

# International Oil Politics I

- **The Basics: Definitional Issues**
- Petroleum or crude oil is a naturally occurring oily, bituminous, toxic, flammable liquid consisting of a complex mixture of hydrocarbons of various molecular weights.
- It is found in geologic formations beneath the earth's surface.
- Petroleum is a compound mainly composed of ***hydrogen*** and ***carbon*** and they are called ***hydrocarbon***.
- When it is found as a solid. It is called coal, shale, tar sands or bitumen.
- The most commonly known hydrocarbon is crude oil which is also referred to as petroleum.

- Under the Petroleum Act of Nigeria (Petroleum Act was promulgated as Decree No. 51 of 1969, now Cap. P10, Laws of the Federation of Nigeria, 2004), Petroleum means:
  - *“mineral oil (or any other related hydrocarbon) or natural gas as it exists in its natural state in strata, and it does not include coal or bituminous shale or other stratified deposits from which oil can be extracted by destructive distillation”.*

- Furthermore, “crude oil” is defined in the Act as
- *“oil in its natural state before it has been refined or treated (excluding water and other foreign substances)”. Natural gas means “gas obtained from boreholes and wells consisting primarily of hydrocarbons”.*

- **Nature and Formation of Oil**
- Petroleum is fossil fuel and is formed from long-buried plants and micro-organisms.
- Fossil fuel is any carbon-containing fuel derived from the decomposed remains of prehistoric plants and animals.
- Fossil fuels include coal, natural gas and petroleum or crude oil, which are the petrified and liquefied remains of millions of years' accumulation of decayed plant life.

- (**Petrifaction** *or* **petrification** means the conversion of substance to stone; that is, the process by which dead things change to a substance like stone after a long period of time).
- Fossil fuels consist largely of hydrocarbons. Some fossil fuels also contain smaller amounts of other compounds.

- Hydrocarbons formed from ancient living organisms that were buried under layers of sediment millions of years ago.
- As accumulating sediment layers exerted increasing heat and pressure, the remains of the organisms gradually transformed into hydrocarbons.
- These substances are extracted from the earth's crust and refined into suitable fuel products such as petrol, heating oil and kerosene.

- When fossil fuels are burned, their chemical energy becomes heat energy, which by means of machines such as engines and turbines, is converted into mechanical or electrical energy.
- Coal first became an important industrial fuel during the 11<sup>th</sup> and 12<sup>th</sup> centuries in China, where iron manufacturing consumed great quantities of this resource.

- The first major usage of coal as a domestic fuel began in 16<sup>th</sup> century London, England.
- During the Industrial revolution, which began in the 18<sup>th</sup> century, coal became a key fuel for industry, powering most steam engines.
- Coal was the primary fossil fuel until the middle of the 20<sup>th</sup> century, when oil replaced it as the fuel of choice in industry, transportation and other fields.

- Deep drilling for petroleum was pioneered in western Pennsylvania in 1859, and the first large oil fields were tapped in south-eastern Texas in 1901.
- The world's biggest oil fields were accessed in the 1940s in Saudi Arabia and in the 1960s in Siberia.

- Why did oil overshadow coal as the fuel of choice considering that oil is less plentiful than coal?
  - The discovery of small engines
  - Oil has certain advantages over coal.
  - It is more efficient than coal, providing more energy per unit of weight than coal does.
  - Oil also causes less pollution and works better in small engines.

- **Characteristics/Composition of Oil**
- The chemical composition of all petroleum is principally hydrocarbons, although a few sulphur-containing and oxygen-containing compounds are usually present; the sulphur content varies from about 0.1 to 5 percent.
- Petroleum contains gaseous, liquid, and solid elements.
- The consistency of petroleum varies from liquid as thin as gasoline to liquid so thick that it will barely pour.

- Small quantities of gaseous compounds are usually dissolved in the liquid; when larger quantities of these compounds are present, the petroleum deposit is associated with a deposit of natural gas.
- Three broad classes of crude petroleum exist:
  - the Paraffin types;
  - the asphaltic types; and
  - the mixed-based types.

- The paraffin types are composed of molecules in which the number of hydrogen atoms is always two more than twice the number of carbon atoms.
- The characteristic molecules in the asphaltic types are naphthenes, composed of twice as many hydrogen atoms as carbon atoms.
- In the mixed-based group are both paraffin hydrocarbons and naphthenes.

- **Formation of Crude Oil**
- Petroleum is formed under earth's surface by the decomposition of marine organisms.
- The remains of tiny organisms that live in the sea- and, to a lesser extent, those of land organisms that are carried down to the sea in rivers and of plants that grow on the ocean bottoms- are enmeshed with the fine sands and silts that settle to the bottom in quiet sea basins.
- Such deposits , which are rich in organic materials, become the source rocks for the generation of crude oil.

- The process began many millions of years ago with the development of abundant life, and it continues to this day.
- The sediments grow thicker and sink into the seafloor under their own weight.
- As additional deposits pile up, the pressure on the ones below increases several thousand times, and the temperature rises by several hundred degrees.
- The mud and sand harden into shale and sandstone; carbonate precipitates and skeletal shells harden into limestone; and the remains of the dead organisms are transformed into crude oil and natural gas.

- Once the petroleum forms, it flows upwards in earth's crust because it has a lower density than the brines that saturate the interstices of the shales, sands and carbonate rocks that constitute the crust of earth.
- The crude oil and natural gas rise into the microscopic pores of the coarser sediments lying above.
- Frequently, the rising material encounters an impermeable shale or dense layer of rock that prevents further migration; the oil has become trapped, and a reservoir of petroleum is formed.

- A significant amount of the upward-migrating oil, however, does not encounter impermeable rock but instead flows out at the surface of earth or onto the ocean floor. Surface deposits also include bituminous lakes and escaping natural gas.

- **Historical Development of the Oil Industry**
- The surface deposits of crude oil have been known to humans for thousands of years.
- In the areas where they occurred, they were long used for limited purposes, such as caulking boats, waterproofing cloth, and fuelling torches.
- By the 14<sup>th</sup> century, these surface deposits were being distilled to obtain lubricants and medicinal products, but the real exploitation of crude oil did not begin until the 19<sup>th</sup> century.
- The Industrial Revolution had by then brought about a search for new fuels, and the social changes it effected had produced a need for good, cheap oil for lamps; people wished to be able to work and read after dark.

- Whale oil, however, was available only to the rich, tallow candles had an unpleasant odour, and gas jets were available only in then modern houses and apartments in metropolitan areas.
- In 1852, Canadian physician and geologist Abraham Gessner obtained a patent for producing from crude oil a relatively clean-burning, affordable lamp fuel called kerosene; and in 1855 and American chemist, Benjamin Silliman, published a report indicating the wide range of useful products that could be derived through the distillation of petroleum.
- Thus, the quest for greater supplies of crude oil began.

- For several years people had known that wells drilled for water and salt were occasionally infiltrated by petroleum, so the concept of drilling for crude oil itself followed.
- The first such wells were dug in Germany from 1857 to 1859 but the event that gained world fame was the drilling of an oil well near Oil Creek, Pennsylvania, by Colonel Edwin L. Drake in 1859.
- Drake, contracted by the American industrialist, George H. Bissell, drilled to find the supposed “mother pool” from which the oil seeps of Western Pennsylvania were assumed to be emanating.
- The reservoir Drake tapped was shallow – only 21.2 metres (69.5ft) deep – and the petroleum was a paraffin type that flowed readily and was easy to distil.

- Drake's success marked the beginning of the rapid growth of the modern petroleum industry.
- Soon petroleum received the attention of the scientific community, and coherent hypotheses were developed for its formation, migration upwards through the earth, and entrapment.
- With the invention of the automobile and energy needs brought about by World War I (1914-18), the petroleum industry became one of the foundations of industrial society.

- **Oil Exploration**
- To explore in relation to petroleum means “to make a preliminary search by surface geological and geophysical methods, including aerial surveys for oil.
- Petroleum geologists and geophysicists have many tools at their disposal to assist in identifying potential areas for drilling.

- Thus, surface mapping of outcrops of sedimentary beds makes possible the interpretation of subsurface features, which can then be supplemented with information obtained by drilling into the crust and retrieving cores or samples of the rock layers encountered.

- In addition, increasingly sophisticated seismic techniques – the reflection and refraction of sound waves propagated through earth – reveal details of the structure and interrelationship of various layers in the subsurface.
- It is believed that the first oil well was dug in Southern Iran in about 500 BC.

- The Chinese are also believed to have drilled for oil and gas using bamboo tubes and bronze drill-bits as early as the 3<sup>rd</sup> century BC.
- In Nigeria, the search for oil started during the colonial era.
- It was in 1908 that the first recorded major exploration took place through the German Bitumen Company in a place near Okitipupa in present-day Ondo State.

- The activities of the German Bitumen Company ceased as a result of the 1<sup>st</sup> World War.
- Interest in the possibility of discovering oil around the Oil Rivers Protectorates and the banks of Rivers Niger and Benue was resuscitated in 1937 through the establishment of Shell D'Arcy Petroleum Development Company of Nigeria as an affiliate of Shell Petroleum Company and British Petroleum Company.

- After the 2<sup>nd</sup> World War, Shell BP intensified its exploration activities, which eventually yielded dividend in 1956 as it discovered oil in commercial quantity in Oloibiri in present-day Bayelsa State.
- Nigeria's proven oil reserves are estimated by the US Energy Information Administration (EIA) as between 16 and 22 billion barrels but some other sources claim they could be as much as 35.3 billion barrels.
- These reserves make Nigeria the tenth most petroleum-rich country in the world.

- **Theories of Ownership and Control of Crude Oil**
- ***A) Absolute Ownership Theory***
- This theory states that the owner of a piece of land is regarded also as the owner of the petroleum lying underneath the land.
- This theory conceptualizes land as the surface of the earth, the subsoil, including everything down to the crux and the airspace up to the sky.
- Within the framework of this conceptualization, ownership implies a complete and total control which a person exercises over land.
- According to this theory, whoever owns a piece of land should also own whatever is found on it whether under or above it.

- This theory has been criticised on the ground that oil and gas are fugacious substances (that is, they move from one place to another beneath the earth's surface) and therefore impossible for anyone to capture them and make them stay permanently on a person's property.
- By way of illustration, if "A" owns a piece of land, underneath of which there is crude oil, we may rightly conclude that he is the owner of the crude oil underneath but if the crude oil wanders to "B's" land, then, "A" no longer has any claim to the crude oil.
- This theory is well recognized in the USA's state of Texas.

- ***B) Qualified Interest Theory***
- This theory states that crude oil and gas cannot be owned until they are captured and reduced into possession.
- What this implies is that ownership of the crude oil and gas under a person's land is qualified.
- The qualification is that ownership can only be claimed if the crude oil is reduced to possession.
- By way of illustration, "A's" ownership of the crude oil underneath his land is qualified. It is qualified in the sense that it is only when "A" is able to reduce the crude oil and gas to possession that he can claim ownership.
- This theory obtains in states like California and Indiana in the US.

- **C) Non-ownership Theory**

- This theory states that crude oil and gas are not capable of being owned because their fugacious nature.
- In essence, since petroleum is like a fluid that can move from one place to another, it cannot be owned in the strict sense of the word.
- There is not much support for this theory as modern practice shows that petroleum is still subject to ownership by the person or authority that captures it at any particular point in time.

- **D) Domainal Theory**
- This theory vests the ownership of crude oil and gas on the sovereign or the state.
- This is the most prevalent system of ownership of minerals.
- Practically, every country, with the major exception of the US, retains sovereign rights over all mineral deposits.
- In many countries, this right is enshrined in their various legislations and constitutions.
- In Nigeria, it is enshrined in Section 44, Subsection 3 of the 1999 Constitution.

- **Interests in Crude Oil Exploration and Exploitation**
- Types of interests in petroleum exploration are
- A) Concession
- B) Production Contracts
- C) Agreements: Participation Agreements/ Joint Ventures
- ***A) Concession***
- The concept concession denotes several things, namely:
- It also denotes a voluntary yielding to a demand for the sake of a settlement;
- It could also mean a grant of land or property especially by a government in return for services or for a particular use.

- In international law, it is a contract in which a country transfers some rights to a foreign enterprise which then engages in an activity (such as mining, drilling etc) contingent on state approval and subject to the terms of the contract.
- Within the context of crude oil exploration and exploitation, concession denotes right conferred on an individual or business entity to use land.
- This usage is tied to an official license granted by the government and which allows work such as drilling for oil to be carried out in a specific area of land.

- There are two types of concession
  - ***i) Traditional Concession***
  - ***ii) Modern Concession***
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- **i) Traditional Concession**
  - Traditional concession was the earliest type of arrangement between governments and the international oil companies.
  - This was an agreement whereby the oil company received the exclusive rights to explore for petroleum and if petroleum was discovered, to produce, market and transport the oil and gas.
  - In return, the company paid specified costs and taxes.

- **Characteristics of Traditional Concession.**
- i) The area was often very large
- ii) The duration was very long, usually between forty and seventy-five years.
- iii) The rights granted were sometimes so extensive that they cannot be differentiated from a freehold interest.
- iv) The rights often granted covered all the mineral deposits in the area.
- v) Financial benefits were minimal and often ridiculous
- vi) Originally, no income tax was levied until 1950.

- **Modern Concession**
- Modern concession is similar to the traditional concession in many ways.
- It is also an arrangement whereby the oil company receives the exclusive right to explore for petroleum and if petroleum is discovered, to produce, market and transport it.
- The company pays specified costs and taxes to the state that has the crude oil.
- Under this type of concession, the company has rights over the produced petroleum and owns it as from the point of extraction.
- It is now called by various names such as licence or lease, but it is still the most widely used type of agreement.

- **Characteristics of Modern Concession**
- i) The duration is an initial period of twenty years.
- ii) The area of coverage has been reduced.
- iii) The company is usually given rights only in respect of crude oil and sometimes natural gas.
- iv) Financial obligations are greatly increased
- v) Petroleum *in situ* remains at all times the property of the state in almost all agreements of this nature.

- **B) Production Contracts**
- Legal arrangements in which crude oil is shared by the parties in prearranged proportions.
- **Types of Production Contracts include:**
  - i) Production Sharing Agreement;
  - ii) Risk Service Agreement;
  - iii) Pure Service Agreement;
  - iv) Technical Assistance Agreement.

- i) ***Production Sharing Agreement (PSA)*** - also called ***Production Split*** –
- It is a contract between the host country and the international oil company about the ratio of sharing crude oil produced.
- In a standard PSA the international oil company bears all the risks of exploration, and is often in charge of the operations and management of the contract area but recoups its money from oil produced.

- ii) ***Risk Service Agreement*** is the arrangement where the international oil company provides the entire risk capital for exploration and production. It recoups its investment when oil is discovered based on the provisions of the agreement.
- iii) ***Pure Service Contract*** is a simple contract where all the exploration and production risks are borne by the state, and the international oil company performs its stipulated service and is paid a flat fee for this service.
- iv) ***Technical Assistance Agreement*** is the agreement in which the international oil company exports its technical expertise to the host country for a specified fee. It is often entered into by a country desiring to develop a viable indigenous petroleum industry.

- **C) Agreements: Participation/Joint operating Agreements or Joint Ventures**
- There are basically **two** types of agreements, namely
  - (i) The Participation Agreement
  - (ii) The Joint Operating Agreement
- Today in Nigeria, equity participation by the Government through various Joint Ventures with subsidiaries of International Oil Companies (IOCs) provide the main method of exploration and production of petroleum resources in our country.

- **The Participation Agreement**
- A participation agreement is one entered into between prospective parties to a joint venture oil operation.
- It involves parties to a joint venture in oil operation entering into separate agreements with each other on the modalities of their participation.
- For example N.N.P.C. which is the organ through which the Federal Government engages in joint venture with oil companies, would be required to sign participation agreements separately with Shell Petroleum Development Company, Elf Petroleum Nigeria Ltd, M.P.N, Agip.
- This participation agreement will spell out N.N.P.C's participation interest in the intended venture, i.e in the Oil Mining Lease (OML); the working capital of the parties; fixed and movable assets of the parties etc.
- Thereafter the parties concerned will sign a common agreement known as **Joint Operating Agreement**.

- **Joint Operating Agreement**
- A joint operating agreement is essentially a contract between two or more parties in an oil joint venture, setting out the terms and conditions of such a venture.
- In other words, it is a contract which involves two or more parties (subsidiaries of international oil companies like SPDC, EPNL, MPN, as well as a national oil company like NNPC) which provides the basis for exploration and production of petroleum.
- It is in the nature of a partnership agreement between two or more parties engaged in a commercial enterprise, in this case, oil exploration and production.

- A joint operating agreement defines the rights and obligations of the joint venture partners.
- For instance, a joint operating agreement will set out the participating or percentage interests of the parties as clearly seen in the NNPC/Shell Joint Ventures Agreement of 1991.
- In that agreement the participating interests of the parties are set out thus, NNPC 60%, NAOC 5%, SPDC 30%, Elf Petroleum Nigeria Ltd 5%.
- The Agreement will also state which party will be the operator of the joint venture.
- In the 1991 Agreement referred to above, Shell has been the operator of that joint enterprise.

- A joint operating agreement will equally specify the sharing formula by the parties of profits accruing to the ventures, which is usually in proportion to the parties' percentage interest.
- A Joint Operating Agreement is based on an OPL or OML granted by the host country.
- **The Role of an Operator under a Joint Operating Agreement**
- It is now a common feature in a Joint Operating Agreement (JOA) for one of the parties to be appointed an operator.
- An operator could be likened to a managing director or chief executive of a going concern.
- An operator is responsible for the day to day running of operations under the joint venture. He is the managing partner.

- In appointing an operator, the parties to the joint venture will usually consider the financial strength as well as the technical competence of the would-be operator.
- When appointed, an operator is expected under the J.O.A. to perform the following functions:
  - (i) The preparation of programmes, budgets and authorization for expenditure.
  - (ii) The implementation of such programmes and budgets as approved by the operating committee.
  - (iii) Conducting the operations of the venture in a proper and workmanlike manner in accordance with methods and practices customarily recognized in petroleum production.
  - (iv) Provision of reports and other vital information on the progress of the joint venture to each of the parties.

- (v) The direction and control of statistical and accounting services, and;
- (vi) The provision of all technical and advisory services required for the joint operation.
- (vii) To comply with all the provisions of the law.
- It could be seen from the role of the operator, as shown in the functions stated above, that it stands in the position of a trustee, the beneficiaries being the other joint venture partners.
- This is because an operator in carrying out his said functions deals with the property of the joint venture partners, who in addition to contributing capital, also provide fixed and movable assets like high-tech machinery on exploration, development and production of petroleum, transport, storage and delivery facilities, export operations and other assets like offices, houses etc.

- As such, an operator owes each partner a fiduciary duty, and must not allow its interest to conflict with its duty to the said partners.
- On the whole, an operator is expected not to misuse property entrusted to it under the venture or misuse information derived in confidence from other partners and must account for the monies or other interests earned.
- It is also important to state that an operator could be changed or removed in accordance with the terms of the J.O.A.
- For example where the operator ceases to carry on business or becomes bankrupt or insolvent or where it defaults in any of its duties or obligations to the joint venture business and fails to rectify same within a specified period of time.

- **The Role of an Operating Committee**
- Another common feature of a Joint Operating Agreement is a provision or clause therein establishing an Operating Committee.
- This Committee is made up of representatives of all the parties to the joint venture.
- It could be likened to the Board of Directors of a company or the cabinet of a government.
- It plays a central role in the operation of the joint venture in that it exercises overall supervision and control of all matters pertaining to the joint venture.

- It is this committee that gives the go ahead for any action by the Operator.
- Its functions include:
  - (i) The determination of general policies and methods of operation.
  - (ii) The approval of programmes, budgets and expenditure for the Operator.
  - (iii) The approval of any public announcement or statement regarding the joint venture.
  - (iv) The overall supervision and control of joint venture operations.