

COMPARATIVE LEGAL FRAMEWORK ON OIL AND GAS PRODUCTION AND SUSTAINABLE ENVIRONMENTAL DEVELOPMENT IN NIGERIA\*

**Abstract**

This article has taken a critical survey of national and international laws and /or legal framework as well as revealed the existence of some critical provisions governing best practices for sustainable environmental management in the sphere of petroleum resources and pollution, particularly in the Niger Delta region. The legislative and institutional framework regulating Nigeria's petroleum industry run through the whole gamut of subsisting laws contained in the Nigeria legal system including the Constitution of the Federal Republic of Nigeria, some of the international and regional treaties in force in the country, part of the laws made by the government of federating states, the local government edicts, common laws and case laws. This article examined in comparative context by reviewing the oil production activities, governmental policies and measures put in place in the following countries, Brazil, United Kingdom, Canada, United States, Saudi Arabia, Iraq, Angola, Equatorial Guinea, Congo Brazzaville, Cameroun and Chad. The article further reviews the efficacy of legal and institutional framework operational in these countries and critically compare them with the present Nigeria regimes on the production, exploration, and the environmental impact of oil activities specifically on the Niger Delta region. The article concluded that the adoption of effective sustainable reforms will encourage responsible petroleum exploration and production activities in ways that positively influence economic development of oil-producing host communities and also preserve human and environmental health, sustainable environmental management, good environmental governance, effective environmental management and protection in the Niger Delta region.

**Keywords:** Legal Framework, Comparative Law, Oil and Gas Production, Sustainable Environmental Development, Nigeria

**1. Introduction**

Every stage of petroleum exploration operations, development and production, decommissioning and rehabilitation, transportation and distribution often result in considerable environmental impacts, human health risks and in most cases cause interference with socio-cultural systems as well as socio-economic problems within the oil-producing host communities.<sup>1</sup> The Nigeria's Niger Delta region is essentially covered by Oil Prospecting License (OPL), Oil Exploration License (OEL) and Oil Mining Lease (OML) that grant oil exploration and production companies' unrestricted access to operate in both onshore and offshore locations with the region. Consequently, there are several environmental impacts associated with petroleum prospecting, exploration and production in the Niger Delta region. For example, disturbance of forests and ground surface as result of geological and seismic surveys, site clearing for construction of roads, tanks farms, brine pits and pipelines, exploratory drilling, development drilling and production wells, construction of processing and production facilities<sup>2</sup>. Over the past fifty five years, a total of about 1,182 exploration wells have been drilled to date in the delta basin, and about 400 oil and gas fields of varying sizes have been documented,<sup>3</sup> apart from environmental exploration and production operations in both offshore fields within the Niger Delta region. Some of the petroleum exploration and production related activities have caused environmental pollution and pose potential risks to the atmosphere, soils, sediments, surface and groundwater, marine environment and terrestrial ecosystems in the Oil-producing host communities in the Niger Delta<sup>4</sup>. The major sources of environmental pollution in the Niger Delta region include oil spillage, pipeline explosion, gas flaring and venting, improper disposal of large volumes of petroleum-derived hazardous waste streams, such as drilling mud, oily and toxic sludge<sup>5</sup>, equipment failure/oil spills associated with ageing facilities, sabotage of petroleum facilities (including illegal oil bunkering and artisans refining), oil well blowout, oil blast discharges and other operational discharges<sup>6</sup>. Recently, some of the environmental problems, human health risks and safety issues as well as some economic problems associated with

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<sup>1</sup>YK Kharaka & NS Dorsey, 'Environmental Issues of Petroleum Exploration and Production: Introduction,' *Environmental Geosciences*, 12 (2)., (2005), 61-63

<sup>2</sup>NG Obaje, *Geology and Mineral resources of Nigeria*, (London, UK: Springer, 2009), 45

<sup>3</sup>LC Osuji, 'Some Environmental Hazards of Oil Pollution in Niger Delta, Nigeria,' *African Journal of Interdisciplinary Studies*, 3 (1)., (2002), 11-17

<sup>4</sup>JP Eaton, J. P., 'The Nigerian Tragedy, Environmental Regulation of Transnational Corporations, and the Human Right to a Healthy Environment,' *Boston University International Law Journal*, 15, (1999),261 -571

<sup>5</sup>Ibid

<sup>6</sup>U Idemudia, 'Corporate Partnerships and Community Development in the Nigeria Oil Industry: Strengths and Limitations', *Geneva: UNRISD: Copenhagen Business School*, (2007), 56.

upstream and downstream petroleum operations have been extensively reviewed by Ite et al<sup>7</sup> and Anejionu et al<sup>8</sup>. Although export of petroleum resources have enormously contributed to Nigeria's economy over the past years, the past and present petroleum exploration and production have affected human right to a healthy environment<sup>9</sup> due to harmful/detrimental consequences associated with petroleum-related environmental pollution and degradation in the oil-producing host communities within the Niger Delta region<sup>10</sup>. Therefore, it could be argued that poor management of the petroleum resource, ineffective government's petroleum development policies and unsustainable operational practices by the multinational oil companies has led to socio-economic, socio-political, military and complex interaction problems involving the people, economic development and the environment in the Niger Delta region.

## 2. Oil Spillage and Liability

The world has today been be-deviled with oil spillage that have has devastating consequences in different parts of the globe making it paramount for the legal regimes in place to be enforced and further strengthened to forestall these violations thereby making our environment safer. Nations, oil companies' regulatory bodies and all involved in the industry must as a matter of urgency and necessity realize that there is the need to be more cautions and responsible in the conduct of oil exploration and transportation. It may be debated whether humans can live without oil or not, but it is most times agreed that we are heavily dependent on it in this modern world and will find it hard to live without it. If we continue to use oil in our everyday lives, we must make sure that we use it efficiently. This we can do by trying to ensure that we minimize the negative effects of oil in our environment in order to expel all the negative repercussions this article critically examined the production of oil and gas by extensively comparing what is obtainable in other countries whose economic are built around exploration and production of petroleum resource and the aftermath impact on the physical environment. The production of oil and gas, legal and institutional framework and its consequent environmental impact on the social economic land scape are further examined in comparative context in this article by reviewing the oil production activities, governmental policies and measures put in place in the following countries, Brazil, United Kingdom, Canada, United States, Saudi Arabia, Iraq, Angola, Equatorial Guinea, Congo Brazzaville, Cameroun and Chad. The article further review the efficacy of legal and institutional framework operational in these countries and critically compare them with the present Nigeria regimes on the production, exploration, and the environmental impact of oil activities specifically on the Niger Delta region.

### United Kingdom

Liability for oil spills with the other, the operator on the "polluter pays" basis with unlimited liability for costs associated with pollution and clean up, there is a substantial<sup>11</sup> regulatory regime involving many government bodies for offshore installation, most of which are located in the North Sea<sup>12</sup>, oil pollution, primary responsibility rests with the marine and coastguard agency<sup>13</sup>. Special rules have been imposed for pollution that is caused by an offshore installation by the Offshore Pollution Liability (OPOL) Agreement of 1975. The OPOL agreement was introduced as an interim measure during the negotiation phase of the convention of civil liability for oil pollution damage resulting from exploration of seabed mineral resources. Negotiation with this convention was ultimately unsuccessful and it was never ratified.<sup>14</sup> However, the UK considered the OPOL agreement to be a satisfactory means of providing for a strict liability regime in case an operator should default on providing the clean-up costs associated with an incident.<sup>15</sup> The aims of OPOL are:

- A. To provide an orderly means for the expeditious settlement of claims arising out of an escape or discharged of oil from offshore exploration and production operation;
- B. To encourage immediate remedial action by the parties;
- C. To ensure the financial responsibility of the parties to meet their obligations;

<sup>7</sup>SO Aghalino, & B Eyinla, 'Oil Exploitation and Marine Pollution: Evidence form the Niger Delta, Nigeria,' *Journal of Human Ecology*, 28 (3)., (2009),177-182

<sup>8</sup>KS Ebeku, 'The Right to a Satisfactory Environment and the African Commission,' *African Human Rights Law Journal*, 3, (2003),149-166

<sup>9</sup>Ibid

<sup>10</sup>UE Ite, 'Changing Times and Strategies: Shell's Contribution to Sustainable Community Development in the Niger Delta, Nigeria,' *Sustainable Development*, 15 (1). (2007),1-14,

<sup>11</sup>The United Kingdom used to be a large exporter of oil until 1999 when oil production began to decline as a result of the exhaustion of its well-known deposits and shifts to more areas with higher cost of production. Ownership of petroleum resources in the United Kingdom is vested in the crown and thus shares the dominical mode of ownership with Nigeria. The United Kingdom has a long history of legislation in the area of environmental protection from oil pollution and has an array of legislations in the area. They include the, Petroleum (Production) Act, 1934; Prevention of Oil Pollution Act, 1971;

<sup>12</sup>Regional Environmental Emergency Team, Atlantic Region Contingency Plan for Environmental Emergency, (1999).

<sup>13</sup>*Journal of Law, Policy and Globalization* www.iiste.org ISSN 2224-3240 (Paper) ISSN 2224-3259 (Online) Vol.31, 2014

<sup>14</sup> Pollution Prevention and Control Act, 1992; Off Shore Installations (Emergency Procedures) Regulations, 1976;

<sup>15</sup> Petroleum (Production) Act, 1934; Prevention of Oil Pollution Act, 1971;

- D. To provide a mechanism for ensuring that claims are met up to the maximum liability under OPOL;
- E. To avoid complicated jurisdiction problems

Claimants under OPOL include public authorities who can make a claim for any remedial measure taken to prevent, mitigate or eliminate pollution damage or to remove or neutralize the oil following an escape or discharged.<sup>16</sup> Any one damaged by pollution from the oil spills may also file a claim for compensation if they have suffered “direct loss or damage caused by contamination.<sup>16</sup>” There is expectation to the operation of strict liability, which includes if the incident of pollution is a result of war, hostilities,<sup>17</sup> an expectation natural phenomenon, an act or omission of a claimant or a third party that intended to cause the damage negligence or wrongful acts from the state or authority.<sup>18</sup>

### **Canada**

Canada is the world’s sixth largest producer of petroleum and the largest supplier of crude oil import to the United States.<sup>19</sup> Offshore drilling in Canada<sup>20</sup> is regulated by the federal government on the west coast and in the arctic and by joint federal provincial bodies off the coasts of Newfoundland and Nova Scotia. Safety standard,<sup>21</sup> liability, limits on liability where there is no illegality or negligence and punishment are established by law<sup>22</sup>. Responsibilities for responding to oil spills are shared by many federal and provincial agencies<sup>23</sup> The Canada Oil

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<sup>16</sup>Pollution Prevention and Control Act, 1992; Off Shore Installations (Emergency Procedures) Regulations, 1976; Merchant Shipping (Oil Pollution Preparedness, Response and Co-operation Convention) Regulations, 1998, etc. The pipes used for transportation of crude are of such a high quality that there is yet no reported case of oil spillage emanating from the pipeline networks. This is unlike the case in Nigeria where the NOSDRA was only enacted in 2006, more than 50 years after oil and gas exploration and production commenced. The pipes used in Nigeria for the pipeline networks are also of very low quality hence many have been corroded already. The United Kingdom also maintains the laudable practice of writing the provisions of international conventions to which it is signatory into its national legislations. Non vessel oil spills are also very rare as is the case with Canada. The Department of Trade and Industry is the lead regulator for discharges and gaseous emissions outside the territorial waters of the United Kingdom. The Environmental Agency or the Scottish Protection Agency is in charge of regulations for waters within three nautical miles zone. There are also other bodies for specific environmental issues in the oil and gas industry. The DTI in conjunction with other specialized agencies has the responsibility of measuring environmental performance in the oil industry. It is mandatory requirement for every applicant for a license to include a statement of its environmental policy which must also state the mitigating measures the prospective licensee is to adopt to minimize risk to the environment. A proposed plan of compliance with the condition to be imposed by the Department of Trade and Industry (DTI) is also included in the application. It is the Environmental Protection Program marshaled by the operator in its application that will determine the outcome of the application for license there are no such conditions attached to the grant of an oil mining lease or license in Nigeria. The United Kingdom anchors the very success of its exploratory and production activities in the oil and gas industry on the compatibility of such activities with the environment. There is a high level of awareness that oil drilling activities can only be of value to the society where they conduce with environmental balance and are not a threat to the environment. This situation is exactly the opposite in Nigeria where the Niger-Delta environment is been mindlessly devastated to the extent that if nothing is done to ameliorate the situation, the terrain could become uninhabitable in the next 30 years.

<sup>17</sup>Merchant Shipping (Oil Pollution Preparedness, Response and C-operation Convention) Regulations, 1998, etc.

<sup>18</sup>If it resulted from compliances with instruction or conditions from the licensing states.

<sup>19</sup>Canada has a largely privatized oil industry and is one of the best countries in terms of prevention and control of oil and gas pollution. In many years of oil exploration and exploitation in Canada, very few spills have been recorded. Apart from accidents involving oil tankers, very few incident of spill has been reported. Most of the spill incidents are isolated. One of such incidents was that which occurred when a construction company accidentally punctured a pipeline in Burnaby, British Colombia and certain quantity of oil escaped shooting plumes of 20 metres into the air. Both the operators and the civil society in Canada are environment friendly. The legislations governing oil spills, individual oil pollution generating accidents and environmental emergencies in Canada are:(1) The Canadian Shipping Act; The Marine Liability Act; The Fisheries Act; The Migratory Birds Convention Act; The Canadian Environmental Act; The Transportation and Dangerous Goods Act; Canada Oil and Gas Convention Act;

<sup>20</sup> Ibid

<sup>21</sup>Canadian Wildlife Service, Environmental Conservative Branch, Environment Canada Atlantic Region, ‘Oil Spill Response Plan’ August, 1999

<sup>22</sup> O Fagbohun, *The Law of Oil Pollution and Environmental Restoration*, (Lagos: Odade Publishers, 2010) .188

<sup>23</sup>This is unlike the situation in Nigeria where even extant legislations in the oil gas sector do not concern them with the issue of pollution. Canada has both the infrastructure and training required to respond to an oil spill. Gas flaring is banned in Canada. The various Acts have established specialized bodies for their administration. In Nigeria, there are no adequate infrastructures for the control of oil pollution and gas flaring is still the rule rather than the exception. Institutional capacity for the administration of extant laws is also weak. The Environmental Protection Branch of Environment Canada is the Federal Agency responsible for ensuring that appropriate reporting, surveillance and response mechanism are in place to deal effectively with Environmental emergencies. They coordinate the efforts of government and industry in their response to Environmental emergencies and advise them on the scene commander and the Federal Monitoring Officer of the Canadian Coast Guard on environmental priorities and response strategies. Responsibilities for environmental protection are complimentary and clearly defined. There are no overlaps in functions or conflict between the agencies that will work to

and Gas Operation Act<sup>24</sup> (COGOA) generally prohibit oil spills and require all spills to be reported. persons who are responsible for an oil spills are required to “take all reasonable measure consistent with safety<sup>25</sup> and the protection of the environment to prevent any further spill to repair or remedy any condition resulting from the spill and to reduce or mitigate any danger to life, health, property or the government that result or may reasonably be expected to result from spill. “The chief conservation officer in the national energy board (NEB) can step in to take any action that he deems necessary. This official can also bring in other parties to do work that are not being done by the polluter.<sup>26</sup> The costs are to be borne by the polluter and constitute a debt owed to the government. Third parties hired by the government are not liable for any damages unless they act unreasonably. The regulatory petroleum regimes in Canada include the following:<sup>27</sup>

- A. The National Energy Board-Canada’s National Energy Board (NEB) has broad responsibilities in the field of oil and gas exploration. Its responsibilities include the regulation of oil and gas exploration, development and production, enhancing worker safety and protecting the environment<sup>28</sup>.
- B. The Department of Indian and Northern Affairs (INAC) – INAC works in partnership with northern and aboriginal government and people govern the allocation of crown lands to the private sector for oil and gas exploration; develop the regulatory environment set and collect royalties and approve benefit plans before development takes in a given area.
- C. Environment Canada–Environment Canada is Canada federal environment protection agency it plays a role in preventing and addressing oil spills.
- D. Canadian Coast Guard – The Canadian coast guard is an agency in the department of fisheries and ocean. The coast guard has the primary responsibility for managing and cleaning up oil spills from tanker and ships.
- E. Canadian Wildlife Service – The Canadian wildlife service coordinate the rescue and treatment of migratory birds and endangered species the service also assesses damaged caused by oil spills to wildlife and habitants to help determine whether liable parties should be prosecuted and the costs that they should bear. Studies are also conducted to determine the status of recovery efforts.<sup>29</sup>
- F. Canada – Newfoundland Offshore Petroleum Board – The Canada Newfoundland and Labrador offshore petroleum board has the responsibility to ensure that offshore oil and gas industrial activities proceed in an environmentally acceptable manner.<sup>30</sup>

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sustain the environmental protection efforts. This is unlike the case in Nigeria where Directorate of Petroleum Resources (DPR), National Environmental Standards Regulation and Enforcement Agency (NESREA) and National Oil Spill Detection and Response Agency (NOSDRA) are struggling for roles and contradicting their various efforts. Every oil spill in Canada which affects an appreciable area of land, water and air can lead to prosecution under the Canadian Environmental Protection Act, the Migratory Birds Convention Act, the fisheries Act and/or the Canadian shipping Act. In addition to fines, a polluter may also be expected to foot the costs of remediation. Most oil spills in Nigeria go unpunished as operators quickly avail themselves of the avalanche of available defenses. Canada has a detailed and substantial legal framework for the control of oil and gas pollution. It is an environment friendly developed economy and does not permit the exploration and exploitation of oil and gas resources at the expense of the natural environment and biodiversity. It is among the few countries that approach petroleum activities from the standpoint of sustainable development. This is unlike Nigeria where pipelines crisscross the mangrove swamp forests and regularly spill oil into such forests wiping out large tracts of them without any body batting an eyelid. The culture of sustainable development is so much imbibed by all that even companies willingly give up mining rights and concessions so as to assist in the consolidation of the natural environment by the creation of specially protected areas.

<sup>24</sup>The Marine Liability Act

<sup>25</sup>The Environmental era legislations were mainly focused on general environmental issues

<sup>26</sup>Canada, Burnaby, Burnaby Oil, Spill, Update> accessed 12/09/2019.Journal of Law, Policy and Globalization www.iiste.org access on the 16/04/2019

<sup>27</sup> A reported 10.6 million gallons was spilled into the Atlantic Ocean, 563-6441cm S.E. of Cape Race, Newfoundland and in an incident involving a ship known as ‘ The Athenian Voltic’

<sup>28</sup> Canada Oil and Gas Convention Act;

<sup>29</sup>www Canada ‘Burnaby Oil Spill Update’ Verdena- 19, Human Rights <[http://versenac19, word press, com/200/07125wwwf](http://versenac19.wordpress.com/200/07125wwwf). ISSN 2224-3240 (Paper) ISSN 2224-3259 (Online) Vol.31, 2014, access on the 16/05/2019

<sup>30</sup> The Canadian Shipping Act

### United States of America

The recent Gulf of Mexico oil spills flowed undiminished for three months in 2010 due to an explosion of deep-water horizon drilling rig<sup>31</sup> that was operated by BP (British petroleum).<sup>32</sup> The explosion killed eleven workers and injured sixteen others; another ninety-nine people survived without serious physical injuries. The effect of the explosion was that the deep-water horizon began to sink which started the offshore oil spills in the Gulf of Mexico. Thousands of dead invertebrate like starfish and coral were found. Similarly, many dolphin offspring were found dead along the gulf coast. Oyster beds were also devastated by the oil spills and it is said that it could take ten years for the population to reach its former size this incident has been referred to as the second largest environment disaster in the US.<sup>33</sup> Prior to the 2010 Gulf spills, the most notable example was the 1989 Exxon Valdez spills, which released approximately 11 million gallons (260,000 barrels) of crude oil into Alaskan waters. According to BBC news, the oil killed over 250,00 seabirds, 2,800 sea otters, 250 bald eagles<sup>34</sup>, 300 harbor seals, and 22 killer whales as well as countless herring and salmon<sup>35</sup>. The Exxon Valdez spills played a large role in highlighting the need for stronger legislation and spurred congress to enact comprehensive oil spills legislation, resulting in the oil pollution act (OPA) which was signed into law in august 1990. This law expanded and clarified the authority of the federal government and created new oil spills prevention and preparedness requirements.<sup>36</sup> The OPA improved the nation's ability to prevent and respond to oil spills by establishing provisions that expand the federal government ability and provide the money and resources necessary to respond to oil spill.<sup>37</sup> The OPA also created the national oil spill liability trust fund which is available to provide up to one billion dollars per spill incident.<sup>38</sup> The government framework for oil spill in the United State remains a combination of federal, state, and international authorities unlike the Nigeria system where the control of mineral resource is highly centralized. Within this framework, several federal agencies have the authority to implement oil spills regulations.

### Saudi Arabia

The Saudi Arabian beaches are cited as the most polluted in the world with about 11 million barrels of oil polluting the surrounding environment. It has been said that fewer coral species survive in the Persian Gulf than the red sea as a result of high salinity from oil pollution.<sup>39</sup> A significant interest in environmental protection in Saudi Arabia

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<sup>31</sup>The legal framework for the control of oil and gas pollution in the United States is founded on three laws. These are the Oil Pollution Act (OPA) of 1990, the Comprehensive Environmental Responses, Compensation and Liability Act (CERCLA), 1980 and the Water Control Act of 1972 otherwise known as the Clean Water Act. In addition to the above Acts is the National Oil and Hazardous Substances Contingency Plan issued by the United States Environmental Protection Agency. The OPA is administered by the United States Guard and provides for liability for oil pollution damage occurring in the navigable waters and the adjoining shoreline or the exclusive economic zone of the United States. The Act also established the Oil pollution Fund for responses and payment of claims where an operator is unable to furnish adequate funds for the purpose. The Act also declares the content of the National Contingency Plan.

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<sup>33</sup>Apart from agencies of government, industry associations such as the UKOOA, IADC and OCA work with the DTI to determine the environmental performance of operators

<sup>34</sup> Section 4201, OPA

<sup>35</sup> Section 1012 OPA

<sup>36</sup>The CERCLA is also known as the 'superfund.' It makes provisions for the clean-up of sites contaminated by spills and hazardous substances. It provides liability for clean ups and clean up procedures that protect humans and the environment. The Act empowers the president to clean up hazardous substances sites either directly or through a responsible party by enforcement actions. Under the Act, the trustee for the environment may recover Apart from agencies of government, industry associations such as the UKOOA, IADC and OCA work with the DTI to determine the environmental performance of operators

<sup>37</sup>The CERCLA operates retroactively and can be used against those responsible for hazardous wastes before its enactment. The Clean Water Act aims at maintaining and restoring the chemical, physical and biological integrity of the waters of the United States and to apply the best available and economically achievable technology to maintain waters quality so as to ensure protection of fish, shellfish, wildlife and human recreation activities. In a nutshell, it aims at preventing the pollution of the waters of the United States. The United States can therefore be said to have an array of mutually complementing legislations for the prevention and control of oil and gas pollution. Its National Oil Contingency Plans thrive on the existing legislations such that there is a harmony between law and implementation. The United State designates the Environmental Protection Agency (EPA) as the lead agency for inland waters and land based oil spills while the United State Coastal Guards (USCG) is the lead agency for coastal and deep water port oil spills. In summary, though the United State of America has the potential threats for devastating oil spills in view of the large size of its oil industry; it has a sophisticated and effective legal framework to meet these challenges. The 2011 regulations made pursuant to the NOSDRA are patterned after the United States model of oil pollution response mechanism. It is however doubtful whether Nigeria possesses the trained personnel and equipment for the implementation of the regulations. One common feature of the oil and gas pollution prevention mechanism discussed above is their awareness that oil and gas activities are hazardous in nature and their readiness to legally address the situation at all times. This is unlike in Nigeria where all the preoccupation of government is on how to maximize oil output with little or no attention being paid to the damaging effects of oil production on the environment.

<sup>38</sup>Restoration, Natural Resources Damage Assessment and Restoration Program 'Laws, Regulations and Authorizing Statutes' at <<http://restoration.doc.gov/laws.html> accessed 19-02-2019

<sup>39</sup> Section 106 CERLA

has been marked by the establishment of the Environmental Committee in 1999. The National Environmental Committee was an initiative of the Saudi Chamber of Commerce and Industry (SCCI),<sup>40</sup> the initiative for the establishment of the National Environmental Committee was followed by the enactment of the Environmental Act in 2001. The Act provides for limitation of emissions and the conduct of environmental impact assessment for every new project. The Kingdom<sup>41</sup> enjoins the government to endeavour to conserve the environment and prevent pollution. In pursuance of this provision, the government has embarked on the establishment of parks and conservation of forest resources as well as the provision of drinking water through the establishment of large desalination plants.<sup>42</sup> The enforcement of environmental laws in Saudi Arabia is constrained by several factors shared in common with countries like Nigeria, Angola and Iraq. These factors include weak institutional mechanisms, lack of political and economic will, absence of the technical capabilities as well as lack of NGO and public participation.<sup>43</sup> The National Contingency Plan for combating oil pollution was established in Saudi Arabia in 1991 by the /Metrological and Environmental Protection Administration (MEPA). The general policy in Saudi Arabia is that oil exploration must be carried on at a minimal risk to the environment. MEPA is the national response coordinator for oil spill activities such as NOSDRA in Nigeria. Other Organizations at the area level assist with the response efforts. Saudi Arabia possesses a recognizable framework for the control of oil and gas pollution and generally unlike Nigeria. Sabotage of oil facilities is unknown in Saudi Arabia. This contrasts with the situation in Nigeria where pipelines are deliberately vandalized for the purposes of oil theft or in pursuit of resource control agitation.

### Angola

There is no report of any major oil spill in Angola. The constitutional law of Angola confers on the citizens the right to live in a healthy non-polluted environment.<sup>44</sup> The State is enjoined under the law to adopt measures for environmental protection and then to promote the defence and conservation of national resources so as to guide the exploitation in the best interest of the Angolan people.<sup>45</sup> The principles developed at the Rio conference and that of Agenda 21 are incorporated into the Environmental Law (EL) of Angola.<sup>46</sup> This law also incorporates the obligations of the Angolan State under ratified international conventions<sup>47</sup> Articles 3, 4 and 5 enunciate the principles to follow in all environmental legislation. The major principles upon which Angola anti-pollution legislation are based include improvement of the welfare and quality of life of the people,<sup>48</sup> preservation and protection of the environment,<sup>49</sup> rational use of national resources, sustainable development,<sup>50</sup> prevention of environmental damage through the establishment of environmental impact assessment, etc. The implementation of the above principles by the enactment of quality legislation has been very slow indeed as a result of opposition from the oil industry operators, and land owners. There is also no culture of judicial intervention in environmental matters. Political instability and widespread poverty have been militating against the enforcement of the few extant regulations. In Angola, it is also a requirement of the law that a claimant in any pollution litigation is expected to prove direct causation and negligence on the part of the defendant. This has not been easy for such claimants due to the limited access to the means of producing such proofs. Oil pollution is not identified as a major environmental problem in Angola. Nevertheless, Angola has moved from a non-existent legal framework situation to a position where relevant international conventions on the issue are ratified and the implementation of a national response plan commenced.<sup>51</sup> There is currently in place a National Oil Spill committee chaired by the Minister of Petroleum with inputs from other governmental agencies and the national oil company.<sup>52</sup> Notwithstanding the above efforts, the pre-occupation of the Angolan State, as is the cases of other developing countries like Nigeria appear to be the maximization of oil output.<sup>53</sup> Thus, the institutions on ground to implement anti-pollution laws lack the capacity and moral will to do so. The ongoing civil war has taken its toll on efforts to control oil and gas pollution

<sup>40</sup>Energy Information Administration 'Saudi Arabia Environmental Issues' Nov., 2002 at <http://www.era.doe.gov/emeu/cabs/Saudi.enu/html>. Accessed 22/08/2019

<sup>41</sup> Under Article 32

<sup>42</sup> *Ibid*

<sup>43</sup> UNEPGEO-2000, Chapter Three: Policy Response- 'West Asian 'Laws and Institutions' at <http://www.unep.org/geo/2000/English/0206.html> accessed 25th October, 2012. *Journal of Law, Policy and Globalization* www.iiste.org ISSN 2224-3240 (Paper) ISSN 2224-3259 (Online) Vol.31, 2014

<sup>44</sup> Constitutional Law C. art. 24/33 *ibid*

<sup>45</sup> *Ibidi*, art. 24/2

<sup>46</sup> *ibid art. 12/2*

<sup>47</sup> Coelho, A in *Juries Angola Environmental Law*, March 2002 <http://www.Jurist.Law Pp.hedu/world/Angola cor2 htm>.

<sup>48</sup> *ibid*

<sup>49</sup> Art 3/2, Environmental Law and CL Art. 9

<sup>50</sup> Art 3/2 EL and CL arts. 12/2, 24/1 and 24/2

<sup>51</sup> Art 3/2 EL.

<sup>52</sup> EL arts 5/a, 5/b, 4/d, 80 and 11/2

<sup>53</sup> EL AA 4C, 100, 150 and 180

by making the government to shroud matters partaking to oil revenues in top secrecy. Much of what goes on in the oil sector is not made open to the public because the sector is seen as a major engine for providing the much needed revenue to the government for the prosecution of the war.

#### **4. Conclusion and Recommendations**

Petroleum exploration and production in the Niger Delta region and export of oil and gas resources by the petroleum sector have substantially improved the Nigerian economy over the past years. However, petroleum pollution of the environment and human health risks and/or socio-economic problems associated with petroleum exploration and production operations have been attributed to the ineffective government's petroleum development policies, unsustainable operational practices by the multinational oil companies and corrupt practices in the petroleum sector. This article through its comparative legal and institutional survey in the develop countries examined has further revealed that there are some lapses in the Nigerian environmental laws that have been exploited by the multinational oil companies to their advantage without recourse to the oil-producing host communities as well as the environment. However, it is becoming increasingly apparent to multinational oil companies that pollution prevention pays while pollution does not and under pressure from stakeholders' groups, oil companies now routinely incorporate environmental impact assessments into their corporate responsibility. Although severe petroleum pollution and degradation of the Niger Delta environment form oil industry activities have been attributed to the absence of justice for the victims, considerable progress has been made at the level of institutional developments, international cooperation accords, and public participation over the last twenty years. In past forty years, over 24 international environmental protection accords with global implications have been promulgated under the auspices of the United Nations and other international organizations, together with many additional regional agreements. In order to achieve sustainable development of oil and gas resources in the Niger Delta, both the government and the multinational oil companies need to adopt environmental sound technologies and cleaner production processes as well as effective implementation of international legal framework to help mitigate the associated problems of environmental degradation and pollution. Adoption of effective sustainable reforms will encourage responsible petroleum exploration and production activities in ways that positively influence economic development of oil-producing host communities and also preserve human and environmental health in the near and long environmental principles are critical for sustainable development, good environmental governance, effective environmental management and protection in the Niger Delta region.

This study recommends proactive measures and effective environmental legislative and institutional framework in order to improve on petroleum industry regulations. Nigeria go unpunished as operators quickly avail themselves of the avalanche of available defenses. Canada has a detailed and substantial legal framework for the control of oil and gas pollution. It is an environment friendly developed economy and does not permit the exploration and exploitation of oil and gas resources at the expense of the natural environment and biodiversity. There is a dire need to review various national laws and the 1999 Constitution of the Federal Republic of Nigeria as they affect hydrocarbon pollution, in order to provide effective framework for regulation, sustainable environmental objectives and environmental enforcement as applicable in the constitutional law of Angola which confers on the citizens the right to live in a healthy non-polluted environment. It is suggested that Oil Industry should be made to pay or it licence be withdraw for any form of hydrocarbon pollution on the environment whether at the upstream or downstream level of its operational activities. A total overhauling of the entire cooperate structure of the Nigeria National Petroleum Corporation (NNPC) is needed as this will refocus a goal oriented output. Again, environmental offences which breach environmental laws and regulations should be made a strict liability offence as practicable in the United Kingdom.