surrendered voluntarily shall notify the other parties in writing accordingly, specifying its reasons thereof, and thereafter:

(a) Each party shall within thirty (30) days after receipt of the notice inform the other parties in like manner whether it concurs in or opposes the proposed surrender;

(b) If all the parties concur in the proposed surrender, the participation area shall be surrendered as soon as possible under the Contract;

(c) If one or more of the parties shall oppose the proposed surrender, the party or parties desiring to surrender shall, upon request by the opposing parties, transfer and convey without warranty of titlefree and clear of all liens, charges and encumbrances and without right to compensation, all of its or their interest(s) in the participation area and material left thereon to said opposing party or parties, each in the proportion that its or their participating interest(s) hereunder bear to the sum of the participating interests of all the opposing parties, or as otherwise agreed by the opposing parties. The transferring party or parties shall bear

(i) Its or their participating interest share(s) of costs, expenses and liabilities incurred hereunder which are attributable to the participation area for the period prior to the effective date such transfer of interest;

(ii) Its or their participation interest share(s) of all costs and expenses incurred by the operator after such date under any contracts entered into by the operator in execution of a participation work programme theretofore approved by the operating committee; and

(iii)Its or their participating interest share(s) of any accrued obligations under the contract which are not included rights or other obligations in connection therewith.

(d) A transfer under paragraph (c) above shall be effective as among the parties thirty (30) days after the opposing parties' receipt of the transferring party's first mentioned notice proposing surrender. Thereafter until such transfer has received whatever approvals may be necessary under the provisions of the Contract or applicable law, the transferring Party or parties shall hold at most legal, but not equitable, title to the interest (s) transferred for the benefit of the opposing party or parties. The transferring party or parties receiving the interest(s) transferred shall execute and deliver such documents and do such other acts as may be necessary to give legal effect to such transfer, to obtain all approvals thereof as may be required from the Minister, and otherwise to effectuate the purpose of this paragraph.

(e) Notwithstanding the foregoing, if the operating committee determines that .....per cent (.....%) or more of the estimated, discovered and recoverable reserves under the participation area have been produced, no party shall be allowed to surrender or required transfer of interest in this Participation Agreement and the Contract without the unanimous consent of all parties.

2. No transfer of any interest under this Participation Agreement and the Contract shall be made by any party otherwise than in respect of an undivided interest in all or part of its participating interest in this participation Agreement and the Contract, and in accordance with the following provisions of this Article 9.

3. If any party shall receive a bona fide offer for the purchase of all or a portion of an offeree party's participation interest in this Participation Agreement and

the participation area which the offeree party is willing to accept, the offeree party shall give notice thereof in writing to the other parties:

(a) Such notice shall set forth the identity of the offeror, the terms and conditions (including monetary and other considerations) offered in good faith, and all other relevant particulars.

(b) For a period of thirty (30)m days next following the receipt of such notice, the other parties shall have no option to purchase the entire interest proposed to be sold on the same terms offered by the offeror, as set forth in the respective offer.

(c) If more than one of the parties should exercise its right to purchase said interest, each shall have the right to acquire such interest in the proportion that the Participating Interest hereunder of such party bears to the sum of the Participating interests of all the parties exercising such right except as they may as they may otherwise agree.

(d) If within such a period of thirty (30) days, none of the other parties shall exercise its rights to purchase said interest, the sale to said offeror may be made under the terms and conditions set forth in the notice given; provided that the sale shall be consummated within six (6) months from the date of such notice and that the sale and any transfer shall be in accordance with the Contract and applicable law.

(e) For the purpose of this paragraph, an offer to purchase shall also include an acceptance of an entity's offer sell.

4. The limitations of Article 9 (3) shall not apply to transfer of a participating interest by a party to an affiliate of such party or by the Government to an appointee, or from an appointee to another appointee, nor shall they apply to a

transfer of a participating interest effected as a result of merger, consolidation, reorganization or sale of capital stock of the parent company of a Party.

5. Every transfer of a participating interest in the participation area shall be made expressly subject to this Participation Agreement and shall include a corresponding interest in jointly acquired equipment and facilities. No transfer of an interest hereunder shall be effective unless made by an instrument in writing duly executed by the parties thereto in accordance with applicable law, and until the same has received all consents required under this Participation Agreement and the Contract. A transfer shall provide that the transferor remains liable for obligations incurred before the date of transfer and such obligations shall in addition become the obligations of the transferee. Where after the transfer, the transferee or transferor owns a participating interest of less than five per cent (5%), they shall be jointly represented.

6. A transfer other than an affiliate on an appointee shall be of sufficient financial standing to meet its participating interest share of its obligations under the Contract and this Participation Agreement. In the event of a transfer of a participating interest to an affiliate of a party the transferor party shall remain responsible for the full performance by the affiliate of the obligations undertaken by said party under this Participation Agreement and the Contract, and if such affiliate ceases to be an affiliate, the participating interest shall be transferred back to the party.

7. In this Article, transfer means a transfer, assignment, sale or other disposal of the interest of a party.

10. DISPOSAL OF PRODUCTION

1. Each party shall separately own, take in kind and dispose of its participating interest share of that portion of the petroleum produced and saved from the

participation area to which the Contractor is entitled under clause 27 of the Contract.

2. Within six (6) months following the signing of this Participation Agreement, the parties shall, in accordance with the provisions of the Contract and in light of the gathering and transportation facilities available under the adopted development plan, in good faith establish set of rules governing the scheduling, lifting and other necessary provisions for the crude oil offtakes of the parties, consistent with good international petroleum industry practice, which shall provide, among other things, such detailed terms and procedures as required for

(a) shortterm production forecasts;

(b) nomination and calculation of entitlements;

(c) scheduling of deliveries;

(d) lifting tolerances;

(e) underlift, overlift and makeup provisions;

(f) passage of title and risk;

(g) penalties assessable to the Parties which cause shutin or reductions of production; and

(h) other related matters.

Whatever is mutually agreed by the Parties shall be deemed to form part of this Participation Agreement.

The above terms and procedures shall apply separately to each grade of crude oil that is segregated and separately stored for offtake.

3. The Government may request from time to time that the Contractor purchase all or part of the Government's participating interest share of crude oil. The Contractor shall use its best efforts to comply with this request but in the event that the Contractor is not able to take such crude oil, then the Contractor will assist the Government in good faith to market such crude oil at the best price, terms and conditions available in the international market for the sale of such crude oil.

4. In the event of production of associated natural gas or of any discovery of natural gas, the parties shall agree upon appropriate procedures for disposal of any natural gas available under this Participation Agreement and the Contract.

11. SOLE RISK OPERATIONS

1. Any party may undertake petroleum operations at sole risk (hereinafter referred to as "sole risk project") in a participation area, subject to the provisions of this Article.

2. The following types of sole risk project may be proposed

(a) the drilling of a well or the deepening, sidetracking, completing, plugging back, testing or reworking of an existing well drilled for the joint account of the parties, in order to test a formation in which no jointlyowned well has been completed as a well producing or capable of producing petroleum;

(b) the installation of production and transportation facilities.

3. The conduct of a project in a development area may not be the subject of a sole risk notice under this Article until after it has been proposed in complete form to the operating committee for consideration pursuant to Article 4 hereof and has not been approved within the period therein provided.

In the event that such project fails to obtain the requisite approval of the operating committee, then any party may serve notice on the other parties of its intention to carry out that project at sole risk. The other parties may give counternotice that they wish to participate in the project within sixty (60) days after receipt thereof but, where a drilling rig is on the location and has not been released, the period is reduced to seventytwo (72) hours after receipt thereof. The periods set forth in this Article 11 (3) shall be extended for any period of time mutually agreed by the parties as necessary or desirable for acquiring or developing additional information on the sole risk project.

4. If all the other parties elect to participate in the project identified in the proposing party's notice within the period thereof provided, such project is considered as being approved by the operating committee and the provisions of Article 4 (8) of this Participation Agreement shall apply.

5. In the event that less than all the parties elect to participate in the project, the parties which elected to participate (hereafter referred to as "sole risk parties") shall be entitled to have the sole risk project carried out.

The interest of each sole risk party in a sole risk project shall be in proportion to its participation interest in this Participation Agreement, or in such
other proportion as the sole risk parties may agree. Any sole risk project shall be carried out at the sole risk, cost and expense of the sole risk parties in the proportion of their respective interests.

6. A sole risk project will be carried out by the operator on behalf of the sole risk parties under the provisions of this participation agreement. No sole risk

project may be commenced after one hundred and eighty (180) days following the expiration of the notice period prescribed in Article 11 (3), but the operator shall commence work as promptly as reasonably possible if the notice period of seventy two (72) hours, set forth in Article 11 (3), applies. The operator shall complete the sole risk project with due diligence provided that it does not jeopardize, hinder or unreasonably interfere with petroleum operations carried out under the Contract and adopted by the operating committee pursuant to Article 4 of this Participation Agreement.

The sole risk parties may use for the sole risk project any production, handling, processing and/or transporting facilities, which are joint property, subject to a determination by the operating committee as to usage fees, availability of capacity and production compatibility.

7. In connection with any sole risk project

(a) the sole risk project will be carried out under the overall supervision and control of the sole risk parties in lieu of the operating committee;

(b) the computation of costs and expenses of the sole risk project incurred by the sole risk parties shall be made in accordance with the principles set out in exhibit"A" attached hereto;

(c) the operator carrying out the sole risk project shall maintain separate books, records and accounts (including bank accounts) for the sole risk project which shall be subject to the same right of examination and audit by the sole risk parties;

(d) the costs and expenses of the sole risk project shall not be reflected in the statements and billing rendered by the operator for petroleum operations under the Participation Agreement; and

(e) if the operator is carrying out a sole risk project on behalf of the sole risk parties, the operator shall be entitled to request the sole risk parties in connection with the sole risk project to advance their share of the estimated expenditure and shall not use joint account funds or be required to use its own funds for the purpose of paying the costs and expenses of the sole risk project; furthermore the operator shall not be obliged to commence or, having commenced, to continue the sole risk project unless and until relevant advances have been received from the sole risk parties.

8. The sole risk parties shall indemnify and hold harmless the other parties against all actions, claims, demands and proceedings whatsoever brought by any third party arising out or in connection with the sole risk project and shall further indemnify the other parties against all damages, costs, losses and expenses whatsoever directly or indirectly caused to or incurred by them as a result of anything done or omitted to be done in the course of carrying out such sole risk project.

9. Subject to the provision of Article 11 (10) below, the sole risk project, including data and information, is wholly owned by the sole risk parties in accordance with the provisions of the Contract, but the sole risk parties shall keep the other parties informed about the project.

In the event that such project results in an increase of production of petroleum from the participation area, the portion of such increase, which is available to the Contractor, shall be owned solely by the sole risk parties. Each of them shall have the right and obligation to take in kind, and separately dispose of its proportional share of supplementary petroleum production.

10. Any party or parties which are not participating in the sole risk project may, by giving thirty (30) days' notice to the sole risk parties, become participants in such project, at any time after the sole risk parties have recovered from the supplementary petroleum production the following sums of money to which they are entitled on the project:

In the case of a project under Article 11 (2) (a) hereof.....per cent (.....%) of the Sole Risk cost of such project, plus one hundred per cent (100%) of the cost of operating such well incurred by the Sole Risk Parties.

In the case of a project under Article 11 (2)(b) hereof.....per cent(.....%) of the Sole Risk cost of such project, plus one hundred per cent (100%) of the cost of operating such facilities.

The value of the supplementary production to which a Sole Risk Party is entitle shall be the market value in sales at arm's length, determined in accordance with clause 26 of the Contract.

From and after the election of any party or parties to become participants in such project, all relevant wells, facilities, equipment and other property appurtenant thereto shall be owned jointly by the participating parties and each of the participating parties shall be entitled to receive its proportional share of the supplementary petroleum production.

12. CONFIDENTIALITY

1. All information related to the petroleum operations shall be confidential and shall not be disclosed to a person other than a party except to

(a) an affiliate;

(b) the Government and other public authorities to the extent necessary for the purpose of any applicable law;

(c) a stock exchange to which a party is obliged to make disclosure;

(d) contractors, consultants, legal counsels or arbitrators of a Party, where disclosure is essential;

(e) a bona fide prospective purchaser of an interest of a Party in the Contract, but that purchaser shall undertake to treat that information as confidential;
(f) a lender, where disclosure is essential; or

(g) a person to whom disclosure has been agreed by the Parties .

2. A party making a disclosure to a person described in paragraph(1)(e) or (f) shall give ten (10) days' written notice thereof to the other parties.

3. The parties shall consult with each other prior to the release of any public statement or press release, and except to the extent required by law, rule or regulation of any government authority or stock exchange, no party shall make any public statement or press release without the approval of all the other parties, which shall not be unreasonably withheld. The operator shall utilize its best efforts to coordinate all such public statements to the end that all Parties may effect simultaneous press releases.

4. The obligations of the parties under this Article 12 are continuing obligations and any party ceasing to be a party to this Agreement shall remain bound by this Article until this Agreement is no longer in force between any remaining parties and the Contract has expired.

13. LIABILITY

1. The parties shall be severally liable in accordance with their respective participating interest to third parties.
2. Where the Government has nominated an Appointee, as defined in clause 28 (1) of the Contract, and the appointee defaults the Government shall be liable.

3. If because of the operation of the joint and several liability provisions contained in the Contract, anyone of the Parties hereto shall be required to pay in full to the Government or any other party, any sum which, if the liability were several, would be required separately from each of the Parties or from

one other party only, then the Party(ies) shall notify forthwith and request immediate payment of the Party's(ies') proportionate share according to its Participating interest. If within ten (10) days from receipt of said notice, the other Party(ies) shall fail to make payment as provided above such Party (ies) shall be in default and the provisions of Article 6 above shall apply, this being without prejudice to any other legal remedies available to the nondefaulting Party(ies) against the defaulting Party(ies).

14. GOVERNING LAW

This Participation Agreement shall be governed by and be construed in accordance with the laws of Kenya.

15. ARBITRATION

A dispute under this Participation Agreement shall be referred to arbitration in accordance with clause 41 of the Contract.

16. FORCE MAJEURE

1. In this Article 16, force majeure means an occurrence beyond the reasonable control of any of the parties which prevents any of them from performing their obligations under this Participation Agreement.

2. Where a party is prevented from performing an obligation under this Participation Agreement by force majeure, that party shall give written notice to the other Parties, and the obligation of the affected Party shall be suspended for the period of the force majeure.

3. The affected party shall promptly notify the other parties when the period of force majeure terminates.

4. No Party may claim force majeure as a reason for the failure to timely pay any monies pursuant to this Participation Agreement.

5. Where any Party disputes the existence of force majeure, that dispute may be referred to arbitration as provided in clause 44 of the Contract.

17. NOTICES

1. All notices and other communications provided for in this Participation Agreement shall be made in writing and shall be delivered by hand or sent by registered airmail, as appropriate, return receipt requested, or by telegram or telex (with confirmation by mail) to the Parties at the following addresses:

To Minister :

Permanent Secretary,
Ministry of Energy and Regional Development,
P.O. Box 30582,
Nairobi, Kenya.
Telex : 23094 MINERGY.

To :

2. Notices given by registered airmail shall be deemed received on the date shown on the return receipt. Notices given by telegram or telex shall be presumed received on the working day at the place of receipt next following the time of transmission.

3. Any party may at any time and from time to time change its authorized representative or its address herein on giving the other Parties ten (10) days notice in writing to such effect.

18. TERM

1. This Participation Agreement shall come into force on the participation date and shall remain inn force until
(a) it is terminated by the written consent of all the parties;

(b) all the Participating interests are vested in one Party; or

(c) the expiration or termination of the Contract.

2. Before this Participation Agreement is terminated, there shall be a final accounting and settlement of the Joint Account.

19. FINAL PROVISIONS

1. Headings are inserted in this Participation Agreement for convenience and shall not affect the construction for interpretation hereof.

2. This Participation Agreement shall not be amended, modified or supplemented except by an instrument in writing signed by the parties.

3. Subject to the provisions hereof, this Participation Agreement shall insure to the benefit of and be binding upon the successors and assignees of the parties hereto and each of them respectively.

IN WITNESS WHEREOF, the Parties hereto have signed this Participation Agreement on the day and year first above written.

EXHIBIT "A"

ACCOUNTING PROCEDURE

Attached to and made a part of the Participation Agreement.

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Section 1 General Provisions

1.1 Interpretation

1.2 Statements, billings and adjustments

1.3 Advances and payments

1.4 – Audits

SECTION 1

GENERAL PROVISIONS

The purpose of this accounting procedure is to establish equitable methods for determining charges and credits applicable to operations under the Agreement.

It is the intent of the Parties that no Party shall lose or profit by reason of its duties and responsibilities as either operator or as nonoperator and that no duplicate charges to the joint account for the same work shall be made.

The parties agree that if any procedure established herein proves unfair or inequitable to any party, the parties shall meet and in good faith endeavour to agree on the changes necessary to correct that unfairness or inequity.

1.1. INTERPRETATION

1.1.1. In this Exhibit

(i) "the Agreement" means the Participation Agreement of
which this Exhibit forms part,
(ii)"the Contract" means the production sharing contract to which the Agreement is attached

(iii) words and expressions defined in the Agreement, the Contract and its appendices have the meanings therein ascribed to them.

1.1.2. In the event of any conflict between the provisions of the
Agreement and this exhibit, the provisions of the Agreement shall prevail.

1.1.3. By mutual agreement between the parties, this accounting procedure attached to the Agreement may be revised from time to time by an instrument in writing signed by the parties.

1.2. STATEMENTS, BILLINGS AND ADJUSTMENTS

1.2.1. The operator shall maintain financial accounts necessary to record in reasonable details the transactions relating to petroleum operations under the Agreement which shall be prepared in accordance with generally accepted standards of the international petroleum industry. The operator shall upon request by the Party furnish a description of its accounting classifications.

1.2.2. Each party to the Agreement is responsible for preparing its own accounting and tax reports and paying of its own tax obligations to meet Kenyan requirements. The operator shall furnish the nonoperator(s) with all reports, statements, billings and accounting documents necessary to maintain their own accounting records.

1.2.3. The operator shall bill the nonoperator(s) on or before the last day of each month for their proportionate share of expenditure for the preceding month. Such billings shall be accompanied by statements of all charges and credits to the joint account, summarized in reasonable detail by appropriate accounting classifications indicative of the nature thereof, except that items of controllable material and unusual charges and credits shall be detailed.

1.2.4. The operator shall, upon request by nonoperator(s) furnish a description of such accounting classifications.

1.2.5. Amounts included in the billings shall be expressed in the currency in which the operator's records are maintained. In the conversion of currencies when accounting for advances or payments in different currencies as provided for in subsection 1.3., or any other currency transactions affecting operations under the Agreement, it is the intent that none of the parties shall experience an exchange gain or loss at the expense of, or to the benefit of, the other Parties. It is agreed that any loss or gain to the joint account resulting from the exchange of currency required for operations under the Agreement or from the translations required, shall be charged or credited to the joint account. The operator shall furnish the parties with a description of the procedure applied by the operator to accomplish said translation or exchange of currencies and provide currency exchange data sufficient to enable nonoperator(s) to translate the billings to the currency of the nonoperator(s) accounts.

1.2.6. Payment of billings by nonoperator(s) shall not prejudice the right of any nonoperator(s) to protest or question the correctness thereof; however, all bills and

statements rendered to nonoperator(s) by the operator during any year shall conclusively be presumed to be true and correct after twentyfour (24) months following the end of any such year, unless within the said twentyfour (24) month period a nonoperator takes written exception thereto and makes claim on the operator shall be made unless it is made within the same prescribed period. The provisions of this Subsection shall not prevent adjustment resulting from a physical inventory or the joint property or from a third party claim.

1.3. ADVANCES AND PAYMENT

1.3.1. If operator so requests, nonoperator(s) shall advance to the operator the nonoperator(s)' share of estimated cash requirements for the succeeding month's operation in accordance with Article 6 of the Agreement. Operator shall make written request for the advance to nonoperator(s) at least twenty (20) days prior to the first banking day of such succeeding month. The advance shall not be due and payable before the first banking day of the month for which the advance is requested. The request shall set out the funds in the currencies to be expended as estimated by the operator to be required. The nonoperator(s) shall on or before the due date make corresponding advances in the currencies requested by depositing such funds to operator's account at a bank as may be from time to time designated by the operator.

1.3.2. Should the operator be requested to pay any large sums of money for operations under the Agreement, which were unforeseen at the time of providing the nonoperator(s) with said monthly estimates of its requirements, the operator may make a written request of the nonoperator(s) for special advances covering the nonoperators' share of such payments. Nonoperator(s) shall advance to operator their share of such advances within fifteen (15) days after date of such notice.

1.3.3. If nonoperators' advances exceed their share of actual expenditure, the next succeeding cash advance, after such determination, shall be reduced accordingly.

However, nonoperator(s) may request that excess advances be refunded. The operator shall make such refund with fifteen (15) days after date of such notice.

1.3.4. If nonoperators' advances are less than their share of actual expenditure, the deficiency shall, at operator's option, be added to subsequent cash advance requirements or be paid by nonoperator's within fifteen (15) days following operator's billing to nonoperator(s) of such deficiency.

1.3.5. If the operator does not request nonoperator(s) as provided in subpart 1.3.1., to advance their share of estimated cash requirements, nonoperator(s) shall pay their share of actual expenditure within fifteen (15) days following date of operator's billing.

1.3.6. Payments of advances or billings shall be made on or before the due date;

and if not so paid, the unpaid balance shall be treated as provided under Article 6 of the Agreement.

1.4. AUDITS

1.4.1. A nonoperator, upon at least thirty (30) days' advance written notice to the operator and other nonoperator(s), shall have the right at its sole expenses to audit the joint account and related records for any year or portion thereof within the twentyfour (24) month period following the end of such year; however, the conducting of an audit shall not extend the time for the taking of written exception to and the adjustment of accounts as provided for in subpart 1.2.5. The operator shall make every reasonable effort to cooperate with the nonoperators, and the nonoperators shall make every reasonable effort to conduct audits in a manner which will result in a minimum of inconvenience to the operator.

1.4.2. All adjustments resulting from an audit agreed between the operator and the nonoperator conducting the audit shall be rectified promptly in the joint account by

the operator and reported to the other nonoperator. Any unresolved dispute arising in connection with an audit shall be referred to arbitration in accordance with Article 15 of the Agreement.

1.4.3. Except as otherwise provided in the Contract, the cost of any audit or verification of the joint account that is for the benefit of all parties shall be chargeable to the joint account if the parties mutually agree.

SECTION 2

CHARGEABLE COSTS, EXPENDITURE AND CREDITS

The operator shall charge the joint account for all those costs and expenditure necessary to conduct petroleum operations under the agreement pursuant to the provisions of subparts 2.12. inclusive of appendix "B" to the Contract.

The operator shall credit the joint account for all the proceeds resulting from petroleum operations under the Agreement pursuant to the provisions of subpart 2.31. of appendix "B" to the Contract.

Appendix 6: National Climate Change Policy 2015



THE REPUBLIC OF UGANDA

MINISTRY OF WATER AND ENVIRONMENT

Uganda National Climate Change Policy

Theme: Transformation through Climate Change Mitigation and Adaptation

APRIL 2015

Uganda National Climate Change Policy

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Foreword

As this policy clearly shows, climate change will affect us all, through its impacts on different crucial aspects of our lives.

Uganda's 2010–2015 and 20162021 fiveyear National Development Plans as well as the Country's vision 2040 already recognise that addressing the challenges of climate change is key to enhancing sustainable economic and social development.

This longawaited policy and its accompanying costed implemented strategy are intended to guide all climate change activities and interventions in the country. The goal of the policy is to ensure a harmonised and coordinated approach towards a climateresilient and lowcarbon development path for sustainable development in Uganda.

The overarching objective of the policy is to ensure that all stakeholders address climate change impacts and their causes through appropriate measures, while promoting sustainable development and a green economy.

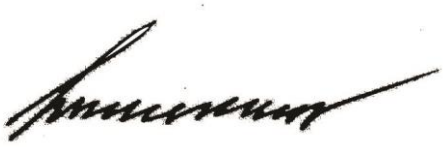
This buyin by all stakeholders is made possible by the fact that this policy was developed after a comprehensive and widespread consultation process at both the

national and local levels. The process was driven by the Ministry of Water and Environment.

I wish to express my sincere gratitude to the many stakeholders, including NonGovernmental Organisations, CommunityBased Organisations, Private Sector Associations, Local Governments, Academia, Development Partners and of course the various Government Ministries, Departments and Agencies, for their commitment, time and knowledge contributed during the development of this policy. Thanks also go to the multistakeholder Technical Working Group that accompanied this process. The contribution of all these stakeholders and their active involvement in the policy development process has ensured that the policy is coherent, comprehensive, feasible and in line with the country's needs, priorities and Uganda Vision 2040.

Finally,I want to take this opportunity to thank the team of International and National Consultants who supported this consultation process and my Ministry throughout the policy development process for their hard work. Special thanks also go to the Royal Danish Embassy, the Belgium Technical Cooperation, and the United Kingdom Department for International Development and the World Bank, for supporting the process financially.

I look forward to following closely with all of you the implementation process for which we all have a role to play to effectively



Prof. Ephraim Kamuntu
Minister of Water and Environment
Republic of Uganda

Executive Summary

Introduction and International Background for National Climate Change Policy

Climate change is a global challenge that requires a concerted effort by all nations. This National

Climate Change Policy (NCCP) is Uganda's integrated response to climate change. It has been prepared and designed within the context of the country's vision and national development priorities; it provides a clearly defined pathway for dealing with the challenges of climate change within the socioeconomic context of Uganda, and looks ahead to the opportunities and benefits of a green economy.

Climate Change and Its Impacts Internationally and Regionally

Climate change is one of the greatest challenges facing humanity in the century, as the Earth's near surface temperatures continue to rise. Climate change is likely to disrupt the Earth's ecological systems and have serious negative consequences on agricultural production and productivity, forests, water supply, health systems and overall human development. Vulnerable populations (mainly the poor and most marginalised, including children, women, older persons and people with disabilities in developing countries) are particularly poorly equipped to cope with the adverse impacts of climate change. As temperatures throughout East Africa rise, precipitation is expected to increase, along with the frequency and intensity of droughts, floods, heat waves and landslides. Scientists predict that the rate of climate change will be more rapid than previously expected.

International Agreements and National Commitments on Climate Change

The global nature of climate change necessitates widespread coordination, cooperation and participation in an international response. By signing and ratifying both the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol, Uganda has committed to the adoption and implementation of policies and measures designed to mitigate climate change and adapt to its impacts. At the regional level, the climate change policy for the East African Community urges Partner States to develop consistent national policies to ensure harmonised action. The global consensus under UNFCCC is implemented according to each country's Green House Gas (GHG) emissions and ability to address the problems. In Uganda, the development of a National Climate Change Policy and its implementation Strategy enables the country to fulfil its obligations under the convention, and therefore to contribute to addressing the global problem. Uganda's fiveyear National Development Plan (2015/162019/20) already recognises that addressing the challenges of climate change is crucial to enhancing sustainable economic and social development. With support from the governments of Denmark, Belgium, as well as from the United Kingdom through the World Bank, the Ugandan

Ministry of Water and Environment has coordinated the development of the Uganda National Climate

Change Policy through extensive consultations with a wide range of national and local stakeholders. The policy is intended to guide all climate change activities and interventions in the country.

Climate change and Achievement of the National Vision and National Development Objectives Achieving longterm sustainable economic growth in the face of climate change is a primary concern.

The Government of Uganda (GoU) is already taking climate change and its impact on development seriously through its development planning framework. Uganda's

fiveyear National Development Plan (NDP) 2015/16/19/20 recognises that most of the key economic sectors (in particular agriculture, forestry and energy) will be affected by climate change and as a result climate change will negatively affect the national economy. Uganda Vision 2040, the longterm term development blue print for the country – aims at transforming Uganda from a predominantly peasant and low income country to a competitive upper middle income country.

Vision 20140 recognizes that climate change affects all sectors of Uganda's economy, making the need for preparedness inevitable through adaptation and mitigation strategies in all sectors to ensure that the country is resilient to the adverse impact of climate change. In addition, developing guidelines for incorporating climate change in sectoral and local government plans and budgets are recognised. A climate change resilient and low carbon climate development pathway, as set out in this *National Climate Change Policy (NCCP)* shall help meet Vision 2040's goals through strategies and actions that address both sustainable development and climate change. This pathway shall also help the Government achieve the Post 2015 Development Agenda and other internationally agreed development goals without compromising the environment and the natural resource base.

Key Issues on Climate Change in Uganda: Rationale for and Scope of for the National Climate Change Policy

Climate Change in Uganda: The average temperature in semiarid areas in Uganda is rising, especially in the southwest. The frequency of hot days has increased while the frequency of cold days has decreased. As a result, the malaria parasite is spreading into new areas of the country and the ice caps on the Rwenzori Mountains have shrunk significantly. Changing temperature patterns in Uganda have been linked to more frequent and longer lasting droughts and consequent increased cattle death. Rainfall has decreased, become less predictable and less evenly distributed. Floods, landslides, droughts and other extreme weather

events are increasing in frequency and intensity. Uganda's economy is particularly vulnerable to climate change given its heavy reliance on its natural resource base. Droughts have significantly affected water resources, hydroelectricity production and agriculture, among many others.

Costs and Benefits of addressing climate Change through the policy: Uganda cannot afford to choose between addressing climate change and promoting development; the two are interlinked and will become increasingly so over the foreseeable future. Building climate resilience or increasing the ability to adapt to climate change in as a low carbon way as possible will help Uganda achieve sustainable development and the Vision 2040 goals. This will also guarantees every Ugandan the right to a clean and healthy environment as provided for in the Uganda Constitution, 1995. An integrated climate resilient and low carbon development pathway emphasizes sustainable development, adaptation and mitigation.

Climate change impacts will be economically significant, especially for African countries, and investment to address climate change is well worth undertaking. Climate change is likely to impact on Uganda's macroeconomic stability and socioeconomic development, as well as its ability to achieve the Post 2015 Development Agenda. Key production sectors most affected by climate are agriculture, water, energy and transport. As agriculture, forestry and fisheries decline, people migrate to urban areas leading to the formation of slums.

Uganda's NCCP will guide efforts towards the attainment of Vision 2040 and encourage people centred sustainable development ensuring that climate change actions help the country move towards longterm development goals. Low carbon climate resilient development can bring benefits including: enhancing sustainable development, improving lives of the poor and vulnerable, building adaptive capacity, disaster risk reduction, contributing towards the implementation of the Constitution of Uganda, 1995, attracting international climate finance, technology

and capacity building, leveraging investment, and demonstrating regional and global leadership.

Rationale for and Scope of the Policy: A policy response to climate change in Uganda is crucial for reducing the country's vulnerability to climate change and it is the most appropriate way to adjust to and cope with the projected impacts of climate change on the nation. Uganda must also address the causes of climate change. Actions on climate change undertaken in Uganda have tended to be scattered and uncoordinated, with inappropriate institutional framework to ensure effective
coordination. Financing for climate change actions must be mobilised and scaled up significantly in Uganda, a process which will be facilitated by an overarching national climate change policy framework.

A policy designed to tackle the challenges of climate change in Uganda is a multisectoral as the problem itself. This policy provides direction for key sectors and stakeholders to facilitate adaptation, mitigation and strengthen efforts towards building an overarching, more resilient national development process. The policy is a "living" document and shall require revisions in the medium term as Uganda's development path evolves and our knowledge increases. The policy provides a framework for coordinated action, with attention to capacity requirements and the development of financial mechanisms. This policy will be the guiding document behind the development of a national costed implementation strategy that will detail actions by sector and designate tools to be prioritised.

Policy Framework

The goal of the policy is to ensure a harmonised and coordinated approach towards a climate resilient and lowcarbon development path for sustainable development in Uganda.

The overarching objective of the policy is to ensure that all stakeholders address climate change impacts and their causes through appropriate measures while promoting sustainable development and a green economy.

To achieve this overarching objective, the policy builds on a number of more *specific objectives*:

1. To identify and promote common policy priorities to address climate change in Uganda.
2. To identify and promote adaptation policy responses for Uganda.
3. To identify and promote mitigation policy responses for Uganda.
4. To identify and promote monitoring, detection, attribution and prediction policy responses for Uganda.
5. To support the integration of climate change issues into planning, decision making and investments in all sectors and transsectoral themes through appropriate institutional arrangements and legal framework.
6. To facilitate the mobilisation of financial resources to address climate change in Uganda.

Guiding Policy Principles

The principles of the policy are:

- Mainstreaming and coordinated response to climate change.
- Communicating effectively and promoting participatory approaches.
- Promoting communitybased approaches to adaptation.
- Devoting adequate attention to capacity development and institutional setups.
- Devoting adequate attention to technology needs, development and transfer.
- Identifying, developing and influencing financing mechanisms.
- Promote both local and International Cooperation and relations
- Providing a credible delivery structure.

- Addressing crosscutting issues.

Policy Directions

The *Uganda National Climate Change Policy* is based on the following priority concerns: adaptation, mitigation, research and observation. Like the EAC regional policy, this national policy emphasises climate change adaptation as the first priority for Uganda, while mitigation efforts are embraced by the policy as secondary.

Common policy priorities for both adaptation and mitigation concerns are mentioned below, followed by policy priorities specific to each concern.

Common Policy Priorities are to:

- Provide adequate support for policies and programmes that take into account the interactions between population dynamics, climate change and development.
- Provide proper support for the information sharing and research that is required to better understand the impacts of climate change in Uganda and the vulnerabilities of particular groups and populations.
- Support education, awareness raising and capacity development for a range of stakeholders (government, academics, civil society and private sector) contributing to the national development process, from the local level to the national level.
- Promote research and development, transfer and diffusion of technology through the use of appropriate information sharing, incentive schemes and support mechanisms as relevant to the various sectors concerned.
- Mainstream gender issues in climate change adaptation and mitigation approaches in order to reduce the vulnerability of women and children to the impacts of climate change and recognise their key role in tackling the issue.

- Promote concrete International Cooperation and relations on Climate Change issues

Adaptation Policy Priorities are to:

Agriculture and Livestock

- Promote climate change adaptation strategies that enhance resilient, productive and sustainable agricultural systems.

- Promote value addition, improve food storage and management systems in order to ensure food security at all times as a factor of resilience.

Water

- Support ongoing efforts to ensure that climate change concerns are integrated into national efforts for sustainable and longterm conservation, access and effective utilisation and management of water resources.

Fisheries and Aquaculture

- Strengthen efforts to promote integrated fisheries resource management and improve aquaculture in order to ensure sustainable fisheries production.

Transport and Works

- Develop and ensure integrated planning and management of transport and other physical infrastructure that build on insights from climate predictions.

Forestry

- Ensure sustainable management of forestry resources so that they can continue to provide global services including mitigating climate change while supporting the sustainable development needs of communities and the country.

Wetlands

- Promote longterm wetland conservation and restoration of degraded wetlands so that they can continue to provide global services including mitigating climate change while supporting the sustainable development needs of communities and the country.

Biodiversity and Ecosystem Services

- Effectively address the challenges posed by climate change impacts on biodiversity and ecosystems so as to ensure ecosystem health and provision of ecosystem services that are crucial to sustainable and resilient development.

Health

- Strengthen adaptive mechanisms and enhance earlywarning systems and adequate preparedness for climate change related diseases.

Energy

- Promote sustainable energy access and utilisation as a means of sustainable development in the face of uncertainties related to climate change.

Wildlife and Tourism

- Ensure conservation of wildlife resources and plan for improved resilience of tourism resources and infrastructure to climate change.

Human Settlements and Social Infrastructure

- Promote urban planning and development of human settlements that are resilient and robust enough to withstand climate change–related risks and hazards.

Disaster Risk Management

- Ensure disaster mitigation and adequate preparedness for climate change induced risks, hazards and disasters.

Crosscutting Priority: Vulnerable Groups

- Give special attention to improvements of the resilience of vulnerable groups to climate change.

Mitigation Policy Priorities are to:

Forestry

With a view to protecting and promoting carbon sinks:

- Continue and step up efforts targeted at effective forest management.
- Make a deliberate departure from "business as usual" by formulating sectoral policies that address issues associated with increased unit productivity in plantation forestry.
- Promote and develop afforestation and reforestation programmes in nonforested areas and intensify afforestation and reforestation efforts in other areas.

Land Use and LandUse Change

- Promote and enforce urban and rural planning of settlements.
- Control and monitor land development and other landuse changes in a sustainable manner so as to better manage GHG sources and sinks.

Reduced Emissions from Deforestation and Forest Degradation+ (REDD+)

- Continue to actively promote joint REDD+ efforts involving the public and private sectors.

Wetlands

- Promote a balance between conservation and sustainable use of wetlands to reduce GHG emissions.

Agriculture

- Mainstream climate change mitigation issues, promote and improve the management of natural resources in order to ensure resilient, productive and sustainable agricultural systems with reduced GHG emissions.

Energy Generation

- Support and accelerate the implementation of the Renewable Energy Policy (REP) in order to the promote and develop new clean energy technologies and reduce GHG.

Energy Utilisation

- Promote conservation and efficient utilisation of energy to reduce GHG emissions especially at consumer levels (industries, households, commercial and institutional buildings).
- Encourage the use of alternative fuels instead of heavily relying on biomass.

Transport

- Promote the development, approval and effective implementation of a longterm national transport policy and plan that will take GHG mitigation concerns into account.
- Effect a gradual shift to the use of less carbonintensive fuels (including compressed natural gas, ethanol and LPG) in vehicles instead of relying heavily on gasoline and diesel fuels.
- Promote modes of transport that take into account GHG emission reduction.

Waste Management

- Promote sustainable use of solid and liquid wastes for energy generation and other uses, such as fertilisers (after sorting).

Industrial Sector □ Promote cleaner production processes in industries to contain the increase in GHG emissions.

Crosscutting Priorities: Technology transfer and the largescale diffusion of clean, lowcarbon technologies

- Put in place functioning institutions that can manage and coordinate issues related to the transfer, deployment and diffusion of technology, including the promotion of the capacity development necessary to support the implementation of clean and lowcarbon technologies.
- Encourage technological development to address the problem of climate change in sectors of economic development with high emissions.

Monitoring, Detection, Attribution and Prediction

Policy Priority

 Continue with efforts to strengthen the capacity of the Department of Meteorology in its functions in climate change monitoring and detection in Uganda.

Implementation Arrangements – From Policy to Action

Institutional Arrangements

The Focal Climate Change Institution: Various institutional structures will play different roles, and a national coordination function will be assigned to a created National climate Change Commission
(NCCC). The CCU will be elevated to the level of a National Commission (the NCCC) under the Ministry of Water and Environment. The main functions of the NCCC are described in the Policy.

Other Key Coordinating Ministries and Authorities: In addition to the NCCC, three national ministries or authorities will have a specific role to play in national coordination to ensure policy implementation: The Ministry of Finance, Planning and Economic Development, The National Planning Authority, and The Ministry of Local Government. Their respective coordination functions are also described in the Policy.

Other Ministries, Departments and Agencies: Each of the numerous ministries, departments and agencies with a role to play in the implementation of the policy responses outlined in this document will designate a departmental focal point and will be accountable for the implementation of the prescribed policy responses that concern them. The Implementation Strategy will detail the accountabilities of the various ministries, departments and agencies concerned around indicative climate change programmes to be detailed in the Strategy. They will be expected to report on their progress in the implementation of their respective tasks and in the attainment of their expected results. On the basis of these reports, the NCCC will be tasked with preparing a consolidated progress report on the overall implementation of the policy.

At the Decentralised Level: A similar management arrangement will be mirrored at the district level.

While the climate change focal point will be anchored within the Natural Resources Department of the District Local Government, all departments will ensure that climate change issues are integrated into

District Development Plans. Provision will be made in districtlevel Indicative Planning Figures for each sector to ensure they can address climate change policy priorities, along with the setting of relevant performance indicators. The existing Environment Committee at the district level will act as a mechanism to ensure crosssectoral coordination.

Collaboration and Coordination: In addition to the NCCC's facilitation function, this coordination will require multistakeholder mechanisms. Two such mechanisms will be established: the Policy Committee on Environment (PCE) will be strengthened to coordinate policy implementation and ensure information flow on resource allocation for the implementation of the policy, and a National Climate Change Advisory Committee will ensure working level coordination and provide technical input to the National Climate Change Policy Committee. The work of these two coordination mechanisms will be guided by the Implementation Strategy. The objective of the Implementation Strategy will be to enable more effective planning and coordination.

Legal and regulatory framework

There is need for a legal and regulatory framework for climate that provides legitimacy, regulate conduct and establish sanctions that can ensure compliance. Absence of such a framework is an obstacle in translating the identified policy priorities into implementable actions with tangible climate change benefits. Already, the Constitution provides a regulatory framework for the implementation of the Policy. The Uganda National Development Plan II FY 2015/162019/20 mainstreams climate change into the development plans, policies and budgets of all sectors. Although some policies and laws like in the disaster preparedness and management and the health and environment sectors tackle climate change; effective implementation of the policy will likely require new legislations and also updating existing legal instruments. Two options are provided, amending the National environment Act, 1995 to cater for climate change; and enacting an overarching standalone

Climate Change Law to facilitate the direction, coordination and governance and high level political prioritisation of climate change policy and practice.

Financing and Resource Mobilisation

A detailed estimate of the costs for implementing the climate change policy measures was carried out as part of the development of the costed Implementation Strategy. Since a number of the strategic directions to be supported fall under sectoral work plans, the costing exercise focuses on
the purely additional cost due to the integration of climate change into the various sector plans. The costed Strategy also examines the financial instruments best suited to support strategic measures and actions, to provide guidance for policy implementation. The costed Strategy can then be used by the various partners to make decisions as to which priority investments to support. Funding for these policy priorities will come from various sources, including national and sectoral investment plans and budgets, private sector investment, multilateral and bilateral donor support and market based mechanisms, including payment for environmental services schemes.

Monitoring and Evaluation, and Policy Enforcement

The full Monitoring and Evaluation Framework for the implementation of this policy builds on the costed Implementation Strategy. The Framework is clearly linked to the planned outcomes and outputs of this strategy and the road map it proposes and will be instrumental in ensuring the full implementation of the policy by the various stakeholders. The concept of 'Measurement, Reporting and Verification' (MRV) which emerged from international climate negotiations are relevant for Uganda, when receiving international support for its voluntary contributions to tackle climate change. The development of relevant gender sensitive indicators as part of Uganda's monitoring and reporting system is also crucial.

The implementation of the policy will undergo an independent external evaluation in 5 years' time. The recommendations resulting from this evaluation will then feed into the revision process for the policy. This revision is to be carried out based

on a thorough public consultation process and review of the results at that point in time.

Acronyms

CCU	Climate Change Unit
CCD	Climate Change Department
CDM	Clean Development Mechanism
CO_2	Carbon dioxide
DSIP	Development Strategy and Investment Plan
EAC	East African Community
EIA	Environmental Impact Assessment
FAO	Food and Agriculture Organization
GDP	Gross domestic product
GEF	Global Environment Facility
GHG	Greenhouse gas
GoU	Government of Uganda
GSI	Geotechnical site investigation
HIV/AIDS	Human Immunodeficiency Virus Infection/Acquired Immunodeficiency Syndrome
ICPD	International Conference on Population and Development
IGAD	Intergovernmental Authority on Development
INC	Initial National Communication

IPCC	Intergovernmental Panel on Climate Change
LPG	liquefied petroleum gas
LULUCF	land use, landuse change and forestry M&E Monitoring and Evaluation
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MDG	Millennium Development Goal
MoFPED	Ministry of Finance, Planning and Economic Development
MoLG	Ministry of Local Government
MoWT	Ministry of Works and Transport
MRV	Monitoring, Reporting and Verification
MWE	Ministry of Water and Environment
NAADS	National Agriculture Advisory Services
NAP	National Agricultural Policy
NAPA	National Adaptation Programme of Action
NCCC	National climate Change Commission
NCCP	National Climate Change Policy
NDP	National Development Plan
NEMA	National Environment Management Authority
NPA	National Planning Authority
PCE	Policy Committee on Environment
PMA	Plan for Modernisation of Agriculture
R&D	Research and development
REDD	Reduced Emissions from Deforestation and Forest Degradation
REP	Renewable Energy Policy
UN	United Nations
UNEP	United Nations Environment Programme

UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
US$	United States dollars

1 Introduction and International Background for the Climate Change Policy

1.1 Climate Change and Its Impacts Internationally and Regionally

It is universally accepted that climate change is one of the greatest challenges facing humanity this century, and as a global challenge it requires global solutions. The threat of climate change is multidimensional and its impacts transcend national borders. Projections by the Intergovernmental Panel on Climate Change (IPCC) indicate that if greenhouse gas emissions continue to rise at their current pace, the world will be faced with a disastrous future in the form of sealevel rise, shifts in growing seasons, biodiversity loss, as well as increased frequency and intensity of extreme weather such as heat waves, storms, floods and droughts. Developing countries, particularly those in Africa and generally the poor and marginalized, will be those most affected, even though the largest share of historical and current global emissions of greenhouse gases originated in developed countries.

The economy of Uganda is highly vulnerable to climate change due to its impacts on key sectors such as agriculture, fisheries, water resources, forestry, energy, health, infrastructure and settlements. This necessitates policy actions to build

climate change resilience and climate compatible development through climate change adaptation and mitigation, while at the same time promoting economic and social development.

Climate Change A change of climate which is attributed directly or indirectly to human activity, that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods (UNFCCC website).

Adaptation Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploit beneficial opportunities.

Mitigation – A human intervention to reduce the sources or enhance the sinks of greenhouse gases.

Social development Process of planned social change designed to promote the wellbeing of the population as a whole in conjunction with a dynamic process of economic development.

Climate change causes global warming, an increase in the Earth's temperature due to an increase in heattrapping gases, referred to as greenhouse gases (GHGs). The Earth's nearsurface temperatures are now about 0.6°C higher than they were in the 1850s, during the preindustrial era. The Intergovernmental Panel on Climate Change (IPCCthe United Nations–sponsored scientific body on climate change) predicts the following climate change trends on the global scale:

- The average air temperature between 2090 and 2099 will be 1.8°C to 4°C higher than was the average temperature between 1980 and 1999.
- The increase in surface temperature will be greater over land than over the ocean.

- Sea ice and snow cover will continue to contract and shrink because of melting due to high temperatures (Increased ocean temperatures at depths of at least 3000 m have been recorded since 1961).
- The sea level will rise by 1.8–3.1 mm/year during the period from 1990 to 2100.
- Droughts will become longer and more intense due to higher temperatures and decreased precipitation.
- Precipitation levels will become more variable.
- Extreme events such as heat waves, tropical cyclones, heavy precipitation and high temperature extremes will become more frequent.

Greenhouse Gas (GHG)
Any gas that absorbs infrared radiation in the atmosphere; Greenhouse gases include, carbon dioxide, methane, nitrous oxide, ozone, chlorofluorocarbons, hydrochlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride.

Carbon Dioxide Equivalent (CO2 eq)
A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential (GWP). Carbon dioxide equivalents are commonly expressed as mega tons (millions of tons) of carbon dioxide equivalents.
Source: US EPA

The effects of climatic change occur at all levels (global, regional and local). Globally, climate change is likely to adversely affect the ability of physical and biological systems to sustain human development, including socioeconomic development. Yet the global population is increasing, expected to reach the nine billion mark by 2045. According to the United Nations Population Fund International Conference on Population and Development (UNFPA ICPD), the world's ability to meet the basic human needs of its growing populations will continue to heavily depend on a healthy environment. Climate change is likely to

disrupt the Earth's ecological systems and to reduce the benefits derived from ecosystem goods and services; with serious negative consequences for agricultural production, forests, water supply, health systems and overall human development. Crop failures and other negative agricultural impacts will affect world food availability, accessibility and utilisation, as well as the stability of food systems, hence negatively affecting human quality of life. Food insecurity, in turn, is likely to influence world food markets. For example, food shortages may lead to high food prices. Vulnerable populations (mainly the poor and most marginalised, including children, women and people with disabilities in developing countries) are particularly poorly equipped to cope with the adverse impacts of climate change, because they have a low capacity to respond (i.e., to mitigate or adapt).

The pressure on our water resources is already significant, and it is increasing along with human populations, particularly in urban areas, where populations are steadily becoming more concentrated (mainly poor populations in slum areas). The degraded rural landscapes are unable to provide adequate water to the growing population. The regions that are most vulnerable to domestic water shortages include those where access to water is already limited, the population is growing rapidly, urban centres are expanding and the economy is burdened by financial problems, increasing young unproductive populations and a lack of skilled workers. Even if the rapid global pace of watersupply development of the 1990s could be maintained, it would not be enough to ensure that everyone has access to safe drinking water by the year 2025.

At the regional level, East Africa experienced a warming of up to 1°C during the last century, and the model projections for future warming range from an increase of 2°C to 4°C or more by 2100.

Precipitation is expected to increase throughout East Africa, including in Uganda. The predicted increase is particularly large in the DecemberJanuaryFebruary period.

In East Africa, there is evidence of retreating glaciers, along with increased frequency and intensity of droughts, floods, heat waves and landslides. The ice cap on Mount Kilimanjaro has significantly melted (about 83% of the ice cap has been lost since 1912), as has a large portion of the ice cap on the Rwenzori Mountains. These ice caps are important sources of water for the communities living on the slopes of the mountains, so their disappearance will have significant negative impacts on the lives and livelihoods of rural communities (especially) and urban centres that rely on water from the ecosystems. Water stress will lead to increasingly poor livelihoods and rising mortality rates due to increasing waterborne diseases, malnutrition and burden on women and children as burden holders for household needs.

Scientists predict that the rate of climate change will be more rapid than previously expected, and the adverse effects of climate change will disproportionately affect poor communities in poor countries. Serious efforts to develop adaptation technologies and strengthen the adaptation capacities of poor countries must be undertaken. However, the difference in capacity to adapt to climate change between developed and developing countries will dictate the extent to which targets for adaptation and mitigation will be achieved.

1.2 International Agreements and National Commitments on Climate Change

The global nature of climate change necessitates widespread cooperation and participation in an effective and appropriate international response comprising mitigation and adaptation measures based on the principles of the United Nations Framework Convention on Climate Change (UNFCCC). The convention provides an international framework for mitigating climate change at both the international and local levels. Uganda signed the UNFCCC on 13 June 1992 and ratified it on 8 September 1993. Uganda also ratified the Kyoto Protocol on 25 March 2002. The protocol provides the basis for an international response to the challenges of

climate change. By signing and ratifying both the UNFCCC and the Kyoto Protocol, Uganda has committed to the adoption and implementation of policies and measures designed to mitigate climate change and adapt to its impacts.

Under these international agreements, Uganda benefits from funds and other support to facilitate mitigation and adaptation measures. In 1994, with funding and s u p p o r t f r o m t h e G l o b a l Environment Facility (GEF) and the United Nations Environment Programme (UNEP), Uganda compiled a national inventory of greenhouse gas (GHG) sources and sinks, which was updated in 1995 under the US Country Studies Program. With continuing GEF support, the country developed and submitted its Initial National Communication (INC) to UNFCCC in 2002. The INC included a national GHG inventory system, an assessment of the country's status of vulnerability and adaptation to climate change, and recommendations for adapting to and mitigating climate change. Uganda is now preparing the Second National Communication. In 2007, in conformity with UNFCCC and under a grant from GEF through UNEP, Uganda developed and submitted its National Adaptation Programmes of Action (NAPA) to UNFCCC. The NAPA includes a list of nine priority projects, many of which are yet to be rolled out and implemented. The priorities highlighted in the NAPA have been taken into account in developing this policy.

At the regional level, the climate change policy for the East African Community (EAC) was adopted by member countries. This regional policy urges member countries to develop consistent national policies to ensure harmonised action throughout the EAC.

Although the UNFCCC has been agreed upon internationally by many parties, the effectiveness of its implementation still remains a challenge, partly because of the principle of common but differentiated responsibility. The global consensus under the UNFCCC is implemented at the national level according to each country's magnitude of GHG emissions and ability to address the problems. The

development of a national climate change policy and implementation strategy will enable Uganda to fulfil its obligations under the convention, and therefore to contribute to addressing this global problem. To effectively address the challenge of climate change through policy requires an examination of how climate change manifests at the national and local level.

The Ministry of Water and Environment (MWE), through its Climate Change Unit (CCU), is the focal institution for the UNFCCC and has the responsibility of coordinating climate change issues in the country.
With support from the governments of Denmark and Belgium, as well as the World Bank, the Ugandan
MWE, as part of its mandate as the focal institution for the UNFCCC, has coordinated the development of this draft of the *Uganda National Climate Change Policy (NCCP)* through extensive consultations with a wide range of national and local stakeholders. The policy is intended to guide all climate change activities and interventions in the country.

1.3 Climate change and Achievement of the National Vision and National Development Objectives

Achieving longterm sustainable economic growth in the face of climate change is a primary concern.
The Government of Uganda (GoU) is already taking climate change and its impact on development seriously through its development planning framework. Climate change is also considered a cross cutting issue that has to be mainstreamed in all the sectors of the economy through the planning process.

Uganda's fiveyear National Development Plan (NDP) 2015/16–2019/20 recognizes that most of the key economic sectors (in particular agriculture, forestry and energy) will be affected by climate change and as a result climate change will negatively affect the national economy. The NDP emphasizes the need to address the challenges of climate change so as to enhance sustainable economic and social

development in the country. The National Planning Authority has developed NDP II for FY 2015/162019/20 which provides an opportunity for mainstreaming climate change interventions into sectoral policies, plans and budgets. This National Climate Change Policy (NCCP) will guide the development of a NDP that mainstreams and strengthens climate change resilient and low carbon development pathways in all sectors of Uganda's economy and thereby promoting sustainable development.

Uganda Vision 2040, the longterm term development blue print for the country – aims at transforming Uganda from a predominantly peasant and low income country to a competitive upper middle income country. However, achievement of the longterm goals depends on opportunities and resources that are climate sensitive, including tourism, agriculture, water and energy resources. Therefore the predicted climate change and its impacts on Uganda will undermine unless the achievement of the National Visions if the climate challenge is not adequately addressed through policy and practice.

In particular Vision 20140 recognizes that:

- The achievement of sustainable development requires using resources to meet human needs while preserving the environment. However, for several decades, development has concentrated on improvement and advancement of economic, social cultural and political conditions and less on preserving the environment and will this has resulted into global warming and other adverse environmental conditions associated with climate change.
- That climate change affects all sectors of Uganda's economy, making the need for preparedness inevitable: for example floods wash away roads and bridges; prolonged droughts affect agricultural productivity and food security, and reduce water levels affecting hydroelectricity generations; floods result into epidemics like cholera and malaria. Therefore sectors and local governments need to plan and adapt to climate change while undertaking mitigation measures.

- There is need to develop appropriate climate change adaptation and mitigation strategies in all sectors to ensure that the country is resilient to the adverse impact of climate change. In addition is developing guidelines for incorporating climate change in sectoral and local government plans and budgets.
- The need to put in place policies and organizational structures to address climate change at both national and local levels. Additionally, enabling strategies with legal instruments need to be put in place.
- There is need to increase climate change financing through both local and international financing. Government will continue to participate in, and benefit from, international arrangements on climate change focusing on how to tap on the available global climate change funding mechanisms while at the same time mobilizing local resources.
- The necessity for developing a comprehensive Monitoring and Evaluation mechanism incorporating climate change with clear milestones and analytical tools to guide the implementation of climate change activities among others.

A climate change resilient and low carbon climate development pathway, as set out in this National Climate Change Policy (NCCP) can help meet Vision 2040's goals through strategies and actions that address both sustainable development and climate change. This pathway can also help the Government achieve the Millennium Development Goals (MDGs) and other internationally agreed development goals without compromising the environment and the natural resource base. The NCCP is expected to inform national development and policy decisions in all sectors of the economy.

A wide range of actors including Government Ministries Departments and Agencies (MDA), Development Partners, private sector and civil society organizations will contribute to the implementation of the NCCP. Since climate change planning is a crosscutting and dynamic process, it is anticipated

that the recommended strategies will be tracked continuously and revised and or updated in line with the national planning and budgetary processes.

2 Why Climate Change matters to Uganda The Rationale and Scope for the National Climate Change Policy

2.1 Climate Change in Uganda

In Uganda, the average temperature in semiarid climates is rising, especially in the southwest. Uganda's National Adaptation Programme of Action (NAPA) cites an average temperature increase of 0.28°C per decade in the country between 1960 and 2010, with the months of January and February most affected by this warming trend, averaging an increase of 0.37°C per decade. The frequency of hot days in the country has increased significantly, while the frequency of cold days has decreased. As a result, the malaria parasite is spreading into new areas of the country. Historical records of Uganda's glaciers show that the ice caps on the Rwenzori Mountains have shrunk significantly in the last 100 years. The percentage of ice loss is highest on Mount Baker (96%), followed by Mount Speke (91%). Mount Stanley has the lowest percentage of ice loss (68%). The changing temperature patterns in Uganda have been linked with drought and consequent increases in cattle deaths in the cattle corridor.

Changes in rainfall patterns are also being observed. Rainfall has decreased and become more unreliable and less evenly distributed. Recent years have seen erratic arrivals and endings of rainfall seasons, and individual rainfalls have been heavier

and more violent. Floods and landslides are on the rise and are increasing in intensity. Since the year 2000, extreme rainfall conditions have been regularly experienced in Eastern Uganda, where there has been an increase of approximately 1500 mm of precipitation in the December to January rainy season. El Niño–Southern Oscillation events have also become shorter and more irregular.

Droughts are on the rise in Uganda. The western, northern and northeastern regions have been experiencing more frequent and longerlasting droughts than have been seen historically. Between 1991 and 2000, there were seven droughts in the Karamoja region, and major droughts also occurred in 2001, 2002, 2005 and 2008. Although there have always been droughts in Uganda, evidence suggests that they are becoming more frequent and more severe. In fact, the increased frequency and duration of droughts is the most significant climaterelated change being experienced in Uganda.

2.2 Impact of Climate Change on the Economy and Development

Uganda is a Low Income country (as defined by the World Bank) with high growth but is also energy hungry. It has been recognized that climate change and the cost of the climate change response presents a serious threat to the country's economic progress. Already, there is evidence on the impact of climate change on the national economy, with clear signs that the Lake Victoria region, the highlands, the semiarid zones are affected. In particular, agriculture, water, biodiversity and energy resources are all affected. This affects the poverty reduction, health and livelihoods of the population, especially for women. Climate Change is already affecting national economic outputs and livelihoods and, therefore, Uganda's longterm development prospects.

Droughts have significantly affected water resources, hydroelectricity production and agriculture, among many other sectors. The high frequency of droughts has persisted since 2000, and Uganda particularly suffered in 2004/2005, when

production of hydroelectricity declined substantially, throwing the country into a power crisis that undermined investment and slowed the country's economic growth. Evidence of the impact of drought on water resources is clear. Any decrease in the water level of Lake Victoria is reflected in the hydroelectricity supplies produced by the two dams Nalubale and Kiiralocated downstream.

Uganda's economy is particularly vulnerable to climate change and variability, due to a number of specific factors:

- Reliance on exploitation of natural resources, particularly within the agricultural sector.
- Heavy dependence on rainfed agriculture.
- Agriculture performance in Uganda fluctuates with changes in climate; consequently, gross domestic product (GDP) growth and inflation rates often correspond to seasonal rainfall.
- A high population growth rate of 3.2% per year.
- This high rate of growth, coupled with the high level of poverty, makes it difficult for Uganda to cope with the impacts of adverse effects of climate change.
- An increasing population puts pressure on forests and wetlands, which may result in deforestation and wetland degradation, in turn contributing to increased GHG emissions.
- A low per capita income of about US$506 (NPA, 2010).
- As a poor country, Uganda cannot adequately finance adaptation measures that would enable it to minimise the impacts of adverse effects of climate change.
- Weak and inadequate infrastructure (weak buildings, seasonal roads).
- Inadequate supply of clean water and sanitation facilities, which tends to have a stronger negative impact on women than on men.
- Inadequate availability of health and medical services.

2.3 Costs Benefit Analysis of addressing Climate Change through Policy

Uganda cannot afford to choose between addressing climate change and promoting development; the two are interlinked and will become increasingly so over the foreseeable future. As Uganda achieves its development goals and objectives, there will be gains and risks. A growing population and economy with urbanization will mean increase in greenhouse gas (GHG) emissions. Resulting environmental and social conditions, including increased competition over resources, could intensify vulnerability to climate risks. Transitioning to a climate resilient and low carbon development pathway can address future risks, thereby improving Uganda's ability to grow under a changing climate with low GHGs emissions. In addition, building climate resilience or increasing the ability to adapt to climate change in as a low carbon way as possible will help Uganda achieve sustainable development and the Vision 2040 goals. This will also guarantees every Ugandan the right to a clean and healthy environment as provided for in the Uganda Constitution, 1995.

An integrated climate resilient and low carbon development pathway emphasizes:

- **Sustainable Development:** Achieving sustainable development should be at the forefront of all climate actions; climate change and development are intricately linked.
- **Adaptation** – Reducing vulnerability to avoid or cushion the impacts of climate change, and enable people to respond to climate risks by moving toward a climate resilient society.
- **Mitigation** – Taking actions, where possible, to encourage GHG emissions that are lower than businessasusual practice; and to reduce the human causes of emissions by moving toward a resource efficient economy that is as low carbon as possible.

  However, no study has been conducted to assess the economic costs of climate change, including the costs of adapting and mitigating climate change for Uganda. Consequently the analysis provided below is largely qualitative and relies on data from studies of other countries in the African region. Therefore conducting a study on the Economics of Climate Change in Uganda has great

potential to provide the evidence base for a meaningful costbenefit analysis of climate change policy but importantly also to provide evidence base the GoU and other stakeholders to allocate resources increased funds to adaptation and mitigation activities.

2.3.1 The Cost of Inaction

Climate change impacts will be economically significant, especially for African countries. In the absence of detailed data for Uganda on the economic costs of climate change and the additional costs and benefits of adaptation, assessments of Africa as a region and of other African countries facing similar challenges are useful sources of information. The Adapt Cost study funded by UNEP indicates that the economic costs of climate change in Africa could equal an annual loss in GDP of

1.5%–3% by 2030 under a businessasusual scenario (Panafrican Climate Justice Alliance – PACJA, 2009). In the longer term (after 2050), these costs could rise rapidly. As an indication, the PAGE model run as part of the Adapt Cost study and used in the Stern review indicates that these costs could rise to almost 10% of GDP lost by 2100 (PACJA, 2009). The table below shows the estimated annual costs of climate change in Africa, as an equivalent percentage of GDP.

Table 1 Annual costs of climate change in Africa, as an equivalent percentage of GDP

Temperature increase	Year reached	Economic costs (% of GDP)
1.5°C	2040	1.7%
2°C	2060	3.4%
4.1°C	2100	10%

Source: AdaptCost, 2009

Some assessments conducted at the national level show that climate change will have high economic impacts on key economic sectors. For instance, aggregate models run in Rwanda and Kenya indicate that the additional net economic costs (on top of existing climate variability) imposed by climate change could be equivalent to a loss of almost 1% of GDP each year by 2030 in Rwanda (though this excludes the future effects of floods and other extremes), and almost 3% of GDP each year by 2030 in Kenya (SEI, 2009). In Namibia, it is estimated that expected climate impacts on the country's natural resources will cause annual losses of between 1% and 6% of GDP (IIED, 2007). In Cameroon, a 14% reduction in rainfall is predicted to cause losses of up to US$4.65 billion, and a 7% reduction in rainfall could cause a reduction of the country's net revenue by 6.5% per hectare (Molua & Lambi, 2006). Table 2 below shows the estimated climate change economic impacts in the ecological region of Lake Victoria for three specific sectors (Hecht, Kahata & Vincent, 2011).

Table 2 Maximum change in value due to climate change between now and 2050

Sector	**Maximum change in value (constant thousand $US)**
Crops	$1,462,686
Livestock	$90,942
Health	$10,291,811

The PAGE model run during the AdaptCost study estimates that adaptation could reduce the economic costs of climate change in Africa significantly, from 2% to 1% of GDP by 2040, and from

10% to 7% of GDP by 2100, under a businessasusual scenario. The remaining economic costs are known as residual damages. The model shows high benefits compared to costs from adaptation, the analysis assuming adaptation investment of around $4.5 billion per year (central value) in Africa from 2020 onwards (Watkiss, 2009). It is evident that investment to address climate change is worth undertaking.

In Uganda, climate change is likely to impact the country's microeconomic stability and overall socioeconomic development, as well as its ability to achieve the Millennium Development Goals (MDGs).

Poor climate conditions reduce the performance of Uganda's agricultural sector, which is the mainstay of the economy. This is likely to result in higher food prices, lower domestic revenues and an increase in the current deficit, due to lower export earnings. The likely overall impact is an increase in inflation (due to an increasing fiscal deficit), an increase in external debt and a depreciation of the Ugandan shilling.

The UN's Food and Agriculture Organization determined that the drop in the growth of the Ugandan economy from 6.6% in 200405 to 5.3% in 200506 was largely due to the variability of the weather, specifically, its impact on agriculture.

In Uganda, the key production sectors that tend to be most affected by climate and weather variability are agriculture, water, energy and transport. Agriculture growth dropped from 1.5% in
200405 to 0.4% in 200506 due to the prolonged drought conditions experienced in most parts of the country, which affected both cash and foodcrop production.

As the productivity of agriculture, forestry and fisheries decreases, people increasingly migrate to urban areas, leading to the formation of slums and their associated problems. In the 200708 fiscal year, climate change damages were equivalent to 4.4% of the national budget. The cost of the damage exceeded the 3.3% budget allocation for the Environment and Natural Resource Sector.

2.3.2 Benefits of addressing Climate Change through this Policy

Uganda's NCCP will guide efforts towards the attainment of Vision 2040 and encourage people centred sustainable development ensuring that climate change actions help the country move towards longterm development goals. Some of the

strategies in the NCCP contribute to development, climate resilience and transitioning to a low carbon economy while other actions focus on development and climate resilience. However, since Uganda is a low emitter of GHG, low carbon actions should be prioritised only if they also have climate resilience or significant sustainable development benefits.

Low carbon climate resilient development can bring benefits including:

- **Enhancing sustainable development** – Addressing climate change brings opportunities and multiple benefits, helping to address pressures related to poverty, population growth, economic growth, urbanization and resource use. Climate Change resilience and low carbon development enhances the integration of the social, economic and environmental pillars of sustainable development.
- **Improving lives of the poor and vulnerable** – Climate change impacts hit hardest on the poor, who are often women and children. The urban poor living in slums that are flood prone and the rural poor who rely on rain fed subsistence agriculture are particularly vulnerable. Efforts to increase climate change resilience can enhance peoplecentred development in Uganda.
- **Building adaptive capacity** – Uganda's vulnerability to climate change is undermined by the inadequate adaptive capacity of its people and institutions, or their inability to take advantage of opportunities or to cope with the effects of climate disasters. Improving development outcomes such as income, literacy, social networks and access to information and services is critical to building our country's adaptive capacity.
- **Disaster Risk Reduction:** Most of natural disasters that occur in Uganda are related to extreme weather events. Therefore, the use of climate risk information and early warning systems in economic activities (such as farming), public infrastructure investment and government planning decisions can enhance decisionmaking capacity, and reduce and prevent climaterelated disasters and risks.
- **Contributing towards the implementation of the Constitution of Uganda, 1995.** The right of every person to clean and healthy environment is a fundamental under the Constitution. This right cannot be fully provided for unless action is taken to address environmental pollution, which can be supported through climate resilience and carbon development.

- **Attracting international climate finance, technology and capacity building** – The policy directions and evidence base provided through this NCCP can help development partners ensure that their investments align with GoU climate change priorities and that these investments are nested within Vision 2040 and Uganda's national planning process. Potential sources of international support include bilateral and multilateral funders, the Green Climate Fund, the Adaptation Fund, carbon markets, and the emerging Nationally Appropriate Mitigation Actions (NAMAs) and REDD+ mechanisms.
- **Leveraging investment** – The NCCP and implementation strategy can encourage investment in climate resilient and low carbon development technologies and industries, such as agriculture, water resource management, renewable energy, and agroforestry. Policy and institutional reforms supported through climate finance can stimulate investment in targeted actions that support climate resilient and low carbon development pathway.
- **Demonstrating regional and global leadership** – The implementation of climate change and low carbon development demonstrates Uganda's as one of the leading countries in the global fight against climate change. Efforts to mainstream climate change across national and local government planning through the Vision 20140 and the national planning process provides an example for other countries.

2.4 The Rationale for the National Climate Change Policy

In light of the challenges reviewed above, the cost of inaction, the benefits of addressing climate change and the commitments of Uganda at both the global and regional level, a policy response to climate change in Uganda is crucial for reducing the country's vulnerability to climate change, and it is the most appropriate way to adjust to and cope with the projected impacts of climate change on the nation.

The policy response to adaptation will help Uganda to address the challenges brought about by extreme weather events such increased warming, droughts, unpredictable rainfall patterns, floods and storms, thereby increasing the resilience

of the population, economy and economic sectors (agriculture, fisheries, water, energy, tourism, infrastructure, settlements, etc.), while also exploring the opportunities available; for example, climate change could actually have positive effects in some regions, where small amounts of warming could benefit agriculture and livestock production.

It is also crucial that Uganda address the causes of climate change. Although national emissions of greenhouse gases are currently low compared to those of industrialised countries, Uganda is in the process of developing, and greenhouse gas emissions will increase along with industrialisation. This policy, which provides guidance for a lowcarbon development path, is therefore meant to target the key sectors with potential for mitigation in Uganda.

There have already been actions on climate change undertaken in Uganda with support from both national and international partners, but these have tended to be scattered and uncoordinated. In addition, an appropriate institutional framework to ensure effective coordination has been missing and has prevented Uganda from fully exploring potential opportunities for climatefriendly and green growth created by the international and regional interest around this issue.

In light of the challenges currently facing the country, public and private financing for climate action will need to be mobilised and scaled up significantly in Uganda. With the help of an overarching national climate change policy framework, various mechanisms can now be tapped to do just that. The Cancun Agreements call on developed countries to provide new and additional resources for climate actions, and Uganda is ready to mobilise resources that will assist in efforts to find lasting solutions for financing climate change action, building on the longstanding work of the UNFCCC, GEF, World Bank and others to share experiences, identify lessons learned and provide policy recommendations for good practice.

2.5 The Scope of the Policy

Since climate change is fundamentally multisectoral in nature (in terms of both its causes and impacts), a policy designed to effectively tackle this challenge in

Uganda must also be multisectoral. The policy provides direction for the key sectors that will be affected by the impacts of climate change, to facilitate adaptation and strengthen coordinated efforts amongst sectors towards building an overarching national development process that is more resilient.

With respect to mitigation potential, the most important sectorsthose with relatively high potential for greenhouse gas mitigationinclude land use, landuse change and forestry (LULUCF); wetlands, energy; transport, agriculture, waste management and industrial processes. New discoveries in the oil sector in recent years will, however, shift this outlook (especially as oil drilling and refining begins by the end of the decade), and other changes may occur after decommissioning. Uganda is moving towards reducing pollution and greenhouse gases, but the country will need new technologies to achieve sustainable development and transition to a lowcarbon economy that may include various marketbased mechanisms to reflect the full cost of consumption and production patterns from a climate perspective. These efforts will provide some vital strategic solutions, but will not be sufficient to mitigate the negative effects of climate change.

This policy is meant to be a “living” document; it will require revisions in the medium term as Uganda’s development path evolves and our knowledge of climate change and its impacts on the country increases. Therefore, the policy focuses on policy directions that can be acted upon now to guide a series of actions within the next 5 to 15 years, with the ultimate goal of addressing the long term challenges brought about by climate change and setting Uganda on a sustainable development path that takes climate change into account.

The policy is also meant to provide a framework for ensuring coordinated action, with adequate attention paid to capacity requirements and the development of the financial mechanisms and tools required to respond to the climate change challenge along these policy directions at the national level.
To conclude, this policy guided the development of a national costed implementation strategy, presented in Annex to the policy and which provides detailed guidance for actions by sector and potential tools to be used to finance the various actions proposed.

3 Policy framework

3.1 The Goal

The goal of the policy is to ensure a harmonised and coordinated approach towards a climate resilient and lowcarbon development path for sustainable development in Uganda.

3.2 The Main Objective

The overarching objective of the policy is to ensure that all stakeholders address climate change impacts and their causes through appropriate measures, while promoting sustainable development and a green economy.

3.3 Specific Objectives

In order to achieve the policy's overarching objective, the policy builds on a number of specific objectives, These are to:

1. Identify and promote common policy priorities to address climate change in Uganda,
2. Identify and promote adaptation policy responses for Uganda,
3. Identify and promote mitigation policy responses for Uganda,

4. Identify and promote monitoring, detection, attribution and prediction policy responses for Uganda,
5. Support the integration of climate change issues into planning, decision making and investments in all sectors and transsectoral themes through appropriate institutional arrangements and legal framework, and
6. Facilitate the mobilisation of financial resources to address climate change in Uganda.

3.4 Guiding Policy Principles

A number of key principles have guided the development of this policy. They are briefly discussed below.

3.4.1 Mainstreaming and Coordinated Response to Climate Change

This policy is not meant to replace sectoral policies, but rather to provide a framework for the harmonisation and coordination of the various sectoral efforts already underway and to be put forth in the future. At the core of this policy is the recognition that climate change is a fundamentally multisectoral issue, and that all sectors and categories of stakeholders must therefore be actively involved for the implementation of the policy to be a success. This especially calls for the mainstreaming of climate change concerns in the relevant sectoral, national and local policies, plans and budgets.

3.4.2 Communicating Effectively and Promoting Participatory Approaches

The assessments and broad based consultations that led to the development of this policy have highlighted just how crucial it is to ensure adequate communication and participation as an integral part of the path of change on which this policy will lead the country, including the participation of women and other vulnerable groups. Also critical to the implementation of this policy is the need for changes in attitudes, behaviours and perceptions. Given the diversity of the actors involved in the implementation of this policy, a variety of resources and methods of communication will be needed to support participation and this change in behaviour both inside and outside the government, at both the national and local levels. The policy has been designed with this need firmly in mind.

3.4.3 Promoting CommunityBased Approaches to Adaptation

The impacts of climate change will be felt heavily by local communities, especially in view of their significant vulnerability to the impacts. Local communities therefore have a crucial role to play in future efforts to adapt to climate change. Central to this policy and its implementation is the recognition of this key role and the need to promote communitybased and bottomup approaches to adaptation.

3.4.4 Devoting Adequate Attention to Capacity Development and Institutional Set Ups

The background studies conducted as part of the policy development process have revealed the need to ensure that the policy fully takes into account the limited current capacity of Uganda in dealing with climate change, and addresses these capacity needs as part of the directions provided.

3.4.5 Devoting Adequate Attention to Technology Needs, Development and Transfer

Technology development and transfer are crucial components for addressing climate change adaptation and mitigation challenges in various sectors. Uganda, like most of the leastdeveloped countries, is characterised by a low level of technology development. However, there are various technologies available in the developed and some developing countries that can be transferred to Uganda to maximise adaptation and mitigation potential.

3.4.6 Identifying, Developing and Influencing Financing Mechanisms

A review of cost estimates and financial mechanisms (both existing and prospective) for the implementation of this policy makes it clear that the financing of the implementation will have to draw on a number of different sources and tools. Not only will the support of international development partners be sought, but adequate attention will have to be paid to innovative market based mechanisms in the implementation strategy to follow. This will be needed to build incentives for climatefriendly approaches to development and technology transfer in various sectors, and to ensure that climate change concerns are mainstreamed into national, sectoral and districtlevel budgets and investment screening processes, in order to leverage both public and private sources of financing.

3.4.7 Providing a Credible Delivery Structure

It is clear that the policy requires an appropriate framework to ensure its proper implementation from two perspectives: 1) In terms of the institutional structure, to ensure coordination on climate change issues; and 2) In terms of the financial delivery mechanisms, to ensure support for policy implementation. Both of these issues are considered within the policy, and are further elaborated upon in the implementation strategy presented in Annex.

3.4.8 Addressing CrossCutting Issues

Adequate attention must be given to issues such as HIV/AIDS and gender. Notably, the background studies for this policy revealed that the genders are affected differently by climate change. Vulnerable groups are also particularly at risk from climate change impacts and must be given due attention in the policy and its implementation.

It should be noted that the policy underwent a strategic environmental assessment in order to ensure that the policy responses and strategic options provided are consistent with national requirements and proactively support sound environmental management.

4 Policy Directions

The *Uganda National Climate Change Policy* is based on the following priority concerns: adaptation; mitigation; and research and observation (including monitoring, detection, attribution and prediction). In line with the EAC regional policy, this national policy emphasises climate change adaptation as the top priority for Uganda, while mitigation efforts are embraced by the policy as secondary, given Uganda's stage in the development process and its current low levels of emissions. Some common policy priorities for both adaptation and mitigation concerns are mentioned below, followed by policy priorities specific to each concern. Some sectors, such as agriculture and forestry, are covered under both the adaptation and mitigation subsections, as relevant.

4.1 Common Policy Priorities

PolicySpecific Objective 1:

To identify and promote common policy priorities to address climate change in Uganda

Given the multifaceted nature of a number of the climate change challenges facing Uganda, some of the policy priorities to mainstream climate change concerns in Uganda's development efforts cut across multiple sectors and address both adaptation and mitigation challenges. These must be given due consideration in order to ensure a coordinated response to climate change at the national level. In particular, the Government of Uganda (GoU) must:

1. Promote and support climate change education, awareness raising and capacity development for a range of stakeholders (government, academics, civil society and private sector) contributing to the national development process, from the local level to the national level. The aim of such efforts should be twofold: i) to ensure that each category of stakeholder better understands the climate change impacts facing Uganda, their causes, and the responses and means available. Support should be tailored to each target group based on their role in the development process, ranging from basic awareness raising training to advanced training on specific tools and technologies for the promotion of a more climateresilient and climatefriendly development process; and ii) to mainstream climate change concerns in education curriculum at all levels and provide mechanisms to ensure the development in the medium term of appropriately skilled professionals to address specific technical challenges associated with climate change.
2. Provide adequate support for policies and programmes that take into account the interactions between population dynamics, climate change and development. Uganda's population trends are likely to expose more people to climate change impacts, because areas of high population growth and density and high vulnerability to climate change impacts overlap. In addition, high population growth trends are critical to future scenarios of GHG emissions. Efforts to address demographic trends and climate change will focus on: 1)

promoting and strengthening family planning and reproductive health as a costeffective way of influencing future population growth by avoiding unintended pregnancies, rooted in the exercise of the right to reproductive health and the full scope of gender equality; 2) concerted action to improve women's status, as well as maternal and child health, while protecting the right of women to make their own decisions about childbearing; 3) promoting awareness and recognising that no human being has more right than any other to alter the global commons of the atmosphere; and 4) promoting access to education beyond the primary level in order to provide a foundation for greater resilience to the negative impacts of climate change.

3. Provide proper support for the information sharing and research that is required to better understand the impacts of climate change in Uganda and the vulnerabilities of particular groups and populations, so as to better inform future
actions for adaptation to climate change.

4. Promote research and development, transfer and diffusion of technology through the use of appropriate information sharing, incentive schemes and support mechanisms, as relevant to the various sectors concerned. Technology development and transfer are crucial components in addressing climate change adaptation and mitigation challenges in different sectors. Uganda, like most of the leastdeveloped countries, is characterised by a low level of technology development. However, there are various technologies available in developed and developing countries that can be transferred to Uganda to maximise the country's adaptation and mitigation potential. Uganda also needs to pursue its own efforts to develop appropriate technologies to address climate change.
5. Mainstream gender issues in climate change adaptation and mitigation approaches in order to reduce the vulnerability of women and children to the impacts of climate change and recognise their key role in tackling this issue. Uganda's vulnerability and adaptation assessments indicate that the poor (in

both urban and rural areas), most being women and children, are most vulnerable to climate change impacts. The greater vulnerability of women is mostly due to gender inequality. Children and infants are still prone to curable diseases and thus are more vulnerable to illness and death. Women have had limited access to and control over resources, especially land. Yet they play a crucial role in their management and will be impacted by strategies for GHG emission reductions, especially when it comes to agriculture and fuel wood use, for instance. The GoU must thus ensure that communities are empowered and that both men and women participate meaningfully in planning, testing and rolling out adaptation and mitigation activities in rural and urban areas. Further work is needed to build on efforts already underway to include gender and climate change in education curriculum and training programmes. Climate change response policies and activities must be gender sensitive, and the capacity of relevant stakeholders at national and local levels to promote gendersensitive approaches to climate change adaptation must be strengthened.

4.2 Adaptation

PolicySpecific Objective 2:

To identify and promote adaptation policy responses for Uganda

Adaptation to climate change in Uganda requires a series of coordinated policy responses that are either sector specific or crosscutting in nature. The key sectorspecific and crosscutting priorities are:

4.2.1 SectorSpecific Priorities

The GoU should act upon a number of sectorspecific priorities to increase the resilience of the country's development path to the impacts of climate change. The key challenges faced by the most vulnerable sectors and the priorities for ensuring

that climate change adaptation concerns are mainstreamed in the development of these sectors are provided below.

Agriculture and Livestock

Sectoral Context and Challenges:

- Uganda depends largely on rainfed agriculture, making rural livelihoods and food security highly vulnerable to the consequences of climate change and variability.
- Climate change in Uganda is expected to severely influence the variability of rainfall and to cause increases in temperature and the potential for evapotranspiration.
- Predicted increases in aridity, and hence droughts, will in turn influence agricultural production.

  These impacts will negatively affect food availability and supply, therefore impacting food security.
  There are currently a number of initiatives to mainstream climate change agricultural policy and practices, including sustainable land management.
- Uganda is developing a National Agricultural Policy (NAP), whose major focus is on food security, increased household incomes, improved value chains, increased domestic and international trade, and improved sustainable natural resource management. The food and nutrition policy is intended to ensure that the entire food chain, from production to consumption, is efficiently managed within the overall development strategy, through building capacities at all levels for adequate action to improve household food security. Uganda's agricultural policy is also shaped by the Ministry of Agriculture, Animal Industry and Fisheries' (MAAIF's) Sector Development Plan 2015/162019/20 whose major goal is agriculture for food and income security. The Sector Development Plan renews recognition of the fundamental importance of agriculture to the Ugandan economy and of the central role it has to play in development, economic growth and poverty reduction. The bulk

of activities to adapt to climate change in the agricultural sector centres on capacity building.

Policy Response:

To address these challenges, the following policy priorities are to be pursued, building on efforts underway in the Ministry of Agriculture, Animal Industry and Fisheries:

- To promote climate change adaptation strategies that enhance resilient, productive and sustainable agricultural systems.
- To promote value addition and improve food storage and management systems in order to ensure food security at all times as a factor of resilience.

Specific strategies for tackling these sectoral policy priorities are the following:

- Promote and encourage highly adaptive and productive crop varieties and cultivars in droughtprone, floodprone and rainfed crop farming systems.
- Promote and encourage highly adaptive and productive livestock breeds.
- Promote and encourage conservation agriculture and ecologically compatible cropping systems to increase resilience to the impacts climate change.
- Promote sustainable management of rangelands and pastures through integrated rangeland management to avoid land degradation and deforestation.
- Promote irrigated agriculture by encouraging irrigation systems that use water sustainably.
- Promote and encourage agricultural diversification, and improved postharvest handling, storage and value addition in order to mitigate rising climate related losses and to improve food security and household incomes.
- Support communitybased adaptation strategies through stretched extension services and improved systems for conveying timely climate information to rural populations to enhance the resilience of agricultural systems to the impacts of climate change.

- Develop innovative insurance schemes (lowpremium microinsurance policies) and low interest credit facilities to insure farmers against crop failure due to droughts, pests, floods and other weatherrelated events.

Water

Sectoral Context and Challenges:

- Water is essential for all forms of life. The availability of safe water is one of many factors

  that determine the amount of life that can exist in a given setting.

  Water is used for agriculture, households, livestock, fishing, energy, mining, manufacturing and a range of services.

  Climate change is already affecting water availability, quality and security across Uganda for both production and domestic use. The predicted rise in temperature and increased variability of rainfall due to climate change will adversely affect water resources and water dependent sectors such as agriculture, livestock and energy.
- The combined effect of climate change, population growth and environmental degradation will lead to competing demands for water. Water stress challenges are already being felt in most parts of the country, especially in the cattle corridor, which receives less rain naturally.
- Uganda's 1999 National Water Policy provides guidance on the orderly development and use of water resources to minimise harmful effects to the environment and establishes responses to emergencies such as droughts and floods. The Directorate of Water Resources Management and Directorate of Water Development under the MWE appear to be taking a lead in climate change vulnerability assessment and adaptation. A Climate Change Vulnerability Assessment, an Adaptation Strategy and an Action Plan for the Water Resources

  Sector in Uganda are already in place. A framework for Integrated Catchment Based Water Resources Management is also being developed.

Policy Response:

To address these challenges, the following policy priority is to be pursued:

- To support ongoing efforts to ensure that climate change concerns are integrated into national efforts for sustainable and longterm conservation, access and effective utilisation and management of water resources.

Specific strategies for tackling this sectoral policy priority are the following:

- Promote and encourage water harvesting and efficient water utilisation among individuals, households, institutions and sectors.
- Ensure availability of water for production in water dependant sectors in order to increase their resilience to climate change impacts.
- Promote and strengthen the conservation and protection against degradation of watersheds, water catchment areas, river banks and water bodies.
- Promote Integrated Water Resources Management (including underground water resources), including contingency planning for extreme events such as floods and drought.
- Ensure that all guidelines for infrastructure/hydraulic works (i.e., water for production, piped water supply schemes and conditional grants guidelines for support to point sources protection) mainstream climate change.
- Improve and strengthen transboundary cooperation regarding water resources management.
- Support institutional and human capacity building in water resource use, development and management.
- Strengthen water resource monitoring networks and flood warning systems.

Fisheries and Aquaculture

Sectoral Context and Challenges:

- Uganda's lakes and rivers are a repository of aquatic resources, which support fisheries.

  Aquatic ecosystems a re threatened by r e s o u r c e overexploitation , tra ns fo r m a tio n and degradation of habitat, pollution, and now, climate change.
  Fish catches and fish stocks are declining, mainly due to overfishing.
- With climate change, reduction in water levels will lead to decline in fish sto**c**ks and other aquatic resources. To reverse the decline of the fishing industry, interventions are ur**g**ently required to stop illegal activities and to exploit existing opportunities.
- Uganda's 2004 National Fisheries Policy recognises the need to develop fisheries in a socially and environmentally sustainable manner and emphasises the protection of aquatic ecosystems to meet the needs of current and future generations. The policy provides guidance on the development of flexible systems of managing, utilising and conserving the country's fisheries.
- Under the MAAIF's DSIP, the government focuses on strengthening controls of illegal fishing, promoting and supporting aquaculture and cage farmingespecially of tilapia (currently at negligible levels but with clear potential for export to neighbouring countries), and stocking small water bodies, including dams. Emphasis will also be placed on ensuring fish quality at all levels. These focuses need to be further strengthened by the climate change policy.

Policy Response:

To address the challenges, the following policy priority is to be pursued:

- To strengthen efforts to promote integrated fisheries resource management and improve aquaculture in order to ensure sustainable fisheries production.

Specific strategies for tackling this sectoral policy priority are the following:

- Promote and encourage climate change resilient fishing practices.
- Promote sustainable fish farming as a means of economic diversification and enhancing the resilience of the fishing sector to the impacts of climate change.
- Promote and encourage collaborative and participatory management of aquatic ecosystems.
- Promote awareness of the climate change–related impacts on fisheries amongst the various stakeholders, such as local communities, resource managers and policy makers.
- Provide economic incentives to diversify livelihood options in order to reduce dependence on climatesensitive fisheries resources.
- Promote biological engineering and restoration of stresstolerant organisms.
- Improve and strengthen transboundary cooperation regarding fisheries ecosystems.

Transport and Works

Sectoral Context and Challenges:

- Uganda's transport systems and other infrastructure continue to be built without taking Predicted climate change patterns into account.
- Climaterelated hazards and predicted impacts of climate change threaten vital transport infrastructure such as roads, bridges and rail networks.
- The economic cost of the impacts of climate change on infrastructure damage, repairs and reconstructions, though difficult to estimate, is very high.
- Uganda's transport policy aims to promote cheaper, more efficient and more reliable transport services as a means of providing effective support to

increased agricultural and industrial production, trade, tourism, and social and administrative services. For all transport projects, Environmental Impact Assessments (EIAs) are prepared in accordance with the

Ugandan Guidelines and the latest international standards and environmental criteria, and submitted to the National Environment Management Authority (NEMA) for approval. Although not much has been done to integrate climate change in transport policy, the Ministry of Works and Transport (MoWT) is currently developing a Climate Change Risk Management Strategy for the transport sector.

Policy Response:

To address these challenges, the following policy priority is to be pursued:

- To develop and ensure integrated planning and management of transport and other physical infrastructure that builds on insights from climate predictions.

Specific strategies for tackling this sectoral policy priority are the following:

- Integrate climate change into the existing infrastructure risk assessment guidelines and methodology.
- Building on work already underway, establish and enforce climate change resilient standards for transport and infrastructure planning and development through monitoring and reporting systems.
- Encourage the integration of climate change into transport and infrastructure development strategies.
- Promote and encourage water catchment protection in transport infrastructure development and maintenance.
- Climateproof existing and future infrastructure by conducting geotechnical site investigations (GSIs) to determine whether areas are appropriate or inappropriate for infrastructural development.

Forestry

Sectoral Context and Challenges:

- Uganda is endowed with abundant forest resources, which contribute significantly to environmental sustainability, the economy, community livelihoods and carbon sequestration.
- Uganda forestry policy (the 2001 National Forestry Policy and the 2001 National Forestry and Tree Planting Act) makes reference to climate change issues on the commercial forest plantation, forest products processing industries, collaborative forest management, and farm forest conservation of forest biodiversity, watershed management, soil conservation and urban forest.
- However, the country's forest cover is disappearing at an alarming rate. Major causes of deforestation include clearing for settlements and agriculture, overgrazing, wildfires, charcoal burning, overexploitation of wood resources for commercial purposes.
- **C**limate change and intensified land use will exacerbate degradation and desertification, as tree mortality increases with reduced rainfall and the incidences of pest, diseases and forest fires rise.
- This will increase the rate of interventions needed in this sector to ensure sustainable forest management.

Policy Response:

To address these challenges, the following policy priority is to be pursued:

- To ensure the sustainable management of forestry resources so that they can continue to provide global services, including mitigating climate change, while supporting the sustainable development needs of communities and the country.

Specific strategies for tackling this sectoral policy priority are the following:

- Strengthen the existing national forestry policy to reduce deforestation and forest degradation.
- Promote intensified and sustained afforestation and reforestation programmes implemented by the government, institutions, households and individuals, the private sector, civil society and multilateral organisations.
- Promote and encourage efficient biomass energy production and utilization technologies to reduce biomass consumption.
- Encourage agroforestry, which will enable poor rural households to meet their subsistence and energy needs.
- Strengthen existing forestry research and encourage conservation and restoration of forest ecosystems critically threatened by climate change.

Wetlands

Sectoral Context and Challenges:

- Uganda is endowed with wetland resources that contribute significantly to environmental sustainability, community livelihoods and carbon sequestration.
- The Uganda government has put in place legislation to manage all its natural resources, including wetlands. The Wetland Policy is in line with efforts to address climate change, as it aims to establish principles by which wetland resources can be optimally used now and in the future, to end practices that reduce wetland productivity, to maintain the biological diversity of natural or seminatural wetlands and to maintain wetland functions and values.
- However, the country's wetlands are disappearing at an alarming rate. In 1964, the total area of wetlands was estimated at 32,000 km^2 but by 1999, it had decreased to 30,000 km^2, about 13% of the total area of Uganda. As of 2005, the wetland cover had been further reduced to 26,308 km^2, only 11% of the total land area.
- Major drivers of wetland degradation include draining of wetlands for agriculture, urban and industrial expansion, overharvesting of wetland resources (mainly for construction and handicraft), overfishing and poor use of wetland catchments leading to siltation of wetlands and rivers.

- Climate change and intensified land use will exacerbate wetland degradation, as wetlands will be encroached upon further for farming, and the incidence of wetland fires is likely to rise.
- This will increase the rate of interventions needed in this sector to ensure sustainable wetland conservation and restoration.

Policy Response:

To address these challenges, the following policy priority is to be pursued:

- To promote longterm wetland conservation and restoration of degraded wetlands so that they can continue to provide global services, including mitigating climate change, while supporting the sustainable development needs of communities and the country.

Specific strategies for tackling this sectoral policy priority are the following:

- Strengthen the existing national wetland policy to prevent wetland degradation and encroachment.
- Promote and intensify wetland protection and restoration of degraded wetlands.
- Strengthen collaborative and participatory management of wetland resources.
- Strengthen existing wetland research and encourage conservation and restoration of ecosystems critically threatened by climate change.

Biodiversity and Ecosystem Services

Sectoral Context and Challenges:

- The GoU promotes the conservation and sustainable utilisation of the country's biodiversity, as well as the effective management of its ecosystems.
- There are currently a number of initiatives in Uganda to mainstream climate change biodiversity and ecosystem management, including sustainable land management.

- The government also promotes equitable sharing of the benefits arising thereof for the wellbeing of the nation.
- However, with climate change and increasing human pressure, biodiversity and ecosystems are being rapidly degraded.

Policy Response:

To address these challenges, the following policy priority is to be pursued:

- To effectively address the challenges posed by climate change impacts on biodiversity and ecosystems, so as to ensure ecosystem health and provision of ecosystem services that are crucial to sustainable and resilient development.

Specific strategies for tackling this sectoral policy priority are the following:

- Identify biodiversity hotspots where only restricted development should be allowed.
- Build on efforts underway to strengthen sustainable land management in fragile ecosystems, especially rangeland ecosystems and hilly and mountainous ecosystems.
- Encourage collaborative management and sustainable use of biodiversity and ecosystems.
- Promote valuation and payment for ecosystem services, and streamline other ecosystem benefitsharing schemes.
- Ensure that any human activity within the vicinity of protected areas does not compromise the integrity of the ecosystem.
- Strengthen the capacity for monitoring the impacts of climate change on biodiversity, ecosystems and ecosystem services.

Health

Sectoral Context and Challenges:

- Uganda's health policy is geared towards improving the health and wellbeing of its citizens, as well as the achievement of MDGs, including reduction of child mortality (MDG4), improved maternal health (MDG5) and combating HIV/AIDS, malaria and other diseases (MDG6).
- Changing climate and weather patterns influence disease spread.
  For example, rising temperatures are expanding the geographical distribution of disease vectors like mosquitoes to include higher altitudes, which intensifies the malaria pandemic.
- Extreme weather events like floods increase the spread of cholera and diarrhoea.
- HIV/AIDSaffected families are more vulnerable to climate change impacts.
- Drought and dry conditions that lead to crop failure and famine have a large impact on the nutrition status of the population and increase the prevalence of respiratory tract infections.

Policy Response:

To address these challenges, the following policy priority is to be pursued:

- To strengthen adaptive mechanisms and enhance earlywarning systems and adequate preparedness for climate change–related diseases.

Specific strategies for tackling this sectoral policy priority are the following:

- Conduct vulnerability assessments of health sector to climate change impacts.
- Put in place contingency plans to develop climate change–resilient health systems.
- Assess the impacts of climate change on human health and wellbeing.

- Improve the capture, management, storage and dissemination of health information.
- Heighten the surveillance of disease outbreaks and provide subsequent rapid responses to control epidemics.
- Strengthen public health systems by building hospitals and supplying them with medicine, equipment and welltrained personnel.
- Make provisions for a safe water chain and sanitation facilities to limit outbreaks of water borne diseases, and implement strong public awareness programmes to promote better hygiene.
- Increase the health workforce's awareness of the relationship between climate change and human health.
- Develop further support action plans against HIV/AIDS to enhance the climate change resilience of HIV/AIDS affected persons and communities.

Energy

Sectoral Context and Challenges:

- Uganda depends predominantly on biomass energymainly from firewood and charcoal The country also depends on hydropower for electricity.
- Electricity shortages in the recent past caused an energy crisis that led to an increase in thermal electricity generation.
- However, the country's energy demand is increasing.
- With climate change, the situation is likely to worsen, as extreme events like frequent and prolonged droughts lead to a reduction of water levels in dams and reservoirs, thereby reducing hydropower production potential.
- The melting of glaciers is also causing a reduction of water flow in rivers. Storms and floods further affect the energy supply chain.

Policy Response:

To address these challenges, the following policy priority is to be pursued:

- To promote sustainable energy access and utilisation as a means of sustainable development in the face of uncertainties related to climate change.

Specific strategies for tackling this sectoral policy priority are the following:

- Promote and participate in water resource regulation so as to ensure the availability of water for hydropower production.
- Promote and participate in water catchment protection as part of hydroelectric power infrastructure development.
- Diversify energy sources by promoting the use of alternative renewable energy sources (such as solar, biomass, minihydro, geothermal and wind) that are less sensitive to climate change.
- Promote energyefficient firewood cook stoves and solar and liquefied petroleum gas (LPG) Cookers.
- Conduct research to determine the potential impacts of climate change elements like rainstorms on the country's power supply chain.

Wildlife and Tourism

Sectoral Context and Challenges:

- Tourism, which is one of Uganda's main sources of foreign exchange, is largely nature based and mainly depends on wildlife, which in turn depends on ecosystems for survival.
- Among the tourist attraction are the national parks, wildlife reserves, community wildlife areas and historical sites.
- The country's wildlife and biological diversity are increasingly threatened by ecosystem fragmentation, consumptive utilisation of resources and conflicts between wildlife and human activities such as agriculture and settlement.
- Climate changeespecially droughts, unreliable rainfall patterns and increasing temperatureswill affect the habitats of animal and bird species.

- Changes in ecosystems will lead to the disappearance of some wild animal species.
- Increasing temperatures are also affecting some attractions, such as the ice caps of the Rwenzori Mountains, which are in danger of disappearing.
- All of these factors will negatively affect tourism and community income bases.
- This is a source of great concern for the tourism industry, which needs to undertake adaptive interventions.

Policy Response:

To address these challenges, the following policy priority is to be pursued:

- To ensure the conservation of wildlife resources and plan for improved resilience of tourism resources and infrastructure to climate change.

Specific strategies for tackling this sectoral policy priority are the following:

- Develop a national wildlife adaptation strategy that includes wellassessed climate change adaptation strategies.
- Promote measures that preserve the integrity of ecosystems that provide critical wildlife habitats and host endangered species.
  Develop park management practices that will enable wildlife to adapt to the changing climate.
- Encourage mechanisms of improving local vulnerable populations' livelihoods using revenues generated from the tourism industry.
- Develop and diversify tourism products that are less sensitive to climate change, as an adaptation and substitute for the many natural attractions that are quickly disappearing.
- Develop weatherresilient infrastructure to support tourism in the region while ensuring minimal damage to wildlife habitats.

Human Settlements and Social Infrastructure

Sectoral Context and Challenges:

- Climate change impacts have been observed on human settlements in Uganda as a result of floods, droughts, landslides and land conflicts.
- The predicted impacts of climate change in Uganda will largely affect communities residing in poor urban neighbourhoods where housing and infrastructure are poorly planned, as well as communities in regions prone to drought, floods and geological movements (e.g., landslides).
- Uganda has put in place the 2010 Physical Planning Act and the 2007 National Land Use Policy, to guide orderly development of human settlements and land utilisation that takes into account risk and safety, local economic development and environmental protection.
- However, human life, animals and property will continue to be threatened by climate related hazards especially floods and landslides.
- Therefore, there is a need to strengthen the efforts to relocate vulnerable communities and to promote disaster preparedness and management in the country.

Policy Response:

To address the challenges, the following policy priority is to be pursued:

- To promote the urban planning and development of human settlements that are resilient and robust enough to withstand climate change–related risks and hazards.

Specific strategies for tackling this sectoral policy priority are the following:

- Promote and encourage proper planning of urban centres in order to have climate change– resilient urban areas.

- Revise and harmonise structural/building codes and standards, as well as the training on such standards, taking into account the expected changes in climate.
- Improve disaster preparedness by increasing the number of wellequipped health facilities, constructing dams and dykes in floodprone areas, and improving disaster preparedness and management knowledge and skills in regions prone to such climatic disasters.
- Strengthen housing development policies, including subsidies to lowincome communities.
- Establish insurance schemes to provide reparations in regions affected by climatic disasters.
- Develop climate change awareness programmes involving all communities and stakeholders.
- Disseminate climatechange and earlywarning information in local languages to improve community disaster preparedness.
- Diversify economic activities to improve the resilience of rural communities dependent on climatesensitive sectors such as agriculture and livestock rearing.
- Create “green spaces” in urban centres to moderate temperatures and provide fresh air for healthy living.

Disaster Risk Management

Sectoral Context and Challenges:

- With climate change, events such as droughts, floods and landslides will become more frequent and more extreme.
- Uganda is committed to international risk management initiatives such as the Hyogo Framework of Action and the African Regional Strategy for Disaster Risk Reduction.
- Uganda’s National Disaster Preparedness and Management Policy approaches disaster management with a focus on preparedness and reduction of risk and vulnerability. However, most of the Disaster Management Committees put in

place at local levels are not functional, and the country is not adequately prepared to deal with disasters.

- Disaster Risk Management is a frontline defence for adapting to the impacts of climate change.
- Disaster risk management is also a key aspect of addressing socioenvironmental conflicts and human security concerns, both locally and regionally, in respect to environmental refugees and management of transboundary resources.

Policy Response:

To address these challenges, the following policy priority is to be pursued:

- To ensure disaster mitigation and adequate preparedness for climate change–induced risks, hazards and disasters.

Specific strategies for tackling this sectoral policy priority are the following:

- Develop and implement a climate change–induced disaster risk management strategy.
- Create an appropriate legal and regulatory framework for disaster management.
- Promote vulnerability risk mapping (including the social and economic impacts of climate change) of the whole country and all sectors.
- Improve earlywarning systems and preparedness to avoid or minimise the adverse impacts of climate change.
- Strengthen climate change–induced disaster management institutions at the national and local levels to reduce causality and ensure preparedness.
- Provide basic needs to victims of climate change–induced disasters in the form of financial assistance or donations of food, goods and services as the need arises.

- Encourage the formation of resident associations that can respond to emergencies, and involve them in key decision making to reduce risks.
- Strengthen the National Emergency Coordination and Operations Centre and establish a national contingency fund.
- Promote the development of innovative insurance schemes to insure households, institutions and businesses against the destruction caused by extreme weather events and disasters.

4.2.2 CrossCutting Priorities

Vulnerable Groups

Context and Challenges:

- Climate change disproportionately affects vulnerable groups
  Vulnerable groups include the poor, people living with disability, youth, people living with
  HIV/AIDS, older persons, the elderly, orphans and children, refugees, and marginalised communities due to their limited adaptive capacity.
- There is a need for the interventions to effectively address the challenges of vulnerable groups to climate change impacts.

Policy Response:

To address the challenges, the following policy priority is to be pursued:

- To give special attention to the improvement of the resilience of vulnerable groups to climate change.

Specific strategies for tackling this crosscutting policy priority are the following:

- Put in place social protection mechanisms to ensure that vulnerable groups and communities are empowered to effectively and adequately adapt to the impacts of climate change.
- Support and encourage vulnerable groups to engage in sustainable adaptation mechanisms to cope with climate change impacts.
- Integrate climate change–related issues into economic policies and action plans that address the needs of vulnerable groups.

4.3 Mitigation

PolicySpecific Objective 3:

To identify and promote mitigation policy responses for Uganda

Like adaptation to climate change, mitigation of greenhouse gas emissions in Uganda also requires a series of coordinated policy responses that are either sectorspecific or crosscutting in nature.

4.3.1 SectorSpecific Priorities

LULUCF (Land Use, LandUse Change and Forestry)

This sector covers a broad area that includes landuse change and forestry. This is the sector that has the highest local impact not only on carbon sequestration but also on local climate.

Forestry

Sectoral Context and Challenges:

- As is the case in many developing countries, Uganda's GHG emissions can potentially be more affected by landuse change and forestry than by transport and industrial emissions.
- Natural growth in forests and other woody areas absorbs significant quantities of carbon dioxide (CO_2).
- In 2002, carbon sinks in Uganda are estimated to have sequestered close to 80,000 kilotonnes of CO_2 equivalents, almost entirely due to natural growth from Uganda's almost 4 million ha of forest at that time.
  With the ongoing loss of natural forests, the establishment of forest plantations will become increasingly important.
- By 2010, new forests established in Uganda under emissions trading and other forms of foreign grants were estimated to cover about 40,000 ha, sequestering up to 1,000 kilotonnes of CO_2 equivalent
- Uganda forestry policy and the National Forestry and Tree Planting Act do make reference to climate change. However, there is currently a very high rate of deforestation in Uganda. Between 1995 and 2005, there was a loss of over 1 million hectares of natural forests
  (woodland and tropical high forest combined), which represents a reduction in forest cover of 2.7% per annum.
- This rapid deforestation was due to the demand for wood fuel, charcoal and agricultural land.

Policy Response:

To address these challenges, the following policy priorities are to be pursued:

With a view to protecting and promoting carbon sinks:

- To continue and step up efforts targeted at effective forest management.
- To make a deliberate departure from "business as usual" by formulating sectoral policies that address issues associated with increased unit productivity in plantation forestry.
- To promote and develop afforestation and reforestation programmes in nonforested areas and intensify afforestation and reforestation efforts in other areas.

Specific strategies for tackling these sectoral policy priorities are the following:

- Ensure that the forest sector continues providing global services in mitigation of climate change while supporting sustainable development needs of the country.
- Provide financial support, technology transfer and provision for capacity building, especially to forestdependent communities.
- Provide incentives for farmers to establish commercial woodlot plantations, including peri urban plantations.
- Implement a system for supporting research and regular data collection and monitoring the status of the forests in terms of areal extent, distribution, plantation species introductions and biodiversity.

Land Use and LandUse Change

Sectoral Context and Challenges:

- An increasing population and demand for food are affecting land use and landuse change in Uganda.
- The amount of human activity carried out per unit of land (cropland or grassland) has also increased.
- Consequently, there have been changes in GHG sources and sinks due to human activities.

- Some of these changes are due to changes in the way that land is used, such as the clearing of forest for agriculture, the conversion of grassland to forest, and the conversion of forest to cropland.
- These changes in use affect the amount of biomass in existing biomass stocks and soil carbon stocks.

Uganda has put in place the 2007 National Land Use Policy to guide the orderly development of human settlements and land utilisation that takes into account risk and safety, local economic development and environmental protection.

- However, land remains under severe pressure from competing land uses by different sectors, including settlements, which is compounded by the increasing population.
- There is still inadequate planning of urban and rural settlements and locations of industries and other land developments.

Policy Response:

To address these challenges, the following policy priorities are to be pursued:

- To promote and enforce urban and rural planning of settlements.
- To control and monitor land development and other landuse changes in a sustainable manner so as to better manage GHG sources and sinks.

Specific strategies for tackling these sectoral policy priorities are the following:

- Demarcate areas reserved for industrial use and other land development.
- Strengthen urban development authorities by providing funds and the ability to enforce regulations.
- Promote human resource development in land management.
- Strengthen law enforcement and regulate activities on land.
- Ensure that new climate change strategies are closely linked to the existing strategies.

Reduced Emissions from Deforestation and Forest Degradation+ (REDD+)

Sectoral Context and Challenges:

- REDD+ is a new mechanism in forest sector development.
- It addresses the weaknesses in other carbon market mechanisms.
- Uganda has just completed the preparation of a Reduced Emissions from Deforestation and Forest Degradation (REDD) Readiness proposal for donor funding.
- It is already implementing several afforestation carbon projects and preparing plans to take advantage of REDD+ to benefit from the restoration of natural forests and other sustainable forest management activities.
- There are new developments of carbon sinks projects.
- Uganda is positioning itself to benefit from the current market mechanism.
- REDD+ is a new initiative still in the pilot stage. It should provide mutual benefits to all stakeholders, but primarily to local communities, through the introduction of equitable benefit sharing mechanisms.
- The information available to the stakeholders about this new initiative is inadequate.
- Some have voiced concern that in some countries, the benefit goes to the investors only.

Policy Response

To address these challenges, the following policy priority is to be pursued:

- To continue to actively promote joint REDD+ efforts involving the public and private sectors.

Specific strategies for tackling this sectoral policy priority are the following:

- Conserve the existing forests and implement REDD+ programmes to access additional funds from carbon markets.

- Setup mechanisms to regulate the implementation of REDD+ projects and the setup of equitable benefit sharing schemes.

Wetlands

Sectoral Context and Challenges:

- Wetlands emit substantial quantities of GHG, even more so when reclaimed on a large scale such as for rice growing in Eastern Uganda.
- The enormous biomass (living and dead) in wetlands and their high productivity suggest an important function of wetlands in the mitigation of GHG emission.
- Much interest is directed towards their role in the carbon balance, in terms of production of carbon dioxide and methane when conserved and even more significant emission of GHG when reclaimed or drained.
- Saving wetlands will therefore help to reduce GHG emission overall.
- There is heavy encroachment of the country's wetlands by developers.
- Political interference has often hampered the enforcement of laws and regulations to protect the wetlands under the current policy framework for wetland protection.
- In some cases, waste from various sources is directed into wetlands and the ecosystem is destroyed.
- There is rampant illegal draining and filling of wetlands, which causes flooding and increased GHG emissions.
- As the population increases, both the rich and poor are increasingly pushed to derive livelihoods from wetlands, including through reclamation for agriculture, vegetables and other industrial and commercial purposes.
- These losses of wetlands are accompanied by large quantities of GHG emissions.

Policy Response

To address these challenges, the following policy priority is to be pursued:

- To promote a balance between conservation and sustainable use of wetlands to reduce GHG emissions.

Specific strategies for tackling this sectoral policy priority are the following:

1. Promote and intensify wetland protection and restoration in order to enhance sinks of greenhouse gases.
2. Promote sustainable use of wetlands.

Agriculture

Sectoral Context and Challenges:

- Agriculture is a very important sector for national development, since it is the main source of livelihood in Uganda.
- This sector is one of the most vulnerable to climate change because most of its activities rely on climate, but farmers often do not get the right information about weather.
- There is growing demand for food to feed Uganda's fastgrowing population, which is currently increasing at a rate of 3.2% per annum.
- The labour force in Uganda is predominantly rural, with 82% of employees located in rural areas, of which 65.6% are employed in agriculture.
- The growing population will need food, and its absence may lead to conflict and security concerns.
- There is increasing heat stress, which affects soil moisture (mostly in arid areas), leading to low agricultural productivity in those areas.
- Water stress will affect the community and economy, which depend on fisheries and aquaculture.
- The National Agricultural Policy (NAP), promoting sustainable natural resources management, provides a step in the right direction, but further efforts are needed to ensure that mitigation practices are adequately

mainstreamed in this sector, especially in cases where they can deliver cobenefits to adaptation efforts in the short to medium term, including with respect to integrated soil fertility management, integrated water management, promotion of biofertilisers and organic manures, zerograzing, biochar, agroforestry, and the development of earlymaturing germplasm.

Policy Response

To address these challenges, the following policy priority is to be perused:

- To mainstream climate change mitigation issues in the efforts underway to promote and improve the management of natural resources, in order to ensure resilient, productive and sustainable agricultural systems with reduced GHG emissions.

Specific strategies for tackling this sectoral policy priority are the following:

- Promote and encourage conservation agriculture and ecologically compatible cropping systems and agricultural practices to increase GHG sinks.
- Promote the sustainable management of rangelands to reduce GHG emissions from soil and land degradation.
- Promote the sustainable utilisation of agricultural products.

Energy Generation

Sectoral Context and Challenges:

- The energy sector is a crucial component of economic development and security in Uganda.
- After the transport sector, it is the next most important in terms of greenhouse gas emissions in the country.
- Uganda depends predominantly on biomass energymainly from firewood, charcoal and agricultural waste.
- The Ministry of Energy and Mineral Development developed and published a Renewable Energy Policy (REP) for Uganda in November 2007.

- The policy vision for renewable energy is to make modern renewable energy a substantial part of the national energy consumption. The overall policy goal is to increase the use of modern renewable energy from the current 4% to 61% of the total energy consumption by the year 2017.
- The GoU plans to develop clean energy resources like hydropower systems, solar energy and biomass. The GoU has a very ambitious programme to achieve 100% electrification by 2025.
- The most constraining barrier to development and uptake of new and renewable energy in Uganda, however, is low institutional capacity and inadequate regulatory and investment frameworks to provide the enabling environment for such development, uptake and transfer of technology on a larger scale.
- In total, 89.5% of the country's energy needs are met by charcoal and firewood.
- The contribution of oil products is 9.2%, mostly in the transport sector, generating a considerable amount of greenhouse gas.
- The recent discovery of oil and gas in Uganda will affect the energy matrix in the country in the medium term and could greatly affect GHG emissions if the use of oil and gas is not properly managed.
- The National Oil and Gas Policy for Uganda, approved in 2008, promotes the use of oil and gas for the national market, including for energy generation, but also makes provisions to limit GHG emissions increases by prohibiting the venting of gas and discouraging flaring of oil and gas.
- The total capacity of renewable energy resources in Uganda is currently only about 5,300 megawatts, which will not be enough in the long term.
- When energy demand exceeds production, it leads to load shedding (i.e., rolling blackouts).
- There is slow growth in the industrial and commercial sectors due to a lack of electricity.
- The use of thermal generators is too expensive, and it also generates greenhouse gases.

- It is very expensive to develop the necessary infrastructure for renewable energy. The lead time for a renewable energy infrastructure can be more than 10 years.

Policy Response:

To address these challenges, the following policy priority is to be pursued:

 To support and accelerate the implementation of the Renewable Energy Policy (REP), in particular with respect to the promotion and development of new clean energy technologies in order to reduce GHG.

Specific strategies for tackling these sectoral policy priorities are the following:

- Promote investment in clean energy generation under public–private partnerships.
- To promote, encourage and incentivise cogeneration, which is the production by industries of heat or steam and electricity from renewable biomass.
- Provide tax incentives and other benefits to privatesector companies who invest in cleaner energy generation.
- Promote the use of alternative renewable energy sources such as solar, biomass, wind and biofuels, as well as their associated technologies.
- Develop hydroelectric and geothermal power systems and integrate them into the East African Power Pool in the medium term.
- Promote the use of combinedcycle gas turbines in cases where there is a shortfall in renewable energy power generation systems.
- Regulate the oil and gas sector and use of fossil fuels to reduce GHG emissions.

Energy Utilisation

Sectoral Context and Challenges:

- In Uganda, most biomass energy is used in households.

- About 66.2% of the country's energy and 25% of its electricity is used in the household sector.
- Industrial and commercial sectors are the largest users of electricity, consuming 59.4% and
  14.9%, respectively, of the total electricity generated.
- Both industrial and commercial sectors are also highly dependent on biomass.
- About 78% of all industrial energy comes from biomass.
- Most households and most of the commercial sector use lowefficiency appliances.
- Some industries still use low power factor and inefficient lighting and electric motors, which leads to high energy consumption and consequently GHG emissions.
- There is limited availability of alternative fuels to replace existing fuels such as biomass and fossil fuels.
- The high level of poverty limits the choice of alternative fuels.

Policy Response:

To address the mitigation challenges faced by the country in the energy sector, the following policy priorities with respect to energy utilisation are to be pursued:

- Promote conservation and efficient utilisation of energy to reduce GHG emissions, especially at consumer levels (industries, households, commercial and institutional buildings).
- Encourage the use of alternative fuels instead of relying heavily on biomass.

Specific strategies for tackling these sectoral policy priorities are the following:

- Promote the development of energy conservation and efficiency projects in all sectors; for example, to promote the use of stabilised bricks and efficient brick kilns in the building sector.
- To enforce building codes with the aim of reducing energy consumption and encouraging designs that maximise the use of natural daylight in buildings.
- Promote the use of energyefficient technologies such as compact florescent lamps and other commercially available highefficiency lamps.
- Promote efficient firewood/charcoal stoves and solar and LPG cookers, and address the high upfront costs of acquiring these technologies through household subsidies or tax waivers.
- Reduce deforestation by providing alternative clean energy sources and efficient appliances for energy use, management and conservation.

Transport

Sectoral Context and Challenges:

- The transport sector is the largest contributor of GHGs, and it is the third most important sector in terms of environmental loading in Uganda.
- Transport plays a major role in economic activities.
- For example, the provision of effective transport supports productivity in the agricultural and industrial sectors, trade and tourism, and social and administrative services, ultimately promoting integration for overall economic growth.
- The availability of an adequate transport infrastructure is also a prerequisite for poverty alleviation, attraction of privatesector investment and facilitation of regional economic integration and international trade, and this is recognised by the current sector policy framework.
- The lack of an officially “approved” national transport policy is a disadvantage to the country in general and to Kampala District in particular, which accounts for over 50% of the vehicles in Uganda.
- Critical issues such as urban mobility are not being given the attention they deserve, as efforts focus instead on main roads and highways.

- The infrastructure in Kampala can no longer handle the traffic, resulting in traffic congestion, high fuel consumption and consequently high GHG emissions.
- Mass transit in the city was reintroduced after an absence of more than 20 years. There is currently a very limited number of buses operating in urban centres.
- There is heavy dependence on roads for freight and cargo transport, which leads to fast deterioration of roads.
- Uganda once had 1,232 kilometres of rail network. At present, only 251 kilometres is operational, on the KampalaJinjaMalaba line.
- Although not much has been done to integrate climate change in transport policy, the MoWT is currently developing a Climate Change Risk Management Strategy for the transport sector. Efforts must be made to ensure that GHG emission concerns are also adequately addressed by the sector.

Policy Response:

To address these challenges, the following policy priorities are to be pursued in the short to medium term:

- To promote the development, approval and effective implementation of a longterm national transport policy and plan that will take GHG mitigation concerns into account.
- To effect a gradual shift to the use of less carbonintensive fuels (including compressed natural gas, ethanol and LPG) in vehicles instead of relying heavily on gasoline and diesel fuels.
- To promote modes of transport that take GHG emission reduction into account.

Specific strategies for tackling these sectoral policy priorities are the following:

- Improve road infrastructure, and traffic management in urban centres to reduce traffic congestion and GHG emissions.
- Promote and encourage reduction of reduce greenhouse emissions from the transport sector.
- Promote privatesector investment in the biofuel industry, covering the whole biofuel chain from cultivation to fuel processing.
- Establish national standards for emissions and implement strict vehicular emissions standards in tandem with measures to gradually phase out old, inefficient motor vehicles, while encouraging the importation of efficient ones.

Waste Management

Sectoral Context and Challenges:

- Most waste is generated in urban areas.
- Worldwide, it is estimated that 60% of municipal solid waste is land filled, but in Uganda, waste is not typically land filled, but is simply left to rot.
- The wastes considered in this case are municipal solid waste and human waste and sewage.
- Most landfills in the towns are not well managed.
- Municipal and human wastes are not treated, and generate considerable amounts of methane.
- There is poor waste management at the national level.
- There are new initiatives to sort wastes in towns, under the Clean Development Mechanism (CDM).
- Landfills leak and generate methane, which is not currently used to produce energy.
- There is potential for generating energy using sewage plants, but such a process has not yet been put into practice.

Policy Response:

To address these challenges, the following policy priority is to be pursued:

- To promote sustainable use of solid and liquid wastes for energy generation and other uses, such as fertilisers (after sorting).

Specific strategies for tackling these sectoral policy priorities are the following:

- Promote and encourage wastetoenergy programmes to reduce GHG emissions and increasing energy generation and access.
- Promote proper disposal and sustainable use of wastes, including sorting and composting wastes.
- Promote the gasification and incineration of large quantities of waste to generate thermal energy or electricity.
- Promote the use of human waste for production of biogas, which can be used for cooking and lighting in institutions such as schools and hospitals, while effluent can be used as fertiliser.

Industrial Sector

Sectoral Context and Challenges:

- Although the level of emissions from the industrial sector is still low, it will increase as the country develops.
- The current emissions from industrial processes primarily come from cement and lime production.
- In recent decades, there has been steady growth in the industrialisation of the country, and the industrial sector contributes considerably to the Ugandan economy.
- In 2011, the estimated real growth rate in this sector was 7.5% per annum.
- This growth is even more pronounced in the construction industry, where cement and lime are used.
- There is growing demand for cement and lime for use in construction and road works.
- This demand will increase the GHG emissions of the industrial sector.

- Most of the traditional lime kilns, which use biomass, are poorly designed, resulting in high levels of energy consumption.

Policy Response:

To address these challenges, the following policy priority is to be pursued:

> To promote cleaner production processes in industries to contain the increase in GHG emissions

Specific strategies for tackling this sectoral policy priority are the following:

- Promote new technologies in cement processing industries.
- Improve the efficiency of and alternative fuels for lime kilns.
- Promote cleaner production in the industrial sector.
- Review and enforce emission regulations in the sector.

4.3.2 CrossCutting Priorities

Some policy priorities cut across multiple sectors and must be given due consideration in order to ensure a coordinated response to climate change mitigation challenges at the national level. This is particularly the case when it comes to barriers to technology transfer and the largescale diffusion of clean, lowcarbon technologies in Uganda.

Context and Challenges:

- Ongoing technology transfer efforts are being made at the national level, but they are not documented.
- There is no coordinated effort to streamline the process of technology transfer.
- The cost of technology transfer can be very high, depending on the type and form of transfer.

- Across sectors, there is a lack of awareness about technologies, a lack of capacity to handle
  new technologies, slow penetration of the technologies transferred, and a lack of capital available, especially to small firms.
- The sectors have inadequate access to skilled personnel and there is a lack of enabling policy initiatives, institutional mechanisms, information and opportunities, as well as a lack of local human capital and capacity for adoption of technology.

Policy Response:

To address these challenges, the following policy priorities are to be pursued:

- To put in place functioning institutions that can manage and coordinate issues related to the transfer, deployment and diffusion of technology, including the promotion of the capacity development necessary to support the implementation of clean and lowcarbon technologies.
- To encourage technological development to address the problem of climate change in sectors of economic development with high emissions.

Specific strategies for tackling these crosscutting policy priorities are the following:

- To ensure adequate capacity development for technology transfer.
- To create a technology fund (with assistance from development partners and other financial institutions) that can facilitate the transfer, deployment and diffusion of technology and promote the capacity building necessary to support the implementation of clean and low carbon technologies in other sectors, such as LULUCF and agriculture.
- Introduce improved seeds and draughtresistant, fastgrowing tree species as part of the process of technology transfer in the forestry sector.

- Provide financial support for capacity building, especially in forestdependent communities.
- Provide support for R&D and accurate data for timely weather monitoring and dissemination of information.
- Enforce monitoring of the carbon footprint.

4.4 Monitoring, Detection, Attribution and Prediction PolicySpecific Objective 4:

To identify and promote monitoring, detection, attribution and prediction policy responses for Uganda

One key to better understanding and predicting climate change is access to adequate data and the capacity to analyse and interpret these data at the national level. In Uganda, such information is also critical for providing earlywarning information about climaterelated disasters (such as drought and floods).

The Uganda Department of Meteorology, which is also the IPCC focal institution in the country, is responsible for climate change monitoring and detection in Uganda. The country has a network of climate change monitoring stations equipped with various types of instruments. The table below shows the existing and required stations and observation networks in Uganda.

Table 3: Network of Climate Monitoring Stations in Uganda

No.	Station Type	Operational Stations	Optimum No. of Stations	Deficit (%)
1	Synoptic stations	12	16	25
2	Climatological stations (hydrological and agro meteorological stations)	40	60	33

3	Rainfall stations	150	1000	85
4	Upper air stations	1	2	50
5	Radar stations	1	2	50
6	MSG receivers	1	2	50

Source: Department of Meteorology, MWE, 2011

As shown in the table above, there is a significant shortage of climate monitoring stations and networks in Uganda, and this negatively affects the country's ability to monitor, detect and predict climate variability and climate change. In addition, the human resources and instrumentation and other modern equipment required, not only for data collection, but also for data analysis, are either unavailable or insufficient. There are also problems with weatherrelated data gaps.

Additional manpower is needed to address these gaps in data collection, measurement and analysis, along with additional training and associated costs. Rain is an extremely important resource for the national socioeconomic development of Uganda, since most of the country's agriculture is rain fed.

A number of development partners have provided support to help the Department of Meteorology start to address some of the capacity gaps identified, but more work is still required.

Sectoral Context and Challenges:

- There is a need for human resources to address issues related to the collection of meteorological and hydrological data, as well as data analysis, storage and management.
- The management of climatological, hydrological and other data relevant to climate change is inadequate.

- Data are still stored in binary code formats, but should be transferred to tabledriven code formats for recording weather parameters, as per the recommendation of the World Meteorological Organisation.

Policy Response:

To address these challenges, the following policy priority will be pursued:

- To continue its ongoing efforts to strengthen the capacity of the Department of Meteorology in its functions in climate change monitoring and detection in Uganda.

Specific strategies for tackling this policy priority are the following:

- Support capacity development for accurate weather data collection, analysis and weather monitoring.
- Support timely sharing and dissemination of relevant data and information with potential users at both the national and district levels.
- Provide support for the development of reliable climate modelling and prediction and climate earlywarning systems.
- Support Research and Development in climate monitoring, detection, attribution and prediction.

5 Implementation Arrangements – From Policy to Action

The NCCP has identified six Policy Priority Areas (stated in the specific objectives) for addressing
Uganda's climate change challenges and opportunities. Each of these policies has a number of specific strategic interventions for addressing the critical policy actions necessary to achieve the desired objectives. These policy objectives will be achieved through the specific strategies and actions as indicated in the Implementation Strategy (Part II of the Policy). Specific actions and outputs as

well as estimated timelines and costs have been identified for each policy objective as part of the Implementation Strategy.

Given the highly multisectoral nature of this policy which focuses on the mainstreaming of a cross cutting issue, the institutional and resource mobilisation setup to support its implementation must inherently involve multiple structures and mechanisms.

There are a number of existing national institutions and private organizations in Uganda whose mandates and activities border on climate and climate change issues. This section, discusses these institutions, their roles and responsibilities, the legal and regulatory framework governing climate change issues and the resource mobilization set up.

5.1 Institutional Arrangements and Legal Framework

PolicySpecific Objective 5:

To support the integration of climate change issues into planning, decision making and investments in all sectors and transsectoral themes through appropriate institutional arrangements and legal framework.

5.1.1 The Focal Climate Change Institution

In determining an appropriate climate change focal institution and climate change governance, there ought to be careful consideration of:

- the GoU's obligations towards meeting GHG emissions reductions as well as adaptation and other mitigation measures – Article 4 and 12 of UNFCCC and Kyoto Protocol,
- what the relevant national laws (including the National environment Act, 1995) provide for;
- institutions that already conducting climate change activities and what they do, and;
- plausible effective options.

It is important that the strategies and actions needed to combat climate change (provided in the NCCP implementation strategy) be anchored within this policy and the legal and regulatory framework (as described in Section 5.2) that enables Uganda to meet its longterm development goals (Vision 20140) while fulfilling its global obligations towards combating climate change. To that end a dedicated climate change institution is important as it establishes a coordination instrument which ensures that all crosssectoral activities match the overall vision of the NCCP – a climate resilient and lowcarbon development path for sustainable development in Uganda**.**

In view of this is proposed that:

1. A National Climate Change Commission (NCCC) be established and adequately resources in the Ministry of Water and Environment to act a national coordination centre for climate change in Uganda.
   This is because a climate change coordinating body must possess the authority to conduct business with the various crosssectoral Ministries Departments and Agencies involved in the implementation of the policy. To that end , the current Climate Change Unit (CCU) should be elevated to the level of a National Commission. The main functions of the new National Climate Change Commission (NCCC) will revolve around:

- Acting as an information clearinghouse on climate change concerns;
- Providing policy and strategic advice on climate change;
- Supporting awareness raising , communication and outreach on climate change;
- Ensuring the integration of climate change concerns into overall national planning through coordination with the relevant ministries, departments and governmental agencies;
- Providing secretarial services to the Policy Committee on Environment (PCE) as regards to climate change mattes only(this is because the Secretariat of the

PCE is NEMA), the National Climate Change Advisory Committee and the CDM Designated National Authority;

- Monitoring the implementation of the Climate Change Policy and its Implementation Strategy;
- Serving as the National Focal Point for the United Nations Framework Convention on Climate Change (UNFCCC);

2. The Policy Committee on Environment (PCE), as provided for in the National Environment Act, 1995 be strengthened to guide and advice on climate policy implementation. It will also ensure information flow on resource allocation for the implementation of the policy. The Committee which is chaired by the Prime Minister will bring together Ministers from the various departments at the national level. To that end, the National Environment Act will be reviewed to cater for this role.
3. A National Climate Change Advisory Committee will be put in place to ensure working level coordination and to provide climate change technical input to the Policy Committee on Environment. This committee will be chaired by the Minister for Water and Environment and will bring together technical representatives from the various government departments at the national level, along with representatives from privatesector associations, civil society, academia and district authorities.

5.1.2 Other Key Coordinating Ministries and Authorities

In addition to the NCCC, three national ministries or authorities will have a specific role to play in national coordination to ensure policy implementation.

The Ministry of Finance, Planning and Economic Development (MoFPED)

The main functions of the MoFPED will be to:

- Ensure that national, sectoral and districtlevel budgets and indicative -planning figures integrate climate change through appropriate provisions for the implementation of the policy and its strategy.
- Review quarterly and semiannual reports from the ministries, departments and agencies concerned, to ensure that resource use is in line with expected and actual progress in implementing the policy.
- Facilitate the introduction of relevant financial mechanisms and tools to the relevant stakeholders, as per the implementation strategy, to support financial resource mobilisation and investment for the implementation of the policy.

The National Planning Authority

The main functions of the National Planning Authority (NPA) are to:

- Ensure that the ministries, departments and agencies concerned integrate climate change through adequate provisions in their annual work plans for the implementation of the climate change policy, building on the guidance provided in the costed implementation strategy but consistent with all relevant national policies and legislations.
- Ensure that these agreed work plans are implemented, through a review of quarterly and semiannual reporting by the institutions concerned and appropriate followup actions by the NPA.

The Ministry of Local Government

The main functions of the Ministry of Local Government (MoLG) will be to:

- Provide guidance to the districts to translate the policy priorities and the implementation strategy into coherent plans at the district level,
- Ensure that districts make adequate provisions in their development plans, annual plans and budgets for the implementation of the climate change policy, and

- Ensure that these are acted upon as planned through a review of relevant reports from the districts and appropriate followup actions by the MoLG as required.

5.1.3 Ministries, Departments and Agencies

Each of the various ministries, departments and agencies with a role to play in the implementation of the policy responses outlined in this document will designate a departmental focal point and will be accountable for the implementation of the prescribed policy responses that concern their department. Given the far reaching nature of this policy, the ministries, departments and agencies concerned by this policy are numerous.

For purposes of this policy, and in addition to the coordinating ministries and agencies, the following
Ministries and their Departments and agencies are identified to have a critical role in implementation of the policy:

1. Ministry of Water and Environment (MWE).
2. Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)
3. Ministry of Works and Transport (MoWT)
4. Ministry of Energy and Mineral Development (MEMD)
5. Ministry of Health (MoH)
6. Ministry of Lands, Housing and Urban Development (MoLHUD)
7. Ministry of Tourism, Wildlife and Antiquities (MoTWA)
8. Ministry of Gender, Labour and Social Development (MoGLSD)
9. Ministry of Trade, Industry and Cooperatives (MoTIC)
10. Ministry of Education, Science, Technology and Sports (MoESTS)
11. Ministry of Local Government (MoLG)
12. Office of the Prime Minister (OPM)
13. National Planning Authority (NPA) 14. Kampala Capital City Authority (KCCA).

The Implementation Strategy details the accountabilities of the various ministries, departments and agencies concerned with the indicative climate change programmes presented in the Strategy. They will be expected to report on a quarterly and semiannual basis on their progress in the implementation of their respective tasks and in the attainment of their expected results and performance targets, based on the Monitoring and Evaluation (M&E) Framework also presented under the Implementation Strategy for the policy. This information will be reported to the Ministry of Finance, and copied to the National Planning Authority and the NCCC. On the basis of these reports, the NCCC will be tasked with preparing a consolidated annual progress report on the overall implementation of the policy, for consideration by the Cabinet and the Prime Minister's Office.

5.1.4 At the Decentralised Level – Local Governments

A similar management arrangement will be mirrored at the district level. While the climate change focal point will be anchored within the Natural Resources Department of the District Local Government, all departments will ensure that climate change issues in their sectors are integrated into the District Development Plans. Adequate provision will be made in districtlevel Indicative Planning Figures for each sector to ensure they can address the climate change policy priorities, along with the setting of relevant performance indicators. The existing Environment Committee structure at the district level will act as a mechanism to ensure crosssectoral coordination.

An organisational chart presenting the main elements of the institutional framework is provided in Annex B.

5.1.5 Collaboration and Coordination

Collaboration and coordination at the national level will be essential for the effective and efficient implementation of the policy. In addition to the NCCC's facilitation function, this coordination will require multistakeholder mechanisms. Two such mechanisms will be established.

As indicated in detail in section 5.2 on legal framework, the Policy Committee on environment will coordinate policy implementation and ensure information flow on resource allocation for the implementation of the policy. The National Climate Change Advisory Committee will ensure working level coordination and provide technical input to the National Climate Change Policy Committee.

The work of these two coordination mechanisms will be guided by the Implementation Strategy. The objective of the Implementation Strategy is to enable more effective planning and coordination. The main functions of this Implementation Strategy are to:

- Provide for a more detailed action plan/roadmap for the implementation of the Policy, with respect in particular to capacity development and the operationalization of the institutional setups required for the different stakeholders involved in Policy implementation, as well as data and information analysis needs.
- Provide phased indicative climate change programmes for the priority areas under the policy
- Highlight the roles and responsibilities of the various stakeholders in the implementation of these programming priorities.
- Provide indicative costing for these programmes.
- Indicate in a more detailed manner potential sources of funding, financial tools to be undertaken and financial management arrangements, including for startup funding that may be required to kick start the policy implementation process.

- Provide for examples of prototype infrastructure designs for key sectors to be impacted by climate change, such as transport and works.
- Provide a solid basis for the monitoring and evaluation of the Policy Implementation process.

5.2 Legal and Regulatory Framework

The Legal and regulatory framework for climate change provides legitimacy, regulate conduct and establish sanctions that can ensure compliance. For Uganda's NCCP and Implementation Strategy to be fully and effectively implemented, a sound and enabling legislative framework (and an inbuilt institutional framework) must be in place. The absence of such a framework is an obstacle in translating the identified policy priorities into implementable actions with tangible climate change benefits.

The Constitution of the Republic of Uganda, 1995 as amended in 2005 makes the government accountable to the people of Uganda. The constitution provides a starting point for developing the climate change policy for Uganda and provides an overall regulatory framework for the implementation of the Policy. Objective X111 of the Uganda Constitution advocates for the management of the environment for sustainable development. Article 39 states that 'every Ugandan has a right to a clean and healthy environment. Article 245 states that "Parliament shall, by law, provide for measures intended: (a) to protect and preserve the environment from abuse, pollution and degradation; (b) to manage the environment for sustainable development; and (c) to promote environmental awareness.

As already mentioned in Section 1.2 of this document, Uganda is a signatory to the UNFCCC also ratified the Kyoto Protocol. By signing and ratifying both the UNFCCC and the Kyoto Protocol, Uganda has committed to the adoption and implementation of policies and measures designed to mitigate climate change and adapt to its impacts. At regional level, Uganda is party to the East African

Community climate change policy which urges member countries to develop consistent national policies to ensure harmonised action.

Uganda has been very keen to explore the opportunities presented by climate change related challenges. The Ministry of Water and Environment has particularly sought to ensure that the development agenda of the GoU responds to the emerging trends of global warming and, to how Uganda could better contribute to the common objective, and to position herself as a leader within the Africa region.

In addition, Uganda is keen to include climate resilience in its development programmes. The National Development Plan (NDP) 2015/16–2019/20 serves as the single most powerful guide for investment planning, budget allocation and social interventions in the country. All government programmes are linked to the NDP within the existing policy, legal, planning, monitoring and reporting systems. The NDP mainstreams climate change into the development plans, policies and budgets of all sectors. Since the NDP is being revised, climate change policy intervations can be provided for in the next five year NDP so that sectors can plan and budget for them. In addition, the Uganda Vision 2040 also recognises the need to promote climate change resilience and low carbon development pathways.

Uganda is adequately represented at various international conferences on climate change to keep abreast with developments in global and regional thinking and decisions on climate response measures, as have been deliberated and agreed by the parties. Since Uganda joined the global community on climate, government has been making strides towards fulfilling its obligations under the climate change convention and the Kyoto Protocol.

Uganda has put in place a number of sectoral policies that are related to climate change, including:

1. The National Disaster Preparedness and Management Policy, 2010
2. The Oil and Gas Policy, 2008;
3. The National Adaptation Programmes of Action (NAPA), 2007
4. The Renewable Energy Policy 2007
5. The Energy Policy 2002
6. The National Health Policy
7. The Water Policy, 1999
8. National Forestry Policy 2001
9. National Environment Management Policy 1994

Uganda has enacted the following national policies legislation amongst, that are relevant to climate change, among others:

1. Uganda National Meteorological Authority Act, 2012
2. The Physical Planning act, 2010
3. The National Agricultural Research Act 2005
4. The Land Act (Amendment Act, 2004
5. National Forestry and Tree Planting act, 2003
6. National Planning authority Act 2002
7. The National environment Act, 1995
8. The Water Act, 1997
9. Uganda Wildlife Act, 1995

In addition a number of statutory regulations on environment are in place 1. The National Environment (Waste Management) Regulations, 1999.

2. The Soil Conservation Measures and Guidelines, 2000;

3. The National Environment (Mountainous and Hilly Areas Management);
4. The National Environment (Wetlands, River Banks and Lake Shores Management) Regulations; among others.

In terms of the various sectoral regulatory frameworks in place in Uganda, the disaster preparedness and management and the health and environment (NEMA) sectors make provisions to tackle climate change. In addition, the forest, land, water and energy sectors' regulatory frameworks are compatible with the climate change policy.

However, many of the above policies and laws do not adequately address climate change. There is therefore need for broader analysis regarding the legislative and regulatory framework to come up with an enabling Legislative and Institutional Framework for Climate Change Response in Uganda.

In view of the above, and arising from the consultations conducted in the policy development process, two options are recommended for providing a legal framework for climate change in Uganda: (i) amending the National Environment Act, 1995 to cater for climate change; and (ii) Providing an overarching standalone Climate Change Law.

5.2.1 Amending the National Environment Act, 1995

A number of stakeholders prefer amendment of the National Environment Act, 1995 to provide a section on climate change regal and institutional framework. This is costeffective in the sense that the process and costs of enacting a new law can be avoided. The limitation with this option is that climate change issues could be shadowed in environment issues. This would make climate change to lose the prominence it needs for getting due attention and in that case the business as usual approach could continue.

5.3 Climate Change Law

Global and national complex dimensions of climate change require very robust institutional and legal frameworks for addressing the growing challenges of

climate and recommend enactment of an overreaching standalone legal framework for climate change as an another option. This is also the preferred option by the CCU and the Ministry of Water and Environment and other stakeholders. The need for Climate Change Law is justified by the following:

- GoU signed and ratified the UNFCCC. The convention requires member states to demonstrate action on climate change by domesticating the UNFCCC provisions in national legislations.
- At international level, a separate framework, the UNFCCC, was created to avoid shadowing climate change under the World Meteorological Convention or the Hyogo Framework of action. This was intended to give climate change prominence and due attention.
- The EAC climate change policy calls on partner states to have climate change standalone policies and laws. It also calls on partner states to create climate change funds which in effects needs legislation.
- Although there are a number of CDM and carbon mechanisms initiatives in Uganda from which the GoU can get levies, there is no legal framework to guide GoU on how it can generate funds from these projects. In Tanzania, for example the government has put in place a 2% levy on all CDM and carbon projects. Uganda needs legislation to guide this initiative.
- Climate change is crosscutting and is both an environment and development issue. Therefore to avoid scattered actions over sectors in terms of policy and legislation, a new overarching climate change law is necessary.

A standalone Climate Change Law will facilitate direction, coordination, policy setting and highlevel political prioritization in order to mainstream climate change across government functions. The overarching legislative framework will need to take account of all necessary institutional and financial considerations for effective climate change response. In summary, the law will provide:

1. A framework for the implementation of global obligations arising from relevant international conventions, protocols and agreements;

2. A framework to enhance the resilience of human and ecological systems to the impacts of climate change taking into consideration of the Constitution of the republic of Uganda;
3. For the mainstreaming the principle of sustainable development in the planning and making of decisions on climate change;
4. A contribution towards the global efforts of combating climate change and facilitate approaches that support low carbon climate resilient development; and
5. A framework for the governance, coordination and financing of climate change at all levels.

However, the standalone law needs to be accompanied with, or followed by, a series of sectoral legislative and regulatory reviews reforms (review policies and laws already mentioned above) that enable implementation of all NCCAP priority actions. This will be done in consultation with the various ministries and agencies to bring sectoral legislation in harmony with the framework law.

5.4 Financing and Resource Mobilisation

PolicySpecific Objective 6:

To facilitate mobilisation of financial resources to address climate change in Uganda

A detailed estimate of the costs over the short and medium term for implementing the various climate change policy measures are outlined within the policy document and was developed as part of the development of the Costed Implementation Strategy for this policy. A number of strategic actions fall under sectoral work plans making the costing focus on purely additional costs due to the integration of climate change into the various sector plans.

The Costed Strategy examines in detail the various financial instruments best suited to support specific types of strategic measures and actions in order to provide more guidance for policy implementation. The Costed Strategy can then

be used by the various national and international partners to make decisions as to which priority investments to support nationally and by sector.
The funding for the policy priorities will come from various public and private sources. The main sources and financial instruments are detailed in the Costed Implementation Plan and include the following:

- National and Sectoral Development Plans and Budgets, as climate change concerns are mainstreamed and leveraged through various development plans.
- Private Sector investments, particularly with respect to energy, industrial developments and technology transfer.
- Multilateral and bilateral development partners' support as well as support from international climate change funds, particularly with respect to issues of capacity development, technical assistance and awareness raising.
- Marketbased mechanisms for climaterelated actions, such as Clean Development Mechanisms, benefitsharing schemes under REDD+, emissionstrading revenues, tax incentive and tariff schemes.
- Payment for Ecosystem Services (P ES) Schemes which is the practice of offering incentives to farmers or landowners in exchange for managing their land to provide some sort of ecological service. PES programmes promote the conservation of natural resources in the marketplace.

6 Monitoring and Evaluation

Monitoring and Evaluation are essential to ensure effectiveness and accountability of climate change actions for sustainable development in Uganda. Three key aspects of monitoring and evaluation are of particular relevance.
First, planning, implementation and decisionmaking on effective use of resources all require monitoring and evaluation, with baseline data and indicators. In general, a set of tools is used before the intervention takes place, or after the intervention, tracking expected or realized outcomes. This helps to ensure that resources for sustainable development are well spent and that the results are communicated back to decision makers and stakeholders for future/further actions.
The Guide to Policy Development and Management in Uganda states that monitoring and evaluation (M&E) is an integral part of policy formulation and

implementation in Uganda. The expectation is that the development of the national climate change policy, its institutions and implementation will fall under the existing M&E systems. Climate change interventions need to be linked to the delivery of sectoral development objectives and be consistent with national priorities. However, monitoring and evaluation on these interventions will require the strengthening of existing M&E systems and development of a Performance Measurement Framework (PMF) for implementing the climate change policy and strategy as described in the implementation strategy of this policy.

Secondly, given Uganda's physical location within the complex East African climate system, where especially future rainfall patterns are hard to predict, the adequate monitoring and evaluation of climatic changes and their impacts is crucial. This is needed in order to plan targeted adaptation interventions and track their appropriateness and cost effectiveness in a changing climate. Uganda requires a central system to record disaster impacts at national level, which undermines disaster preparedness. There is a need for systematic observation systems for disaster response. Networks for the transmission of data from stations to monitoring and evaluation centres and early warning information from monitoring and evaluation centres to end users (especially rural communities) need to be strengthened.

Thirdly, the concept of 'Measurement, Reporting and Verification' (MRV) which emerged from international climate negotiations, is relevant for Uganda, when receiving international support for its voluntary contributions to tackle climate change. The concept includes a registry to keep track of whether the international support promised is really being provided, as well as monitoring whether climate change interventions are in operation, how successful they are and to what extent they reduce emissions and create effective adaptation. The development of relevant gender sensitive indicators as part of Uganda's monitoring and reporting system is also crucial.

An effective MRV system for Uganda's REDD+ activities will enable the country to access larger scale international support, and needs international support for building the required institutional and technical capacity. In addition, a REDD+

system needs to link to a wider national system for MRV to avoid duplication and increase coherence, especially with changes in reporting needs for all stakeholders.

The full M&E Framework for the implementation of this policy builds on the draft costed Implementation Strategy presented in Annex C and is elaborated upon in the strategy document itself. The M&E Framework is clearly linked to the planned outcomes and outputs of this strategy and the roadmap to implementation that it outlines. It is instrumental in ensuring the full implementation of the policy by the various stakeholders involved. The M&E Framework provides a

basis to later develop specific performance indicators and targets for each policy priority and strategic action by sector and proposes accountabilities for the actors that are tasked to implement them.

Each ministry, department, and agency for which specific accountabilities will be identified, will have to ensure enforcement of the relevant policy priorities and measures, using means and mechanisms at its disposal as well as those identified in the costed Implementation Strategy.

-

In addition to monitoring and enforcement against the M&E Framework, the implementation of the policy will undergo an independent external evaluation in 5 years' time. The recommendations resulting from this evaluation will then feed into the revision process for the policy. This revision is to be carried out based on a thorough public consultation process and review of the results at that point in time.

Annex A: Glossary

Adaptation	Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities
Afforestation	The direct, humaninduced conversion of land that has been unforested for at least 50 years to forested land through planting, seeding and/or human induced promotion of natural seed sources; This is distinct from reforestation, which is defined as the conversion of land that has been unforested since at least 31 December 1989 to forested land
Afforestation and reforestation (A/R)	The title given to the class of projects devoted to planting trees on unforested land to provide carbon emissions reduction and other environmental benefits
Biofuels	Renewable fuels made from plants that can be used to supplement or replace the fossil fuels (petroleum and diesel) used for transport; The two main biofuels are ethanol and biodiesel: ethanol is produced from the fermentation of sugar or starch from crops such as corn and sugar cane, and biodiesel is made from animal fats or from vegetable oils from crops such as soy bean
Carbon neutral	Responsible for no net emissions of greenhouse gases, whether as an individual, household or organisation; To achieve carbon neutrality, emissions must be reduced to a minimum and any remaining emissions must be offset by emissionreducing activities carried out elsewhere; Buying accredited clean electricity helps to reduce household or office greenhouse emissions, while investments in sustainable energy projects and afforestation schemes are examples of offsets
Carbon	The incorporation of carbon dioxide into permanent plant tissues

sequestration

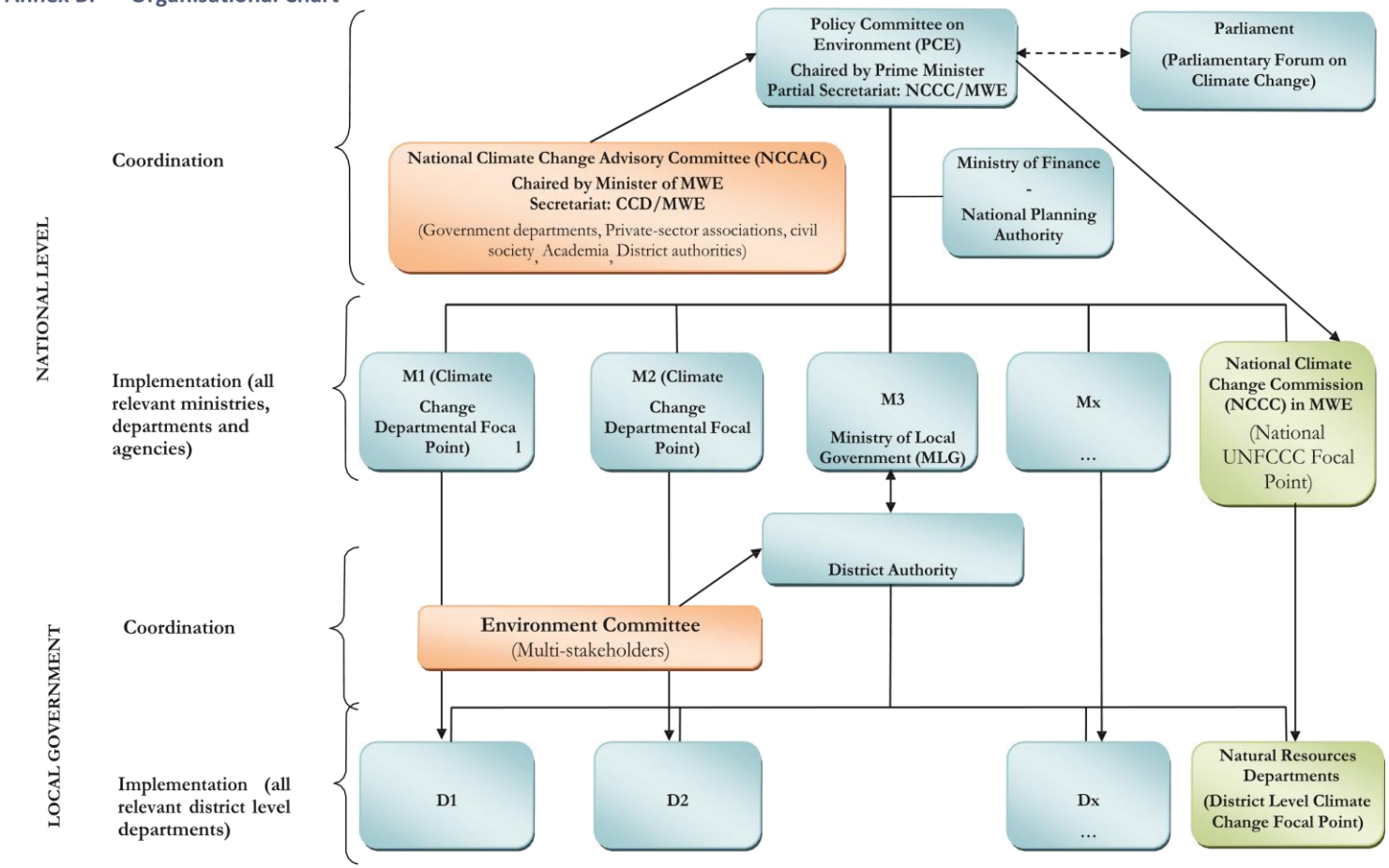
Carbon sink	A feature where carbon dioxide is removed from the atmosphere; The major natural carbon sinks are forests and oceans, which have processes that absorb CO_2
Clean Development Mechanism (CDM)	A Kyoto Protocol initiative under which projects that are set up in developing countries to reduce greenhouse gas emissions generate tradable credits called CERs (certified emission reductions), the first step towards a global carbon market; These credits can be used by industrialised nations to offset carbon emissions at home and meet their Kyoto reduction targets; CDM projects include renewable energy generation, reforestation and clean fuels switching
Climate change	Any significant change in measures of climate, such as temperature, precipitation or wind, lasting for an extended period (decades or longer); This report refers to climate change induced by human activities that change the atmosphere's composition (e.g., burning fossil fuels) or the land's surface (e.g., deforestation, reforestation, urbanisation, desertification, etc.)
Emissions trading	A form of carbon pricing creating a marketbased system for regulating the emission of greenhouse gas; The quantity of emissions is controlled and the price is allowed to vary by the issuing of tradable emissions permits; These rights to emit can be traded in a commercial market under an emissions trading scheme
Greenhouse gas (GHG)	Any gas that absorbs infrared radiation in the atmosphere, including (but not limited to) water vapour, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), hydrochlorofluorocarbons (HCFCs), ozone (O_3), perfluorocarbons (PFCs) and sulphur hexafluoride (SF_6)
Kyoto Protocol	The agreement reached in Kyoto in 1997 committing develope

	and countries making the transition to a market economy (Annex I counties) to achieve quantified targets for decreasing their emissions of greenhouse gases
Land use, change and forestry (LULUCF)	anduse The title given to the sector comprising reforestation, afforestation, land clearing and agriculture; Each of these activities can make significant contributions to atmospheric carbon emission and/or removal
Lowcarbon development	Actions that make a contribution towards stabilising levels of CO_2 and other greenhouse gases at a level that will not cause dangerous climate change
Mitigation	The reduction and/or avoidance of emission of greenhouse gases into the atmosphere, through financing and implementing lowcarbon technologies, programmes and projects
Nationally Appropriate Mitigation (NAMAs)	Actions The central concept in the international climate change negotiations on developing country emission reductions; The NAMAs first appeared in the Bali Action Plan (2007) as "nationally appropriate mitigation actions by developing country Parties in the context of sustainable development, supported and enabled by technology, financing and capacitybuilding, in a measurable, reportable and verifiable manner"
REDD+	REDD stands for "Reducing Emissions from Deforestation and forest degradation in Developing countries." REDD+ goes beyond this and calls for activities with serious implications directed towards the local communities, indigenous people and forests which relate to reducing emission from deforestation and forest degradation. Therefore this will involve enhancing existing forests and increasing forest cover. In order to

	meet these objectives, policies need to address enhancement of carbon stocks by providing funding and investments in these areas
Reforestation	The direct, humaninduced conversion of land that was once forested but was converted to nonforested land and has remained unforested since at least 31 December 1989 to forested land through planting, seeding and/or humaninduced promotion of natural seed sources; This is distinct from afforestation, which is defined as the conversion of land that has been unforested for at least 50 years to forested land
CO_2	A tonne of carbon dioxide or an equivalent standard measure or unit of other greenhouse gas; It is a measure used to describe how much global warming a given type and amount of greenhouse gas may cause, using the functionally equivalent amount or concentration of carbon dioxide (CO_2) as a reference
The United Nations Framework Convention on Climate Change (UNFCCC)	An international agreement for action on climate change, drawn up 1992; The framework was agreed upon for action aimed at stabilising atmospheric concentrations of greenhouse gases; The UNFCCC entered into force on March 1994 and currently has 192 signatory parties; The UNFCCC was updated with the Kyoto Protocol in 1997 to implement emission reductions in industrialised countries until 2012 and is currently seeking the negotiation of a new treaty to extend commitments beyond 2012
Tonne	A metric ton; equals to 1,000 kg

Isaac Christopher Lubogo

Annex B: Organisational Chart



Appendix 7: National Oil and Gas Policy for Uganda



NATIONAL OIL AND GAS POLICY FOR UGANDA

THE POLICY GOAL IS TO USE THE COUNTRY'S OIL AND GAS RESOURCES TO CONTRIBUTE TO EARLY ACHIEVEMENT OF POVERTY ERADICATION AND CREATE LASTING VALUE TO SOCIETY.

FEBRUARY, 2008

MINISTRY OF ENERGY AND MINERAL DEVELOPMENT

FOREWORD

It is with great pleasure that I present a foreword for this holistic National Oil and Gas
Policy for Uganda. This policy which was approved by Cabinet on 30th January, 2008 is intended to guide the development of Uganda's emerging oil and gas sector following the discovery of commercial petroleum resources in 2006.

The National Oil and Gas Policy supersedes the Energy Policy for Uganda published in 2002 in matters of exploration, development, production and utilization of the country's oil and gas resources. Apart from creating a conducive environment for petroleum exploration to continue in the country and the anticipated development, production and utilization of any discovered resources to take place, the policy also seeks to put in place a framework for the efficient management of the oil and gas resources as well as revenues accruing therefrom.

Formulation of this Policy has been carried out through an extensive consultative process which has involved the review of policies of many petroleum producing countries, discussions with institutions of Government, local authorities and cultural institutions especially those in the areas with the potential for petroleum production in the country, civil society organizations and academia, among others.

Implementing this Policy will require putting in place new legislation for oil and gas administration and management of petroleum revenues, developing and implementing a communication strategy to manage public anxiety and expectations, preparation of procedures and criteria for competitive licensing and creation of a new institutional framework for the subsector. The Ministry of Energy and Mineral Development will prepare a strategic plan for the implementation of those activities and continue to work in consultation with the different stakeholders to accomplish the same.

In conclusion, I wish to register my gratitude for the guidance received from His Excellency Yoweri Kaguta Museveni, President of the Republic of Uganda in developing the oil and gas sector in the country in general and in the formulation of this Policy in particular. I am grateful to colleagues in Cabinet for their participation in the consultative workshop which preceded the submission of the draft Policy to Cabinet and the enrichment of the policy document during discussion in Cabinet. My colleagues in the Ministry, Hon. Dr. Simon D'Ujanga, Minister of State for Energy and Hon. Kamanda Bataringaya, Minister of State for Mineral Development made good input. I wish to thank the Technical Team in the Ministry which spearheaded the process of formulating this policy and coordinated the consultations. The team was led by F.A. KabagambeKaliisa, Permanent Secretary and included Reuben Kashambuzi, Commissioner, Petroleum Exploration and Production Department, Ernest N.T. Rubondo, Assistant Commissioner, Fred Kabanda, Principal Petroleum Geologist, Rev. Frank Tukwasibwe, formerly Principal Economist and Emmanuel
Ajutu, Senior Policy Analyst. The consultants Farouk Al Kasiim of PetroTeam Norway and Professor James Katorobo of Makerere Institute of Social Research provided good support in the development of this policy. The contribution of all the stakeholders who participated in the consultations is duly recognized. I am equally grateful to the Government of the Kingdom of Norway who, in partnership with the Government of the Republic of Uganda, facilitated the development of this Policy.

Daudi Migereko [MP]
MINISTER OF ENERGY AND MINERAL DEVELOPMENT

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ACRONYMS

1.	2D	Two Dimensional
2.	3D	Three Dimensional
3.	API	American Petroleum Institute
4.	BOPD	Barrels of Oil Per Day
5.	CNG	Condensed Natural Gas
6.	CO_2	Carbon dioxide
7.	CSO	Civil Society Organisation
8.	EA	Exploration Area
9.	EIA	Environmental Impact Assessment
10.	EITI	Extractive Industries Transparency Initiative
11.	EPS	Early Production Scheme
12.	GTL	Gas to Liquid
13.	HSE	Health Safety and Environment
14.	md	millidarcy
15.	MEMD	Ministry of Energy and Mineral Development
16.	NATOIL	National Oil Company
17.	NCHE	National Council for Higher Education
18.	NEMA	National Environment Management Authority
19.	NIMES	National Integrated Monitoring and Evaluation Strategy
20.	NPV	Net Present Value
21.	PAU	Petroleum Authority of Uganda
22.	PEAP	Poverty Eradication Action Plan
23.	PEPD	Petroleum Exploration and Production Department
24.	PMA	Plan for Modernisation of Agriculture
25.	PSA	Production Sharing Agreement
26.	RBP	Regulatory Best Practice
27.	UWA	Uganda Wildlife Authority

EXECUTIVE SUMMARY

The Need for a National Oil and Gas Policy

The effort to establish Uganda's oil and gas potential has been successful and it has now been established that the country has commercial reserves of oil. Four oil fields namely Mputa, Waraga, Nzizi and Kingfisher have been discovered and a minimum of three hundred (300) million barrels of oil is estimated to be in place in the Kaiso Tonya area, which covers less than 5% of the entire prospective belt. A significant level of investment continues to be made to undertake seismic surveys together with exploration and appraisal drilling in the country, and therefore the country's reserves are expected to increase as further exploration work is undertaken.

These developments have necessitated putting in place a National Oil and Gas Policy to address the entire spectrum of exploration, development and production of the country's oil and gas resources more comprehensively than in the Energy Policy of 2002. The broad objective of the Energy policy with regard to the petroleum subsector was to promote the petroleum potential of the country with a view of attracting investment in the subsector and monitor exploration programmes. Emphasis was laid on capacity building for petroleum exploration; acquisition of geoscientific data and information; attraction of investments for more expensive petroleum exploration operations like seismic surveys and drilling; contract negotiations; and monitoring of exploration operations. The country now needs to focus beyond the oil discovery stage and plan for sustainable oil and gas production, processing and utilization, hence the need for a more comprehensive policy framework with robust objectives, strategies and actions.

The Issues

The policy identifies the following issues for the country with regard to the petroleum sub sector:

1. Development of institutions, including legislation and manpower, necessary for effective management and regulation of the subsector.
2. Establishment of the country's oil and gas resource base so as to facilitate short, medium and long term planning for the subsector.
3. Management of the country's oil and gas resources together with the revenues accruing therefrom, in a manner that facilitates sustainable development and avoids distortion and destruction of the nation's economy.
4. Managing the impact of an emerging oil and gas sub sector on, among others, the country's governance system, the economy, the environment and subsequently human development.
5. Contribution of oil and gas resources to the country's energy mix.
6. Ensuring that the country provides a conducive environment for attracting the levels of investment required to establish the country's resource potential and facilitate its development.
7. Participation of the country's private sector and its entrepreneurs in the oil and gas activities.
8. Management of expectations, arising out of the perceived benefits of oil and gas activities, together with the anxiety arising from some experiences of poor management of this subsector in other parts of the world.

The Policy Framework: The Principles, Goal, Objectives and Actions.

This policy is based on the following principles:
i) Using finite resources to create lasting benefits to society;
ii) Efficient Resource Management; iii) Transparency and Accountability;
iv) Protection of the Environment and Biodiversity;
v) Spirit of Cooperation; and vi) Capacity and Institutional Building;

The Policy Goal is to use the country's oil and gas resources to contribute to early achievement of poverty eradication and create lasting value to society.

The objectives of the Policy are:

i) To ensure efficiency in licensing areas with the potential for oil and gas production in the country.

ii) To establish and efficiently manage the country's oil and gas resource potential. iii) To efficiently produce the country's oil and gas resources. iv) To promote valuable utilization of the country's oil and gas resources.

v) To promote the development of suitable transport solutions which give good value to the country's oil and gas resources.

vi) To ensure collection of the right revenues and use them to create lasting value for the entire nation.

vii) To ensure optimum national participation in oil and gas activities.

viii) To support the development and maintenance of national skills and expertise.

ix) To ensure that oil and gas activities are undertaken in a manner that conserves the environment and biodiversity.

x) To ensure mutually beneficial relationships between all stakeholders in the development of a desirable oil and gas sub sector for the country.

Linkages of the National Oil and Gas Policy to the Country's key policy frameworks.

The impact and linkages of the National Oil and Gas Policy to the country's key policy frameworks like the Poverty Eradication Action Plan (PEAP), the Plan for Modernization of Agriculture (PMA) and the country's drive for industrialization, have been articulated in the respective sections of the policy document.

Uganda's Poverty Eradication Action Plan (PEAP) focuses on promoting privatesector led economic growth in such a way that growth leads to a reduction of absolute poverty in the country to levels below 10% by the year 2015. The development of an oil and gas sub sector in the country will contribute significantly to the early achievement of the above goal by enhancing the country's capacity to invest in productive sectors of the economy, development of new

economic and social infrastructure, increasing power generation capacity and the general enhancement of energy security through production and refining of oil.

Oil and gas activities will have a positive impact on the country's Plan for Modernization of Agriculture (PMA) through the enhancement of areas with higher multiplier effects, like provision of energy services and infrastructure for rural agroprocessing industries, together with the increased use of modern and mechanized agriculture through the provision of more affordable inputs like fuels and fertilizers.

Oil and gas operations will provide opportunities for both forward and backward linkages in the country's industrialization drive. On one hand, oil and gas activities will provide raw materials which will be used as inputs during the manufacturing process. On the other hand, oil and gas activities will act as a market for industrial products, both directly and indirectly. Oil and gas operations will provide the country an opportunity to develop a petrochemical industry. This will include industries like oil refining; the offshoot industries utilizing the refinery byproducts to produce soap, plastics, pesticides, paints, medicine, asphalt, chemicals and others; together with industries arising from the utilization of natural gas like cement production, iron ore smelting and production of fertilizers.

The Policy also addresses the crosscutting issues between oil and gas activities and the country's education and research plans, employment opportunities and patterns, population distribution, land ownership and use, energy availability together with relationships with other countries. It also recognizes that if the country's petroleum resources and revenues are not well managed, the sub sector has the potential to have the most negative impact on society, "The Oil Curse" or the paradox of plenty. The oil curse is the negative effect of oil and gas resource utilization leading to economic stagnation, environment degradation and increased poverty. The oil curse can and should be avoided.

Institutional and Regulatory Framework

Promotion of the country's petroleum potential together with implementing and regulating the initial exploration efforts have been ably undertaken by the Ministry of Energy and Mineral Development through the Petroleum Exploration and Production Department, (PEPD) and good results have been achieved. However, the increasing number of investors, subcontractors and other stakeholders are leading to an increase in the volume and complexity of tasks in managing this sub sector. In line with Government's institutional reform policy of Regulatory Best Practice (RBP), policy, regulation and the business/commercial aspects of the oil and gas sub sector will be separated. The Ministry responsible for oil and gas will handle the policy aspects while new institutions will be set up to handle the regulatory and business/commercial aspects respectively. The regulatory functions will be handled by the Petroleum Authority of Uganda (PAU) while the business/commercial aspects will be handled by the Uganda National Oil Company (NATOIL). The roles of these institutions together with those of the other institutions of Government and Civil Society are described in the policy.

The Policy recommends upgrading of the existing regulatory framework by putting in place a new law for the administration of oil and gas activities and a law for the management of oil and gas revenues. The former will better provide for the development and production phases of the oil and gas value chain, bring on board international best practice in areas like improved oil recovery together with Health, Safety and Environmental standards. It will also operationalise the Oil and Gas Policy by providing for, among others, competitive licensing and national content in the sub sector. The latter will be formulated to regulate the payment, use and management of oil and gas revenues and their use to create lasting value for the entire nation. This will include prescribing the necessary frameworks to manage the revenues used to support the national economy and creation of a sustainable asset in form of a petroleum fund to store revenues not used in the national economy. It shall also provide for the sharing of royalties in accordance with the constitution.

The Formulation Process

The National Oil and Gas Policy is a result of an intensive consultative process which started with the review of oil and gas policies from Algeria, Chad, Egypt, East Timor, Indonesia, Kenya, Libya, Malaysia, Mozambique, Nigeria, Norway, Pakistan, Russia, Sao Tome and Principe, South Africa, Tanzania, United Kingdom, USA and Venezuela.

Three consultative meetings and workshops were held with technical staff of various government institutions between 25th28th April, 2006; 17th18th July, 2006; and 31st July1st August, 2006 after which a working document of the draft policy was formulated.

The draft policy was then forwarded to representatives of local and urban authorities, cultural institutions in the Albertine Graben, civil society organizations and academic institutions for their review before participating in a two day stakeholder's consultative workshop held between 29th and 30th November, 2006. Many views received during the workshop were incorporated in the draft policy. It was presented and discussed at the Permanent Secretaries meeting held on 7th August, 2007.

Additional consultative meetings were held on 10th, 12th of August and 3rd December, 2007 in Hoima, Arua and Kasese respectively. The meetings were attended by area Members of Parliament, officials of the District Executive Committees and Council Members of the districts of Hoima, Masindi, Kibale, Bullisa, Arua, Nebbi, Moyo, Amuru, Gulu, Kabarole, Kyenjojo Bundibugyo, Kasese, Kamwenge, Bushenyi, Rukungiri and Kanungu.

Guidance was received from H.E. the President when he reviewed the draft policy with the

Ministries of Energy and Mineral Development, Finance, Planning and Economic Development and Justice and Constitutional Affairs at State House, Nakasero on 25th September, 2007. A consultative workshop was held for Cabinet on 26th September 2007 in which the draft policy was presented for consideration before formal submission for approval. The comments received during these meetings enriched the policy immensely. The policy was approved by Cabinet on 30th January, 2008.

1 INTRODUCTION

The effort to promote Uganda's oil and gas potential has led to intensified exploration work being undertaken in the Albertine Graben. This culminated in the confirmation of the existence of commercial reserves of oil in the country during 2006. It is now apparent that petroleum will be produced in the country. This has occasioned the formulation of a National Oil and Gas Policy to address the entire spectrum of exploration, development and production of the country's oil and gas resources more comprehensively than in the Energy Policy of 2002.

The policy seeks to put in place a framework that will create a conducive environment for efficient management of:

- Continued promotion and exploration of the country's oil and gas potential;
- Evaluation of the discovered oil and gas reserves;
- Exploitation and utilization of these reserves, and
- Revenues accruing from the country's oil and gas resources

Oil and gas are nonrenewable extractive resources which are therefore finite. Their exploitation and utilisation shall therefore be undertaken in a manner that creates durable and sustainable social and economic capacity for the country. These resources have the potential to provide immense benefits to the country through creation of employment, generation of revenues, development of infrastructure, and subsequently fasttracking social transformation of the country. Oil and gas

resources and the revenues accruing from them can also pose challenges of windfall revenue phenomenon and the paradox of plenty if not well managed.

This policy is designed to maximize the benefits and meet the challenges by providing for appropriate resource management systems and procedures in line with the country's Poverty Eradication Action Plan (PEAP). It seeks to achieve this by providing for; the setting up of relevant institutions and capacity building in the country; attraction of companies to invest in the development of the country's petroleum sector; adequate and commensurate return on the companies' investments; ensuring the country's receipt of appropriate share and benefits from any oil and gas resources and activities; and ensuring efficient and effective utilization of these resources together with the revenues accruing there from.

The policy emphasizes the deliberate implementation of National participation in oil and gas activities in order to expand employment opportunities, acquire diversified skills and enable application of the skills learnt from the oil industry into other sectors of the economy. Development of an oil and gas sector provides the country opportunities for the mitigation of shocks from international oil and gas prices together with generation of revenues that can support development of other sectors of the economy, thereby contributing to both poverty reduction and the achievement of sustainable development.

A background to this policy, its scope and the status of the legal and contractual frame conditions are presented in the opening chapter. This is followed by a description of the country's oil and gas resource base. The subsequent chapter presents the key issues in the oil and gas sector in the country. The key issues identified in this policy include development of institutions to regulate the sector, the size of the country's oil and gas reserves, oil and gas revenue management, the social and economic impact of oil and gas activities, the contribution of oil and gas to the energy mix, attraction of the investment required for developing the sector, development of national capacity to participate in the sector.

The policy framework is then presented starting with the guiding principles, followed by the policy goal and policy objectives respectively. Strategies to achieve the identified objectives together with the recommended actions are also presented in this chapter. The policy proposes a new law to regulate the payment, use and management of petroleum revenues under the objective of ensuring collection of the right revenues and using them to create lasting value for the entire nation.

The policy then addresses the crosscutting issues as impacts of oil and gas activities on the other sectors. These include impacts on the national economy, environment and social conditions, education and research together with foreign relations.

An institutional framework for managing the oil and gas sector in the country is presented together with the roles of the different institutions therein. This policy is concluded by addressing its financing together with the systems for monitoring and evaluating its implementation.

2 BACKGROUND AND SCOPE

2.1 BACKGROUND

Ownership and control of minerals and petroleum in, on or under any land or waters in the country is vested in the Government by Article 244 of the Constitution of the Republic of Uganda, 1995. The Constitution empowers parliament to make laws regulating the exploration and exploitation of minerals and petroleum, the management of accruing revenues, payment of indemnities, and the conditions for the restoration of derelict lands. This mandate together with the Petroleum (Exploration and Production) Act, Chapter 150 of the Laws of Uganda, 2000 and the Petroleum (Exploration and Production) (Conduct of Exploration Operations) Regulations, 1993 provide the legal and regulatory framework under which the Ministry of Energy and Mineral Development through the Petroleum Exploration and Production Department (PEPD), has promoted and regulated the

exploration of oil and gas in the country. This exploration effort has led to the discovery of commercial quantities of petroleum in the Albertine Graben, an area which runs along the entire western border of the country.

Government's strategy of promoting petroleum exploration in the country through capacity building, acquiring basic geoscientific information and using this information to attract investment in this subsector of development has been successful. Five out of the current nine Exploration Areas, identified to have good potential for petroleum production in the country have been licensed to international oil companies. Government continues to receive many applications for the unlicensed Exploration Areas.

The licensed oil companies are making significant investments in the country and some have advanced the exploration effort to the identification of specific petroleum prospects in the respective Exploration Areas licensed to them. Drilling of these prospects has recently led to the discovery of petroleum in the Waraga, Nzizi and Mputa prospects in the KaisoTonya area of Exploration Area 2. These prospects have been found to contain high quality petroleum in quantities sufficient to commence planning for the development and production of oil in the country. Drilling and well testing of the Kingfisher prospect in Exploration Area 3A indicates that this prospect also has accumulations of high quality petroleum. Efforts are now underway to establish the reserves of oil and gas in these discovered fields. These efforts include acquisition and interpretation of 3D seismic data over the fields together with further drilling to appraise their production potential.

In Exploration Area 1, 2D seismic data acquisition commenced at the beginning of 2007 and is ongoing. Similar surveys were also started in Exploration Area 5 towards the end of the year.

Three hundred (300) million barrels of oil are now estimated to be in place in the KaisoTonya area where the Waraga, Nzizi and Mputa discoveries were made. The KaisoTonya area covers less than 5% of the Albertine Graben, the area with the potential for petroleum production in the country. Plans are underway to produce 4,000 barrels of oil per day (BOPD) from the reserves identified todate. This production will feed an Early Production Scheme (EPS) scheduled to start producing kerosene, diesel and heavy fuel oil during 2009. The heavy fuel oil will be used to generate 50100MW of electricity to alleviate power shortages in the country. Kerosene and diesel will be distributed directly into the existing market.

As more resources are confirmed through the ongoing exploration and appraisal programmes, plans to undertake medium to large scale refining in the country to satisfy national and regional petroleum products requirements shall be formalised in line with the country's policy of value addition. Consideration for exports to international markets shall also subsequently be made as additional reserves continue to be established.

Although gas has been discovered in the Nzizi prospect, it is still necessary to establish the size of gas reserves in the country before making concrete plans for its utilisation. If sufficient reserves of gas are found in the country, plans shall be made to utilise gas for electricity generation together with setting up petrochemical industries and other value addition processes like manufacturing of fertilizers and smelting of iron ore for steel production.

In view of these developments, and in order to provide an environment that is conducive for all stakeholders to efficiently and harmoniously participate in the development of the oil and gas subsector in the country, there is need to formulate a National Oil and Gas Policy. The National Oil and Gas Policy addresses the entire spectrum of exploration, development and production of the country's oil and gas resources more comprehensively than the Energy Policy of 2002. It provides a basis for putting in place the necessary legislation, regulations and other

aspects of the institutional framework required for the efficient development of the sector.

The Energy Policy has provided a good framework for attracting investment and undertaking of petroleum exploration in the country. The National Oil and Gas Policy will provide the necessary framework for continued exploration, together with development and production of oil and gas in the country. The National Oil and Gas Policy shall supersede the Energy Policy with regard to matters pertaining to upstream petroleum activities.

2.2 SCOPE

The oil and gas value chain is subdivided into upstream, midstream and downstream respectively. Upstream covers promotion, licensing, exploration, development and production of petroleum. Midstream includes transportation, refining of oil and conversion of gas. It is recognised that upstream petroleum also includes aspects of transportation, especially with regard to transportation of oil and gas on petroleum fields and in between these fields and processing centres. Downstream petroleum deals with distribution, marketing and sale of petroleum products. The Energy Policy, 2002 provides for the regulation of the downstream subsector.

This policy provides for the administration, regulation and management of the upstream petroleum and presents a basis for regulating and investing in the midstream petroleum subsector.

The scope of this policy also includes relevant comments on the cross cutting issues regarding managing the social and economic impact of oil and gas activities on the other sectors of the economy together with management of revenues accruing from oil and gas resources. These comments are considered necessary in order to emphasize the necessary link between petroleum extraction policies and the overall policies and plans for economic and social development in the country.

This policy endeavours to avoid duplication of what is provided for in other existing national policies and plans, but makes reference to the following: Decentralization Policy 1992, Energy Policy 2002, National Environment Management Policy 1999, National Forestry Policy 2003, National Population Policy for Sustainable Development 1995, National Water Policy 1999, Poverty Eradication Action Plan 2004/5 – 2007/8, Plan for Modernisation of Agriculture, Public Enterprises Reform and Divesture of 1991, The National Fisheries Policy 2004, The Uganda Tourism Policy, 2003, The Uganda Wildlife Policy 1999 together with other national policies that impact on or are impacted on by this policy.

2.3 LEGAL AND CONTRACTUAL FRAME CONDITIONS

2.3.1 Petroleum Act: Status and Future Requirements

Petroleum exploration and production activities in the country are guided by the Petroleum (Exploration and Production) Act, Chapter 150 of the Laws of Uganda 2000. Downstream petroleum activities (i.e. distribution, marketing and sale of petroleum products), are guided by the Petroleum Supply Act of 2003. The former gives the responsibility of directing the upstream petroleum subsector to the Minister responsible for the sector. The Minister receives applications for any petroleum rights, and is responsible for issuing, renewing and revoking petroleum exploration and production licences. The Act also provides for a Commissioner of PEPD, who, together with the technical staff under him, carry out petroleum exploration promotion, initiate petroleum legislation and monitor oil companies' compliance with existing laws, regulations and agreements.

The Petroleum Act has served adequately the promotion, licensing and exploration for petroleum in the country, but will need to be reviewed after this Oil and Gas Policy is put in place, so as to operationalise the policy, make the Act more suitable to handle the development and production of oil and gas and appropriately capture the recent trends in the industry. The new Act will, among other things,

include provisions for the development and production of natural gas; bring on board international best practices in areas like Improved Oil Recovery (IOR) together with Health, Safety and Environment (HSE) standards; provide a harmonious relationship with the proposed law on management of petroleum revenues; provide for National participation as an effort to enhance value creation by oil and gas activities; and provide for a more competitive licensing process. The new Act will also take cognisance of the Petroleum Supply Act (2003), and adequately relate to the emerging issues of the midstream petroleum subsector (i.e. oil and gas transportation, processing and refining).

2.3.2 Petroleum Regulations: Status and Future Requirements

The Petroleum (Exploration and Production) (Conduct of Exploration Operations) Regulations, which were made in 1993, are the set of regulations currently guiding the conduct of operations in the upstream petroleum subsector.

There is need to revise these regulations in order to take into consideration the global improvements in technology over the recent past together with the increasing concern for environmental conservation and sustainable development. This will include implementation of international best practices like use of green dragon burners for flaring during flow testing of oil and gas wells instead of other types of burners which produce a lot of smoke and fumes and are therefore less friendly to the environment. The improved regulations will also better address the operations and activities undertaken during the development and production of oil and gas.

The activities to be regulated under the upstream petroleum subsector shall include exploration, development and the production of oil and gas. The new regulations will be in harmony with those for midstream (refining and transportation) and downstream (petroleum products distribution, marketing and sales) petroleum activities.

2.3.3 Petroleum Contracts: Status and Future Requirements

In addition to issuing of licences to oil companies, the Act provides for the entry into agreement by the oil companies and Government. The type of agreement used in the country is the Production Sharing Agreement (PSA). The parties to PSA's are the government and licensees (oil companies). The PSA details the specific obligations and requirements of the parties to the Agreement. These include work programmes and financial obligations, Health, Safety and Environment (HSE) requirements together with other data and reporting obligations.

To facilitate ease of negotiating PSA's with oil companies, Government prepared a model

Production Sharing Agreement detailing Government's positions on the different issues. The model PSA enables the oil company to easily identify areas on which it wishes to negotiate and forward counter proposals to Government. There will be need to update the model PSA in order to take into account the new policies and changing business environment in Uganda's oil and gas industry.

3 THE RESOURCE BASE: STATUS AND PROJECTIONS

Uganda is a land locked country in East Africa with Kenya to the East, Tanzania to the South, Rwanda to the South West, Democratic Republic of Congo to the west and Sudan to the North. The cost of petroleum products constitutes over 15% of the country's total import bill and these products are mainly imported through the port of Mombasa in Kenya, a distance of 1300km from the capital city Kampala. Some products are also imported through the port of Dar es Salaam in Tanzania, which is a longer distance from Kampala.

Although Uganda is mainly covered by Precambrian metamorphic and igneous rocks, 20% of the country is underlain by sedimentary rocks, which have the potential for generating and accumulating petroleum deposits.

Petroleum occurrence was first recorded in Uganda in the early 1920's. One deep well was drilled in 1938 which encountered some hydrocarbon shows but was not

tested. Several shallow wells were also drilled during the 1940's and 1950's for stratigraphic purposes. There was then a period of limited or no activity between 1940 and 1980 largely due to the Second World War and political instability in the country. A modern and consistent effort to establish the country's petroleum potential has been undertaken since the 1980s.

Aeromagnetic surveys undertaken during 1983 and 1992 respectively identified five sedimentary basins in the country. These are; the Albertine Graben, Lake Kyoga Basin, Hoima Basin, Lake Wamala Basin and MorotoKadam Basin. These aeromagnetic surveys were followed by ground gravity/magnetic surveys and geological mapping starting in the early 1990's. The aim of these surveys was to better define the extent and geometry of the subbasins in these major sedimentary basins and study the types of rocks distributed therein with a view of establishing their suitability for petroleum generation and accumulation.

Followup work on the ground has shown that the most prospective sedimentary basin todate is the Albertine Graben. The Lake Wamala basin and KadamMoroto exhibit thin sediment thicknesses which are not sufficient for the generation of petroleum. The sediments in the Hoima basin have been interpreted to be over mature for petroleum generation. Nevertheless, more work needs to be undertaken to properly evaluate the potential of Hoima and Kyoga basins.

The discovery wells drilled in the KaisoTonya and Bugoma areas by Hardman Petroleum Africa Pty Ltd (now Tullow Oil) and Heritage Oil and Gas Ltd respectively have confirmed the existence of a working petroleum system in the Albertine Graben. Flow rates of over 12,000 barrels of oil per day (bopd) from three zones in Waraga1, 1,100 bopd from two zones in Mputa1, 14mmscf/d of natural gas from one zone in Nzizi2, 1,800 bopd from one of the three potential zones of Mputa3 and over 14,000 bopd from three zones in Kingfisher1 have confirmed the existence of significant petroleum accumulations in the Graben. Currently, three hundred (300) million barrels of oil are estimated to be in place in the KaisoTonya area where the Waraga, Nzizi and Mputa discoveries have been made.

The KaisoTonya area covers less than 5% of the Albertine Graben.

3.1 SOURCE ROCKS

Source rocks are rocks rich in organic matter which, if heated sufficiently will generate oil and/or gas. In the Albertine Graben, bituminous, lacustrine, Miocene shales matured to generate oil and gas. Over 50 oil seepages are documented, and 10 confirmed, in and around Lake Albert. The seepages in the basin together with the shale sequences encountered on the surface during geological mapping and in the wells drilled, confirm the presence of high quality mature source rocks. The seepages confirm that these source rocks have generated oil which has migrated. A 200 m thick shale was encountered in the subsurface while drilling wells on the Turaco prospect in the Semliki Basin, Exploration Area 3B. Such a unit is expected to have sufficient potential to charge most of the prospects mapped in the Albertine Graben todate. This could explain why all the drilled prospects in the Albertine Graben todate have encountered hydrocarbons, a situation which does not always pertain in basins around the world where petroleum exploration is undertaken.

3.2 RESERVOIR ROCKS

Reservoir rocks are rocks having sufficient porosity and permeability to store and transmit fluids. Thick sequences of good quality reservoir sands have been mapped in outcrop at several locations in the basin. The middle Miocene Kisegi sandstone outcrop in the Semliki basin has been analysed and found to have porosities ranging between 20% and 30%. All the wells drilled in the Albertine Graben have encountered good quality sandstone rocks interbedded with clays and silts. These sandstones have been analysed to have potential to form good reservoirs, with porosities greater than 20% in most cases and occasionally up to 40%. Permeabilities range from 32 to 6,000 md in the wells where flow testing has been undertaken. These parameters would be considered very good for oil and gas reservoirs anywhere in the world.

Basement rocks impregnated with oil have been mapped in outcrops and also

encountered in the wells drilled to basement. There is therefore a high potential for commercial oil and gas reservoirs in the basement rocks adjacent to the Albertine Graben.
Reservoirs in basement are well known to produce oil in other parts of the world.

3.3 TRAPS AND SEALS

The structural setting of the Albertine Graben provides for the development of full grabens and half grabens separated by accommodation zones. Areas around the accommodation zones and along the major basin bounding faults have provided good structural traps in which petroleum has accumulated. Tectonic activity has also created a range of potential structural traps including tilted fault blocks, anticlines together with the more complex 'flower structures' in the Graben.

Clay and shale sequences have been mapped intercalated with sands in the Graben. As is typical of rift basins, sediments in the Albertine Graben indicate relatively rapid facies changes during deposition. Relatively well worked sand deposits within the central part of the basin and alluvial fans along the basin margins are conducive for formation of stratigraphic traps.

Clay sequences of over 100m thick have been encountered both in outcrop and in the drilled wells. These sequences provide the seals required to hold hydrocarbon accumulations in the subsurface.

Preliminary interpretation of the data acquired in the Albertine Graben todate also indicates good potential for shallow gas and shale gas accumulations. These types of gas plays are well known and are being exploited in other parts of the world.

3.4 LICENSING STATUS AND PROGRESS OF EXPLORATION

The Albertine Graben is currently subdivided into nine Exploration Areas (EAs), five of which are licensed to oil companies, and four are yet to be licensed as shown in Figure 1 below;

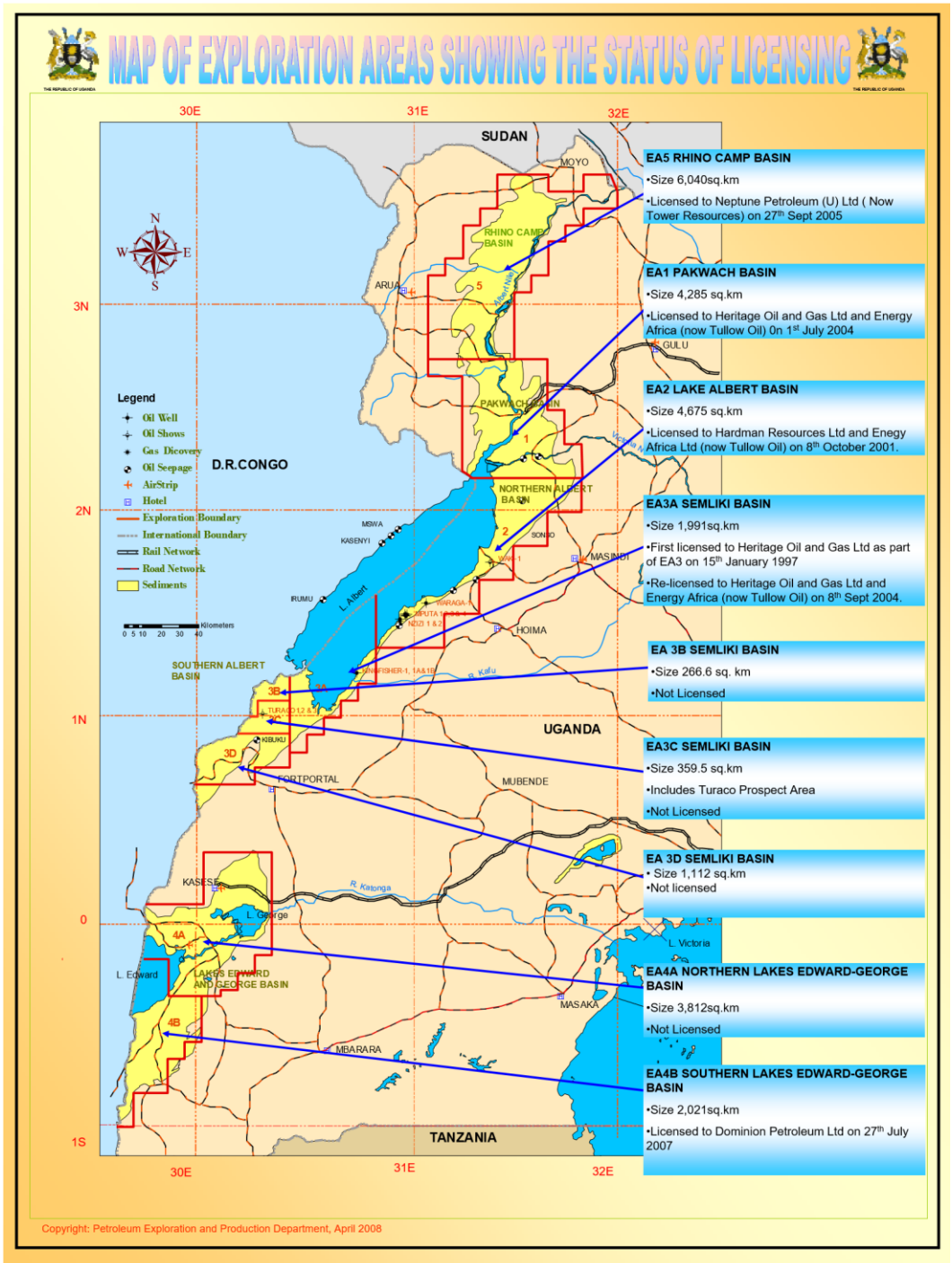

MAP OF EXPLORATION AREAS SHOWING THE STATUS OF LICENSING
30E
31E
32E
3N
2N
1N
0
1S
SUDAN
MOYO
RHINO CAMP BASIN
ARUA
PAKWACH BASIN
GULU
D.R.CONGO
NORTHERN ALBERT BASIN
MASINDI
HOIMA
SOUTHERN ALBERT BASIN
UGANDA
KIBUKU
FORTPORTAL
MUBENDE
KASESE
L. George
L. Victoria
L. Edward
LAKES EDWARD AND GEORGE BASIN
MASAKA
MBARARA
TANZANIA
Legend
Oil Well
Oil Shows
Gas Discovery
Oil Seepage
AirStrip
Hotel
Exploration Boundary
International Boundary
Rail Network
Road Network
Sediments
Kilometers
0 5 10 20 30 40
EA5 RHINO CAMP BASIN
•Size 6,040sq.km
•Licensed to Neptune Petroleum (U) Ltd (Now Tower Resources) on 27th Sept 2005
EA1 PAKWACH BASIN
•Size 4,285 sq.km
•Licensed to Heritage Oil and Gas Ltd and Energy Africa (now Tullow Oil) On 1st July 2004
EA2 LAKE ALBERT BASIN
•Size 4,675 sq.km
•Licensed to Hardman Resources Ltd and Enegy Africa Ltd (now Tullow Oil) on 8th October 2001.
EA3A SEMLIKI BASIN
•Size 1,991sq.km
•First licensed to Heritage Oil and Gas Ltd as part of EA3 on 15th January 1997
•Re-licensed to Heritage Oil and Gas Ltd and Energy Africa (now Tullow Oil) on 8th Sept 2004.
EA 3B SEMLIKI BASIN
•Size 266.6 sq. km
•Not Licensed
EA3C SEMLIKI BASIN
•Size 359.5 sq.km
•Includes Turaco Prospect Area
•Not Licensed
EA 3D SEMLIKI BASIN
• Size 1,112 sq.km
•Not licensed
EA4A NORTHERN LAKES EDWARD-GEORGE BASIN
•Size 3,812sq.km
•Not Licensed
EA4B SOUTHERN LAKES EDWARD-GEORGE BASIN
•Size 2,021sq.km
•Licensed to Dominion Petroleum Ltd on 27th July 2007
Copyright: Petroleum Exploration and Production Department, April 2008

Figure 1; Exploration Areas in the Albertine Graben and the Status of Licensing

Exploration Area 1 **(Pakwach Basin):**

Exploration Area 1 was licensed to Heritage Oil and Gas Ltd in partnership with Energy Africa, (now Tullow Oil) on 1st July, 2004. 2D seismic data has been acquired in the area during 2007. Interpretation of the seismic data has identified potential prospects for drilling.

Plans to drill the identified prospects are under consideration.

Exploration Area 2, **(Northern Lake Albert Basin):**

Exploration Area 2 was licensed to Hardman Petroleum Africa Pty Ltd in partnership with

Energy Africa Ltd. (now Tullow Oil), on 8th October 2001. Hardman Petroleum Africa Pty Ltd. was bought by Tullow Oil in January 2007 making the latter the sole licensee. 2D seismic data were acquired over Lake Albert and on land during 2003 and 2005 respectively. Interpretation of the seismic data identified several prospects, both onshore and offshore. Two of these prospects onshore namely Waraga and Mputa have been drilled and found to contain oil. A third onshore prospect, Nzizi, has been found to contain natural gas. Drilling of the fourth prospect, Ngassa, commenced during November, 2007.

Three zones in the Waraga1 well which was drilled on the Waraga prospect were tested and gave a combined flow rate of over 12,050 bopd. The oil encountered in the three zones has a specific gravity ranging between 31340 API. Four wells namely Mputa1, Mputa2, Mputa3 and Mputa4 have been drilled on the Mputa oil field. Three zones in Mputa1 well were also tested and two of the zones were found to have a combined flow rate of over 1,100 bopd with oil of 320API. Although hydrocarbons were encountered, no flow testing was undertaken at Mputa2 mainly because of the slim hole nature of the well which could not accommodate the testing equipment.

Mputa3 was flow tested during August, 2007 and it flowed 1,800 bopd from one of the three zones that were found to contain oil. The other two zones which were not tested are believed to be in communication with those in Mputa1 which were tested earlier. Mputa4 was flow tested during October/November, 2007 and oil of 33o API flowed at 1,160 bopd from the interval that was tested. The Nzizi1 and Nzizi2 wells drilled on the Nzizi prospect encountered both oil and natural gas. Drill stem testing of Nzizi2 flowed 14mmscf/d of dry natural gas.

Acquisition of 3D seismic data in the KaisoTonya area and over the adjacent part of Lake Albert commenced during June 2007 and is expected to last a period of nine months. These seismic surveys and drilling programmes will lead to better definition of the reserves in the identified oil fields and prospects.

Plans to develop an Early Production Scheme from these discoveries are underway.
Construction of a topping plant (minirefinery) is expected to commence during 2008. Production of oil to supply this topping plant (minirefinery) and generation of electricity using HFO from the plant are expected to start during 2009.

***Exploration Area 3A* (Southern Lake Albert Basin):**
The area was first licensed to Heritage Oil and Gas Ltd as part of EA3 on 15th January 1997. The area was relicensed to Heritage Oil and Gas Ltd together with Tullow Oil on September 8th 2004. Seismic data were acquired over the lake, land and transition zones during 2003, 2004 and 2005 respectively. Interpretation of the seismic data led to the identification of several prospects both on land and under the lake. The companies drilled the first well, Kingfisher1 on the Kingfisher prospect on the shores of Lake Albert. The well identified three hydrocarbon bearing zones which were tested and flowed a cumulative total of over 14,000 bopd.

A 3D seismic survey over the Kingfisher and Pelican prospects in this Exploration Area was undertaken during 2007. Interpretation of the acquired data will help to better define the extent of the two prospects in preparation for further drilling on the Kingfisher prospect and exploration drilling on the Pelican prospect. Additional 2D seismic data was also acquired in the Southern part of Lake Albert during 2007 with a view of identifying additional prospects in that part of the Exploration Area.

Exploration Area 3B (Semliki Basin):

About 400 line kilometres of 2D and 390sq.km of 3D seismic data were acquired on land in this Exploration Area. Interpretation of the seismic data led to the identification of several prospects in the area. Three wells were drilled on the Turaco prospect, one of the prospects mapped in the area. These wells intersected oil and gas bearing intervals. Well testing was undertaken on one of the zones in this prospect. The tested zone flowed natural gas which was significantly contaminated by Carbon dioxide. The other zones identified to contain hydrocarbons in this well were not tested. The license over this area expired during 2006 and it is currently not licensed. The other prospects in this area have not yet been tested by drilling. The available data have been used to better understand the petroleum potential of the area, and the area has now been subdivided into three Exploration Areas 3B, 3C and 3D which will be promoted to oil companies for relicensing in line with the guidelines of this policy and subsequent legislation.

Exploration Area 4A (Northern Lakes Edward and George Basin):

Gravity and Magnetic data, together with surface geological and geochemistry data have been acquired by Government over this area. These data have confirmed the presence of both source and reservoir rocks in the area. Interpretation of the gravity data acquired in the area has also demonstrated the presence of structures with the potential for petroleum accumulation. Several oil companies have expressed interest in acquiring exploration rights over the area, but their applications are awaiting a new licensing policy.

Exploration Area 4B (Southern Lakes Edward and George Basin):

The area was licensed to Dominion Petroleum (U) Ltd on July 27, 2007. The company is carrying out studies of the existing data which was acquired earlier by Government in preparation for undertaking a 2D seismic survey over the area.

Exploration Area 5 **(Rhino Camp Basin):**

The area was licensed to Neptune Petroleum (U) Ltd now Tower Resources on 27th September, 2005. The company commenced the acquisition of 2D seismic data over the area during November, 2007.

3.5 GENERAL PROSPECTIVITY AND FUTURE OULOOK

The ten deep wells recently drilled on the Turaco, Waraga, Mputa, Nzizi and Kingfisher prospects in the Graben have not only confirmed the presence of a working petroleum system in the area, but have also demonstrated that there is no major risk associated with petroleum exploration in the Albertine Graben. Future plans shall therefore include promoting and licensing the acreage which is not yet licensed, together with fast tracking the appraisal and development of the discoveries made so far, with a view of achieving early production of petroleum in the country and better establishing the country's resource potential.

4 THE ISSUES

Confirmation that Uganda has commercially exploitable quantities of oil and gas raises the following issues:

4.1 INSTITUTIONAL DEVELOPMENT

There is a need to put in place the institutional framework required to manage and regulate this new sector of development. This framework will necessitate the introduction of new legislation and institutions, together with the enhancement of existing ones. Significant training and other capacity building efforts will have to be undertaken in order to enable the established institutions to effectively carry out their different mandates.

4.2 SIZE OF RESERVES

Plans for exploiting the country's oil and gas resources will be based on the size of the reserves. Although the reserves established in the country todate are already sufficient for small scale production, it is necessary that additional efforts are made to establish the country's oil and gas reserve potential by continuing exploration and appraising the discoveries made so far. This will facilitate establishment of long term development plans for the oil and gas sector in the country.

In addition to the work being undertaken in the Exploration Areas already under license, there will be need to license other areas with the potential for petroleum production in the country. The areas currently under licence but subsequently relinquished will also require to be relicensed. It is therefore necessary for an open, efficient, transparent and effective licensing process to be put in place.

There will be need to safeguard the established oil and gas reserves in the country by avoiding poor extraction practices, such as excessive production from wells without due regard to the impact on the entire reservoir, thereby leading to loss of integrity of the reservoirs. Efficient production will contribute to avoiding poor extraction practices.

4.3 OIL AND GAS REVENUE MANAGEMENT

The development of an oil and gas sector is expected to generate revenues for the country, which will increase with the level of production and could escalate significantly. The earning of significant revenues from oil and gas resources will create a new environment for the country which is currently among the least developed countries in the world and is classified as financially constrained. Managing these revenues in a manner that facilitates sustainable development and avoids distortion and destruction of the economy will require well defined and deliberate efforts. These efforts will need to ensure that the country receives the right revenues and that these revenues are used to achieve equitable, sustainable

and value oriented national development for the current generation while also providing for future generations.

4.4 IMPACT OF OIL AND GAS ACTIVITIES

The opportunity to exploit indigenous oil and gas resources means that oil and gas activities are going to become an important sector of development in the country. This sector has the potential to significantly impact the already existing sectors and can be an important engine for poverty reduction and sustainable development. It can also create negative economic and social impacts if not managed properly. Governance, the economy, the environment and subsequently human development will be impacted upon by an emerging oil and gas sector in the country.

Many of the areas with the potential for petroleum production in the country also coincide with areas of important biodiversity like national parks, water bodies, game and forest reserves among others. Due consideration will therefore be necessary so as to ensure harmony between developing the country's oil and gas resources and conserving its rich biodiversity.

4.5 CONTRIBUTION OF OIL AND GAS RESOURCES TO THE ENERGY MIX

Biomass constitutes over 90% of the country's energy supply while hydropower and imported petroleum products constitute 1% and 6%, respectively. The country is currently experiencing a severe shortage of electricity mainly due to low production of hydropower and increasing electricity demand. Indigenous oil and gas resources can be used to contribute to addressing the current severe shortage of electricity in the country in a more timely manner through thermal generation of electricity. Achieving generation in a timely manner would necessitate fast tracking the production of oil and gas in the country. In addition to the generation of electricity, the country's oil and gas resources, when processed, shall contribute to substitution of imported petroleum products.

4.6 INVESTMENT PROMOTION

Significant investments are required to establish the country's oil and gas resource potential and develop the established reserves. Tens of millions of United States Dollars are required for seismic surveys and drilling to establish the resource potential in the different Exploration Areas. Bigger investments ranging in hundreds of millions of United States dollars will be required to appraise and develop any discovered oil and gas fields as well as putting in place the infrastructure necessary for transporting, storing and processing oil and gas. Efforts will therefore need to be made to attract the investment required to undertake these activities through promotion of the investment opportunities in this sector and ensuring that the country is conducive to attracting and sustaining the required levels of investment.

4.7 NATIONAL PARTICIPATION

Development of an oil and gas sector will lead to receipt of significant investments by the country. Whereas most of these investments will be for the development of the oil and gas sector, others will be for the resulting opportunities in the other sectors of the economy. It is necessary to use these investments to create as much value as possible in the country. National participation through shareholding in licences and provision of goods and services by the country's entrepreneurs shall be some of the key avenues to achieve the desired value creation in the country from these investments.

The extent to which the country's private sector and its entrepreneurs can participate in oil and gas activities is currently limited by their financial capacity, together with their management and technological skills. It is therefore necessary for the country's private sector to acquire and develop the skills necessary to participate in this sector of development, and where possible, for it to be provided with the opportunity to participate.

4.8 PUBLIC ANXIETY AND EXPECTATIONS

The perceived importance and benefits of oil and gas activities in the country have raised significant expectations in the public, while the poor management of the sector in other countries, especially in Africa, has raised some anxiety. The nature of benefits to be realised from oil and gas activities, the time it will take before these benefits are realised and how any benefits will be shared are concerns being raised by the public. Timely information dissemination will go a long way in addressing these concerns. Constructive dialogue together with respectful and mutually beneficial relationships between the state, oil companies and other stakeholders will also contribute to reducing any anxieties and managing expectations.

5 THE POLICY FRAMEWORK

5. 1 GUIDING PRINCIPLES

This policy is to be guided by the following principles:

5. 1.1 Using Finite Resources to Create Lasting Benefits to Society

Oil and gas are nonrenewable finite resources and therefore the benefits accruing from them may end with exhaustion and depletion of the fields. This policy promotes the safe guarding of these resources and managing them in a manner that will create lasting benefits to society. Creation of lasting benefits shall include the use of these resources to develop durable and competitive competencies through education, infrastructure development, together with financial and social capital which are useful beyond the life of the oil and gas. The activities of the current generation shall not put a burden on future generations especially with regard to the depletion of nonrenewable resources. These resources shall, therefore, also be used to provide for intergenerational equity. Sustainable resource management, as opposed to accelerated revenue generation will, among other things, contribute to creating lasting benefits to society.

5. 1.2 Efficient Resource Management

Oil and gas activities should be most efficient and effective so as to maximize their returns. This policy strives to ensure that oil and gas resources are managed efficiently through reducing costs of operations and maintaining optimal levels of production. It also promotes effective revenue management by striving to ensure that petroleum revenues are used to boost balanced growth and sustainable development. Revenues accruing from oil and gas resources shall not be used for consumer purposes, but for durable investments like infrastructure development and other activities which will contribute to lowering the cost of doing business in the country.

5. 1.3 Transparency and Accountability.

Openness and access to information are fundamental rights in activities that may positively or negatively impact individuals, communities and states. It is important that information that will enable stakeholders to assess how their interests are being affected is disclosed.

This policy recognises the important roles different stakeholders have to play in order to achieve transparency and accountability in the oil and gas activities.

The policy shall therefore promote high standards of transparency and accountability in licensing, procurement, exploration, development and production operations as well as management of revenues from oil and gas. The policy will also support disclosure of payments and revenues from oil and gas using simple and easily understood principles in line with accepted national and international financial reporting standards.

5. 1.4 Competitiveness and Productivity.

It is through competition among licensees, operators, and suppliers, that cost effective choices can be achieved. Competition enables selection of the most capable operators, the most efficient, the best quality, and the most reliable suppliers thereby ensuring high levels of productivity. It is this that justifies the principle of open bidding. In the private sector, it is vital for managers to

maximize returns to investors and shareholders. In the public sector the same principle applies to maximize returns to society both for the current and the future generations. This policy shall support fair competition with a view of improving efficiency and productivity in oil and gas operations.

5. 1.5 Protection of the Environment and Conservation of Biodiversity

The environment, human development and biodiversity should be neatly balanced for mutual benefit and survival. Many actors engage in development initiatives and interventions focusing on expected benefits and often end up by doing harm. This policy shall contribute to and promote this balance to ensure sustainable development. It is the responsibility of licensed oil companies to protect the environment where they work or any areas in the country impacted by their operations while Government shall legislate, regulate and monitor compliance.

5. 1.6 Spirit of Cooperation

The relationships between government, oil companies, and other stakeholders should be conducted and maintained in a spirit of mutual respect, cooperation and trust. Mutual understanding shall be promoted by adequate twoway communication and constructive dialogue. This system of cooperation will be extended to communities in the oil and gas producing regions and any pipeline corridors. The interests of local communities in areas where oil and gas production is undertaken shall be taken into account by, among other things, sharing of royalties in line with the Constitution and any relevant laws passed by Parliament. All efforts shall be made to avoid the development of conflicts and emphasize peaceful resolution of disputes. Where oil and gas activities or their impacts extend to neighbouring countries, this spirit shall be exercised in accordance with the principles grounded in the country's foreign policy.

5.1.7 Capacity and Institution Building

National capacity building is an essential ingredient in enabling the country to participate in, and benefit from, oil and gas activities. The oil and gas sector shall contribute to the development of sustainability, endurance and prosperity through institutional capacity building. Institutional capacity building shall entail development of the necessary regulatory framework, infrastructure and manpower.

This policy promotes capacity building for both the authorities and national entrepreneurs. The oil companies operating in the country shall be expected to contribute to this effort and in the transfer of technology.

5.2 GOAL

The goal of this policy is to use the country's oil and gas resources to contribute to early achievement of poverty eradication and create lasting value to society.

5.3 OBJECTIVES

The objectives of the National Oil and Gas Policy are;

5.3.1 To ensure efficiency in licensing areas with the potential for oil and gas production in the country.

5.3.2 To establish and efficiently manage the country's oil and gas resource potential.

5.3.3 To efficiently produce the country's oil and gas resources.

5.3.4 To promote valuable utilization of the country's oil and gas resources.

5.3.5 To promote the development of suitable transport and storage solutions which give good value to the country's oil and gas resources.

5.3.6 To ensure collection of the right revenues and use them to create lasting value for the entire nation.

5.3.7 To ensure optimum national participation in oil and gas activities.

5.3.8 To support the development and maintenance of national skills and expertise.

5.3.9 To ensure that oil and gas activities are undertaken in a manner that conserves the environment and biodiversity.

5.3.10 To ensure mutually beneficial relationships between all stakeholders in the development of a desirable oil and gas sector for the country.

5.4 STRATEGIES AND ACTIONS TO ACHIEVE THE OBJECTIVES

Objective 1: To ensure efficiency in licensing areas with the potential for oil and gas production in the country.

Strategies:

(a) Promote the country's oil and gas potential with the view of attracting oil companies to invest in the country.

(b) Evaluate the merits of gradual licensing visavis licensing all the areas at once. Gradual licensing will optimize the license terms by attaining good work programmes and improved fiscal terms for the country. It will also enable the country to develop the required skills in tandem with the growth of the sector thereby facilitating better management of the resources

(c) Use open and transparent bidding as a basis for licensing and only consider other licensing options where necessary.

(d) Carry out due diligence on oil companies applying for licenses in the country with regard to their technical and financial capabilities together with their environmental standards. This may be undertaken with a view of prequalifying applicants.

(e) Avoid the undesirable situation of a monopoly by licensing and maintaining several oil companies in the country, so as to benefit from variety and competition in the way petroleum operations are implemented in the country.

(f) Review and update the existing model PSA to take into account the country's oil and gas potential.

Actions:

(i) Put in place appropriate petroleum legislation.

(ii) Acquire and prepare data for licensing.

(iii) Carry out promotional efforts.

(iv) Prepare procedures and criteria for competitive licensing.

(v) Undertake open and transparent licensing rounds.

Objective 2: To establish and effectively manage the country's oil and gas resource potential.

Strategies:

(a) Put in place an appropriate institutional framework for promoting and regulating petroleum exploration programmes.

(b) Set exploration parameters and targets for oil companies to accomplish.

(c) Optimize the integration and use of all available data in a license area for interpretation with a view to identifying all existing prospects therein.

(d) Rank the petroleum prospects identified in a licence area and testdrill the worthy ones in order of priority.

(e) Continuously update the country's oil and gas resource database.

Actions:

(i) Enact legislation for petroleum exploration in the country.

(ii) Carry out petroleum exploration in the country by undertaking seismic surveys and exploration drilling among others

(iii) Establish and develop institutions to promote, monitor, regulate and carry out petroleum exploration operations.

(iv) Establish and maintain a National Oil and Gas Resource Data Bank.

Objective 3: To efficiently produce the country's oil and gas resources.

Strategies:

(a) Keep in dialogue with oil companies during the preparation of development plans with a view of understanding the assumptions or approaches made by the companies.

(b) Undertake independent evaluations where necessary with a view of identifying any points of divergence from the plans presented by oil companies.

(c) Ensure that the country's oil and gas resources are produced optimally through cost effectiveness and where necessary, enhanced recovery.

(d) Hold timely consultations with licensees regarding tailend production with a view of considering any necessary incentives for continued production after the cut off point.

Actions:

(i) Establish an institution to monitor and regulate field development and production programmes.

(ii) Put in place the necessary regulatory framework for field development and production.

(iii) Plan and implement field development and production.

(iv) Plan and implement tail end production.

Objective 4: To promote valuable utilization of the country's oil and gas resources.

Strategies:

(a) Use oil and gas resources to contribute to the country's energy mix with a view of ensuring adequate energy supply.

(b) Optimise the use of the country's oil resources.

(c) Promote the use of natural gas especially in strategic areas like generation of electricity, production of steel and production of inputs for other industries.

(d) Prohibit venting and restrict flaring of natural gas.

Actions:

(i) Evaluate and document options for utilising the country's oil resources.

(ii) Evaluate and document the opportunities for utilising the country's gas resources.

(iii) Support the utilisation of Natural Gas.

(iv) Put in place the necessary regulatory framework for prohibiting venting and restricting flaring in order to avoid wastage of the resources and safeguarding the environment.

(v) Plan and Implement an Early Production Scheme (EPS) with a view of contributing to addressing the country's electricity needs.

(vi) Plan and implement a petroleum refining strategy with a view of supplying the national and regional petroleum products demand.

Objective 5: To promote the development of suitable transport and storage solutions which give good value to the country's oil and gas resources.

Strategies:

(a) Establish the potential destinations for the country's oil and gas resources.

(b) Promote efficient development and utilization of transport corridors and storage facilities.

(c) Prioritize the transport methods giving due recognition to cost, efficiency together with health, safety and environment considerations.

Actions:

(i) Evaluate the existing transport systems and storage facilities with a view of establishing their importance to oil and gas transportation and storage together with identifying any additional requirements.

(ii) Put in place the necessary regulatory framework for the utilization of transport corridors and tariff setting for oil and gas transportation.

(iii) Support development of the necessary transport and storage infrastructure for oil and gas.

Objective 6: **To ensure collection of the right revenues and use them to create lasting value for the entire nation**.

Strategies:

(a) Identify and document the different sources of revenue in oil and gas activities.

(b) Ensure collection of the right revenues due to Government taking into consideration that these revenues include both tax and nontax components.

(c) Publish the revenues received from oil and gas activities regularly.

(d) Ensure equity, fairness and transparency in the use of oil and gas revenues.

(e) Utilise petroleum revenues for supporting strategic areas of the national economy like education and research, development of infrastructure and other activities which contribute to lowering the cost of doing business in the country.

(f) Put in place a sustainable asset in form of a petroleum fund to store revenues not used in the national economy and creation of a permanent source of wealth as a provision for intergenerational equity.

(g) Evaluate spending criteria for the revenues used to support the national economy based on absorptive capacity and forecast rates of return.

(h) Take into account the interests of local governments and stakeholders during the development of oil and gas resources and sharing of royalties in accordance with the Constitution.

Actions:

(i) Put in place a law to regulate the payment, sharing, use and management of revenues accruing from oil and gas activities.

(ii) Put in place the necessary institutional framework for collection and management of oil and gas revenues.

(iii) Participate in the processes of the Extractive Industries and Transparency Initiative (EITI).

Objective 7: To ensure optimum national participation in oil and gas activities.

Strategies:

(a) Promote state participation in Production Sharing Agreements with a view of providing better opportunities for the state to understand the basis for decisions

in exploration, development and production, together with acquiring the skills necessary for commercial management of the sector.

(b) Promote use of the country's materials, goods and services in oil and gas sector activities.

(c) Promote participation of the country's entrepreneurs in providing goods and services to the subsector as a way of optimizing the contribution of oil and gas activities to the overall development of the country.

(d) Promote public private partnerships whose benefits outweigh their cost, and whose costs and benefits are mutually and fairly shared by the partners.
(e) Encourage civil society to participate in the building of a productive, vibrant and transparent oil and gas sector.
(f) Promote employment of Ugandans in the oil and gas sector.
(g) Promote transfer of skills and technology to the country.

Actions:

(i) Put in place the necessary regulatory framework for state participation and implementation of national content.
(ii) Put in place an institution to undertake state participation in oil and gas activities.
(iii) Identify the opportunities for national content in oil and gas activities and plan for its implementation.

Objective 8: To support the development and maintenance of national expertise.

Strategies:

(a) Identify the training skills required for the sector and plan for their development through both formal and industrial training.
(b) Utilise oil and gas activities in the country to support provision of the necessary training.
(c) Promote provision of goods and services to the sector by national enterprises and entrepreneurs as a way of building national expertise.
(d) Provide appropriate training to Government personnel in the relevant fields as one of the ways to facilitate professional dialogue with oil companies.
(e) Broaden the national education curricula to prepare the necessary workforce for the growing oil and gas sector in the country.
(f) Promote the development of skills during the implementation of oil and gas activities.

Actions:

(i) Train Government personnel in monitoring oil and gas exploration, development and production.

(ii) Review and expand the education curricula in the country with a view of producing the workforce required for oil and gas activities nationally.

(iii) Support the development of skills and competitive competencies necessary for the country's entrepreneurs to participate in the delivery of goods and services for the oil and gas sector.

(iv) Require licensed oil companies and their subcontractors to provide training to Ugandans.

Objective 9: **To ensure that oil and gas activities are undertaken in a manner that conserves the environment and biodiversity.**

Strategies

(a) Ensure availability of the necessary institutional and regulatory framework to address environment and biodiversity issues relevant to oil and gas activities.

(b) Ensure presence of the necessary capacity and facilities to monitor the impact of oil and gas activities on the environment and biodiversity.

(c) Require oil companies and their contractors/subcontractors to use self regulation and best practices in ensuring environmental protection and biodiversity conservation.

(d) Require oil companies and any other operators to make the necessary efforts to return all sites on which oil and gas activities are undertaken to their original condition as an environmental obligation.

Actions:

(i) Upgrade the relevant Environment and Biodiversity legislation to address oil and gas activities.

(ii) Strengthen the institutions with a mandate to manage the impact of oil and gas activities on the environment and biodiversity.

(iii) Develop physical master plans, environmental sensitivity maps and oil spill contingency plans for the oil and gas producing region and any transport corridors.

Objective 10: To ensure mutually beneficial relationships between all stakeholders in the development of a desirable oil and gas sector for the country.

Strategies:

(a) Recognise and promote the different roles of the state, oil companies and other stakeholders.

(b) Ensure that the PSA's entered into have clear obligations with regard to work programmes and fiscal obligations.

(c) Provide for clear procedures for any framework adjustments, arbitration, and exit points.

(d) Require good and established self regulation and monitoring mechanism by oil companies.

(e) Ensure that oil companies and their contractors/subcontractors implement the necessary guidelines regarding health and safety at work including provision of protective equipment where necessary.

(f) Encourage the implementation of corporate social responsibility by oil companies.

(g) Provide for availability of information that may be required by stakeholders.

Actions:

(i) Monitor and evaluate the performance of institutions participating in the development of the oil and gas sector in the country.

(ii) Periodically review the regulatory framework with a view of making any necessary changes.

(iii) Put in place an efficient communication strategy for the oil and gas sector.
(iv) Carry out adequate consultations with stakeholders especially in the oil and gas producing areas.

6 CROSSCUTTING ISSUES

This policy recognises issues in sectors other than the oil and gas sector, which will impact together with those which will be impacted upon by oil and gas activities. The potential impact of oil and gas activities on the different sectors together with the desired outcome of the impact are presented herebelow. This policy does not define the strategies and actions required to achieve the desirable outcomes in the other sectors because they are best articulated in the respective sector policies. The policy shall promote positive impacts of oil and gas activities on the other sectors and mitigate against any negative impacts on them.
The most direct impacts of oil and gas activities will be the addition of indigenous fossil fuels to the country's energy mix and the generation of additional revenues for the country. The policy also recognises that if the country's petroleum resources and revenues are not well managed, the petroleum sector has the potential to have the most negative impact on society that is **"The Oil Curse"** or the paradox of plenty. The oil curse is the negative effect of oil and gas resource utilization leading to economic stagnation, environment degradation and increased poverty. The oil curse can and should be avoided.

IMPACT ON THE NATIONAL ECONOMY

This policy shall, in collaboration with other relevant national policies, promote the use of oil and gas activities to have a positive impact on the economy. These activities will lead to the generation of revenues for investment in the non oil and gas sectors resulting in higher growth rates of the economy, expansion of the country's gross domestic product and higher per capita incomes.
Uganda's economic policy focuses on promoting privatesector led economic growth in such a way that growth leads to a reduction of absolute poverty in the

country to levels below 10% by the year 2015. The development of an oil and gas sector in the country will contribute significantly to the early achievement of this goal by enhancing the country's capacity to invest in productive sectors of the economy, economic and social infrastructure, development of new industries and businesses, creation of new jobs and boosting of national and household incomes. This development shall be undertaken in line with the country's PEAP.

This policy recognises that there may be need to review the country's policy on "Guide to Macroeconomic Stability" to accommodate the challenges of dealing with oil and gas activities with the view of avoiding negative impacts on the economy like the **"Dutch Disease"**.

The extent to which oil and gas activities are used to develop the nonoil sectors of the economy shall provide a good measure of how beneficial these activities are to the economy in particular and the country at large.

6.1.1 Impact on Land Ownership and Use

Implementation of oil and gas activities will affect, and be affected by existing land policies, laws, regulations and practices. Petroleum exploration, development, production, processing and transportation shall impact land ownership and use. During the phase of petroleum exploration, land is used for carrying out surveys and temporary accommodation and this use is for a limited period of time. The other phases of the petroleum value chain require land to be acquired and held on a longterm basis. Article 237 of the Constitution, the Land Act 16 of 1998, the National Land Use Policy 2004 together with the Land Sector Strategic Plan 2001 – 2011 define the existing policies and regulations for land ownership and use in the country.

It will be essential for oil companies and/or Government to acquire land for the different aspects of the petroleum value chain like provision of transportation corridors, i.e. pipelines, roads together with that for infrastructure such as wellheads, oil and gas processing facilities and refineries. Agreements will have to be entered into with landowners to cover aspects like compensation for their land surface interests. Government shall where necessary and in accordance with the

Constitution, acquire land in the public interest to support implementation of oil and gas activities.

Article 204 of the constitution provides for the decentralisation of the administration of land to District Land Boards. These boards, in accordance with laws made by Parliament, hold and allocate land, facilitate the registration and transfer of interests in land together with other matters connected with land in the respective districts. Capacity building programmes for Land Boards, in the areas with the potential for petroleum production or in areas where transport corridors will be constructed, shall be undertaken with a view of enabling them to make decisions which promote effective and efficient development of oil and gas activities.

Article 244 of the Constitution vests the control of petroleum in its natural condition in or upon any land or waters in Uganda in the Government on behalf of the Republic of Uganda. The responsibility to lease out rights to explore and exploit petroleum resources is therefore solely the responsibility of Government. The constitution also provides for the making of laws by Parliament to regulate the exploration and exploitation of petroleum resources together with the sharing of royalties arising from the exploitation.

This policy shall promote the implementation of oil and gas activities in accordance with the existing laws and regulations on land ownership and use in the country.

6.1.2 Impact on Physical Planning

Urban centres resulting from the development of oil and gas activities need to be well planned to meet the challenges of urbanization. This policy, in collaboration with other relevant national policies, shall endeavour to ensure organised urbanisation in and around the Albertine Graben. In order to achieve this objective, consideration will be made to declare the areas where oil and gas

activities will be concentrated special planning areas so as to pave way for their physical planning. This entails the identification of potential urban and growth centres around the Graben and the proactive planning for these centres with the oil and gas activities in mind. Planning for these areas could be phased in line with the progress of these activities. It will be necessary to support efforts to design and implement physical planning in pace with, or preferably prior to, the development phases of oil and gas activities. Community participation should be ensured in both planning and implementation. All infrastructure and other spatial developments shall be phased in accordance with prepared structure and detailed plans. In addition to the areas around the Albertine Graben, improved and timely physical planning shall be encouraged in the other parts of the country with a view of maintaining balanced infrastructure across the country.
These measures will contribute to avoiding any undesirable population migration.

This policy promotes effective physical planning and urban development of the ring of towns that exist, and those that will develop within and at the periphery of the oil and gas producing regions.

6.1.3 Impact on Fiscal and Monetary Policy

This policy recognises the important relationship between fiscal and monetary policy and the country's oil and gas extraction policies and shall promote their harmony. It further recognises the need to enhance fiscal discipline over any revenues generated from oil and gas activities. The policy shall support the priorities of reducing the fiscal deficit and prioritising spending that promotes increases in productivity and competitiveness of other sectors in the economy. It discourages the use of oil and gas resources to increase public spending in areas that do not add value to the economy.

6.1.4 Impact on the Balance of Payments

This policy shall, in collaboration with other relevant national policies, encourages a positive impact on the country's balance of payments by oil and gas activities. Depending on the volumes of oil and gas reserves in the country, the levels of commerciality of the different fields and the management of the revenues accruing

therefrom, oil and gas should significantly contribute to growth in the country's balance of payments. Currently, the cost of importing petroleum products into the country is in excess of US$400 million per annum constituting over 15 percent of the country's import bill. The extent to which Uganda reduces being a net importer of petroleum products on account of domestic oil production and processing will largely determine the improvement in the balance of payments. Any export of the country's petroleum or its products will provide additional opportunities for the country to have a significant positive balance of payments. Additional import substitution arising from the country's use of goods and services, primarily developed to support the oil and gas industry, shall also contribute to a positive impact on the country's balance of payments. It is recognised that as the country becomes wealthier and the citizens become richer, there is a potential for increased importation of consumer goods, among others. Measures to ensure that the additional importation does not completely offset the contribution of oil and gas resources to the country's balance of payments will have to be put in place.

6.1.5 Impact on National Industry

Oil and gas activities provide opportunities for both forward and backward linkages in the country's drive to industrialisation. On one hand, oil and gas activities provide raw materials which can be used as inputs during manufacturing processes. On the other hand, oil and gas activities act as a market for industrial products, both directly and indirectly.

These activities also provide an opportunity for the country to develop a petrochemical industry. This includes industries like oil refining, the off shoot industries utilising the refinery byproducts, together with industries arising from the utilisation of natural gas. Refinery byproducts can be processed to produce inputs for soap, plastics, pesticides, paints, medicine, asphalt, petrochemicals and polymers among others. Industries arising from the utilisation of natural gas include mineral processing industries, like smelting of iron ore, agroprocessing, natural gas conversion to liquids (GTL), manufacture of fertilizers, production of Condensed Natural Gas (CNG), production of carbon black used in tyre

manufacturing and others. This policy shall promote the development of appropriate and efficient hydrocarbon related industry in the country, including the participation of private sector investment in these developments. Industrial development will also provide an opportunity for the development of national content, especially through the development and strengthening of industries in the country which can provide goods and services to the oil industry.

6.1.6 Impact on Agriculture and Rural Activities

This policy shall, in collaboration with other relevant national policies, support significant and positive impact of oil and gas activities on the country's agricultural sector in line with the objectives of the country's Plan for Modernization of Agriculture (PMA). This could be achieved through enhancement of specific areas with higher multiplier effect, like provision of energy services and infrastructure for rural agroprocessing industries, together with the increased use of modern and mechanised agriculture through provision of more affordable inputs like fuels and fertilizers. On the other hand, the policy will promote mitigation measures against people abandoning agricultural activities and migrating to the oil and gas sector. Mitigation measures could include using oil and gas activities to support agricultural zoning, agroprocessing, agro marketing, agroinputs and propoor agrobiotechnologies.

6.1.7 Impact on Fisheries

Oil and gas exploitation may have some effects on the aquatic environment especially in the fisheries of lakes surrounding the areas where oil and gas activities are undertaken. Hydrocarbon gases, if released within water may rapidly penetrate into fish especially through the gills and disturb their main functional systems. Increasing temperature and reduced levels of oxygen will affect fish metabolism resulting in a reduction of their resistance to many organic and inorganic contaminants.

On the other hand, oil and gas activities have and continue to lead to improved accessibility to fishing communities resulting in improved marketing opportunities of fish for the fishermen.

It is therefore recognised that whereas some of the effects of oil and gas activities on fisheries will be positive others may be negative. This policy will promote the positive impacts and ensure that efforts are made to mitigate the negative effects.

6.2 THE SOCIAL IMPACT

6.2.1 Impact on Population Distribution

Uganda's population is estimated at 28.2 million people (2006). Out of these, 12% live in urban areas with a very high rate of urbanization to escape rural poverty in the belief that cities, municipalities, and towns offer greater opportunities to improve their social and economic livelihoods. Small holder agriculture mainly in the rural areas supplies the food upon which the urban populations depend.

Experience from some countries shows that oil and gas producing regions may attract labour and threaten other sources of productivity thus leading to the abandonment and collapse of other sectors of the economy. It is therefore possible that large numbers of people may move to the Albertine Graben where oil and gas activities are likely to be concentrated despite the area being largely a wildlife and biodiversity protected area.

This policy recognizes the need to guide population movements and settlements triggered by oil and gas activities. Local industries supplying the oil and gas activities should, as far as possible, be spread throughout the country to avoid concentration around typically oil and gas centres of activity. This policy will support enforcement of regulations restricting population movements and settlements in the protected wildlife and biodiversity areas. Only a minimum of required infrastructure like access roads and installations together with the required work force shall be allowed into the protected areas.

6.2.2 Impact on Energy Availability

The main sources of energy in Uganda are: 93% biomass, 6% petroleum products and 1% electricity. The petroleum products used in the country are: gas oil

(diesel), petrol, aviation fuel, fuel oil, kerosene, lubricants and bitumen. All are imported thereby exposing the country's economy to fluctuating and exorbitant prices together with a significant level of uncertainty with regard to their availability.

In order to reduce the impact of oil price shocks and the erratic supply of imported petroleum products on the economy, this policy shall support use of the country's oil and gas resources to meet domestic demand, export the surplus within the region and subsequently overseas. Use of the country's oil and gas resources to substitute imported products will facilitate value addition to these resources, import substitution of petroleum products, and improved security of supply for petroleum products in the country. Pricing of petroleum products refined from the country's oil and gas resources shall not distort the value of the country's resources through subsidies.

Oil and gas resources can be used to support the energy mix. A critical impact on energy availability will be their utilization to generate electricity, with a view of addressing the severe electricity shortage in the country resulting from limited hydropower generating capacity, climatic changes and the increasing demand. This policy will support the use of best lessons and practices in utilizing oil and gas resources to enhance the availability of energy. Efforts shall be made to achieve early oil and gas production with a view of addressing the country's energy needs.

6.2.3 Impact on Employment Opportunities and Patterns

Oil and gas activities tend to be capital intensive and mainly generate direct employment for science and engineering professionals and technicians, among others. These activities are not labour intensive and therefore the number of people directly employed on a sustainable basis may not be large. However, the industry provides significant employment opportunities through chain or multiplier effect. Businesses that come into being to provide goods and services to the oil and gas sector will provide employment opportunities. Expansion of other sectors

of the economy as a result of the development of an oil and gas sector will also lead to induced growth of employment opportunities. This policy shall promote employment of nationals in the oil industry and in the resulting employment created by the industry's chain or multiplier effect.

Transportation and storage of any oil and/or gas produced within the country may lead to the construction of pipelines, roads, rail lines and storage facilities. This construction part of which may be in the countryside will create a large demand for semiskilled and unskilled labour which should be recruited from the local communities. Significant amounts of cash may also come from compensation claims. This policy promotes the development of appropriate procedures for compensation and provision of employment to local communities. Efforts shall be made to put in place microdevelopment projects in these areas with a view to support poverty reduction and sustainable development. These efforts will also contribute to the generation of new employment opportunities.

6.2.4 Impact on the Environment

Oil and gas activities in the country can impact the environment from several angles. They may affect human beings, wildlife and biodiversity, together with the associated tourism. Transboundary water resources and the economy of the Albertine Graben ecosystem where production is anticipated may also be affected. Furthermore, the corridor in which any pipelines or other transport systems will pass will also be affected.

This policy considers environmental protection to include both the physical and social aspects and seeks to mitigate typical forms of environmental damage and hazards associated with oil and gas exploration, development and production. The policy supports gas utilization rather than wastage and will therefore promote prohibiting the venting of gas and discourage flaring of oil and gas except in situations of emergency where the alternatives may result into greater risk. This will lead to avoiding environment degradation, like increased green house effects

arising from venting and flaring. Utilization of natural gas especially in homesteads will contribute to reduction in the use of biomass energy which results in indoor house air pollution with undesirable effects on human health. Reduction in the use of biomass energy resulting from the increased use of natural gas will also have a significant impact of reducing the degradation of the environment through felling of trees.

Access roads will be kept at a minimum in wildlife areas and other areas of sensitive biodiversity, and efforts will be made to construct and maintain these roads in a manner that conserves the environment.
This policy, in collaboration with other relevant policies, will support control measures against the release of hazardous gases, chemical wastes and spills into the atmosphere, water bodies, aquifers and soils which will ensure that water remains safe for animals, fish and human consumption.

The policy will support the relevant institutions to put in place disaster preparedness and response mechanisms for any oil spills in the Albertine Graben, storage facilities and any transportation corridors. Putting in place these mechanisms together with their implementation shall be the responsibility of the Licensees. This policy endorses the principal of “polluter pays”. Government will therefore design a mechanism of levying penalties for environmental pollution and/or degradation.

6.2.5 Impact on Health

This policy recognizes several potential causes of negative impacts on human health from oil and gas activities. Oil spills can contaminate water sources leading to sickness and disease. Gas blowouts result in fires that destroy property and may lead to loss of human lives. Gas flares and dust result in air contamination leading to sickness. This policy shall promote the setting up of best international practices for prevention and rapid emergency response mechanisms designed to mitigate against air and water pollution. Licensees will be required to put in place response

mechanisms in all aspects of their operations. Efforts to construct roads in a manner that reduces or prevents dust pollution will be promoted.

This policy recognizes that drilling in settled communities and water bodies used by the population can be hazardous. Where deviation/directional drilling can minimize these hazards and achieve the desired results of the drilling objective in an efficient manner, deviation drilling shall be promoted.

This policy recognizes that health hazards do not occur in isolation of each other. While pollutants and toxins are directly inhaled by humans causing disease, they also invade the food chain entering fish, animals and vegetables. Thus the quality of water and food needs to be monitored and tested for unacceptable levels of pollutants and toxins such as lead and mercury. This policy shall, in collaboration with other relevant policies, support the review, updating and implementation of waste disposal standards together with the establishment and enforcement of the necessary monitoring, evaluation and control mechanisms. Considerations shall be made where possible for the use of alternatives to toxic chemicals.

The policy realizes that population movements and increased income may result in the increase of communicable diseases including HIV infection. The policy shall support measures to mitigate the spread of these diseases.

6.3 IMPACT ON EDUCATION AND RESEARCH PLANS

Development of the oil and gas sector will create a demand for skills currently not supplied by the country's education and training institutions. This policy recognises that under the Universities and Other Tertiary Institutions Act 2001, The National Council for Higher Education (NCHE) has the mandate to support implementation of this policy through development and training of requisite national expertise and to promote relevant research in the oil and gas sector. This policy will promote the establishment of human resources requirements for oil and gas activities and their projected estimates for the short, medium and long term and

use these requirements to support the training necessary to meet the demand with Ugandan nationals. Educational and training institutions in the country will be induced to orient some of their training courses to meet human resource requirements of the oil and gas sector.

In some countries the oil and gas sector attracted teachers and students to drop out of the education system leading to negative impacts on the education sector. This policy will promote measures to mitigate such negative effects on the education sector.

Effective management of the oil and gas sector depends on research and studies that generate new information on successes and failure and promote the learning of new innovative approaches and processes. This policy proposes the establishment of an energy centre that would, among other institutions, meet the need for research in this sector. It would generate information on socioeconomic impacts and scientific innovations which would, among other things, facilitate monitoring and evaluation of the oil and gas sector. Creation of the centre may not commence immediately in which case its embryo could start in the Ministry responsible for oil and gas. In setting up this centre, consideration shall be made on its potential to become a nucleus for future research in energy for the region.

This policy proposes the establishment of new institutions to manage the oil and gas sector. The national staff in these institutions will require training to expose them to the different aspects of the oil and gas industry. This training will contribute to developing the human capacity required to work with oil companies on a mutually responsible basis.

6.4 IMPACT ON RELATIONS WITH NEIGHBOURING COUNTRIES

The Albertine Graben which is the principal area with the potential for petroleum production in the country is shared between Uganda and the Democratic Republic

of Congo. An “Agreement of Cooperation for the Exploration of Hydrocarbons and Exploitation of Common Fields” was signed between the Government of the Republic of Uganda and The Executive Council of the Republic of then Zaire in 1990.

This policy recognises among other things, that unitization, a method used in determining how oil and gas fields falling across borders or boundaries are shared, is well established internationally and used in several parts of the world. This policy shall support the implementation of the Agreement of Cooperation, and the application of unitisation as a basis for sharing any oil and gas fields falling across any borders. The policy also supports a review of the agreement of cooperation with a view of bringing it in line with the current and future requirements of the oil and gas sector.

In addition, the policy will promote transboundary cooperation based on existing foreign policy principles and agreements, and complements the programmes, projects and protocols formulated under the International Conference on the Great Lakes Region aimed at transforming the region from tensions, hostilities and underdevelopment to security, stability and prosperity.

There will be need for consultations with neighbouring countries for access where transport corridors like pipelines may need to cross borders. In addition, sales of the country’s oil and gas may also require discussions or entry into agreements with foreign countries. This policy will where necessary support enhancement of the existing foreign policy principles with a view to facilitate harmonious implementation of these activities.

7 INSTITUTIONAL FRAMEWORK

7.1 GENERAL

This policy recognizes the need to enhance the current institutional framework which was set up to facilitate the promotion and exploration for oil and gas. There is need to enhance this framework with a view of enabling it to handle the continuing exploration effort together with the development and production of oil and gas.

In addition, there is need to put in place an institutional framework to handle the refining of oil, conversion of gas to valuable products like ammonia, together with the transportation and storage of oil , gas and their by products.

Establishment of an appropriate framework has to take into consideration the different roles of the state and those of the oil companies in the implementation of oil and gas activities.
The policy recognizes the following roles for the state and oil companies respectively:

7.1.1 The Roles of the State

(a) Establishing and implementing oil and gas policy.
(b) Establishing and developing legislation.
(c) Organising the state's petroleum administration.
(d) Planning and implementing licensing.
(e) Monitoring operations and administering compliance.
(f) Managing data from petroleum operations.
(g) Ensuring the right national participation in petroleum operations.
(h) Managing the impact of oil and gas activities on the economy, environment and social life.

(i) Using petroleum revenues to build durable capacity through education, development of infrastructure and a competitive economy in line with the goal of this policy.
(j) Adjusting institutional framework conditions to meet any changes.

7.1.2 The Roles of Oil Companies

The role of oil companies will be to efficiently explore, develop and produce the country's oil and gas resources so as to maximize Net Present Value (NPV). In order to achieve this, the companies require highly competent staff, financial strength, ability to manage risk and ability to work with Government. The companies shall be good corporate citizens by among others, abiding by the policies and laws existing in the country as well as managing emergencies that may arise out of the oil and gas activities.

7.2 REGULATORY BEST PRACTICE

This policy recognizes Regulatory Best Practice (RBP) as the cornerstone for Government's institutional reform policy. RBP which has been practiced in the country for over 15 years is based on the principle that a regulatory agency should be separate and independent from the entities being regulated, in this case oil companies. A policymaking body should be separate from the regulatory agency and the competing producers and suppliers of the goods and services.

This policy endorses this model by recommending setting up of the following three separate institutions; an oil and gas policy making and monitoring body (a Directorate of Petroleum in the Ministry responsible for oil and gas), a regulatory agency (Petroleum Authority of Uganda) and a separate commercial entity (the Uganda National Oil Company). The specific roles of these institutions are defined under section 7.2.3, 7.2.4 and 7.2.5 below. The following sections indicate the different institutions and their proposed roles in the implementation of oil and gas activities in the country.

7.2.1 The Roles of Parliament

(a) Enacting petroleum legislation.
(b) Enacting the proposed legislation for the management of petroleum revenues.
(c) Monitoring performance in the petroleum sector through policy statements and annual budgets.

7.2.2 The Roles of Cabinet

(a) Putting in place a National Oil and Gas Policy
(b) Authorising drafting and approving submission of the required legislation to Parliament.
(c) Approving petroleum administration.
(d) Consenting to Production Sharing Agreements.

7.2.3 Roles of the Ministry Responsible for Oil and Gas

The main roles of Government in managing petroleum resources can be classified into policy making and implementation, regulation of the subsector and managing the commercial/business aspects. Currently all these roles are being played by the Ministry of Energy and Mineral Development (MEMD) and the technical arm of the ministry PEPD. Although this has enabled successful promotion, licensing and exploration, separation of these roles will facilitate a more efficient management of the sub–sector especially as it expands into development and production.

It is important to strengthen the Ministry responsible for oil and gas to effectively carry out the increasing roles of policy making, monitoring and evaluation for the sector. The Ministry will therefore require a Directorate of Petroleum within it to effectively carry out these roles. The Directorate will coordinate development of the oil and gas sector in the country through three separate departments responsible for the upstream, midstream and downstream petroleum sub sectors respectively. The Directorate will also be responsible for coordinating national capacity building

for the oil and gas sector. The institutions providing support services within the Ministry shall be strengthened to provide the necessary support to the Directorate.

The specific roles of the Ministry through the Directorate shall include:

(a) Undertaking licensing
(b) Undertaking promotion of the country's petroleum potential to investors together with data acquisition
(c) Initiating, developing and implementing oil and gas policy.
(d) Submitting draft legislation to Parliament.
(e) Issuing Petroleum Regulations.
(f) Proposing Petroleum Administration
(g) Negotiating, endorsing and administering PSA's.
(h) Approving Plans for Field Development.
(i) Participating in the formulation of a law to regulate the collection, use and management of oil and gas revenues.
(j) Promoting and sustaining transparency in the oil and gas sector.
(k) Approving data management systems.
(l) Recommending the option to exercise state participation in development and production of oil and gas.
(m) Ensuring dissemination of information on oil and gas activities.

7.2.4 Roles of the Petroleum Authority of Uganda (PAU)

An authority shall be put in place to regulate the different players in the subsector. The specific roles of this regulatory body will include:

(a) Monitoring and regulating Petroleum Operations including reserve estimation and measurement of the produced oil and gas.
(b) Proposing and implementing Regulations.
(c) Monitoring expenditure on licences.
(d) Managing petroleum data.

(e) Assisting in proposing and implementing petroleum legislation (f) Assisting in proposing and implementing oil and gas policy.
(g) Assisting in negotiating and administering PSAs.
(h) Assessing Plans for Field Development.
(i) Assessing tailend production and abandonment.
(j) Assisting in the measurement, estimation/ assessment of Royalties and Profit Oil due to the state.
(k) Ascertaining the Cost Oil due to Licensees.
(l) Ensuring that licensees uphold laws, regulations, rules and contract terms.
(m) Ensuring Health, Safety and Environmental standards in oil and gas operations.
(n) Ensuring optimal levels of resource exploitation.
(o) Promoting planned, well executed and costefficient operations.
(p) Ensuring optimal utilization of existing and planned infrastructure.
(q) Contributing to national (Budgetary) Planning and control.
(r) Providing information relevant to the collection of taxes and fees from oil and gas activities.
(s) Ensuring appropriate implementation of petroleum legislation.
(t) Assisting in the acquisition of data for use in promoting unlicensed areas.

7.2.5 Roles of the Uganda National Oil Company (NATOIL)

In addition to policy and regulation, the State will require an entity to handle its commercial interests in the sub sector, e.g. state participation in the licences and marketing the country's share of oil and gas production received in kind. Although this entity will become more relevant when production begins, the period before production shall be used to build its capacity so that it is able to play its role when production starts.
The specific roles of NATOIL shall include:
(a) Managing the business aspects of state participation.
(b) Developing in depth expertise in the oil and gas industry.

(c) Optimising value to its shareholders.
(d) Administering contracts with co ventures.
(e) Participating in Contractor/Operator meetings.
(f) Investigating and proposing new upstream, midstream and downstream ventures initially locally but later internationally.

Government shall promote the business effectiveness of the NATOIL and enhance its recognition by international oil companies as a partner through the following strategies:

(i) Keeping NATOIL focused on the State's commercial interests.
(ii) Insulating NATOIL from bureaucracy and political play.
(iii) Promoting healthy competition among oil companies.
(iv) Reaping benefits of diversified expertise and approach.
(v) Allowing correct benchmarking of the companies' performance.
(vi) Avoiding power concentration (i.e. a state within a state).
(vii) Facilitating NATOIL's expansion abroad (with Government's approval).

7.2.6 Roles of Other Government Ministries and Agencies

This policy recognises the roles of other institutions of Government in facilitating the desirable implementation of oil and gas activities. Government stakeholders include Ministries that are responsible for policies relevant to oil and gas, and operational/ managerial agencies dealing with implementation and regulation. This policy recognizes that parent ministries are responsible for guiding and monitoring the work of the operational/ managerial agencies placed under them. The roles of the ministries and other agencies are identified as follows:

7.2.6.1 Ministry stakeholders

(a) Ministry Responsible for Justice and Constitutional Affairs

(i) Guiding the formulation and drafting of petroleum legislation.

(ii) Guiding the formulation and drafting of the law on management of petroleum revenues.
(iii) Participating in oil and gas policy formulation.
(iv) Participating in petroleum licensing.
(v) Participating in the negotiation and administration of PSA's.

(b) Ministry Responsible for Finance, Planning and Economic Development

In general, the role of this Ministry is to ensure macroeconomic stability, which includes prudent fiscal management and ensuring appropriate distribution of government funds to provide efficient and effective delivery of services. Specific roles under this policy shall be:

(i) Ensuring appropriate management of petroleum revenues.
(ii) Responsibility for administering the collection and utilisation of oil and gas revenues in line with the relevant laws.
(iii) Promoting and sustaining transparency in the oil and gas sector.
(iv) Participating in the formulation of the law to regulate the collection, use and management of oil and gas revenues.
(v) Defining the roles of different institutions with regard to the collection of oil and gas revenues.
(vi) Monitoring and assessing the impact of oil and gas revenues on the economy.
(vii) Providing policy guidance in the management of the Petroleum Fund.
(viii) Participating in petroleum licensing.
(ix) Ensuring that fiscal and other economic issues are appropriately addressed in the PSA's.
(x) Participating in oil and gas policy formulation.
(xi) Participating in the administration of PSA's.
(xii) Participating in the formulation of petroleum legislation.
(xiii) Providing the necessary funding to support undertaking of the additional responsibilities for the different Ministries and operational/managerial agencies arising out of this policy.

(xiv) Ensuring development and harmonization of accounting standards in oil and gas activities including implementing principles of the Extractive Industries Transparency Initiative (EITI).

(c) Ministry Responsible for Local Governments

This policy recognizes that Local Government Authorities undertake development plans, capacity building and infrastructure development, among other activities, in accordance with the Local Government Act, 1997.

In accordance with these activities of the local government authorities, the Ministry responsible for Local Government shall have the following coordinating roles:

(i) Formulating and monitoring of local government policies which are in harmony with this policy.

(ii) Guiding local governments to undertake plans and capacity building that take cognisance of oil and gas activities.

(iii) Implementation of physical plans to avoid the development of slums arising out of oil and gas activities.

(iv) Integrating oil and gas activities in local governments' plans and programmes.

(v) Mobilizing local governments to support oil and gas activities including provision where possible of the necessary infrastructure.

(d) Ministry Responsible for Works and Transport

(i) Planning and regulating transport services i.e. road, rail, air and waterways.

(ii) Providing technical guidance on mechanical engineering aspects of machinery used in oil and gas activities imported into the country.

(iii) Issuing approvals for movement along Uganda's roads of heavy equipment (above 56 tonnes) on roads in the country.

(iv) Supporting development of the necessary infrastructure for oil and gas activities.

(v) Participating in verification of the structural integrity of oil rigs and other production facilities.

(e) Ministry Responsible for Water and Environment.

(i) Ensuring that oil and gas activities conform to the requirements of the policies regarding the protection and utilization of water bodies and aquifers.

(ii) Management of any potential impact of toxins from oil and gas activities and development of infrastructure like laboratories to handle toxins.

(iii) Participating in formulating and monitoring polices regarding protection of the environment, oil and gas activities will comply with these policies.

(iv) Monitoring the impact of oil and gas activities on the quality of ground and surface water bodies, surrounding flora and atmosphere.

(v) Regulating water use and pollution load into water bodies through issuance of water permits.

(vi) Ensuring compliance with conditions provided for in the water permits.

(vii) Ensuring protection of water catchment and drainage areas.

(viii) Ensuring respect of Uganda's commitments towards cooperative frameworks for basin wide transboundary water resource management.

(ix) Ensuring self monitoring by the oil companies for compliance with wastewater effluent standards together with ground and surface water quality standards.

(x) Participating in monitoring and management of oil spill emergencies.

(f) Ministry Responsible for Forests and Wetlands

(i) Ensuring that oil and gas policies are in harmony with policies for the development and utilization of forest resources.

(ii) Ensuring that oil and gas activities are carried out in a manner that preserves and enhances forest reserves and wetlands.

(g) Ministry Responsible for Tourism and Wildlife

(i) Ensuring that oil and gas policies are in harmony with wildlife conservation and tourism development policies.

(ii) Ensuring that oil and gas activities are in harmony with wildlife conservation and development of infrastructure and services for tourism.

(iii) In collaboration with relevant stakeholders, monitor the impact of oil and gas activities on wildlife conservation, development of tourist infrastructure and services together with the harmonious coexistence between ecotourism and oil and gas operations.

(iv) Monitoring the impact of oil and gas activities on antiquities.

(h) Ministry Responsible for Labour

(i) Carrying out regular statutory inspections to ensure health and safety in the oil and gas sector.

(ii) Ensuring that employment policies in the oil and gas sector are in line with the country's labour policies and guidelines.

(iii) Issuing certificates of registration of oil and gas activities.

(iv) Formulating and enforcing guidelines on safety and health in the oil and gas sector.

(v) Monitoring compensation for occupational injuries and diseases.

(vi) Mediating labour disputes and participating in conflict resolution.

(vii) Issuing guidelines on labour unions in the oil and gas sector.

(viii) Monitoring compliance with the labour standards.

(ix) Ensuring that the equipment and technologies brought into the country are environmentally friendly and comply with the desired safety and health standards.

(i) Ministry Responsible for Education

(i) Promoting the development of education and training programmes in order to create requisite national manpower expertise for the oil and gas sector on a sustainable basis.

(ii) Promoting relevant research and studies in collaboration with the Ministry responsible for oil and gas, and any other relevant institutions.

(iii) Identifying and proposing measures to mitigate any adverse effects of oil and gas activities on the education sector.

(j) Ministry Responsible for Industry

(i) Ensuring that oil and gas policies are in harmony with the country's industrial policy.

(ii) Promoting guided development of a petrochemical industry in the country.

(iii) Promoting the use of oil and gas byproducts to support industrial development in the country.

(k) Ministry Responsible for Physical Planning

(i) Conducting physical planning for the areas where oil and gas activities are to be undertaken.

(ii) Approving change of user in provided physical plans for any areas.

(iii) Monitoring compliance with guidelines to discourage development of slums.

(l) Ministry Responsible for Foreign Affairs

(i) Ensure cordial bilateral relations with neighbouring countries.

(ii) Advocate for joint exploration and exploitation of any oil and gas resources along the country's common border.

(m) Ministries Responsible for Security

Securing oil and gas activities and installations against external aggression and from any internal threats.

(n) Ministry Responsible for Information and Communication Technology

(i) Initiating the formulation and implementing information technology laws and regulations that will provide a conducive and secure environment for data transmission and storage for oil and gas activities.

(ii) Promoting, supporting and guiding the use of ICT in order to among others enhance efficiency and effectiveness in oil and gas operations and transactions.

(iii) Ensuring that the infrastructure necessary for data and voice communication including telephone, internet and broadcasting are put in place.

7.2.6.2 Government Agencies

(a) Role of the Central Bank

(i) Advising Government on the impact of the oil and gas sector on the national economy.

(ii) Ensuring that oil and gas activities do not impact negatively on monetary policy and macro economic stability.

(iii) Managing and administering the Petroleum Fund.

(b) Role of the Uganda Revenue Authority

(i) Administering the collection of revenue from oil and gas activities in line with the relevant laws.

(ii) Assisting in monitoring and assessing the impact of oil and gas revenues on the economy.

(iii) Participating in the formulation of tax measures to regulate collection of the right revenues from oil and gas activities.

(c) Role of the National Planning Authority

(i) Leading national planning for effective incorporation of oil and gas activities into the national economy.

(ii) Conducting in depth evaluation of the effectiveness and cost of petroleum related activities.

(iii) Studying and publishing independent assessments of key economic and social issues and options to increase public understanding and participation in oil and gas activities.

(iv) Participating in monitoring the relationship between the different agencies of the State's petroleum administration.

(d) Role of the National Environment Management Authority (NEMA)

(i) Coordinating the processes of environmental impact assessments for oil and gas activities.

(ii) Carrying out, alongside other stakeholders, environmental monitoring and audits of oil and gas activities.

(iii) Ensuring and monitoring compliance of oil and gas activities with environmental guidelines.

(iv) Issuing guidelines for strategic environmental assessment.

(v) Harmonizing national performance standards in the oil and gas sector on environmental sustainability with international standards.

(e) Role of the Uganda Wildlife Authority (UWA)

(i) Monitoring compliance of oil and gas activities to regulations governing operations in wildlife protected areas.

(ii) Harmonizing national and international performance standards on wildlife protected areas

(iii) Monitoring the impact of oil and gas activities on wildlife protected areas.

(iv) Participating in evaluation of Environmental Impact Assessments (EIA) and environmental audits for oil and gas activities.

(v) Issuing consent to undertaking petroleum operations in wildlife protected areas.

(f) Role of the Auditor General

(i) Providing an independent oversight of government petroleum operations through financial and other management audits in accordance with the constitutional provisions and any other relevant legislation.

(ii) Ensuring adherence to national and international accounting standards in the oil and gas sector.

7.3 THE ROLE OF CIVIL SOCIETY AND CULTURAL INSTITUTIONS

This policy recognizes the role Local Governments, Civil Society Organisations (CSO's) and Cultural Institutions can play through advocacy, mobilization and dialogue with communities. These institutions will contribute to holding the different players accountable with regard to oil and gas issues and participate in getting the voices of the poor into designing, monitoring and implementation of programmes in the oil and gas sector. CSO's may also be contracted in the delivery of various services, especially in the communities where oil and gas activities will be undertaken.

8 FINANCING THE POLICY

Financial Resources will be required for putting in place the proposed institutional and regulatory framework together with the necessary economic and social infrastructure.

The overall cost of implementing this policy over the next ten (10) years is estimated to be US$ 5.13 billion. This amount is subdivided into US$ 377 million for the short term (1 2 years), about US$ 2.86 billion in the medium term (3 5 years) and US$ 1.89 billion in the long term (6 10 years).

The source of funding to implement the policy is estimated at 94% as investment by the private sector, 2% public sector funding and 4% public private partnership.

8.1 FINANCING THE INSTITUTIONAL FRAMEWORK

8.1.1 Financing the Creation of a Directorate of Petroleum

The creation and maintenance of the Directorate of Petroleum in the Ministry responsible for oil and gas matters will be financed under the budget of the Ministry responsible for oil and gas.

8.1.2 Financing the creation of the Petroleum Authority of Uganda (PAU)

Government will provide the Authority with the resources necessary for its creation and execution of its work. In providing for these resources consideration of PAU's capacity to be selfsupporting will be emphasized.

In most countries however, financing capacity building has been undertaken through a capacity building grant or credit. This policy proposes the assessment/costing of the resources (human, equipment, infrastructure etc.) required by PAU for a tenyear period, and their provision through a capacity building programme.

8.1.3 Financing the National Oil Company (NATOIL)

The policy recognizes the importance of early entry of the National Oil Company into the business especially since any delays will make the barriers of entry even greater.

Financing of the National Oil Company may be difficult in the initial period of production especially because most of the revenue will be financing Cost Recovery for the companies that invested in the exploration and development phases, NATOIL may therefore not be able to attract share holders. It will be necessary for NATOIL to be supported as an embryonic unit at the beginning. As more funds become available after recovery of the major investment costs by the

oil companies, funding for NATOIL can be more easily available from its share of participation.

This policy proposes that the National Oil Company starts with minimal resources and grows steadily by learning from the experienced actors. The state shall provide seed money to start NATOIL and consider floating its shares later.

8.1.4 Financing Additional Roles for the Other Arms of Government

The policy recognizes that monitoring and implementing oil and gas activities will introduce additional roles to the different Ministries and operational/managerial agencies, outside the Ministry responsible for oil and gas, as highlighted in section 7.2.6 above. The Ministry responsible for Finance, Planning and Economic Development will evaluate the need for additional resources required to carry out these roles and provide the necessary funding as considered appropriate.

8.2 FINANCING THE REGULATORY FRAMEWORK

2The policy provides for the upgrading of the Petroleum (Exploration and Production) Act Chapter 150 together with the Environment Act Cap. 150 to better adequately handle the developing oil and gas sector. It also provides for the e2nactment of a law for the collection, use and management of petroleum revenues. Putting in place these legislation together with their attendant regulations will require that the necessary funding is made available.

8.3 FINANCING INFRASTRUCTURE

The development of an oil and gas sector in the country will require putting in place the necessary infrastructure like refineries, processing plants, pipelines and others. Financing this infrastructure will be undertaken mainly by the private sector. Public Private Partnerships shall also be used to put in place some of the required infrastructure. The private sector will also participate in financing the development of social infrastructure especially in the areas where the oil companies will be undertaking oil and gas operations.

9 MONITORING AND EVALUATION OF THE POLICY

Output and outcome planning, monitoring and evaluation are required at all levels from policy making to implementation. Although some of the issues encountered would be solved administratively, some will need to be taken to the policy level for solutions. This means that the policy level needs its own milestones, performance indicators, especially about impacts and outcomes. Issues like the levels of investment made in the sector per year, assessment of social, economic and environment impacts will require to be monitored at the policy level, thereby necessitating availability of data on a regular basis.

This policy proposes that the system of results and outcomes monitoring and evaluation be adopted at the policy level. This system shall be based on minimal indicators that can be tracked at the policy level but be adequate to give key signals about performance of the oil and gas sector.

Within the Ministry responsible for oil and gas, monitoring of this policy and its evaluation shall be undertaken by the Directorate. The Directorate shall produce regular reports as part of its policy implementation and monitoring role.

At the highest level, it is the responsibility of the Office of the Prime Minister to monitor and evaluate all government policies. This policy recognizes that under the National Integrated Monitoring and Evaluation Strategy (NIMES), the Office of the Prime Minister has developed policy monitoring systems which can be enhanced, where necessary, to incorporate oil and gas monitoring and evaluation systems. These systems shall be used to monitor and evaluate the successes and failures of implementing this policy and its effectiveness in achieving the desired goal and objectives.

Appendix 8: Status Policy Implementation of the National Oil and Gas Policy

REPUBLIC OF UGANDA

MINISTRY OF ENERGY AND MINERAL DEVELOPMENT

PROGRESS OF IMPLEMENTATION OF THE NATIONAL OIL AND GAS POLICY FOR UGANDA

FEBRUARY 2017

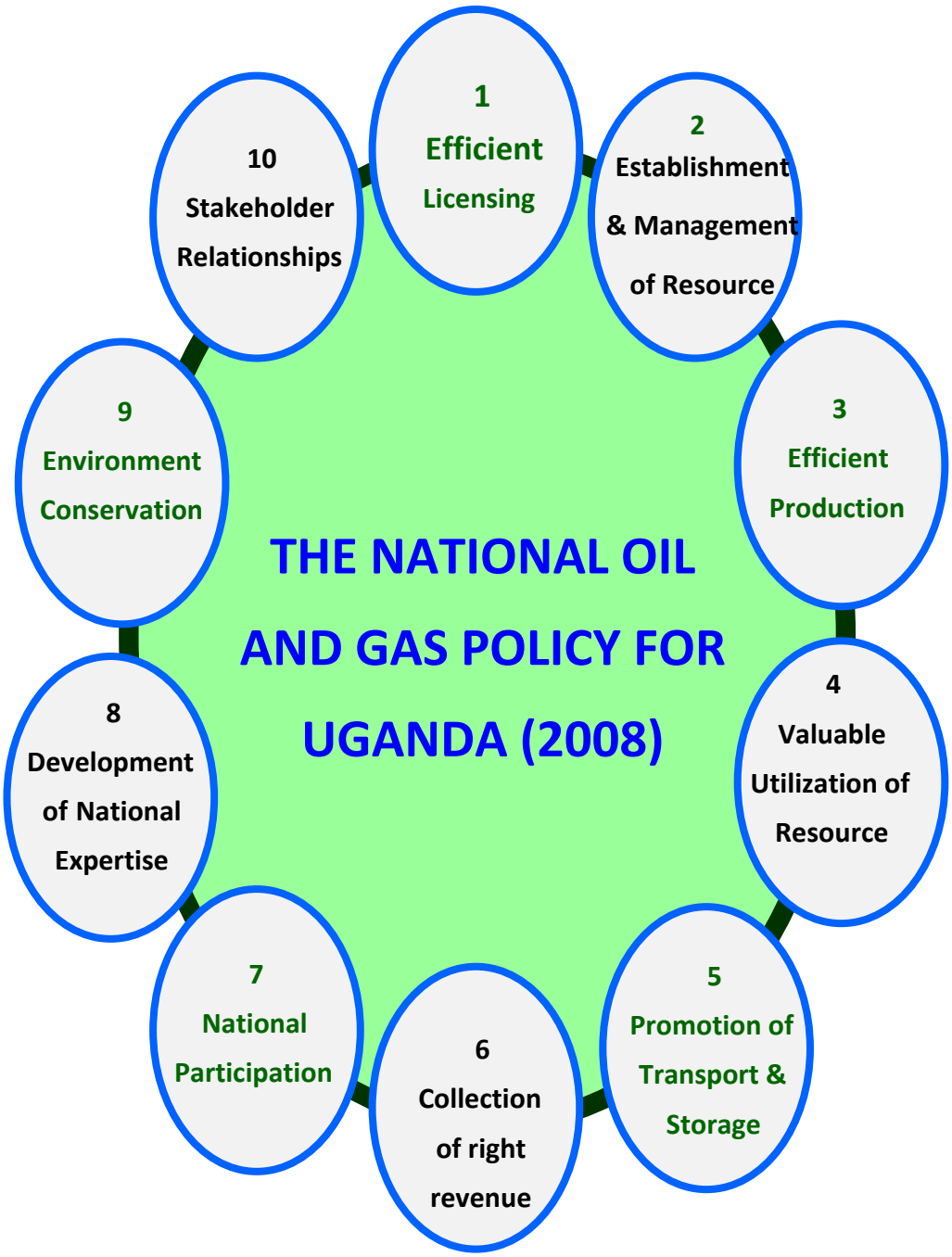

THE NATIONAL OIL AND GAS POLICY FOR UGANDA (2008)
1 Efficient Licensing
2 Establishment & Management of Resource
3 Efficient Production
4 Valuable Utilization of Resource
5 Promotion of Transport & Storage
6 Collection of right revenue
7 National Participation
8 Development of National Expertise
9 Environment Conservation
10 Stakeholder Relationships

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INTRODUCTION

1. The National Oil and Gas Policy for Uganda (NOGP), which was approved during 2008, is the key document guiding the development of the country's oil and gas sector. The Ministry of Energy and Mineral Development (MEMD) presents this progress of implementation of NOGP to keep all stakeholders informed on developments in the country's oil and gas sector, and to share the progress being made with regard to each of the ten objectives of the National Oil and Gas Policy to date.

CURRENT STATUS OF THE SECTOR

2. Uganda's oil and gas sector has transitioned from the exploration and appraisal phase to the development phase in preparation for sustainable production of the petroleum resources that have been discovered in the country.

3. The oil companies currently licensed in the country to undertake petroleum exploration, development and production are: China National Offshore Oil Corporation Uganda Limited (CNOOC (U) Ltd), Total E&P Uganda B.V and Tullow Uganda Operations Pty Limited.

4. Other significant investors are expected to join the sector when;
   a) the selection of a lead investor for the development of a refinery and its attendant infrastructure in the country is concluded,



The ZPEB7001 rig during drilling of Kingfisher4 well in Buhuka, Kyangwali Subcounty, Hoima District during 2014

b) new licensees come into the country at the conclusion of the ongoing competitive licensing round, and

c) the subcontractors and service providers who will come into the country to support the development phase for the oil fields, development of the refinery and construction of pipelines and other facilities.

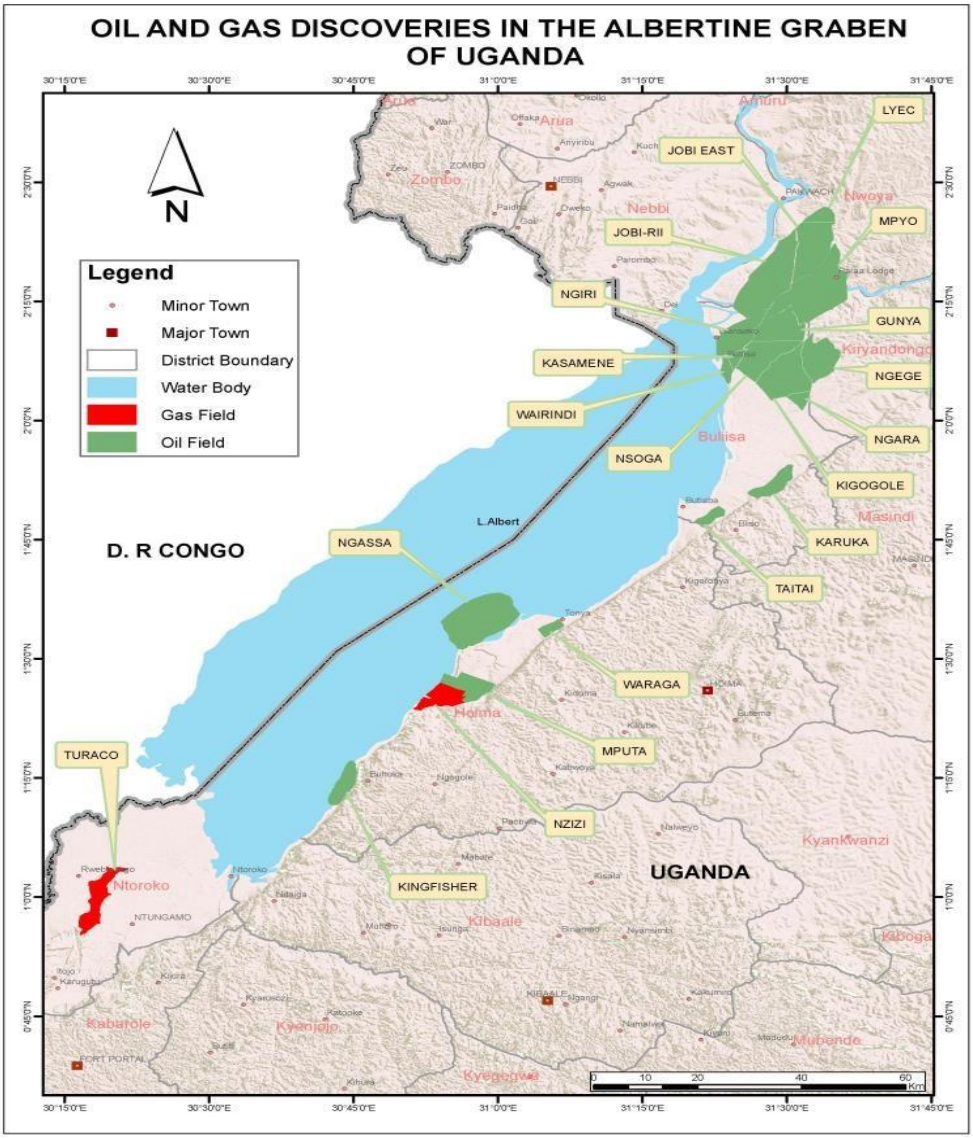
Well Data Acquisition

5. One hundred and twenty (121) exploration and appraisal wells have been drilled in the country with one hundred and six (106) of these wells encountering oil and/or gas which, is an unprecedented drilling success rate of over 85%.

Confirmation of Resources

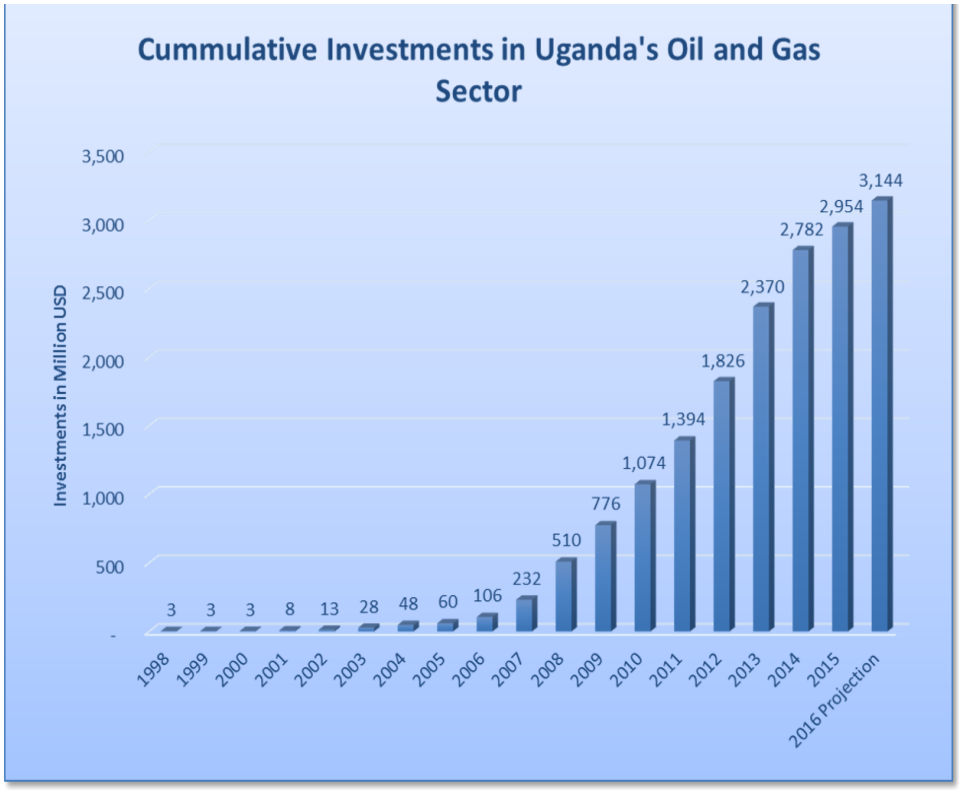
6. The above mentioned work has led to the discovery of twenty one (21) oil and/ or gas fields in the country's Albertine Graben. Appraisal of these discoveries has established that petroleum resources in these fields are now estimated at over 6.5 billion barrels of oil equivalent in place with 1.4 – 1.7 billion barrels of these resources estimated to be recoverable.

Map showing oil and gas discoveries in the Albertine Graben



Investment

7. Cumulative foreign direct investment in petroleum exploration in



the country since 1998 was estimated to be over USD 3 billion at the end of 2016. Investment in the petroleum sector is expected to increase significantly as the country enters the development, and subsequently the production, transportation and refining phases of the petroleum value chain.

Legal Framework

8. Following a wide consultative process, two new laws were enacted during 2013 to update the legal framework for the sector. These are; the Petroleum (Exploration, Development and Production) Act 2013 and the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act 2013.

   Regulations to operationalize these laws have been put in place, and these are;

   a) The Petroleum (Exploration, Development and Production) Regulations 2015.

b) The Petroleum (Exploration, Development and Production) (Health, Safety and Environment) Regulations 2016.
c) The Petroleum (Exploration, Development and Production) (National Content) Regulations 2016.
d) The Petroleum (Exploration, Development and Production) (Metering) Regulations 2016.
e) The Petroleum (Refining, Conversion, Transmission and Midstream Storage) Regulations 2016.
f) The Petroleum (Refining, Conversion, Transmission and Midstream Storage) (National Content) Regulations, 2016.
g) The Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016.

9. In addition, the Public Finance Act 2015 was enacted during March 2015 and provides for among others the management of revenues accruing from petroleum activities. These pieces of legislation together with other relevant laws and statutes like those on Environment, Wildlife, Water, Land and Income Tax, are used in regulating the country's petroleum sector.

THE NATIONAL OIL AND GAS POLICY FOR UGANDA

10. The National Oil and Gas Policy for Uganda (NOGP) which was formulated through an extensive consultative process and approved in 2008 is the key framework guiding the development of the oil and gas sector in the country. The NOGP together with its popular version which has been translated into eleven languages can be accessed at www.petroleum.go.ug and www.energyandminerals.go.ug.

11. The Policy was developed to comprehensively address issues of exploration, development, production, utilization and commercialisation of the country's

petroleum resources following the confirmation of commercial petroleum resources in the country in 2006.

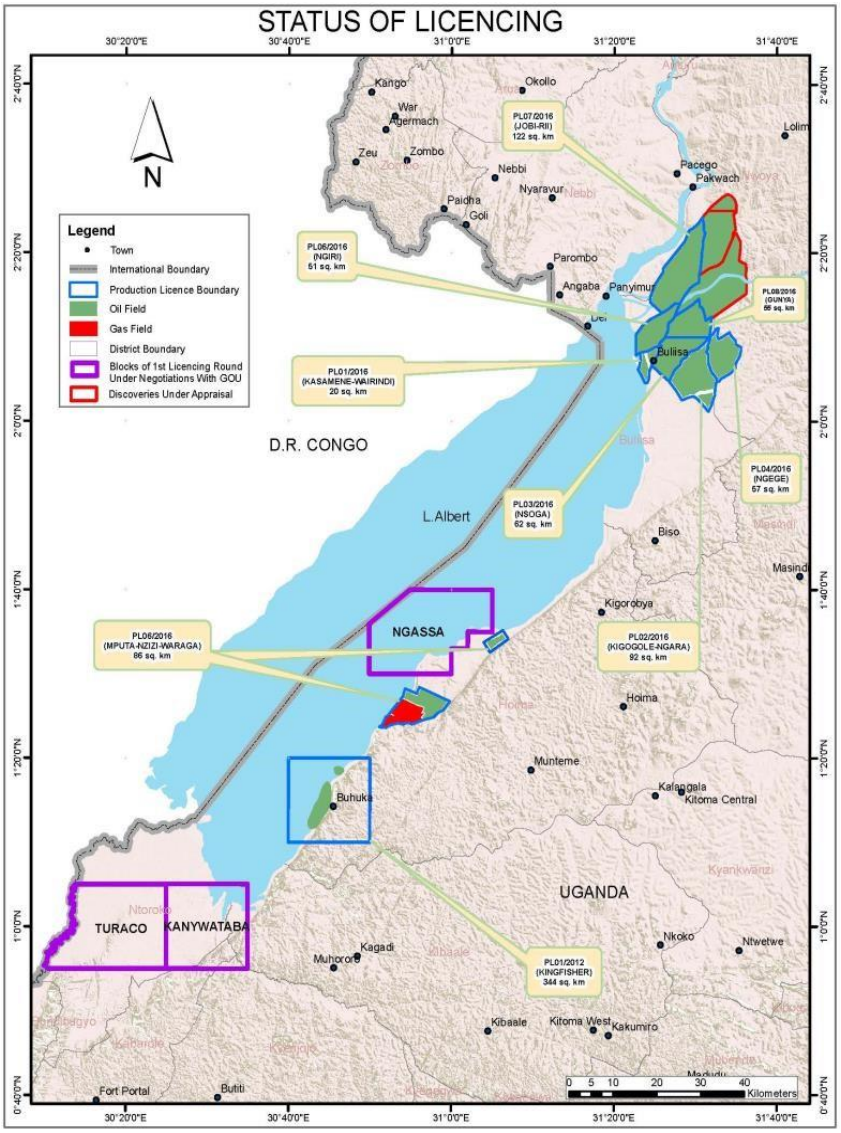
12. The discovery of petroleum in the country created excellent opportunities for the accelerated development of the economy, but also brought along key issues such as anxiety and high expectations by the population, the need to ensure national participation in the development of the sector, the need to develop the sector with due regard to the country's environment and biodiversity, concerns on management of oil revenues, the need to put in place appropriate regulatory and institutional frameworks for the sector and decommissioning of installations, among others.

13. The goal of the National Oil and Gas Policy for Uganda is to "**Use the Country's Oil and Gas Resources to Contribute to Early Achievement of Poverty Eradication and Create Lasting Value to Society".** The policy has ten objectives for developing and utilizing the country's oil and gas resources and describes the strategies and key actions which need to be taken to maximize the opportunities and address the challenges in the sector.

POLICY IMPLEMENTATION

14. Following the approval of NOGP in 2008, Government has continued to implement the Policy in line with its (10) policy objectives. The key achievements made in implementing each of the ten objectives is presented below:

Objective 1: Ensure efficiency in licensing areas with the potential for oil and gas production in the country



15. The confirmation of commercial resources of petroleum in the Albertine Graben led to the significant lowering of the country's

exploration risk, hence a need to update the regulatory framework for the sector to provide for, among other things, competitive licensing rounds.

16. Formulation of legislation for the sector commenced in 2009 after putting in place of the NOGP. The Petroleum (Exploration, Development and Production) Act 2013 which repealed the Petroleum (Exploration and Production) Act of 1985, was passed by Parliament during December 2012 and it became effective on 5th April 2013 upon Presidential assent.

17. In line with the Act, the first competitive licensing round for some of the areas which are currently not licensed was announced by the Minister for Energy and Mineral Development during February 2015. This licensing round covered six areas in the Albertine Graben which have good data coverage. The six blocks are: Ngassa (410 Km^2) in Hoima District, Taitai & Karuka (565 Km^2) in Buliisa District, Ngaji (895 Km^2) in Rukungiri & Kanungu Districts, Mvule (344 Km^2) in Moyo and Yumbe Districts together with Turaco (425 Km^2) and Kanywataba (344 Km^2) in Ntoroko District

18. 16 out of 19 applicants that responded to the notice of request for qualification for the first licensing round for petroleum exploration, development and production in Uganda were prequalified to participate in the Bidding Stage. Seven of the applicants submitted proposals during the bidding stage, and Government is negotiating five Production Sharing Agreements with three of the bidders, namely; Oranto Petroleum International Ltd, Waltersmith Petroman Oil Ltd and Armour Energy.



Mr. Nurudin Njabire, Geologist with the Ministry interacts with a delegates at the promotional roadshow for the first licensing round. The roadshow was held in London, UK during June 2015.

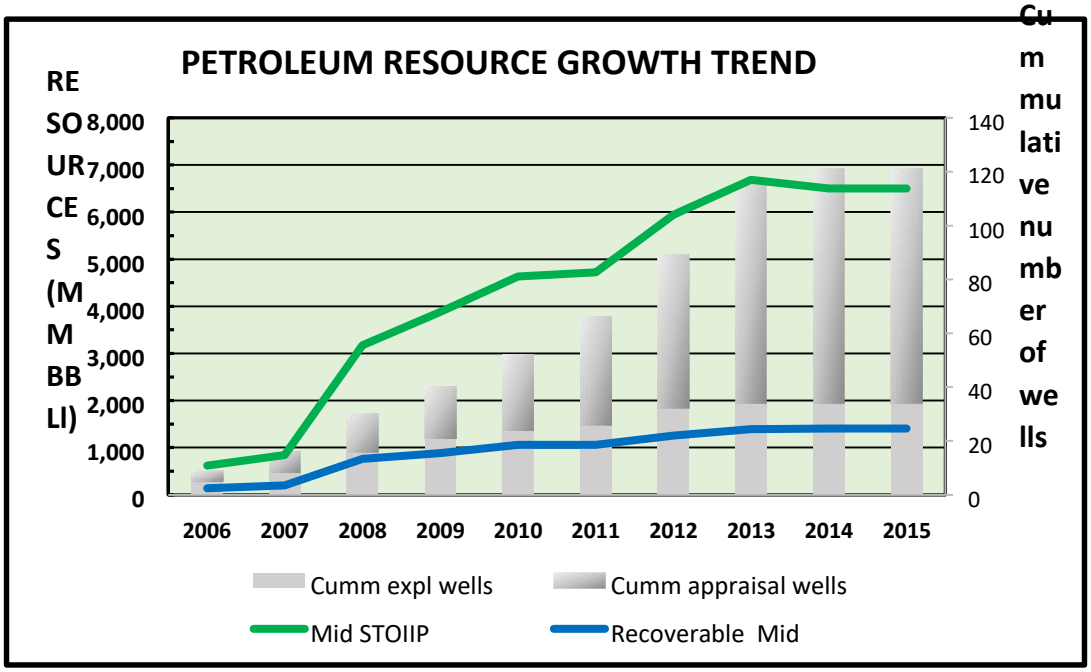
19. About 10% of the Albertine Graben is currently licensed and over 14,000 Sq. km of acreage with high potential for petroleum production remains unlicensed in the Albertine Graben. This acreage includes over 10,000 sq. km which became available through relinquishment or surrender of acreage by the licensed oil companies and expiry of exploration licenses as provided for in the legislation and the
Production Sharing Agreements (PSAs) entered into between Government and the oil companies. Another over 10,000 sq. km of acreage with potential for petroleum production exists outside of the Albertine Graben.

20. The Ministry of Energy and Mineral Development is planning for geophysical surveys in the above areas of the country which have potential for petroleum production but with little or no data acquired in them to date. These areas include parts of the Albertine Graben together with other sedimentary basins in

the country. Licensing for those areas is expected to be undertaken in future licensing rounds.

Objective 2: Establish and efficiently manage the country's oil and gas resource potential

21. The exploration and appraisal of the oil and gas discoveries in the Albertine Graben has led to an increase in the country's petroleum resource base from an estimated 300 million barrels (MMBBL) to 840 million barrels of Stock Tank Oil Initially in Place (STOIIP), when the policy was approved in February 2008, to the current estimate of 6.5 billion barrels, of which 1.4 billion (BBBL) is estimated as recoverable. In addition, gas resources are currently estimated at 500 Billion standard cubic feet (BCF). The Ministry of Energy and Mineral Development uses the Petroleum Resources Management Systems (PRMS) to estimate and report the country's petroleum resources.



22. A new Institutional framework for the sector which separates the three aspects of policy setting, regulation of the industry and execution of the commercial interests of the state respectively has been put in place.

23. In line with Section 9 of the PEDP Act 2013, the Petroleum Authority of Uganda (PAU) has been put in place to regulate the sector. The Uganda National Oil Company (UNOC), provided for under section 42 of the PEDP Act 2013, was incorporated under the Companies Act, 2012 to manage Government's commercial interests (including managing the State Participation provided for in the respective Production Sharing Agreements) in the sector.

24. Members of the Board of Directors for PAU and UNOC were appointed by His Excellency the President, approved by Parliament, and inaugurated in October 2015. The Executive Director for PAU and the Chief Executive Officer together with some top management were recruited during 2016. Recruitment of staff for other key positions is being taken forward, and the two institutions are operational and undertaking their respective roles.



Members of the PAU and UNOC Board of Directors together with MEMD staff following the inauguration by His Excellency, President Yoweri Museveni during October 2015

25. The Ministry has also been restructured and a Directorate of Petroleum created to better support policy setting and implementation as well as the licensing roles of the Ministry. The Directorate has three departments, namely Petroleum Exploration, Development and Production Department (PEDPD – Upstream), Midstream Petroleum Department (MPD) and the Petroleum Supplies Department (MPD).

Objective 3: Efficiently produce the country's oil and gas resources

26. Commercial production of petroleum in the country has not yet commenced. Appraisal drilling, three dimensional (3D) seismic surveys and extended well testing have been undertaken as part of the effort to appraise the oil and gas discoveries made in the country to date. This appraisal work provides a better understanding of the volumes of oil and gas in each of the discoveries made and enables identification of the most efficient methods of producing these volumes.

27. The licensed oil companies use the data and information acquired during appraisal to prepare Field Development Plans (FDPs) and Petroleum Reservoir Reports (PRRs) which are submitted to Government as part of the application for production licenses.

    Of the 21 discoveries, 16 have been adequately appraised and 14 of these approved for development. On 30th August 2016, eight Production Licenses were awarded over 13 discoveries. These are; MputaNziziWaraga, KasameneWahrindi, KigogoleNgara, Nsoga and Ngege fields in Exploration Area 2 operated by Tullow Uganda Operations Pty, and Gunya, Ngiri and JobiRii in Exploration Area 1 operated by Total E&P Uganda. The Kingfisher Production license was awarded to CNOOC in 2012 and development studies are ongoing.



Caroil rig 2 at JobiEast6/6A in Nwoya district during drilling and well testing operations.



Eng. Irene Muloni, Minister of Energy and Mineral Development Awards Production Licenses to CNOOC, Tullow and Total during August 2016

28. Production license applications for Mpyo and JobiEast discoveries in EA 1 will be awarded after final review of their field development plans and petroleum reservoir reports. Appraisal of the Lyec field in EA 1A will continue during 2017.

29. Granting the above production licenses marks the country's entry into the development phase of the petroleum value chain. CNOOC (U) Ltd has commenced predevelopment work on the Kingfisher oil field starting with construction of infrastructure to support the operations. This includes the construction of a 10 kilometer all weather road from Ikamiro Village, across the escarpment to Buhuka in Kyangwali Sub county, Hoima district where the Kingfisher oil field is located, which was completed in February 2016.

30. Other predevelopment activities being undertaken include; Development of a Land Acquisition and Resettlement Framework (LARF), Studies on Excess Associated Gas Utilization, Front End Engineering and Design (FEED) for facilities and Enhanced Oil Recovery (EOR) through Polymer Flooding, Environment and Social Impact Assessments, Biodiversity studies, Resettlement Action Planning and other Geotechnical and geological studies among others.



Land Acquisition and Resettlement Framework disclosure meeting in Uduk village, Buliisa District during November 2016

Objective 4: Promote valuable utilisation of the country's oil and gas resources

32. The policy recommends refining the discovered oil incountry to supply the national and regional petroleum product demand before consideration of exportation. In order to facilitate achievement of this policy objective, the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act 2013 was enacted by Parliament during February 2013 and became effective during July 2013 following Presidential assent. This Act provides for among others, the legal foundation for the development of a refinery in Uganda and other midstream infrastructure like pipelines and storage facilities.

33. Following enactment of the Midstream Act, the Ministry together with the other arms of Government put in place General Licensing, National Content and Health, Safety and Environment (HSE) regulations to operationalize this Act.

34. In addition, the Ministry together with the Uganda National Bureau of Standards (UNBS) through Technical Committee 16 have developed standards and codes for the operation of petroleum infrastructure in the country. 192 standards identified as required for both upstream and midstream petroleum operations have been formulated through a consultative process involving both private and public sector institutions, and have been approved by the National Council for Standards. The Standards were launched in October 2016.



Mr. John Bosco Habumugisha, Assistant Commissioner, Pipelines Development and Ms. Patricia Ejalu UNBS Deputy Executive Director launch the petroleum standards in Kampala

35. Regarding the development of a refinery in Uganda, the East African Community (EAC) Refineries Strategy of 2008 recommended, among other things, the development of a second refinery in East Africa to be developed in Uganda. The other refinery being that of Mombasa which has since been shut down.

36. Government subsequently contracted Foster Wheeler Energy Limited from the United Kingdom during 2009 to carry out a feasibility study on the development of a refinery in Uganda. This study was undertaken during 2010/2011 and it defined the key aspects of developing a refinery in the country such as the size and configuration of the refinery, its location and financing as well as the market for the petroleum products to be produced from the refinery. The study also confirmed the economic viability of refining petroleum in the country and its recommendations were adopted by Government during 2011.

37. The development of a 60,000 barrel per day refinery to be located at Kabaale in Buseruka Subcounty, Hoima District, is now being taken forward by Government. Acquisition of the land required for the refinery commenced in 2012 with the preparation of a Resettlement Action Plan (RAP) for project affected persons (PAPs) through a consultative process. The RAP was completed during 2012 and as part of its implementation, payment of



Minister of State for Energy Eng. Simon D'Ujanga speaking to Project Affected Persons (PAPs) during a sensitization meeting on land acquisition for the refinery development.

compensation to the PAPs who opted for cash commenced in December 2013. By December 2016, 2,625 Project Affected Persons (PAPs) of the 2,670 who opted for cash compensation have been compensated, accounting for 98.3%. The remaining 1.7% includes the PAPs who have never turned up for verification and disclosure. It also includes those whose grievances are still being addressed and some who are in court disputing the compensation rates that were used.

38. In addition, 533 acres of land was acquired in Kyakabooga Parish, Buseruka Subcounty for resettlement of the PAPs who opted for relocation. Physical planning for this land was undertaken and construction of resettlement houses

and other social amenities for those who opted for relocation is almost complete. The infrastructure includes: construction of 46 resettlement houses, construction of Nyahaira and Kyapaloni Primary Schools, rehabilitation of Buseruka Primary School, rehabilitation and expansion of Buseruka and Kabaale health centres IVs. It is expected that the houses will be handed over to the PAPs during the first quarter of 2017.





Some of the structures in Kyakaboga, Buseruka Subcounty for resettlement of PAPs. Left are houses, right is ongoing construction of Nyahaira primary school (right) and Buseruka health centre IV (below)



39. In preparation to develop the refinery, Government embarked on a competitive process of selection of a lead investor to lead the construction and operation of the refinery in 2013. The process involved issuance of a Request for Qualification (RFQ) that was followed by issuance of a Request for Proposals to six firms/ consortia that were shortlisted from the RFQ stage. Four of these submitted detailed proposals and a consortium led by RT Global Resources from Russia was selected as the preferred bidder to be the lead investor for Uganda's refinery project during February 2015. However, negotiations of the Project Agreements between Government and the RT Global Resources led consortium were terminated during June 2016 due to additional requests made by the Consortium that were not agreeable to Government. The refinery development project is now being restructured in order to conclude the selection of a developer during 2017.

40. The Uganda Refining Holding Company that will hold Government's interest in the Refinery project was incorporated as a subsidiary of the Uganda National Oil Company, and recruitment of staff is ongoing, starting with the General Manager who was appointed in January 2017.

41. In addition to development of the refinery, Government agreed to a revised commercialization plan which provides for exporting some of the crude oil produced in the country. In this regard, a Memorandum of Understanding (MoU) between Government and the Licensed Oil Companies which provides for the commercialization of the discovered oil and gas resources was concluded during 2014. The MoU provides for use of the petroleum resources discovered in the country for power generation, supply of Crude Oil to the refinery to be developed in Uganda by Government and export of Crude Oil through an export pipeline or any other viable options to be developed by the Industry.

42. A Master plan for the development of the industrial park which will have an international airport, refinery, crude oil and products storage, transmission hub, logistics warehousing, offices, Petrochemical industries and associated facilities among others, is being developed and will be completed in 2017. The

Master Plan will provide for development of utilities, infrastructure and common services. The industrial park will be located in the 29 sq.km of land acquired in Kabaale, Hoima district.

Objective 5: Promote the development of suitable transport and storage solutions which give good value to the country's oil and gas resources.

43. A study for the development of **Pipelines and Storage Facilities of Petroleum Commodities** (crude oil and gas) from the fields to the refinery was concluded during March 2012. Planning for the transportation of crude oil from the oil fields to the refinery is ongoing. The development of these crude oil feeder pipelines from central processing facilities to the delivery point near refinery will be developed as part of upstream development.
44. A Front End Engineering Design (FEED) study for these feeder pipelines (Buliisa – Kabaale, Hoima and Kingfisher – Kabaale, Hoima) commenced in December 2016 and is expected to be completed within 12 months. Development of a Resettlement Action Plan (RAP) and Environment and Social Impact Assessment (ESIA) studies for these feeder pipelines are planned to commence during the first quarter of 2017.
45. In line with the MoU on commercialisation of the discovered petroleum resources in Uganda, feasibility studies on the development of a **Crude Oil Export Pipeline** from the Albertine Graben in Uganda to the East African Coast, were undertaken with a view to selecting the least cost route for transporting Uganda's crude oil to the coast. The Hoima (Uganda) – Tanga (Tanzania) route was selected as more secure, at a cheaper cost and therefore, a lower tariff.
46. A 1445km long, 24inch diameter, heated East Africa Crude Oil Pipeline (EACOP), is being developed to transport crude oil from Uganda to Tanga port in Tanzania. The development of this pipeline is being led by the licensed upstream oil companies in Uganda, with participating interests by the Governments of Uganda and Tanzania.
47. Project development committees have been set up including a Pipeline Project Team led by the private sector in carrying out daily activities of the Project. This is in addition to a multidisciplinary Joint Project Development Committee

(JPDC) spearheading the implementation of the project, and a Project Steering Committee (PSC) of Permanent Secretaries to review progress and report to the sector Ministers. Negotiation of an Intergovernmental Agreement (IGA) with Tanzania Government is ongoing and is expected to be concluded in the first quarter of 2017.

48. Front End Engineering Design (FEED) study for the EACOP commenced in December 2016 and is expected to be completed within 12 months. Topographic survey and aerial capture for the entire pipeline route using LIDAR technology has been completed and processing of the data acquired is ongoing. RAP and ESIA studies are also planned to commence in the first quarter of 2017.



Representatives from Governments of Uganda and Tanzania, and the upstream licensees in Uganda during the Launch of the FEED for the EACOP in Kampala during January 2017

49. A study covering the **Distribution and Storage Facilities of Petroleum Products** (gasoline, diesel, kerosene, jet fuel etc.) from the refinery to different national and regional markets was concluded during November 2012. A 211 km pipeline to transport refined petroleum from the refinery in Kabaale, Hoima

to a distribution center in Buloba, Northwest of Kampala is planned to be developed as part of the refinery project.

50. The process of acquiring the Right of Way for this pipeline is ongoing, with the detailed pipeline routing study and the Environmental Baseline survey study completed. The Resettlement Action Plan (RAP) study for this pipeline is ongoing and will be followed by land acquisition once the valuation surveys are completed and compensation values have been approved by the Chief Government Valuer. Plans to extend this pipeline from Kampala to Kigali, Rwanda and Eldoret, Kenya are also under consideration.

51. The Ministry of Energy and Mineral Development concluded the preparation of a National Strategy and Plan for petroleum Transportation and Storage Facilities in Uganda which is due for submission to Cabinet during 2017. To ensure effective implementation of the Strategy, an Implementation and Monitoring Framework has also been developed.

52. Construction of the other infrastructure, specifically upgrade of the road and other transportation networks required to support the development of the oil and gas sector is also ongoing. In this regard, the Hoima – Buseruka – Kaiso Tonya Road whose construction commenced in 2013 was completed and handed over to Government in December 2014. In addition, a 10km road from Ikamiro Village across the escarpment to Buhuka in Kyangwali subcounty, Hoima district, where the Kingfisher field is located was constructed by CNOOC, completed and handed over to government in 2015.



Rt. Hon. Prime Minister, Dr. Ruhakana Rugunda, commissions the road to Kingfisher field in Hoima District during March 2016

53. Designing of the KyenjojoKagadiHoimaMasindi as well as that for Hoima – Biso – Wanseko (Buliisa) Road were completed by the Ministry of Works and Transport and procurement of contractors for these two roads is in final stages. The construction of the KabwoyaBuhuka, KarugutuNtoroko and BuliisaParaa roads is also being taken forward by the Uganda National Roads Authority (UNRA).

Objective 6: Ensure collection of the right revenues and use them to create lasting value for the entire nation.

54. The Ministry of Finance, Planning and Economic Development is taking lead in implementation of this policy objective. The Ministry formulated an Oil and Gas Revenue Management Policy that was adopted in February 2012. The Ministry formulated the Public Finance Management Act, 2015 which provides for among others, the management of revenues accruing from petroleum resources.

55. As of 2016, Government had received over UGX 2.5 trillion as Nontax revenues, Capital Gains Tax, and other tax obligations from operations in the sector. Government's successful defense in the Permanent Court of Arbitration in February 2015, of the assessment of Capital Gains Tax on the sale of Heritage assets and an out of court settlement of the Capital Gains Tax dispute with Tullow Oil during June 2015 regarding its farmdown to CNOOC and Total in 2012 are testimony to the efforts Government is taking to ensure collection of the right revenues in the oil and gas sector.



H.E President Yoweri Museveni commissions the HoimaBuserukaKaiso Tonya Road during February 2015. Oil revenues will be utilised to support development of infrastructure to boost other productive sectors of the Economy such as Agriculture, Manufacturing and Tourism, among others

Objective 7: Ensure optimum national participation in oil and gas activities.

56. A study to establish the opportunities and challenges for the participation of Ugandans in the oil and gas sector was commissioned in 2010 and completed during 2011. The final study report can be accessed at www.petroleum.go.ug.

57. The key recommendations of the study included; establishment of an institutional framework for the implementation of national content policies for the oil and gas sector, ensuring capacity building in people and in firms (enterprise development), and facilitating participation of Ugandans in the sector with due regard to maintaining the competitiveness of the sector.

58. An institutional framework for National Content development in the petroleum subsector is in place. The Directorate of Petroleum is responsible for Policy formulation related to National Content, together with development, coordination and monitoring of National Content. The Petroleum Authority of Uganda regulates and monitors Licensees and their contractors on their compliance to National Content requirements, whereas the Uganda National Oil Company supports development of National Expertise in petroleum operations.

59. Other recommendations of the study being implemented include supporting the setting up an Association of Oil and Gas Service Providers (AOGAS) in the country and formulation of a National Content Policy. The draft National Content Policy was prepared and stakeholder consultations concluded during 2014/2015. The Policy was submitted to the Cabinet Secretariat and is expected to be approved during 2017.

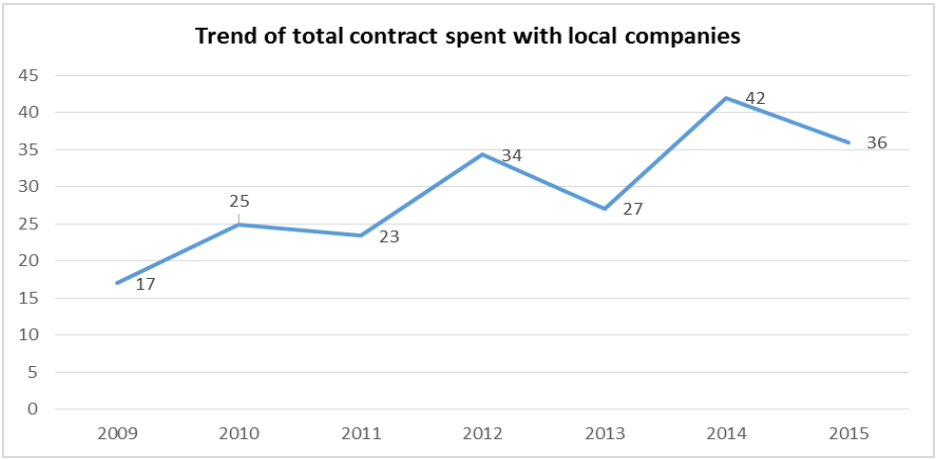
60. In addition, National Content Regulations to operationalize the Upstream and Midstream Acts were issued in June 2016. The regulations cover the provision

of goods and services by Ugandan businesses, employment of Ugandans and transfer of technology. The National Content Regulations further provides for fifteen categories of goods and services reserved for Ugandan entrepreneurs. These are Transportation, Security, Foods and beverages, Hotel accommodation and catering, Human resource management, Office supplies, Fuel supply, Land surveying, Clearing and forwarding, Crane hire, Locally available construction materials, Civil works, Environment studies and impact assessments, Communications and information technology services and Waste management, where possible.



MEMD staff with Ugandan employees at a drilling activity in the Albertine Graben during a National Content monitoring visit.

61. To date, more than 1000 National Enterprises have provided services such as Logistics, civil works, Environment consulting services, Catering and Hotel Accommodation, cleaning and fumigation services, transportation, communication, Medical services and manpower/ recruitment services among others to the Oil and Gas Sector. These companies have also provided employment to over 9,000 Ugandans through indirect and induced employment. There has been growth in percentage contract value spent with Ugandan companies from 17% in 2009 to 42% in 2014 to 36% in 2015



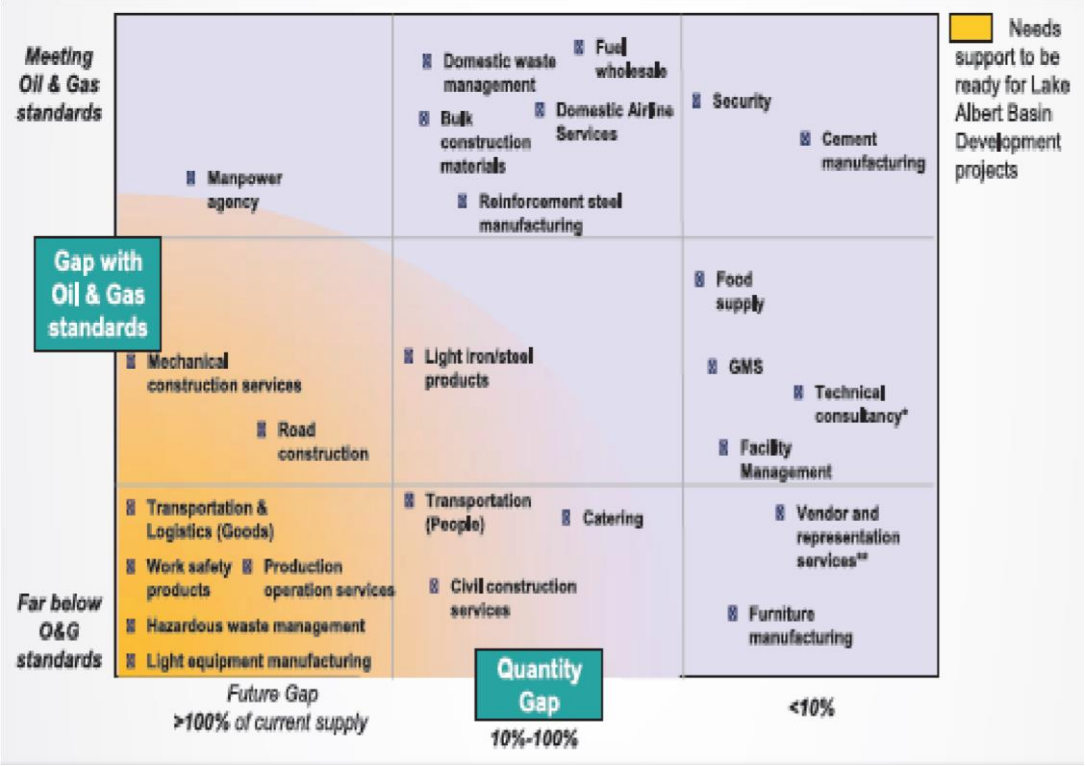
62. Other efforts to ensure that Ugandans are actively participating in the sector through direct employment and provision of goods and services to the oil and gas sector include: requiring the licensed oil companies to develop Nationalisation Plans which are approved and monitored by
Government. The licensed companies have offered direct employment to a total of over 1,000 Ugandans over the years with more than 70% of staff as Ugandans.

63. In preparation for the development of the discovered oil fields, the licensed oil companies undertook an Industrial Baseline Study to assess the projected demand for the planned activities and also assess the ability of the different service sectors in the country to supply the emerging oil and gas sector.

64. The study identified the demand and supply gaps in terms of quantity and quality and recommended key actions to be undertaken which are being implemented. These actions include dissemination of information on the requirements such as manpower and services among others, putting in place an
Industrial Enterprise Center (IEC) to raise the standards of businesses and entrepreneurs, among other measures. The design of the IEC was completed and Government is in the final phases of planning for its operationalization.

65. The study also highlighted 25 critical industries with high potential for National Content for Uganda.

These are; Civil construction, Site safety and security, Road construction, Bulk construction material, Cement, Catering, Domestic airline services, Facility management, Food supply, Fuel (wholesale), Furniture manufacturing, Generic waste management, General maintenance, Hazardous waste management, Light equipment, Manpower consultancy, Mechanical construction, Production operations, Structural/ flat steel, Technical consulting, Transport & Logistics (Goods), Transportation (People), Vendors, Work safety products and Reinforcement steel manufacturing.



Quality and quantity mapping of the 25 industries with high potential for national content as per the Industrial Baseline Study

66. Government and the Licensees undertook a study for Agriculture Development in the Albertine region. The Agriculture Development Programme once implemented will support local farmers to meet the petroleum subsector standards and requirements. This will ensure sustainable food production for the local production

while meeting the needs of the sector. The capacity of farmers will also be developed to enable them export or sell their additional products to other markets outside the region.

67. Government is also working with the licenses to establish a National Suppliers' Database (NSD) as provided for in the Upstream and Midstream National Content regulations, 2016. The NSD will shorten the procurement cycle, reduce costs associated with engaging contractors and provide a standardized approval process in line with the laws and regulations. It will also enable efficiency in monitoring of IOCs spend and submission of timely procurement reports by the licensees. The PAU advertised for applications from potential suppliers for qualification to, and subsequently registration on the NSD. The submissions will be evaluated and the successful applicants will be shortlisted and published on the NSD.

Objective 8: Support the development and maintenance of national skills and expertise.

68. Under this policy objective, the Uganda Petroleum Institute Kigumba (UPIK) which offers diploma and certificate courses in petroleum related studies was established in March 2010 under the Ministry of Education, Science Technology and Sports.

69. The Institute has to date produced 88 Technicians, who undertook 2 years formal training at UPIK and then 6 months of industrial training in Trinidad and Tobago. Admission of 30 students for UPIK's third intake was undertaken in 2014 and Infrastructure for the institute including lecture rooms, dormitories and workshops are being put in place together with the procurement of training equipment for the workshops. The infrastructure will enable the students to undertake most of their industrial training in the country. A 5 year institutional development plan has been put in place to guide the development of the institution.





Some of the infrastructure at UPIK. Left are prefabricated structures hosting lecture rooms, dormitories and workshops. Right – are the lecturers' living quarters.

70. At the professional level, a Bachelor's degree in Petroleum Geosciences was introduced at Makerere University in the academic year 2009/2010. MEMD supports this training through facilitating field work in the Albertine Graben, supervising fourth year students' projects and providing internship placement for some of the students.

71. Makerere University also commenced a Master of Science degree in Petroleum Geoscience Programme during 2012. This post graduate programme is being undertaken in collaboration with the University in Bergen, Norway. Private institutions, including Victoria University, Institute of Petroleum Studies/ Quest Energy, OGAS Training East Africa, QSourcing among others have also commenced both short and long term training courses in Petroleum studies in the country. There is, however still a need for the institutions to take on an optimum number of students at both undergraduate and post graduate levels for whom field training opportunities can be made available and the job market can accommodate.



Students from Victoria University pursuing petroleum related courses on a field visit to operations in the Albertine Graben

72. As these capacity building efforts are being taken forward, MEMD, the Ministry of Education, Science, Technology and Sports and with support from the World Bank, have completed a comprehensive study on the skills requirement for the entire petroleum value chain in the country and a Workforce Skills Development Strategy and Plan for the sector was developed. This study documents the skills required for exploration, development, production, refining and transportation at the artisan, technical and professional levels of education. Among other aspects, the study projected that approximately 160,000 direct, indirect and induced jobs will be created by the current planned projects, with most of
the jobs at technician level. Majority of the indirect and induced jobs will be created by other sectors which will benefit from the economic development triggered by the oil and gas sector.

73. As part of implementation of the strategy, an assessment of UPIK and Qsourcing with support from the World Bank was under taken by OPITO, a leading certification body for the Oil and Gas industry to ascertain the capability to offer OPITO accredited training. The assessment concluded that both institutions have capability to offer OPITO courses at Foundation and Level one OPITO, subject to filling a few gaps that were identified. Both Institutions are currently fillings the gaps that were identified. In addition, two

training centers (Qsourcing and Kinyara Sugar Works) are now approved as City and Guilds Training Centers. City and Guilds is another leading certification body for the oil and gas industry.





Some of the participants in the City and Guilds certified training courses in Electrical installation (left) and welding and fabrication (right) that was held at St. Peter's vocational training school in Hoima, facilitated by Qsourcing in partnership with Irish Aid

74. Government has also continued to prioritize capacity building of officers from the different institutions taking forward the development of the oil and gas sector in the Country. These include Ministries of Energy and Mineral Development, Finance Planning and Economic Development, Justice and Constitutional Affairs, , Lands, Housing and Urban Development, Water and Environment, National Environment Management Authority, Uganda Wildlife Authority, Uganda Revenue Authority, Office of the Auditor General and Bank of Uganda among others. More than 200 officers of Government have to date been trained at post graduate level specializing in different petroleum disciplines.

75. The oil companies licensed in the country such as Tullow Oil, Total and CNOOC together with their service providers are also have and continue to offer training opportunities for the sector at both the blue collar and professional levels.

76. Government with support from the German Government, Norwegian Agency for Development Cooperation (NORAD), and Department for International Development (DFID) is implementing the Skills for Oil and Gas (SOGA) Project. The project, which is inline the Workforce Skills Development Strategy and Plan (WSDSP), will train over 2000 Ugandans at different levels, and also support a number of Ugandan Training institutions to produce graduates that meet accepted international standards.

77. Other Development partners or projects that are supporting the implementation of the WSDSP are: the World Bank under the Albertine Skills Development Programme, Belgian Technical Cooperation under the implementation of Skilling Uganda Business, Technical and Vocational Education and Training (BTVET) strategy, the Japan Oil, Gas and Metals National Corporation (JOGMEC), Irish Aid and United States Agency for International Development (USAID), among others.

Objective 9: Ensure that oil and gas activities are undertaken in a manner that conserves the environment and biodiversity

78. The Ministry of Water and Environment together with the National Environment Management Authority (NEMA) continue to play a leading role in the implementation of this policy objective. The Albertine Graben, where oil and gas activities are taking place in Uganda, is recognized as one of the most biodiverse rich areas in the world. Environment and Social Impact Assessments (ESIAs) are conducted prior to undertaking each activity in the oil and gas sector as required by the National Environment Act Cap 153 and National Environment (Environment Impact Assessment) Regulations, 1998. During the EIA process, consultations are undertaken with stakeholders at community and national levels to ensure a harmonious interface between petroleum activities, communities, the environment and the biodiversity of the Albertine Graben. In addition, routine Environmental.

Inspections are carried out by the respective responsible arms of Government to assess compliance with environmental requirements and to investigate impacts which may not have been predicted at the time when ESIA approval was granted.

79. Drilling waste was in the past been containerized and monitored at designated sites prior to existence waste management facilities in the country. In 2014, NEMA authorized six firms to set up petroleum waste treatment and disposal facilities in the country. Three of these firms, Enviroserve, White Nile and Luwero Industries have constructed facilities in Hoima and Nakasongola respectively and are now licensed to operate these facilities. Construction of the Enviroserve facility at Nyamasoga commenced during 2014 and the facility was officially launched during April 2015. Containerized waste from the designated sites has now been transferred to the waste treatment plants for disposal.





Left Waste treatment facilities at the Enviroserve waste management Facility in Nyamasoga in Buseruka Subcounty, Hoima District. Right A solid waste engineered land fill at the facility.

82. In addition, the following environmental and biodiversity tools have been developed as part of the efforts the effort to ensure appropriate environment management for the oil and gas sector in the country,

- An Environment Sensitivity Atlas (ESA) for the Albertine Graben was developed in 2009 and updated in 2011. The ESA describes the different levels of sensitivity in the different parts of the Graben with a view to guiding the oil and gas activities in the area.
- An Environment Monitoring Plan (2012 to 2017) for the Albertine Graben that defines the key monitoring indicators together with an enforcement and compliance monitoring strategy have been put in place and are being implemented.
- Guidelines for operation of Oil Companies in Protected Areas have also been developed.
- A Strategic Environment Assessment (SEA) for Oil and Gas Activities in the entire Albertine Graben was prepared and approved by Government in July 2015. The SEA will be used to ensure that environmental concerns are captured in Government's PPPs (plans, programmes & policies).
- A National Oil Spill Contingency Plan is under development for use in the (unlikely) event of an oil spill.
- Management plans for the protected areas within the Albertine Graben such as Murchison Falls National Park, Queen Elizabeth National Park and Budongo Forest have been updated to provide for the ongoing and planned oil and gas activities within these areas of high biodiversity.

83. A multiinstitutional environment monitoring team led by the National Environment Management Authority (NEMA) and composed of the Uganda Wildlife Authority (UWA), Fisheries Resources Department, National Forestry Authority, Directorates of Environmental Affairs and Water Resources Management in the Ministry of Water and Environment, District Local Governments, Ministry of Lands, Housing and Urban Development, the

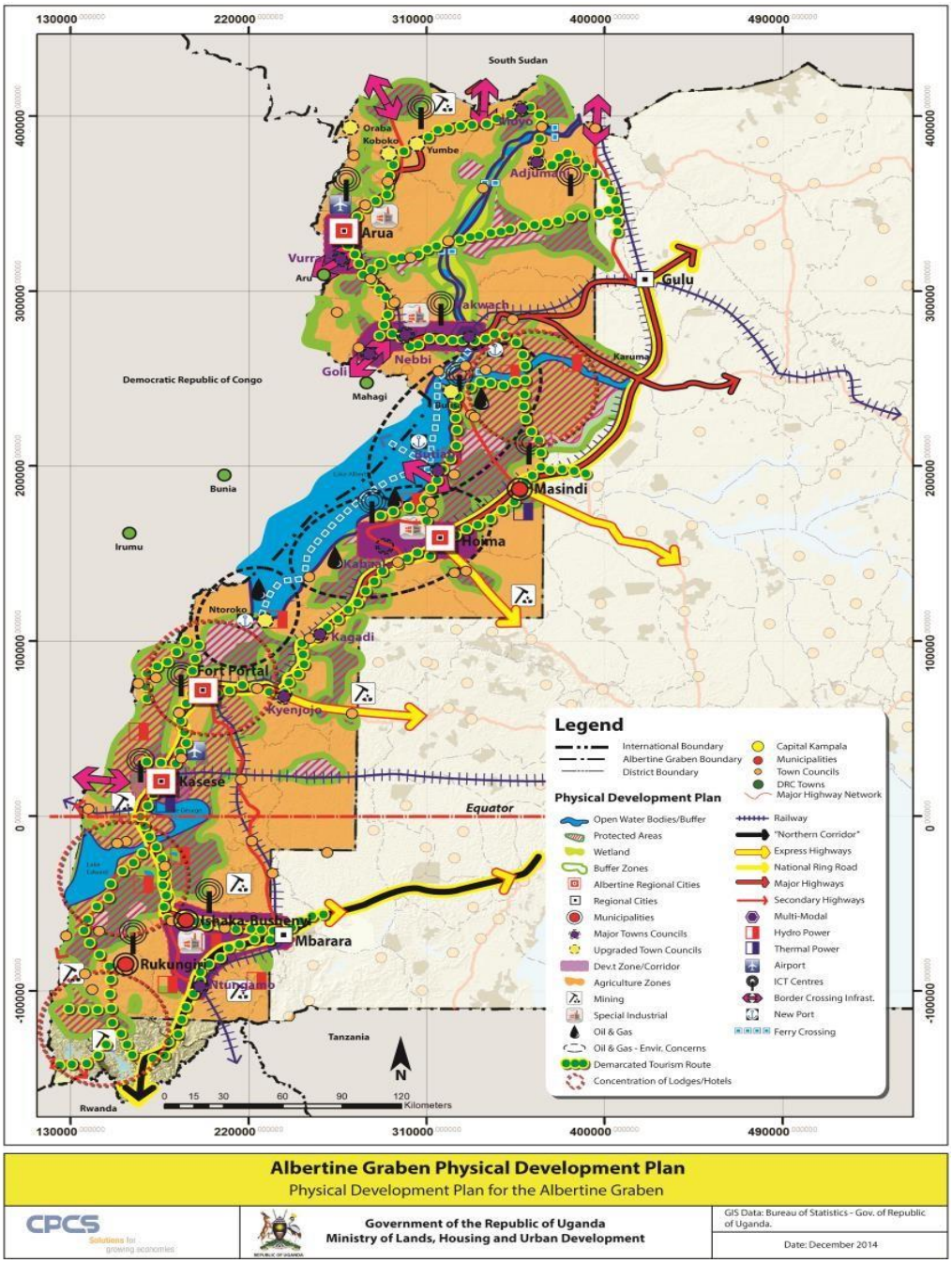
Petroleum Authority of Uganda and Directorate of Petroleum is in place to monitor the interface between the environment and petroleum activities.

84. The monitoring framework includes representatives of these institutions based in the field, regular visits to field operations by senior level technical officers from these institutions who report to a committee of executives from the same institutions.

85. In addition several laws are being revised to strengthen the existing legislation. These include; National Environmental Act Cap. 153, National Environment (Waste Management) Regulations, Statutory Instrument No. 1532, National Environment (Standards for Discharge of Effluent into Water or on Land) Regulations, Statutory Instrument No. 1533, National Environment (Noise Standard and Control) Regulations, Statutory Instrument No. 30 of 2003. Other legislation under development include National Air Quality standards (NAQS), Petroleum (waste management) regulations and Oil Spills Regulations and Guidelines.

86. Land use planning for the Albertine Graben and its surrounding areas as recommended by the Policy commenced when the Graben was declared a special planning area in 2012. Physical planning for specific towns in the operation areas, namely Sebagoro in Hoima District together with Butiaba and Buliisa in Buliisa district that will be impacted by the developments has been undertaken together with planning for the areas around the refinery development area (Kabaale, Kaseeta, Kidoma, Nyamasoga, Buseruka, Kigaaga, Buseruka and
Kyakaboga resettlement area).

87. The Ministry of Lands, Housing and Urban Development has prepared a regional physical development plan for the entire Albertine Graben and planning for several growth centres in the region is ongoing.



Map showing the physical development plan for the Albertine Graben

Objective 10: To ensure mutually beneficial relationships between all stakeholders in the development of a desirable oil and gas sector for the country.

88. Development of the oil and gas sector in Uganda is being taken forward in a manner that recognizes the roles of different stakeholders and seeks to ensure their participation in the development of the sector.

89. Extensive consultations were undertaken during formulation of the National Oil and Gas Policy and in the preparation of the new petroleum legislation that became effective subsequently. The consultations on the new laws were enhanced by the additional consultations which Parliament undertook both in country and overseas in preparation for the debate on the Bills. Consultations with stakeholders continue to be undertaken during studies relating to the Upstream and Midstream
Infrastructure Development, National Participation and Environment Management, among others. The consultations undertaken while putting in place these frameworks do not only enhance the quality of the frameworks but also enhance ownership of the outcome of the frameworks by the respective stakeholders.

90. In addition to the consultative process, a National Communication Strategy for the Oil and Gas Sector was developed and put in place during 2011 to bridge the communication gap between the oil and gas industry and the general public. A public information and education effort to enable Ugandans achieve a better understanding of the developments and opportunities in the sector and how they (Ugandans) can participate is also ongoing.

91. This effort has included radio and television programmes across the country, engagements with different stakeholder groups such as the media, civil society, business entrepreneurs, religious and cultural institutions together with leaders and communities in the Albertine Graben as focal stakeholders. In addition, the

website www.petroleum.go.ug is regularly updated with recent developments and documents relating to the oil and gas sector.



Community sensitization meeting on land related issues in Ngwedo Subcounty, Buliisa District during April 2015

92. The Policy also recommends regional cooperation in the development of Uganda's oil and gas resources. The Albertine Graben where oil and gas exploration is taking place is shared with the Democratic Republic of Congo. In 1990, the Governments of Uganda and the Democratic Republic of Congo (DRC) (then the Republic of Zaire) signed an "agreement of cooperation for the exploration of hydrocarbons and exploitation of common fields" between the two countries. As a result of the understanding arising out of this Agreement, the Oil companies which have been licensed by the Government of the DRC to undertake oil exploration and development in DRC are using Uganda as a base or as a transit route for movement of their equipment and personnel required for their operations. For example, Soco E&P DRC completed Environment and Bathymetric studies and acquisition of seismic and aeromagnetic data over the Lake Edward basin in DRC using a base camp located at Lake Katwe in Uganda.

93. In addition, the East African Community (EAC) Partner States are also working together to promote investment in the region's emerging oil and gas sector, mainly through the biennial East African Petroleum Conference and Exhibition (EAPCE) and the EAC Sectoral Council on Energy. The 8th EAPCE 2017 will be held in Bujumbura, Burundi from 8th to 10th March 2017.



Rt. Hon Anastase Murekezi, Prime Minister of Rwanda (right) is taken round Uganda's exhibition booth by Eng. Irene Muloni (center) and Hon. Peter Lokeris (2nd right) during the 7th East African Petroleum Conference and Exhibition that was held in Kigali, Rwanda during March 2015.

94. Government is continuing to establish bilateral linkages with other countries where oil and gas exploration, development and production is taking place, including Australia, India, Ghana, Malaysia, Nigeria, Norway, Trinidad and Tobago and USA, among others. This is with a view to provide opportunities to share experiences and best practices for the country's oil and gas sector.

CONCLUSION

95. The Government of Uganda is taking forward the development of the oil and gas sector in the country through implementation of the National Oil and Gas Policy. The oil companies that have been licensed in the country are continuing 9to invest in the development of this sector. The exploration success in the country has led to the transformation of the Albertine Graben from being a frontier exploration basin to an internationally recognised and established petroleum province. Planning for the development, production, refining and transportation of petroleum in the country is ongoing.

96. The oil and gas sector which is a newly emerging sector in the country is beginning to provide opportunities and benefits for the people of Uganda, its economy, and the region at large. These opportunities include; new investments, development of infrastructure, enhanced demand for services in the country, employment opportunities; establishment of offices and bases in the country by multinational companies; technology transfer and industrial development, among others.

97. The Ministry of Energy and Mineral Development appreciates the roles played by the respective stakeholders and invites the public to support this new and important sector of development in the country through actively playing their respective roles.

Government of Uganda is committed to effective and efficient development of the Country's Oil and Gas Sector.

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Appendix 9: Uganda Interim NDC Submission

THE REPUBLIC OF UGANDA

Ministry of Water and Environment

Submission of Uganda's Interim Nationally Determined Contribution (NDC)

12 October 2021

Uganda's interim NDC submission is in response to paragraphs 24 and 25 of decision 1/CP.21 and in particular Uganda's commitment to update its nationally determined contribution (NDC).

In this submission is a table accompanying information to facilitate clarity, transparency and understanding (ICTU) of our interim updated NDC in compliance with Decision 4/CMA.1.

Uganda formally communicated its (I)NDC under the Paris Agreement on 14 October 2015 which became our NDC upon ratification of the Paris Agreement in November 2016.

Since then, Uganda has undertaken steps to implement the NDC and increase its ambition. Most significantly is Uganda's formulation of the National Climate Change Act 2021 to give the force of law to the Paris Agreement.

Unlike Uganda's initial NDC, the interim NDC aims to further strengthen mitigation actions on one part as well as adaptation actions. Adaptation remains the country's priority response to climate change.

Whereas our NDC submitted in 2016 projected 2030 emissions would be 77.3 MtCO2e, under this update they are projected to almost double.

This interim NDC submission shows an improvement upon Uganda's initial NDC which is presented as sector wide conditional reduction target as represented in the ICTU table below.

To achieve this a multi stakeholder process, and internal approval process is still ongoing, once this is complete Uganda will formally communicate her updated NDC

We believe that once the process is completed, the updated NDC shall show a marked improvement both in the process and format by which the 2030 sectoral target was determined and set to be implemented.

Information to facilitate clarity, transparency and understanding of the updated NDC of Uganda for the period 2021 2030

1. Quantified information on the reference point, including, as appropriate, a base year	
a Reference year(s), base year(s), reference period(s) or other starting point(s)	The updated base year is 2015 reflecting the latest national greenhouse gas inventory. The reference year is 2021 and the reference period is 2021 – 2030 with the Business as usual projection target year as 2030
b. Quantifiable information on the reference indicators, their values in the reference year(s), base year(s), reference period(s) or other starting point(s), and, as applicable, in the target year	The base year emissions accordingly to the first Biennial Update report was estimated at 90.53 $MtCO_2e$/year and the projected emissions by 2030 under the Businessasusual (BAU) scenario is estimated at 143 MtCO2e.
c. For strategies, plans and actions referred to in Article 4, paragraph 6, of the Paris Agreement, or polices and measures as components of nationally determined contributions where paragraph 1(b) above is not applicable, Parties to provide other relevant information	Not applicable

d. Target relative to the reference indicator, expressed numerically, for example in percentage or amount of reduction	The national economywide emission reduction target is under technical review and will be to be adopted by the National Climate Change Advisory Committee (NCCAC)
e. Information on sources of data used in quantifying the reference point(s)	The key data sources used for baseline projection are: Future emissions were estimated using Low Emissions Analysis Platform (LEAP) and excel sheets Industrial Development in Uganda: An Assessment of the Policy Framework.

	East African Commission (2015). The East African Community Vision 2050. Electricity Regulatory Authority (2021) Least Cost Electricity Expansion Plan 20202030. PLN/83120/021/008 Government of Uganda (2007). Climate Change: Uganda National Adaptation Programmes of Action (NAPA) submitted to UNFCCC. Government of Uganda (2013b). Uganda National Climate Change Learning Strategy 2013 – 2022. Ministry of Water and Environment. Government of Uganda (2015a). Annual Statistical Abstract. Uganda Bureau of Statistics (UBOS). Government of Uganda (2015b). National Climate Change Policy. Ministry of Water and

	Environment. Government of Uganda (2015d). Second National Development Plan 2015/2016 – 2019/2020. National Planning Authority. Kampala Uganda. Government of Uganda (2016). Strategic programme for climate resilience: Uganda pilot programme for climate resilience (PPCR). Government of Uganda (2017). The Uganda Green Growth Development Strategy 2017/18 2030/31. Government of Uganda (2020). Third National Development Plan 2020/21 2024/25. National Planning Authority. Kampala Uganda. IFPRI (2010). Enterprise Budget Survey: An Analysis of Crop and Livestock Enterprises, International Food Policy Research Institute, Uganda Strategy Support Program (USSP), Working Paper No. 5, June 2010. International Centre for Tropical Agriculture (CIAT) (2011). Future Climate Scenarios for Uganda's Tea Growing Areas. Final report: July, 2011. Kampala Capital City Authority (KCCA). (2015). Kampala city Energy and Climate Profile. Ministry of Agriculture, Animal Industry and

	Fisheries (2018). National Adaptation Plan for the Agricultural Sector. MAAIF, Kampala Uganda. Ministry of Agriculture, Animal Industry and Fisheries (2020a). Situational Analysis of the Agriculture Sector in Uganda. Final Report. Ministry of Agriculture, Animal Industry and Fisheries (2020b). Long term low carbon, climate resilient agricultural development pathways for Uganda actions for meeting the goals of the Paris Agreement (UNFCCC COP21). Draft Report. Ministry of Water and Environment (2013). National Forest Plan.

	Ministry of Water and Environment (2014), Uganda's Second National Communication to the United Nations Framework Convention on Climate Change. Accessed from: https://unfccc.int/resource/docs/natc/uganc2.pdf Ministry of Water and Environment (2015a). Uganda's Intended Nationally Determined Contribution (INDC). Ministry of Water and Environment. Ministry of Water and Environment (2015b). Economic Assessment of the impacts of climate change in Uganda. Final Report. Ministry of Water and Environment (2015c). Uganda Wetlands Atlas: Volume One – Kampala city, Mukono and Wakiso districts Ministry of Water and Environment (2019), Uganda's First Biennial Update Report (BUR) to the United Nations Framework Convention on Climate Change. Accessed from: https://unfccc.int/sites/default/files/resource/FBUR%20Final_2019.pdf Ministry of Energy and Mineral Development (2013). Biomass Energy Strategy for Uganda (BEST). Ministry of Energy and Mineral Development. Accessed from: https://data2.unhcr.org/en/documents/download/64163 Ministry of Energy and Mineral Development (2015) Energy and Mineral Sector Development Plan. Accessed from: http://npa.go.ug/wpcontent/uploads/2018/01/EnergySectorDevelopmentplanFinal.pdf National Planning Authority (2010). Uganda Vision 2040.

	National Planning Authority, Kampala Uganda. Accessed from: http://www.npa.go.ug/ugandavision2040/ Nsubuga, F. W., & Rautenbach, H. (2018). Climate change and variability: A review of what is known and ought to be known for Uganda. International Journal of Climate Change Strategies and Management. Rautenbach. H. (2014). Regionalscale Climate Change Projections of Annual. Seasonal and Monthly NearSurface Temperatures and Rainfall in Uganda. Report for the Ministry of Water and Environment & Climate and Development Knowledge Network (CDKN). Republic of Uganda (2014). Poverty Status Report 2014. Twinomuhangi R. (2018). Uganda national urban climate change profile. UNDP and Ministry of Lands, Housing and Urban Development. Kampala Uganda. Uganda Bureau of Statistics (UBOS) (2018). Uganda National Household Survey 2016/2017. Kampala, Uganda; Accessed from: https://www.ubos.org/wpcontent/uploads/publications/03_20182016_UNHS_FINAL_REPORT.pdf UNDP (2013). Climate Risk Management for Sustainable Crop Production in Uganda: Rakai and Kapchorwa Districts UN FAO (2019). Options for lowemission development in the Uganda dairy sector. Final report.

	USAID. (2013). Uganda Climate Change Vulnerability Assessment. USAID, African and Latin American Resilience to Climate Change (ARCC).

	World Bank Group. (2015). Uganda: Strategic Climate Diagnostics, World Bank Group. WWF (2015). Energy report for Uganda: A 100% renewable energy future by 2050
f. Information on the circumstances under which the Party may update the values of the reference indicators	Baseline projections may be updated under following circumstances: □ Significant changes in the country's Gross Domestic Product (GDP) projections □ Methodological improvements
2. Time frames and/or periods for implementation	
a. Time frame and/or period for implementation, including start and end date, consistent with any further relevant decision adopted by the CMA;	2021 to 31st December 2030
b. Whether it is a singleyear or multiyear target, as applicable.	Single year target in the year 2030.
3. Scope and coverage	
a. General description of the target;	The emission reduction target will both conditional and unconditional thus demonstrating the country's increased climate ambition.

b. Sectors, gases, categories and pools covered by the nationally determined contribution, including, as applicable, consistent with IPCC guidelines;	The following IPCC sectors have been covered: Energy includes Electricity generation and supply, Transport Agriculture, Forestry and Other LandUse (AFOLU) includes Agriculture and Livestock, Forests, Wetlands Waste includes solid waste and wastewater Industrial Processes and Product Use (IPPU) includes Industries, Mining and Quarrying and Petroleum, Chemical and Nonmetallic Mineral Products
	The following IPCC gases have been covered: Carbon dioxide (CO_2) Methane (CH_4) Nitrous oxide (N_2O)
c. How the Party has taken into consideration paragraphs 31(c) and (d) of decision 1/CP.21;	To the extent possible, categories of emissions or removals have been included, especially those considered ‘significant source categories’. However data availability remains a key challenge.
d. Mitigation cobenefits resulting from Parties’ adaptation actions and/or economic diversification plans, including description of specific projects, measures and initiatives of Parties’ adaptation	Mitigation cobenefits resulting from adaptation actions will be featured

actions and/or economic diversification plans.	
4. Planning process	
a. Information on the planning processes that the Party undertook to prepare its NDC and, if available, on the Party's implementation plans, including, as appropriate:	Uganda established a technical team to support the NDC update process and development of longterm low emissions strategy simultaneously. A series public consultations process was launched once the sectoral teams where established in the beginning of 2019 with the support of development partners. These included a series of consultations with the youth, the civil society, the private sector policy makers and the public through regional workshops i.e. Central region, Western region, Eastern region, Northern region and West Nile region.
i. Domestic institutional arrangements, public participation and engagement with local communities and	The Ministry of Water and Environment, Climate Change Department is the institution responsible for coordination, supervision, regulation and management of all activities related to climate change. Therefore, the department spearheaded

indigenous peoples, in a genderresponsive manner;	the update of the NDC and ensured whole of government and whole of society approach. The regional consultations across the 5 regions provided a platform for local communities and public to participate in the NDC update process. A national validation is envisaged to provide a platform for the public to own the updated

	NDC
ii. Contextual matters, including, inter alia, as appropriate:	
(a) National circumstances, such as geography, climate, economy, sustainable development and poverty eradication;	It will be contained in the updated NDC
(b) Best practices and experience related to the preparation of the NDC;	The NDC Update embraced whole of society approach were various categories of the society fully participated in a bottomup approach. Despite the Covid19 pandemic, the hybrid mode of participation through regional workshops, youth and civil society consultations enabled the identification of various climate actions which were discussed and prioritised by policy makers during the sectoral consultations which ensured alignment with overarching national planning and budgeting frameworks. The collaboration with National Planning Authority and Ministry responsible for Finance ensured alignment of the update process with the vision 2040 and development aspirations highlighted in the third National Development Plan (NDP III) of the country.

	The simultaneous work on midterm climate action planning (NDC update) and long term (LTS development) promoted efficient strategic planning for climate action. The joint modelling for NDC update and LTS scenarios; systematic data and information sharing and joint progressive planning propelled synergy.
(c) Other contextual aspirations and priorities acknowledged when joining the Paris Agreement;	The country envisages to achieve a lower middle income status that comes along with improvements in socioeconomic welfare for all Ugandans.
b. Specific information applicable to Parties, including regional economic integration organizations and their member	Not Applicable

States, that have reached an agreement to act jointly under Article 4, paragraph 2, of the Paris Agreement, including the Parties that agreed to act jointly and the terms of the agreement, in accordance with Article 4, paragraphs 16–18, of the Paris Agreement;	

c. How the Party's preparation of its NDC has been informed by the outcomes of the global stocktake, in accordance with Article 4, paragraph 9, of the Paris Agreement;	Not applicable since Global stocktake has not be undertaken as yet
d. Each Party with an NDC under Article 4 of the Paris Agreement that consists of adaptation action and/or economic diversification plans resulting in mitigation cobenefits consistent with Article 4, paragraph 7, of the Paris Agreement to submit information on:	
i. How the economic and social consequences of response measures have been considered in developing the NDC;	Not Applicable
ii. Specific projects, measures and activities to be implemented to contribute to mitigation cobenefits, including information on adaptation plans that also yield mitigation cobenefits, which may cover, but are not limited to, key sectors, such as energy, resources, water resources, coastal resources, human settlements and urban planning, agriculture and	In this NDC update, Uganda continues to prioritize adaptation as the first response to climate change. The updated NDC features information on elements of an Adaptation Communication. However, a comprehensive and detailed Adaptation Communication and National Adaptation Plan will be developed and submitted.

forestry; and economic diversification actions, which may cover, but are not limited to, sectors such as manufacturing and industry, energy and mining, transport and communication, construction, tourism, real estate, agriculture and fisheries.	
5. Assumptions and methodological approaches, including those for estimating and accounting for anthropogenic greenhouse gas emissions and, as appropriate, removals:	
a. Assumptions and methodological approaches used for accounting for anthropogenic greenhouse gas emissions and removals corresponding to the Party's nationally determined contribution, consistent with decision 1/CP.21, paragraph 31, and accounting guidance adopted by the CMA;	The "2006 IPCC Guidelines for National Greenhouse Gas Inventories" was used in compiling the base year GHG inventory as well as the assumptions used in the first Biennial Update Report 2019

b. Assumptions and methodological approaches used for accounting for the implementation of policies and measures or strategies in the nationally determined contribution;	Not applicable since implementation of policies and measures is yet to commence
c. If applicable, information on how the Party will take into account existing methods and guidance under the Convention to account for anthropogenic	See 5.(d)
emissions and removals, in accordance with Article 4, paragraph 14, of the Paris Agreement, as appropriate;	
d. IPCC methodologies and metrics used for estimating anthropogenic greenhouse gas emissions and removals;	The NDC update was informed by the use of Global Warming Potential (GWP) of Greenhouse gases for 100 years which was used for the 2015 national GHG inventory. Calculation of emissions from some categories was based from the 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories.

e. **Sector, category or activityspecific** assumptions, methodologies and approaches consistent with IPCC guidance, as appropriate, including, as applicable:	
i. Approach to addressing emissions and subsequent removals from **natural disturbances** on managed lands;	Not Applicable
ii. Approach used to account for emissions and removals from **harvested wood products**;	Not included in the emissions calculations
iii. Approach used to address the effects of **ageclass** structure in forests;	Not applicable
f. **Other assumptions and methodological approaches** used for understanding the nationally determined contribution and, if applicable, estimating corresponding emissions and removals, including:	
i. How the **reference indicators**, baseline(s) and/or reference level(s), including, where applicable, sector, category or activityspecific reference levels, are constructed, including, for example, key parameters, assumptions,	The emission reduction projections were informed by historical trends taking into account the country's Forest Reference Emission Level (FREL). The BAU scenarios were projected using LEAP and excel based models in accordance with 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories.

definitions, methodologies, data sources and models used;	
ii. For Parties with nationally determined contributions that contain **nongreenhousegas components**, information on assumptions and methodological approaches used in relation to those components, as applicable;	Not applicable
iii. For **climate forcers** included in nationally determined contributions not covered by IPCC guidelines, information on how the climate forcers are estimated;	Not applicable
iv. **Further technical information**, as necessary;	Not applicable
g. The intention to use **voluntary cooperation under Article 6** of the Paris Agreement, if applicable.	Uganda will use voluntary cooperation provided for in Article 6 in accordance with the National Climate Change Act 2021 to demonstrate her mitigation ambition and mobilise support to promote sustainable development and poverty eradication. Nonmarket approaches such as Adaptation Benefit Mechanism will be explored among others.
6. How the Party considers that its NDC is fair and ambitious in light of its national circumstances	

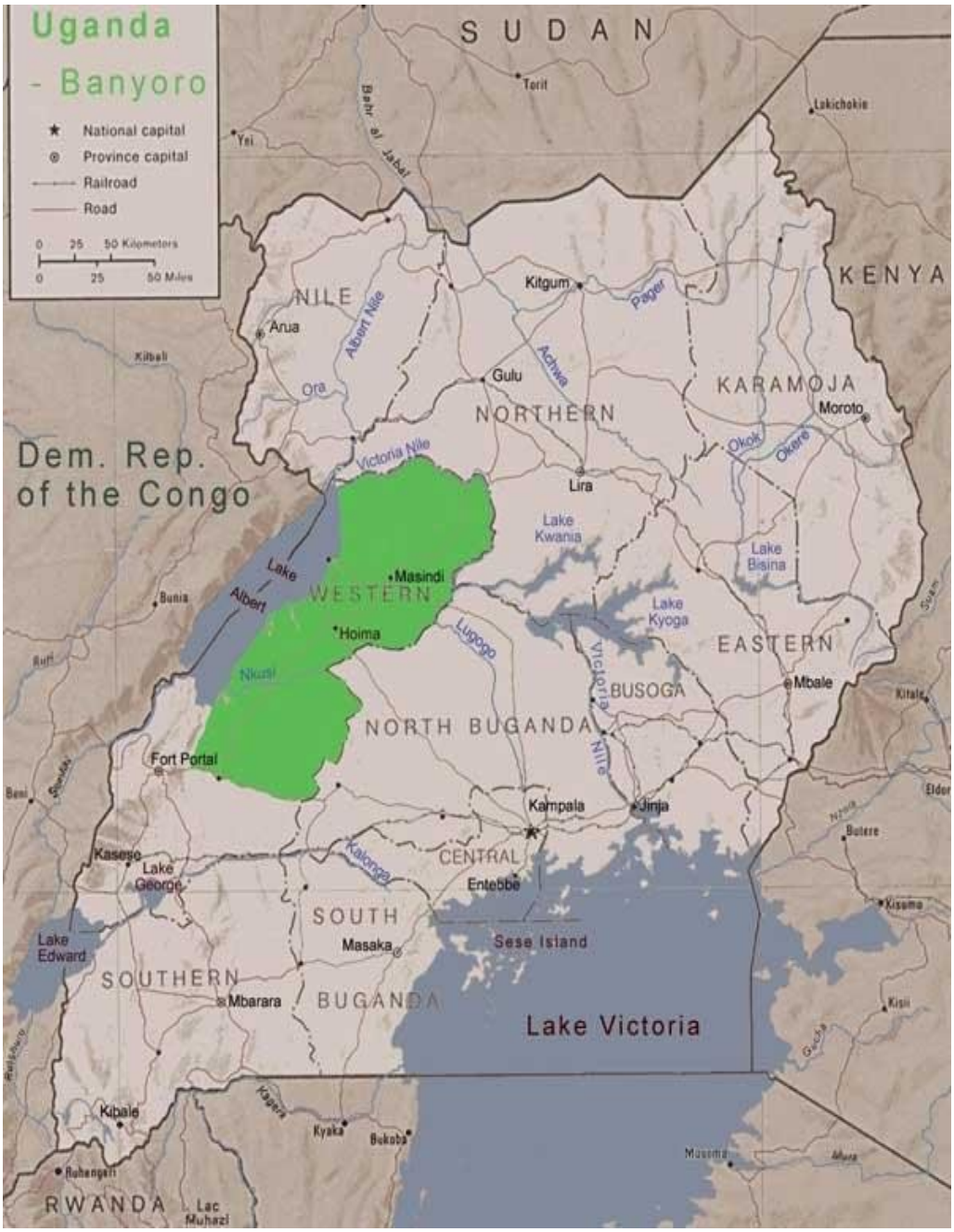
a. How the Party considers that its NDC is fair and ambitious in the light of its national circumstances;	Uganda is a Least Developed Country highly vulnerable to climate impacts and characterized with very low emissions but undertaking climate actions with her domestic budget complemented by assistance from development partners. Despite the country's low human development index of 0.477, the country has set an economywide emission reduction target expected to be greater than the target in the first NDC communicated in 2016. The new target includes takes into account specific sector emission targets for Energy, Transport, Waste and Industry. This is a significant development since the first NDC target focused on only on AFOLU sector.
	The country intends to feature both a conditional and unconditional component in the new economywide emission reduction target. Additionally, the first NDC sectors and subsectors of focus have increased from 9 to 14 in the updated NDC i.e. Agriculture; Energy; Health; Forestry; Fisheries; Water & Environment; Urban, Tourism;

	Transport; Built Environment; Disaster Risk Reduction; Manufacturing and Ecosystems including Biodiversity, Rangelands and Mountains
b. Fairness considerations, including reflecting on equity;	Uganda is still a Least Development Country with overarching goal of transforming from a predominantly peasant and low income country to a competitive upper middle income country. Uganda intends to transition to low carbon and climate resilient economy in the near future and thus its updated NDC represents her contribution and the fair share of domestic effort to achieve the longterm temperature goal.
c. How the Party has addressed **Article 4, paragraph 3**, of the Paris Agreement;	The updated NDC is a progression beyond the first NDC and ambitious despite the new challenges e.g. Covid19 pandemic which has contracted the economy of Uganda. The implementation of the updated NDC will depend on the both domestic and external support.
d. How the Party has addressed **Article 4, paragraph 4**, of the Paris Agreement;	Uganda has developed a set of Clean Development Mechanism Projects and Nationally Appropriate Mitigation Actions (NAMAs) as part of the mitigation

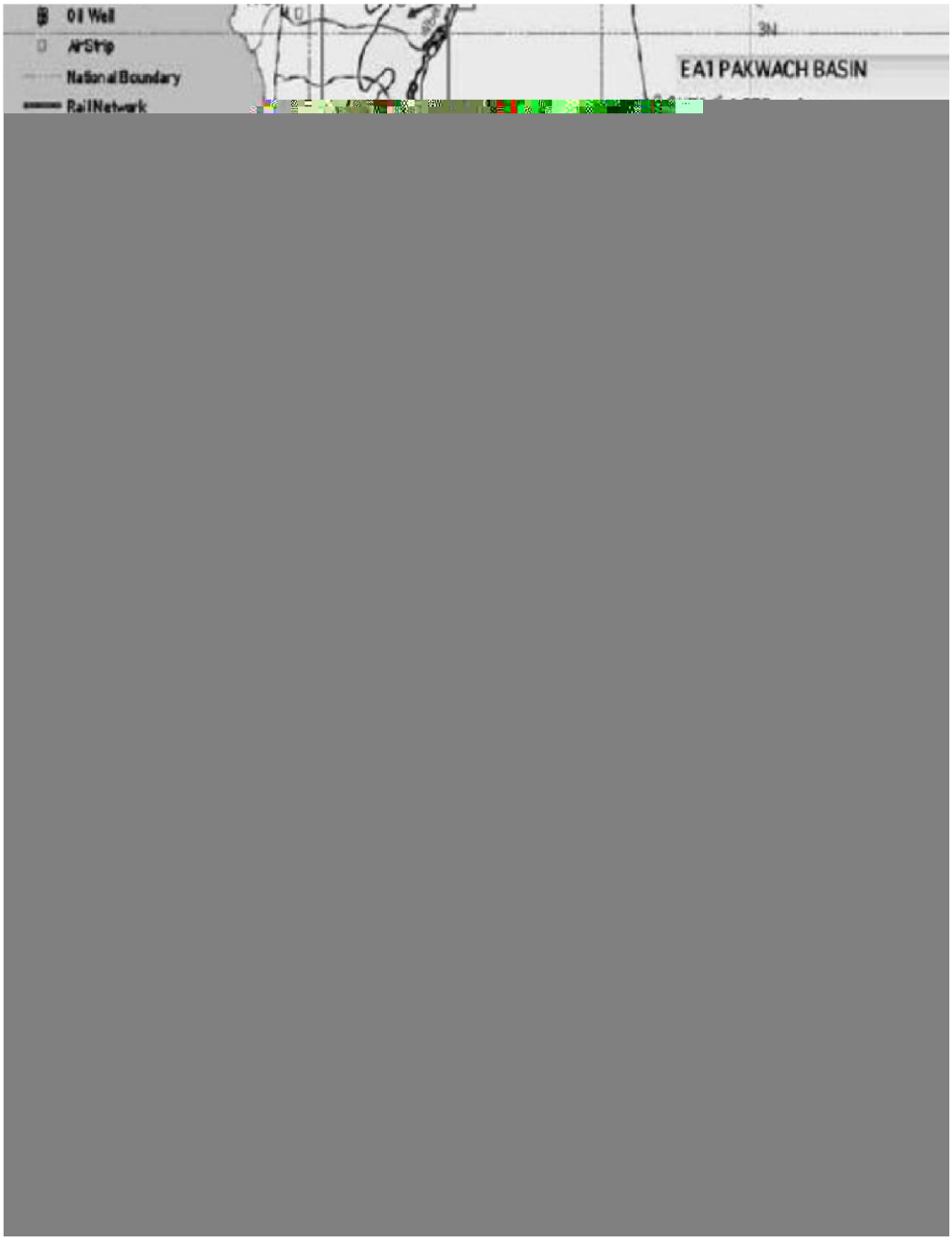
	efforts to implement the first NDC. The updated NDC will feature an economywide emission reduction target with mitigation measures across key sectors of the economy.
e. How the Party has addressed **Article 4, paragraph 6**, of the Paris Agreement.	The NDC update has been simultaneously done with the country's longterm low emission development strategy undergoing preparation in accordance with Article 4, paragraph 19, of the Paris Agreement.
7. How the NDC contributes towards achieving the objectives of the Convention as set out in its Article 2	
a. How the NDC contributes towards achieving the objective of the Convention as set out in its Article 2;	The updated NDC reflects Uganda's contribution towards achieving the objective of stabilization of greenhouse gas concentrations in the atmosphere and defines priority adaptation and mitigation actions.
b. How the NDC contributes towards Article 2, paragraph 1(a), and Article 4, paragraph 1, of the Paris Agreement.	The updated NDC defines the country's contribution highlighted in priority adaptation and mitigation actions towards holding the increase in global average temperature to well below 2°C. See 6.(a)

Appendix 10: The oil producing region of Uganda

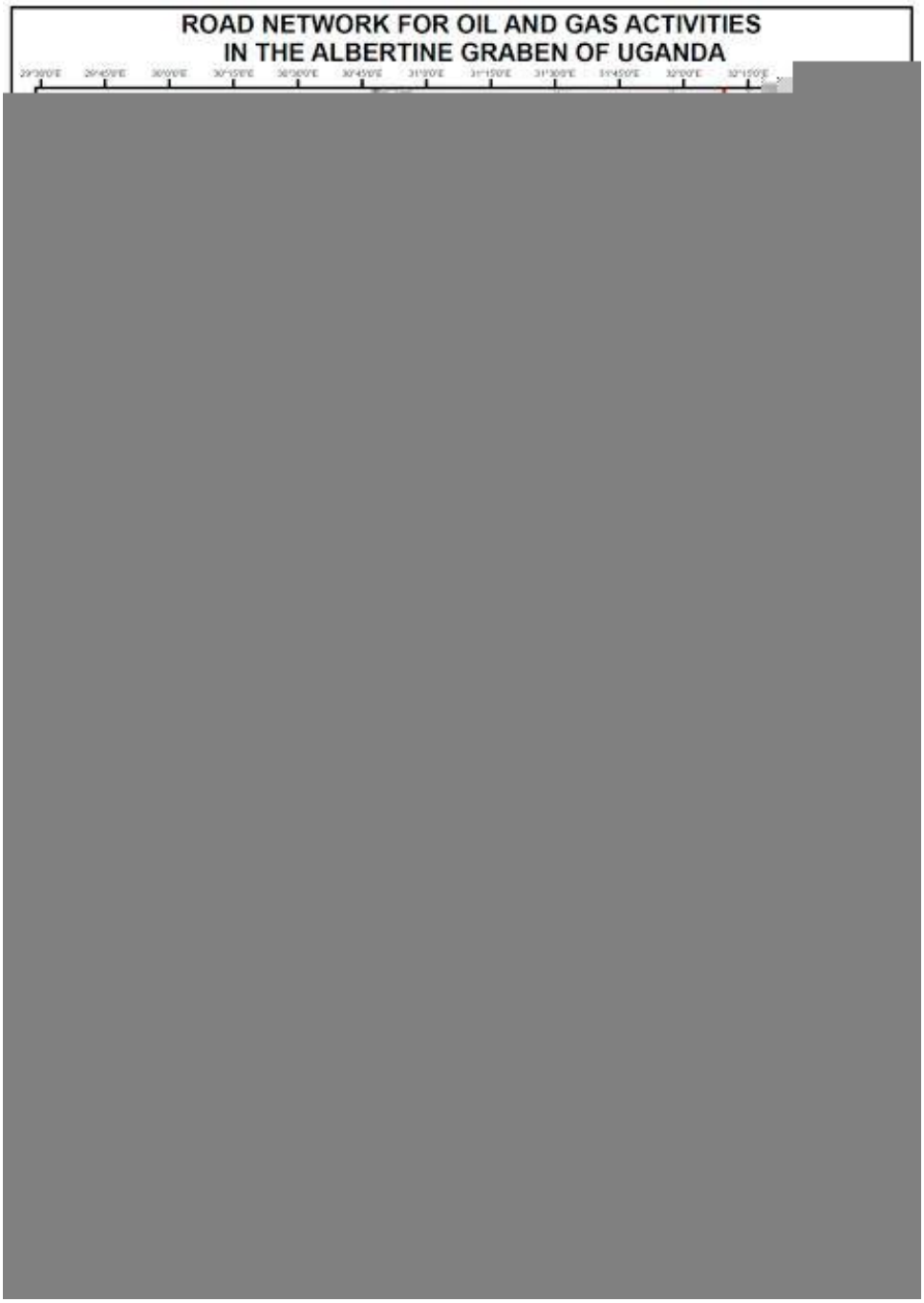
(The area marked green is the oil rich Albertine Graben)



Appendix 11: A map showing oil licensing in the Albertine Graben (source: International Alert, 2009)



Appendix 12: a map showing all the oil routes in the albertine



Appendix 13: Commentary on the East African Crude Oil Pipeline (EACOP) (Special Provisions) Bill 2021

Local content regulations have fallen short of diversity in practice. Their application is sometimes narrowed upon use of specific goods, and services of unskilled and semiskilled labor to the exception of certain other professionals. The practice todate excludes the use of some local professionals like lawyers. It is trite that most International Oil Companies prefer to employ their foreign legal service providers, insurers, architects among others, yet these would tremendously bring in a lot of revenue, internal development and skills mastery.

The current Act provides for employment of Ugandan citizens and for foreign employees, that work permits be given supported by a letter from the department certifying that the applicant possesses skills adequate for employment and that no Ugandan has such. In the contracts for public works, the minister will reserve certain contracts for public works to be exclusively granted by Ugandan citizens and companies. In so doing, foreign companies are supposed to employ at least 60% of its total staff being Ugandans and to sub contract 40% of the scope of contracted services; to undertake training of Ugandan staff in spheres of the project and dedicate at least 2% to training. It is cognizable that the national content regulations are in practice, more concerned with supply of goods and services related to goods still but do not stress about the hiring and use of professional services like of lawyers, financial insurers and the medics. More to this, it is absurd that mostly the unskilled and semiskilled labor is employed whereas the most professional positions are left for foreigners.

Local content regulations have not been fully complied with by licensees because first of all, the latter in most cases don’t feel bound or obligated by the rules. Local content is defined by the Act to include the quantum or percentage of locally

produced goods, locally produced services and the utilization of personnel, financing, goods and services by a local content entity in any operation or activity carried out in Uganda.

In the Upstream Act, Section 125(1) provides that goods may be produced or made 9available in Uganda, by anyone, not necessarily Ugandan citizens or companies and that services must be rendered by Ugandan citizens and companies. There is ambiguity on whether the alternatives provided by this section achieve the same result. Section 125(2) provides for the supply of goods and services, which are not available in Uganda. This means that suppliers of goods and services available in Uganda are not subject to the joint venture requirement and may be supplied by wholly foreign entity subject to the preference in subsection (1). We ask then, when can goods and services be said to be unavailable in Uganda? Some of the required services such as finance, legal and food supply are considerably available in the country. It is also worth noting that the section only provides for Ugandan ownership in suppliers to licensees and not as licensees themselves. It is also not clear why Section 125 (3) only focusses on Ugandan entities and does not provide for local tendering. Section 125 (5) does not help us understand what Ugandan goods are. The provision does not directly address suppliers of these goods. Section 53 (3) of the Midstream Act requires the licensee, the contractor and subcontractor of the licensee to give priority to the purchase of local products and services wherever they are competitive in terms of quality and timely availability. This provision is problematic given that it will take a while for Ugandan companies to realistically compete favorably in the petroleum sector. Regulation 8 of the National Content Regulations (supra) requires a licensee to show a plan for giving preference to Ugandan good where the goods meet the quality and timeline for delivery. It is also difficult to assess how this preference should be implemented, determinants of pricing, quality and timelines of delivery. For such reports to be

meaningful, the licensee would need to be informed about industry and production dynamics in the country even outside the scope of its expertise and investment interest.

Policy and law makers should consider creating a database for Ugandan goods and services. Although Regulation 11 of the National Content Regulations (supra) provides for a national supplier database for companies, citizens and registered entities, it does not afford the same protection to "goods and services". In a limping intellectual property and quality standards regime dominated by counterfeit and substandard goods, the expectations for using Ugandan good should extend to the minimum value addition required and clear tracking of origin of materials or process of manufacture. Also, the provisions on "goods not available in Uganda" should be more clear about the stage of production and expected consumption alternatives for such goods.

Finally, and most emphatically, the law and practice of the time should also reflect and emphasize the use of local professional services like legal services, financial, and food supply among others. It is even not enough for the regulators to demand Ugandan companies to demonstrate capacity, experience and technology succession in an industry where innovations have not been tried and tested and approaches are predominantly driven by market forces and invariably volatile. These are some of the issues that warrant an amendment of the National Local Content Act but good enough, we have a bill before parliament called ***The East African Crude Oil Pipeline (EACOP) (Special Provisions) Bill 2021***



Isaac Christopher Lubogo

ABOUT THE BOOK

This book focuses on the main legal issues within the oil and gas industry today in Uganda and beyond. It helps one to understand and the skills to deal with a wide range of oil and gas legal issues. Helps to Develop a sound knowledge of the main legal, regulatory and contractual issues pertinent in the oil and Gas industry in the Uganda, Regional and international level both upstream and downstream operations; it give an understanding of the operation of some key legal principles in the context of non-contractual issues in the oil and Gas industry; and legal jurisprudence in Oil and Gas law in Uganda. The book recognizes the lack of rigorous academic publications in the oil and gas law field in Uganda. It further recognizes that the terms oil and gas have been occasionally intertwined by most writers all over the globe but the writer is awake to the underlying distinctions between them which would warrant that a deeper, more specific legal body be arraigned to capture the natural gas sector per se. by this book, Uganda is honored to be availed a number of legal and institutional reforms to guide its oil and gas utilization at this infancy stage.

The book to gives a broad and clear insight into relevant legal, political and economic issues related to oil and gas law at national, regional levels; it Critically appraises and discusses the legal structure and regulatory matrix of the oil and gas sector in Uganda it also Critically appraises contractual frameworks, environmental concerns, dispute resolution mechanisms as used in the oil and gas industry. The book uses legal reasoning, analysis and research by critically analyzing the broad principles and practical implementation of oil and gas law and policy in Uganda and various regions of the world. The intention is to Exhibit full understanding of legal issues covering finite resources and incorporate them into the decision making processThis book focuses on the main legal issues within the oil and gas industry today in Uganda and beyond. It helps one to understand and the skills to deal with a wide range of oil and gas legal issues. Helps to Develop a sound knowledge of the main legal, regulatory and contractual issues pertinent in the oil and Gas industry in the Uganda, Regional and international level both upstream and downstream operations; it give an understanding of the operation of some key legal principles in the context of non-contractual issues in the oil and Gas industry; and legal jurisprudence in Oil and Gas law in Uganda. The book recognizes the lack of rigorous academic publications in the oil and gas law field in Uganda. It further recognizes that the terms oil and gas have been occasionally intertwined by most writers all over the globe but the writer is awake to the underlying distinctions between them which would warrant that a deeper, more specific legal body be arraigned to capture the natural gas sector per se. by this book, Uganda is honored to be availed a number of legal and institutional reforms to guide its oil and gas utilization at this infancy stage.

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