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Oil Related Environmental Degradation and Human Displacement: Case Study of Niger Delta Nigeria

Joshua Onyemachi

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OIL RELATED ENVIRONMENTAL DEGRADATION AND HUMAN
DISPLACEMENT: CASE STUDY OF NIGER DELTA NIGERIA

By

Joshua Onyemachi

A Thesis
Submitted to the Faculty of
Mississippi State University
in Partial Fulfillment of the Requirements
for the Degree of Master of Arts
in Political Science
in the Department of Political Science and Public Administration

Mississippi State, Mississippi

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DISPLACEMENT: CASE STUDY OF NIGER DELTA NIGERIA

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Oil wealth enriches Nigeria, but it has not improved the lives of the majority of the masses living in the oil-bearing areas of the Niger Delta. Niger Delta region has been exposed to environmental risks that have caused many to lose their means of livelihood, triggering high level of poverty in the region. This study examines the impact of oil-related environmental problems and how it has induced human displacement in the Niger Delta. Furthermore, it examined the efficacy of the Nigerian environmental policies as it related to the oil-bearing areas. The research found that oil activities have caused more harm than good in the Niger Delta.

At present, the oil-bearing areas remain marginalized from the mainstream economic, social, and political activities in Nigeria. The Nigerian government's top-down approach to the development of the oil-bearing areas has not been people-centered and participatory. The paper also made some viable recommendations.

DEDICATION

I would like to dedicate this research to my lovely wife, Dr. Ufuoma Onyemachi, my parents, Mr. Herbert and Mabel Onyemachi for their endless love, support and encouragement.

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CHAPTER I

INTRODUCTION

Our environment suffers from different forms of attacks, on a daily basis. These attacks, more often than not, leave our lands, the waters we drink and use, the air we breathe, our vegetation and all other features that constitute our natural environment, with damage done to them. This damage reduces the productivity of the environment and even reduces, if not completely extinguishes, the pleasure we can derive from it (Abubakar, 2010).

The Nigerian state relies on oil as the main source of its revenue. Its Petroleum oil was discovered in Oloibiri in the present day Bayelsa state, Nigeria in 1958. As a monocultural nation with sole reliance on oil, gas, and ancillary derivatives, a preponderance of these resources is found in the Niger-Delta region. The Niger Delta coincides approximately to the southern part of Nigeria. The Niger Delta region can be called the engine room that propels and drives economic growth and development in the larger Nigerian society. Also, it could be rightly referred to as the oil and natural gas capital of Nigeria, where most of the petroleum and natural gas in Nigeria are currently extracted. The region accounts for about 90 percent of the country's foreign exchange earnings, and generates about 85 percent of total national revenue. But over the years, the region where crude oil is extracted generally suffers poverty, neglect, the denial of fundamental human rights, and environmental degradation (Naanen, 1995).

Oil exploration and exploitation in the Niger Delta have opened their lands to environmental problems. More damaging to the ecosystem is the impact of oil spillage, air pollution, water pollution, and careless handling of petroleum effluents by oil companies. The marine resources of the region are systematically depleted while the traditional occupation of farming and fishing are engendered. Oil exploration in the Niger Delta has led to the degradation of their environment (David Dafinone, 2003). However, this does not preclude or diminish the importance of other environmental issues such as bush burning, petroleum fires, erosion of various configurations, and indiscriminate waste disposal. Other causes of environmental degradation pale into insignificance when pitched against the backdrop of oil exploration and unintended consequences of oil spillage that have largely become a component in the wheel of development of the Niger Delta (Jike, 1987).

Environmental degradation in the Niger Delta region has over the years received an increasing amount of attention. It has become a major concern to the people of the region. Productivity losses have been on the increase as a result of many environmental problems in the region (World Bank, 1995). Communities where oil exploration and exploitation take place have attributed oil production and extraction in the region as the major cause of declining productivity of their local economy mainly based on agriculture and fishery (Aaron, 2006). Both lives and productivity are increasingly at risk.

More than 75% of the people in Niger Delta depend majorly on their natural environment for subsistence living (UNDP Report, 2006). They bear the adverse effect of natural hazards, biodiversity loss and forest depletion, water pollution and the negative activities that are inimical to the existence and survival of the people in the region as a result of industrialization through oil exploration (Oviasuyi and Uwadiae, 2010). The

spread of environmental degradation with respect to oil production is expanding in the region and it has become very obvious.

Decline of local economy caused by oil induced environmental problems (pollutions, for example, oil spillage, and gas flaring) in the region has displaced members of the local communities from their means of survival and livelihood causing high level of unemployment, underdevelopment, poverty, and rural-urban migration.

There is no doubt that human displacement has become a global, national and community concern over the years. The most dominant within the globe is displacement caused by conflicts, floods, tornado, erosion and other natural environmental destructive activities (UNHCR, 2007). The conflicts in Somali, Mississippi flood in U.S, tornado and earthquake in Japan have all caused different kinds of displacement nationally. Nigeria is not left out. Human displacement in Nigeria is majorly caused or blamed on armed conflicts and violence. The religious unrest, ethnic violence, and communal conflicts mostly in the Northern part of the country have displaced thousands of Nigerians. However, conflict induced displacement seems to be more, and have taken eminence in the country. In the Niger Delta, the cause and nature of displacement differs compared to displacements in other parts of the country. Displacement in the Niger Delta is majorly oil induced human displacement. In this research, the author will be examining the cause and effects of oil related environmental displacement in the Niger Delta.

The question is what are the effects of oil based environmental degradation in Niger Delta? Do they have the potential of causing or creating situation of human displacement in the region? In other words, this paper will focus on impacts of oil related environmental degradation and how it has created a situation of internal displaced persons in the Niger Delta region. Furthermore, it will evaluate some regulations enacted

by the Nigerian government to ensure that the environment is protected and preserved. Has this laws and regulations been able to fulfill their purpose? What are their weaknesses?

This study is organized in the following format. Chapter 2 has five sub-sections. The first sub-section is a review of literature on a general concept of environmental degradation. The second sub-section explains the concept of human displacement and how it relates to the area in focus, Niger Delta. The third sub-section gives a brief overview of Nigeria and its oil politics in the Niger Delta region. Sub-section four consists of the strategic importance of Niger Delta and it's relevant to the growth of the Nigerian state. Sub-section five discusses global policies enacted to preserve the environment from degrading.

Chapter three consists of oil related environment degradation and human displacement in the Niger Delta region. Chapter four accesses the efficacy of Nigerian environmental policies In Niger Delta and chapter five concludes with recommendations.

1.1 Methodology

The methodology I adopted in this research work is the case study (single) because it focuses mainly one case study, which is the Niger Delta region. Normally, this method is used when the phenomenon under study is not readily distinguishable from its context. Such a phenomenon may be a project or program in an evaluation study. It involves contextual analysis of a limited number of events (Yin, 2003: 4). According to Robert Yin (1984), it is “an empirical enquiry that investigates a contemporary phenomenon within its real life context; when the boundaries between phenomenon and context are not clearly evident, and in which multiple sources of evidence are used”.

This case study method is recognized as a tool in many social science studies. Its role in research become more prominent when issues with regard to education (Gulsecen and Kubat, 2006), sociology (Grassel and Schirmer, 2006), environmental and community based problems (Johnson, 2006), such as poverty, unemployment, illiteracy. This makes the case study very useful for the subject matter of this thesis; oil related environmental degradation and human displacement in the Niger Delta region. In other word, the method is usually used to analyze real life situations as the one the author is considering in this thesis. The advantage of this method is that it allows the author good enough room to make an in-depth analysis of the subject matter. It also allows for systematic analysis that permits one to have a clear understanding to the subject matter of enquiry (Zaidah, 2003). However, critics of case study method have criticized it on grounds of reliability and lack of rigor. They posit that the analysis of a small number of cases cannot offer generality of findings.

This thesis also adopts the qualitative approach of analysis. This is used to gather an in-depth understanding of human behavior (Individuals and groups) and the reason that govern such behavior. It can also be used where the goal of the research is to explore people's subjective experiences and meanings they attach to those experiences.

The method is therefore appropriate for this thesis as it seeks to understand the causes and resultant impacts of oil induced environmental degradation, the nature of human displacement, Nigerian government and multinational activities on the oil producing communities in the Niger Delta region of Nigeria.

Materials used in this research are mainly secondary. They were mostly found electronically on the database in the Mississippi State University library. None of the materials used in this research is obtain from the field. Although there is a serious lack of

reliable data on human displaced persons caused by oil induced environmental degradation in the region. It is so because government does not take official account of this unconventional category. In addition, the difficulty of getting to the region as a result of high level of conflict situation and tension that exist in the Niger Delta region have prevented individuals and groups from getting real and adequate data regarding the number of people that have been displaced due to environmental degradation (Myers 1995, p12). In doing so, this research draws together available data that highlight several direct and indirect impacts of oil related environmental problems that consequently have led to human displacement in the Nigeria's Niger Delta.

However, I relied heavily on previous works and researches done in the area by some international organizations, governmental organizations and non-governmental organizations. For example, Reports from United Nations Development Program, United Nations High Commissioner for Refugees (UNHRC) Internal Displacement Monitory Council (IDMC), and World Bank reports on Niger Delta Development were equally utilized in this research work.

1.2 Theoretical Framework

This thesis adopts two theoretical models; Capability approach theory and internal colonial theoretical model. These models are discussed hereafter and its application as it relates to the situation in the Niger Delta and the Niger Delta people.

1.2.1 Capability Approach Model

The capability approach is a broad normative framework that is used for the evaluation of individual well-being and social arrangements, the design of policies and proposals about social change in society. The model is used in various fields, mostly in

development thinking, welfare economics, social policy and political philosophy. It also can be used to assess a wide multiplicity of aspects of people's wellbeing, such as individual wellbeing, inequality and poverty (Fukuda-Parr, 2003).

The main characteristics of capability approach centers on what people are effectively able to do and to become without restrictions. It contrasts other philosophical approaches that concentrate basically on people's happiness or desire-fulfillment, or on theoretical and practical approaches that are based on income, expenditures, consumption or basic needs fulfillment. Focusing on individual's capabilities in the choice of development policies is what distinguishes capability approach with other theories like neo-liberalism and utilitarianism.

The roots of capability approach has been linked to scholars like Aristotle on 'political distribution' and his analysis on eudemonia- 'human flourishing,' Karl Marx's concern on human freedom and emancipation, and Adam Smith's 'necessities' and human conditions (Nussbaum, 1988; 1993). The approach was basically established by the economist and philosopher Amartya Sen (1980) and recently, it has been extensively developed by the philosopher Martha Nussbaum (1988, 2003).

The main critical divergence in the capability approach is between the means and the ends of well-being and development. Only the ends have fundamental importance, while means are only instrumental to reach the goal of increased wellbeing and development.

However, the importance is based essentially at the analytical level. Well-being, according to this theory discusses peoples capability to function, on their effective opportunities to undertake the actions and activities that they want to engage in, and be the kind of persons that they want to be in life. Amartya Sen calls this being and doing

‘achieved functionings’ which together they form what makes life priceless. For instance, functioning include working, resting, being literate, being healthy, being respected, and being part of a community (Sen, 1985). The basic thing is that people have the freedom (capabilities) to live the kind of lives they want to live, to do what they want to do and be the person they want to be. Once this freedom is in place, they can choose to act on those freedoms in line with their own ideas of the kind of life they want to live (Kymlicka, 2002).

The capability approach to well-being and development appraises policies base on their impact on people’s capabilities. It questions healthy existence of people and whether the resources necessary for this capability, such as clean water, access to health care and medical doctors, protection from infections and diseases, and protection from environmental pollution. It further asks whether people are well nourished, whether the condition for this capability, like food supplies and food entitlements, are adequately met (Nussbaum, 1990). It also asks if individuals have access to good education. The capability approach therefore, covers the full territory of human well-being. Development and well-being are viewed in a complete and incorporated manner, and much attention is paid to the links between material, mental, spiritual and socioeconomic well-being of life (Sen, 1992)

On the whole, what the theory seeks to achieve is to build a society in which each individual is treated with dignity, and lives as a human being and not subjected to a life not worthy of living.

1.2.1.1 Relevance of the theory

The theory has been used to investigate poverty, social-injustice, economic and distributive justice, gender inequality, and health. It has also been adapted in issues on security and human rights. As a normative theory, it is useful in explaining rights fulfillment.

Nussbaum's capability theory is of practical application in our modern day world. It can serve as a functional tool in measuring poverty and well-being of an individual. Gross domestic product (G.D.P.) is often times used by Economists in assessing level of development. Despite the fact that this may be a good way of measuring the standard of living of people in a particular place, this may not be applicable in all situations because certain things in life might not be quantified or measured effortlessly. For instance, happiness cannot be easily measured or reveal the capabilities of individuals in a society or the opportunities available to the individual. The potentials of individuals cannot be known using the GDP as a measure of human development index since the GDP concentrates mainly on income (Nussbaum, 2000).

In the same light, this theory can be used to discuss the rights to life and good health, dignity, work, and education as it relate to the Niger Delta people. The people of the region have been made to live below the social minimum in their country, Nigeria. They have also been made to become accustomed to their preferences based on opportunities available to them. Moving out of communities that they have known all through their lives in search of a better life elsewhere would not be the best of choices for them. But the deplorable and degraded environment compelled them to make such choices if they must survive (UNDP, 2006). Because of harsh situations they have been made to face and endure over the years, their expectations in life have been adjusted and

reduced. This explains why most of them still live in a polluted environment caused by oil operation in the region. Erratic power supply is a constant situation if at all there is any within their communities. Unavailability of clean water is common in the region. Health care and educational facilities are not up to standard where they are provided. No employments for the youth even among the educated ones, hence they are easily tempted to join militant groups in order to demonstrate their frustrations (Watts, 2008).

1.2.2 Internal Colonialism Theoretical Model

Colonialism as a process of sociopolitical and economic domination and exploitation of nations by more powerful nations has a long standing in human history. Divergent to classical colonialism, internal colonialism exist, according to Blauner (1969) as a situation in which both the dominant group and the subordinate groups live together in the same society. The dominant group in this case is the majority in power or places of authorities, while the subordinate is the minority. Blauner went ahead to categorize the fundamental element of colonialism; (1) Colonization originates with a force, involuntary entry. (2) The colonizing authority implements a policy that restraints, convert or destroys indigenous tradition and culture which includes its values, orientations, and ways of life, beliefs, and mode of subsistence. (3) Members of the subordinate group are basically ruled by representatives of the dominant power. (4) The colonized have the experience of being controlled and manipulated by outsiders who employ either a supremacist or a paternalistic ideology to maintain the system of dominant-subordinate relations (Blauner, 1972). A recent modified version of internal colonialism framework as originally postulated by Blauner (1967) would help in giving more understanding in

the relationship between the states, MNCs, those that dominate known as the ‘core’ ethnic groups, and the peripheral indigenous tribes.

Internal colonialism in Nigeria could be traced from the independence of Nigeria in 1960 when the numerical majority (The Hausa, Ibo, and Yoruba) skillfully and strategically pursued political dominance over the numerical minority like the tribes in the Niger Delta. According to Naanen’s (1995) explanation, the political power acquired by the numerical majority ethnic group in Nigeria (The Hausa/Fulani majority), has been used to transfer resources from the periphery to develop the core areas especially in the northern part of the Country, while creating inequality among the subordinated resource-dependent ethnic communities in the periphery.

There are three fundamental elements of internal colonialism that is obvious in the Nigerian case. First, there exists an ethnic-centered political dominance, strategically put in place to control, direct and exploit the natural resources of the minority communities that benefits the major ethnic groups in the country. Second, the coalition of the core ethnic groups, multinational oil companies, political elites, the military, and the government that often and generally suppresses the opportunity structures for the minorities. Thirdly, massive ecological destructions and disruptions of basic means of subsistence of the resource-dependent communities of indigenous minority groups (Frank, 1967). Above elements are basically obtainable in the Niger Delta region framework also fits for this thesis.

CHAPTER II

REVIEW OF LITERATURE

This section examines existing literatures on environmental degradation in general, its concept and its impacts on resource if environmental problems are not addressed. Many environmental problems that have gone unnoticed, however, grew more serious as the twentieth century began. According to Lewis M. (1993) that: “Modern man is the victim of the very instruments he value most. Every gain in power, every mastery of natural forces, every scientific addition to knowledge, has proved potentially dangerous, because it has not been accompanied by equal gains in self-understanding and self-discipline of our environment”.

Man’s economic activities in his immediate environment have brought about improved living conditions. God the creator of the earth’s unique infinite creative invention designed the living and non-living elements of the environment to exist in perfect harmony (Offiong, 2000). However, man’s activities have also impacted the environment negatively and as a result have shifted ecological balance thus threatening his own very existence on the planet. Globally, environmental degradation is threatening the human population e.g., fossil fuel related emissions.

Environmental degradation is a major problem not only to local communities but also to the whole world. Industrialization and its consequent fast growing population and concentration are the chief contribution to environmental troubles in both developed and developing countries. The magnitude of the problems varies from country to country

depending on various factors, including stage of industrial development and the degree of enforcement of environmental regulations. Both developed and developing countries are faced with environmental problems arising from noise, smoke from automobile exhaust and harmful emissions from industries. Regions with mining are associated with ground water pollution through leachates from mines and agricultural pollutants as their major challenge (Lewis, 1993). More critical to the environment is flooding, erosion, earthquake, oil spillage, gas flaring, and all kinds of pollutions due to oil exploration and exploitation. Most of the environmental changes that took place during the twentieth century have been a product of the efforts to secure improved standards of living.

As noted earlier, both developed and developing countries have contributed to the environmental problems that we face today. Developed countries, with 85 percent of the world's gross national production and 23 of its population, account for the majority of mineral and fossils-fuel consumption. The increase in atmospheric carbon dioxide has the potential for altering global climate with significant consequences for all countries (UNDP, 1998). Furthermore, about 40million metric tons of hazardous wastes are generated yearly. The United States alone produces about 250million metric tons. Its citizens constitute less than 5% of the world's population, but produce about 25% of world's carbon dioxide (CO₂) and generate roughly 30% of the world's waste. China took over from United States in 2007 as the world's biggest producer of carbon dioxide. However, the prosperity and technology of these developed countries give them the greater possibilities and responsibility for addressing environmental problems. In the developing countries, the resource consumption per capital is low, but the rapidly growing population and the pressure to develop their economies have led to substantial and increased damage to local environment (Eneh and Agbazue, 2011). This damage is as

a result of direct pollution from energy use and other industrial activities. The Lack of enforcement of environmental regulations and corruption has made most developing countries vulnerable to environmental damage.

2.1 General Concept of Environmental Degradation

2.1.1 Environmental Degradation

Environmental degradation does not only interest the geographers and town planners, but has interest political scientists, sociologists, economists, biologists, chemists, engineers, agricultural scientists and government of different nations of the world.

Before going further, if degrading the environment causes environmental problems, then what is the meaning of environment? Environment is defined as conditions, circumstances that affect people's lives. It is the complex of physical, chemical and biotic factors that acts upon an organism or an ecological community and ultimately determines its form and survival (Encyclopedia Britannica, Vol.4). However, with the current trend of sustainable development, the definition of the environment has been expanded to include natural and human resources and their interactions with each other. In this regards, the World Bank (1991) defines the environment as the natural and social conditions surrounding all mankind including future generations.

According to Emmanuel Ekpenyong (2005), the environment is a gift of nature to man in its natural settings in order to enhance a good habitation for man's happy living, health, spiritual, economic and social-political growth and development. In other words, the environment could be treated within the structure of natural human surrounding and activities, which includes biophysical components and processes of natural environment

of land, water, and air. This also includes all layers in the atmosphere, inorganic and organic matters (both living and living), social-economic components and processes of the human environment. These components and processes include social, economic, technological, cultural, and historical processes. Land and associated resources, structure, human health, nutrition and safety are basically included (Emmanuel and Alakinde, 2006).

From the above context, the environment is regarded as the natural habitat of man with lots of components within which various activities do take place. In most cases, these components and activities reflect the level of development that needs to be protected in all its ramifications. According to McEachern (1997), these components of development target productivity which if not managed properly, especially the natural resources, will definitely result to environmental degradation, which will be to the detriment of both man and the ecosystem. The above situation brings to our awareness that to sustain development, the environment must be preserved and sustained.

According to report by World Commission on the Environment and Development (1987) titled “ Our Common Future”, sustainable development is defined as the development that meets the needs of the present generation without endangering the ability of future generations to meet their wants. The above definition has enhanced the understanding of global interdependence and the relationship between economic development and environment. Hence, sustainable development lies on the ability to advance the quality of human life while with the carrying capacity of the supporting ecosystem.

On this note, development could only make meaning to humanity if it makes them better in its entirety. Sustainable development in this case becomes a balancing act and

sometimes compromise between efficiency (economic sustainability), equity (social sustainability) and conservation (Environmental sustainability) (Olujimi, 2010).

Furthermore, looking at environment from the economic stand point, it is a natural, capital and equivalent to financial capital assets. As it stands, any damage done to the environment crumbles the capital, which at the long run will reduce the value of its recurrent services. In general, the environment provides all life support systems of every human society. These life support systems are built and sustained by the natural resources found in air, land and water (Onuoha, 2008). These resources include fresh/safe water, fish, arable land, plants, animals, mineral resources, air, among others. These resources often come in variable quantity and quality. Humans therefore exploit these resources for survival and sustenance (UNDP Report, 2006). The misuse or over-use of these resources affects their quality and/or quantity in comparison with their pristine availability in the environment.

On the other hand, the deterioration of the environment through depletion of resources such as air, water, and soil, the destruction of ecosystems and the extinct of wildlife is what is referred as environmental degradation. According to the United Nations International Strategy for Disaster Reduction (2004) defines environmental degradation as the reduction of the capacity of the environment to meet social and ecological objective, and needs. When the environment becomes less valuable or damaged, environmental degradation occurs. When natural resources are depleted, habitats are destroyed, biodiversity is lost, and the environment ends up being hurt.

There are two major ways in which environmental degradation normally take place. It can occur naturally, or through human activities. Those that occur naturally come in form of earthquakes, volcanic eruptions, landslides, flood, hurricane, and drought

among others. Environmental damages caused by human activities (man-made) are indiscriminate release of pollutants into the ecosystem. These pollutants take forms ranging from solid, through liquid to gaseous release. Others have to do with the withdrawals from the ecosystem in terms of mining which may be extended to include oil exploitation, industrialization, and improper disposal of domestic solid waste and quarrying activities. Bush burning, destructive logging of forests and other seminar practices could also be taken as significant (Ukpong, 1994).

All people depend on the services supplied by ecosystems directly or indirectly. Some of these services are delivered by natural ecosystems, such as rangelands, oceans, and forest. Others are delivered by highly managed ecosystems like cultivated or urban landscapes. Human well-being, by many measures and on average across and within many societies, has improved substantially over the past centuries and will continue to do so. The human population in general is becoming better nourished. People live longer and incomes have risen, political institutions have become more participatory (Kaufman and Dayton, 1997). These gains, in part, in terms of well-being have been made possible by exploiting certain ecosystem services such as crop production, timber, and grazing. These exploitations sometimes are to the detriment of the ecosystem and its underlying capacity to continue to provide these and other services.

Humanity benefits in many ways from the ecosystem. For instance, fishes and animal products are commonly traded in economic markets. According to report, the annual world fish catch in 1989 amounts to approximately 100 million metric tons and is worth between \$50 billion to \$100 billion (UNFAO, 1993). In 1990, the total number of freshwater fish harvested worldwide totaled at about 14 million tons and was valued approximately \$8.2 billion (UNFAO, 1994). Fish is the leading source of animal protein,

with over 20% of African and Asian population depends on it as their primary source of protein. However, the future of these fisheries is in question. Most of the major marine fishing areas are in decline because of overfishing, pollution, and habitat destructions (Kaufman and Dayton, 1997).

In addition, grasslands are fundamentally the source of marketable goods, including animals which are used for labor (Mules, horses, asses, camels. etc.) and others whose parts or products are consumed such as milk, meat, wool, and leather. Animals such as deer, elk, pigs, moose and other wild animals are being hunted. In many countries, game meats are important source or part of their local diet, and in other places, hunting is an economic and culturally important sport (UNFAO, 1993).

More benefits that humanity enjoys from natural ecosystems are vegetation used directly by human as food, timber, fuel wood, fiber, pharmaceuticals and industrial products. Fruits, nuts, mushrooms and other foods are majorly extracted from many forest species. Woods and other plant materials are used in the construction of homes and other buildings. Manufacturing of furniture, farming implements, paper and others are produce from woods. Approximately, 15 percent of the world's energy consumption is supplied by fuel wood and other plants material. Areas like developing countries, biomass supplies almost 40 percent of energy consumption (Hall et al, 1993).

Turning our attention to medicinal resource, research done recently showed that the top 150 prescription drugs used in the United States, 118 are made of natural source: 74 percent on plants, 18 percent on fungi, 5 percent on bacteria, and 3 percent vertebrate species. In addition, the commercial value of pharmaceuticals in the developed countries exceeds \$40 billion per year (Principe, 1989). From a global point of view, approximately 80 percent of the human population relies on traditional medical systems, and about 85

percent of traditional medicine involves the use of plant extracts (Farnsworth et al. 1985). The availability of most of these natural products is in decline due to environmental problems.

The concern for environmental degradation therefore comes into play when these resources diminish in quantity or quality, or both (Okoko, 1998) Man's activities and the environment are inter-twined. This is because any activities of man in the environment, the resultant effect is either positive or negative. The emission of carbon gases from highly industrialized nations of the world plants, can be regarded as an aspect of indirect or economically induced environmental degradation, owing to the quest for nations to produce social and economic goods, through several production cycle that is intended to increase their gross domestic product (GDP), and enhance the national income of the country, as these products are exported to earn foreign exchange.

In quest for economic development, that seeks to increase the quantum of economic output without considering the short and long term changes of human and material resources arising from the process, has conquer and wrecked the environment rather than sustain it for the present and future generations. Rapid industrialization has left with us polluted rivers, soils that are contaminated, depleted wildlife, and exhausted natural resources. On a global level, man-made pollutants from combustion, construction, mining, agriculture and warfare are increasingly significant in the air pollution equation.

For instance, motor vehicles emissions have been recorded as the leading causes of are pollution. United State is the world's largest polluter. The U.S alone accounted for 36.1 percent of worldwide greenhouse emissions in 1990(BBC, 2002).

Table 2.1 Three biggest polluters of Carbon Dioxide

	The U.S	EU Countries	China	Total
World Population	4.6 %	6.3%	21%	31.9%
World Economy	30%	23%	3.2%	56.2%
C02 Emissions	24%	14%	13%	51%

Source: BBC News, 2002

The United State contains about 4 percent of the world's population but produces about 25 percent of all carbon dioxide emissions. By comparison, Britain emits 3 percent which is about the same as India which has 15 times as many people (Hugh Beach, 2005). China in 2007 took over the lead from United States. Motor vehicle is also the dominant source of noise pollution, producing about ninety percent of all unwanted noise worldwide. Noise is most often defined as unwanted sound. Noise is usually measured in decibels (db) and is generated mostly in high-density urban or even in the industrial areas that usually use industrial plants as their sources of energy (Eneh, 2011).

Other source of pollution is nuclear power plant which has the proclivity of producing widespread and hazardous release when accidents occur. For instance, the two natural disasters that struck Japan's Fukushima Daiichi nuclear power stations in 2011, Ukraine's Chernobyl nuclear reactor explosion in 1986 saw some serious hazardous release, as a result caused series of environmental damages. In the case of Japan, radioactive gases and particles were release and high radiation fields created as a result of fuel damage in three reactors.

The greatest concern for marine life comes from radiation from cesium, strontium and radioactive iodine entering the oceans via the smoke and water from the damaged facilities. This has brought to a standstill the fishing industry which is one of Japan's

most robust economic drivers and exports were shut off to several countries (Oceana, 2011). Some common types of pollution have main health effects on human. Ozone pollution can cause respiratory disease, cardiovascular disease, throat inflammation, chest pain and congestion. According to research, water pollution causes 14,000 deaths per day worldwide due to contaminated drinking water from untreated sewage in developing countries.

Environmental degradation may also not be economically induced, but could be politically induced, like the production of atomic and nuclear energy for military adventure and incursion into the political life and activities of other nations, without invitation in many situations (Eneh, 2011). A vivid example, which should serve as a global epitome of this unwarranted development is the case of World War II (1939-45), where the United States Air force bomber dropped two very highly compact lethal bombs (“The atomic bombs) into two densely populated Japanese cities, Hiroshima and Nagasaki, at the end of World War II (1939-1945). This bombing created a shock wave from the epicenter of the bombs to as much as 200km in radius, with poisonous gases traveling wide within the diameter, and suffocating over 0.2million Japanese to death.

The mass development of armaments, nuclear weapons – such as the “Inter-continental Ballistic Missiles (IBM)”, was as a means of showing one country’s supremacy over the others in world in terms politics and economic affairs. Added to this, is the secret process and some attempts by some nations to produce chemical and biological weapons of war against their perceived enemies in the world (including terrorists propensities across the globe).

Land degradation is one of the worst environment issues confronting humanity worldwide. The intensification of the use of fragile and marginal ecosystem has led to

progressive degradation and continued desertification of marginal agricultural lands even in years of normal rainfall (Ukpong, 1994). It is feared that damage done by drought and population pressures may have resulted in the genetic loss of a vast array of valuable plant species. Pressure on the dwindling resources in the arid in the arid prone areas has caused in a number of devastating social-political and sectarian conflicts in some countries with concomitant death, injury and heavy economic losses. Furthermore, agricultural air pollution comes from contemporary practices, which include clear felling and burning of natural vegetation, as well as spraying of pesticides and herbicides (Van Loon and Duffy, 2000).

Environmental problems have generated global, national and local attention. While international environmental concerns are usually expressed in broad terms like climatic change and desertification, the environmental problem of concern to local settings and vulnerable groups is generally localized in nature, and circling around immediate issues that threaten their livelihood and survival (Adamo, 2008). Examples include deterioration of rangeland, deforestation, degradation of topsoil, inappropriate disposal of waste, depletion of fresh water, pollution of air and water systems, and animals facing extermination (Barnett and Webber 2009). These problems directly or indirectly impact on human well-being. For example, declining soil fertility leads to poor crop yields while rangeland depletion reduces animal productivity (UNDP Report, 2006), and any deterioration in water quality adversely affects the fish fauna.

2.1.2 Oil Based Environmental Degradation

Oil exploration and extraction are activities which started at different times in different parts of the world. Oil and gas related operations are the most obvious industrial

activities that have resulted to a number of environmental problems in the world today both in developed and developing nations. Energy is fundamentally the lifeblood of human planet Earth, an essential commodity that powers the expanding global economy. From the 1950s, oil and natural gas became the main sources of primary energy for the increasing world population, and this ascendancy is expected to continue for several more decades (Edward, 1997). The benefit of petroleum consumption, however, can carry major environmental impacts that may be globally or regional. Oil related environmental problems are recognized as manmade which are oil spills, gas flaring, dredging of oil canals and land taken for the construction of facilities.

Oil spillage and gas flaring are the most common and destructive of all the environmental impacts of oil exploration. According to the Constitutional Right Project (1991), defines oil spills as uncontrolled releases of any product relating to oil production including crude oil, chemicals, or waste caused by equipment failure, operation mishaps, human error, or intentional damage to facilities.

There are approximately 40,000 oil fields in the world today, and 4000 new oil exploration licenses granted in the past 18 years (Mead, 2003). At the discovery of oil, exploration activities are carried out and expanded on a commercial level, which requires more wells and infrastructure. These processes include a range of drilling techniques and the use of subsurface explosives (Epstein and Selber, 2002). The costly and complex processes of locating oil deposits in remote locations, bringing the oil to the surface, transportation of oil products, and most times, improper disposal of some of the large volumes of saline water produced with oil and gas, from accidental hydrocarbon and produced-water releases, and from abandoned oil wells that were not properly plugged (Kharaka et al., 1995) has its impacts on the environment. Produced water is extracted

from the ground along with oil and is often reinjected into wells under high pressure to force more oil to the surface. Produced water not reinjected is discharged into the surface waters (Doyle, 1994).

Fundamentally, on- and off-shore oil activities are intrinsically invasive and the alteration of the physical environments also contributes and impacts the environment negatively. Such impacts includes deforestation, destruction of ecosystem, chemical contamination of land and water, long term harm to animal population, human and health and safety risks, and the displacement of indigenous communities and their local cultures (Veil et al., 2004).

Oil production can disrupt human population and animal and fish life globally, if not managed. Oil waste dumping, production pollution, and spills wreak havoc on the surrounding wildlife and habitat. It threatens the extinction of several plants, and has already harmed many land, air and sea animals and plant species. The National Academy of Sciences estimated in 2002, that 38, 000 tons of petroleum hydrocarbons were released into the world's oceans each year as a result of oil and gas operations. Most of these devastating oil spills and gas flaring are mostly pronounced in the developing world as a result of weak environmental policies, external influences, and corruption.

Oil spills often take a deadly toll on fish, shellfish and other marine life, particularly if large numbers of fish eggs or larvae are exposed to the oil. The shrimp and oyster fisheries along the coast were among the first casualties of the 2010 US BP deep-water Horizon offshore oil spill. Similarly, the Exxon Valdez oil spill destroyed billions of salmon and herring eggs.

Guihulngan City and municipality of Villahermosa in Philippine, was reported that oil spill have reduced their fish catch to 2-1 kilos from 10-15 kilos in 2007.

Sea creatures that live in or near the ocean are also poisoned by oil waste. The hazards for wildlife include toxic effects of exposure or ingestion, injuries such as smothering and deterioration of thermal insulation, and effects that contaminate or destroy the marine organic substrate and thereby interrupt the food chain are also harmful to the wildlife. Human life is also directly affected by environmental damage as a result of oil retraction and production. They include pollution of water resources and contamination of soil. Human are affected by the devastating nature of the environment because it is damaging to vegetation, livestock, and to the health of human body itself (EIA, 2004).

Gas flaring is another major effect of oil exploitation on the environment which generates heat and pollution. Gas flaring is the deliberate burning of natural gas that is produced and it creates a ceaseless, high intensity flame. Natural gas is a by-product of oil extraction, which is removed from the earth crust along with the crude oil. According to the World Bank (1995), gas flaring is known to be the singular highest contributor to the problem of global warming or global climate change. In the same vein, greenhouse gases such as methane and carbon dioxide emitted from gas flares contributes to global warming which could lead to a rise in sea level, accelerate the problem of harsh living conditions on earth if not checked (Orubu, 1999). It has been estimated that the total emission of carbon dioxide (co2) from gas flaring in Nigeria amounts to about 35 million tons per year and it is on record that Nigeria flares the highest amount of gas In the World (World Bank, 1995, 2000/2001).

Multinational oil companies representing major industrial states in the world operating mostly in the developing world have contributed massively to environmental damage of their host countries (Dunlap et al., 1993). According to Wimberley (1990), the

activities of MNCs have distorts development in the developing countries by retarding economic growth, promoting economic injustice, obstructing domestic political processes that may be contrary to core economic interests. They also distort development by diverting land from sustainable production for domestic needs and by displacing poor farmers and indigenous landholders who have little or no alternative means of livelihood through oil exploitation and extraction (Renner, 1996).

On this note, it will be proper to define environmental degradation as an abuse of the environmental standard naturally set by nature, occasioned either by a conscious or an unconscious pollution, deforestation and excavation of minerals, by an individual or group of individuals acting on the impulse of economic motives or by agents acting to propagate their political and economic interests and benefits of their principals who are operating from the one being degraded (Emmanuel Ekpenyong, 2005). The activities of oil companies in most developing nations have contributed negatively to the environment as the rush for oil increase by developed country increases.

It is of no doubt that individuals with low social economic status (SES) suffer the harsh effect of environmental dynamics because social, political and economic exclusion indicates that they are left with few choices about where they live. (Aluko 004, p17). This makes them vulnerable to natural hazards, pollution and negative impact of industrialization vis-à-vis oil exploration or extraction. Host communities as well as scholars on environmental issues have blamed oil extractions and its assistant consequences for the declining productivity of their local economy which is predominantly based on fisheries and other agricultural activities like farming (Opukri and Ibaba, 2008).

Deforestation, global warming and other environmental threats appear to be new category of environmental problems that causes human displaced. The United Nations High Commissioner for Refugees (UNHCR), in the 1993 State of the World's Refugees, identified four root causes of human displacement. These are political instability, economic tensions, ethnic conflict, and environmental degradation. The claim that environmental degradation was a root cause of displacement was inspired by a number of articles suggesting that the impact of environmental degradation on communities has the potentials of causing internal displaced persons triggering mass migration (Stern, 2006; Opukri and Ibaba, 2008).

However, human displacement due to environmental degradation is not a recent phenomenon. Historically, people have had to leave their land because it had been degraded (through natural disasters, war, oil spillage or over-exploitation) and could not sustain them. What is recent is the potential for large number of displaced persons seeking means of survival resulting from a combination of resource depletion (RPN 1995, P7), the irreversible destruction of the environment which is mostly man made. The physical environment now is changing in ways that make human populations more vulnerable to environmental stress.

2.2 Conceptualization of Human Displacement

The phenomenon of human displacement is centuries old although the subject did not make its way to the international agenda until the last decade of the twentieth century (Cohen and Deng 1998, p33). Since then, it has become a major concern to the international communities. Human displacement as it relates to Niger Delta will be analyzed from the stand point of internal displaced persons. There is no legal definition

for internal displaced persons. The definition is basically descriptive (Mooney 2005, p2). However, a working definition is needed to identify the group of persons under this category. The definition by the United Nations Secretary General put forth in 1992 was a starting point to define Internal Displaced persons. By definition, internal displaced persons are "persons or groups of persons who have been forced to flee or to leave their homes suddenly or unexpectedly in large numbers, as a result of armed conflict, internal strife, systematic violation of human rights or natural or man-made disaster, and who are within the territory of their own country" (UNCHR 1992,para 17).

This definition centers or highlights two elements: the involuntary character of movement within borders, environmental situations or conditions which may be natural or man-made.

The 1992 definition was determined too narrow in other respects which led to the inclusion of several important nuances. For instance, in recognition that people could become displaced as a result of suffering the causes of displacement but also in anticipation of such effects, reference was made to people having fled "as a result of or in order to avoid the effects of". As people did not have a home, reference was also made to "habitual places of residence" Finally, the condition of being "within the territory of their own country" was altered to "who have not crossed an internationally recognized state border, which reflects that borders could possibly change suddenly as a result of break-up. The definition that eventually emerged from the Representative's deliberation is contained in the introduction of the Guiding Principle on Internal Displacement. These principles, which were presented to the UN has be recognized as an important tool and a standard for addressing people that have been displaced internally and are being used

around the world by United Nations, non-governmental organizations, regional bodies, governments, and others.

Internal Displaced Persons has been defined as: persons or group of people who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized State border" (UNCHR, 1998).

The above definition does not include or capture persons who migrate because of economic reasons. However, persons who are forced to flee their homes because of economic injustice and marginalization would come under this definition (IDMC, 2006). It will be proper to say that voluntary movement in search of means of livelihood or means of survival due to displacement of occupation also fit into the concept of internally displaced persons. Poverty is the main reason for such movement or migration. The fundamental reason for such movement is been identified to be poverty. Poverty is one of the numerous effects and impacts of environmental degradation. Since oil induced environmental degradation is man-made, and then arguing that voluntary migration can be qualified as one of the elements of internal displaced persons will be a valid point.

According to the definition by the Guiding Principle on Internally Displaced persons, relocation is a major and significant criterion in describing the category of people who are displaced. There could still be displacement without relocation, as displacement could be defined here as the inability of a person, group of persons or community to realize its interests, more especially, their essential and regular needs in relation to other groups (Ibeanu, 2002). Therefore, displacements from people's

occupation and its consequential loss of income and means of livelihood, that hinders the competitive advantage of one group in relation to other groups, are basically the manifestation of displacement (Ibaba and Ikpokri, 2008). Oil related environmental degradation has aggravated poverty in the Niger Delta region which has caused many to move or migrate within the rural and between rural and urban areas.

As noted earlier, armed conflicts have been the major and dominant cause of human displacement in Nigeria. No doubt, its impacts have been diverstating. Those affected are forced to flee their residents which sometimes, may or may not get government assistance to provide shelter for them. The situation in the Niger Delta is different. Is basically oil related displacement.

Displacement caused by oil induced environmental degradation on host communities like the Niger Delta has not been taken seriously probably because those who were displaced voluntarily decide to migrate to other rural neighborhood or to urban areas in search of means of survival and livelihood still get accommodated in their new locations by friends and families. This explains the communal setting that is operational in the African society where families and friends help one another in times of difficulties. For example, John S. Mbiti (1969) writes to explain the traditional African family and community way of life. He writes, “Whatever happens to the individual happens to the whole group, and whatever happens to the whole group happens to the individual. I am because we are; and since we are, therefore I am”. This is the cardinal point in understanding the African view of communal way of life. However, this does not solve the original problem that caused displacement and migration. It only shifted the problem to their host neighborhood. The main impacts of migration, however, are sometimes

overwhelmingly negative; they include escalating humanitarian crises, rapid urbanization and associated slum growth, and stalled development (Andrew Morton, et al, 2008).

Those displaced occupationally without relocation are not left out. They look for means of survival also but in more dangerous ways. It has been noted that these group of persons have been engaged in conflicts, violence, and kidnapping of foreign and local expatriates for ransom has become their means of survival in the society (BBC 2009).

The number of internally displaced persons in the world increased from 25 million in 2001 and 27.1 in 2009. It stood at approximately 27.5 million at the end of 2010.

Table 2.2 Internal Displaced Persons by region (millions of people)

Regions	End of 2011	End of 2009	% change
Africa	11.1	11.6	-4%
America	5.4	5.0	+8%
South and South-East Asia	4.6	4.3	-7%
Middle East	3.9	3.8	+3
Europe and Central Asia	2.5	2.4	+4%
Total	27.5	27.1	+1%

Source: IDMC, March 2011

While there is a global crisis of internal displaced persons, Africa is by far the most affected continent with 21 countries affected. The total number of IDP in Africa stood at 11.1 million at the end of 2010 (Jeff Crisp and Erin Mooney 1998, p469). On top of the list of IDPs in Africa is Sudan, with the largest number stood at 4.5 million, followed by DRC 1.7 million and Somalia with 1.5 million (IDMC, 2011). In Nigeria, the

number has been put at about 1,600,000 Internal Displaced persons (Refugee United 2010). This statistics is based on conflicts related induced cases including Niger Delta which is the author's main area of study.

2.3 Brief Overview of Nigeria

Nigeria is in the Western part of Africa. It is bordered on the North by Niger and Chad, Cameroon on the East, the Atlantic Ocean on the South, and Benin Republic is in the West.

It covers an area of 923,770 square kilometers or 356,700 square miles. It has the largest population in Africa with more than 155 million of its citizens (CIA, 2011).

Nigeria as an entity came into existence in 1914 when the Southern and Northern protectorates were amalgamated by Sir Fredrick Lord Laggard. Although the history of Nigeria does not start with the British colonialism, but the colonial experience forms the critical starting point for understanding many contemporary problems in the Nigerian state. The amalgamation or unification of two protectorates did not translate into unification at the regional and local level because the unification was basically for economic and administrative reasons which laid the foundation for a fractured society. Under the British colonial rule, the Nigeria state was further fragmented into three distinct regions: Northern, Western, and Southern. The unequal fragmentation of the Nigerian state under British rule can be seen as the basis for Nigerian's present political, ethnic and economic crises (Mbabuika, 2005).

The fragmentation of Nigeria into three parts prevented the unification process, which aided in its colonial rule over Nigeria. Rather than unification, each of the regions was made up of distinct ethnic groups with one or two major groups as the dominating

power within a particular region, which still exists till date. For instance, Hausa-Fulani in the north, Yoruba in the west and the Igbo are in the east. This has turned into deep, long-standing ethnic struggles and conflict within the country. The Igbo, Yoruba, Hausa-Fulani are the main dominant political and economic elite in the present Nigeria, while the ethnic groups of Niger Delta remain marginalized (O'Neill, 2007).

The present Nigeria is made up of 36 states structure, with Abuja the Federal Capital. For political and administrative expediency in the sharing of offices, the country is further divided into six geopolitical zones: South West, South East, South-South, North West, North East and North Central. The Niger Delta is located at the South-South geopolitical zone.

It is no secret that Nigeria is the highest producer of oil in the African continent. It is also the 11th largest producer and 7th largest exporter of oil in the world (The Independent, 2007). Nigeria is already a key supplier of oil to the United States, which imports about 40 percent of its petroleum from Nigeria and expected to increase in the coming years (Global Trade Atlas, 2009). The country's oil production is currently estimated to be about 2.45million barrels per day. The low sulfur content of Nigerian oil petroleum makes it desirable in a pollution conscious world. Nigeria's economy remains reliant on oil. It accounts for up to 95% of its export earnings and more than 80% of total government revenue (Watts, 2004; CIA, 2011). Approximately 1%, of the population earns an income from the oil industry. State revenue earned from oil is solely distributed by the federal government. Base on the Nigerian constitution, a little less than 50% of total oil revenue is distributed to state and local governments, with an additional 13% of the revenue to the nine-states that made up the Niger Delta where oil is produced (Junger, 2007).

Oil has been a major and important part of the economy since vast reserves of petroleum were discovered. Based on available records, Nigeria has earned more than \$1.6trillion as oil revenue for the past 54 years since oil was discovered in Oloibiri, now in Bayelsa state. (BBC News, 2009). Despite these huge foreign exchange earnings, the economy underperforms, and the majority of the people have not been able to benefit from the oil wealth. For most Nigerians, life remains bleak.

Years of military rule, Poverty, unemployment, decay infrastructures, corruption at all government levels, ethnic divisions, conflicts of all kinds and lack of basic amenities seems to be the lot of the people of Nigeria. Despite the potential of oil to change the lives of ordinary people, most Nigerians continue to subsist on less than US\$1 a day. The discovery of oil rather than being a blessing has turned out to be a curse to many Nigerians. Life expectancy for Nigerians is 43.4 years. To put this in perspective, the life expectancy in Japan is almost double at 82.2 years. Unemployment rate in Nigeria was last reported to be at 23.9 percent in 2011 and poverty level stands at 71.6% at the moment (UNDP, 2006).

2.3.1 Nigerian Oil Politics

The politics and dynamics of revenue allocation have manifested over the years in attempts to address the peculiar development challenges of the Niger Delta as a region that produces oil in Nigeria. The amalgamation of the Southern and the Northern Protectorates by Lord Lugard in 1914 introduced a derivation plan called cross-subsidization; the richer South would subsidize development endeavors in the poorer North (UNDP, 2006). Though the colonial administration did not specify clearly how the derivation method should be applied.

An attempt to write the basis and levels of sharing revenues among the component units (regions as they were called) of the Nigeria Federation was in 1946 by Phillipson Fiscal Commission. They proposed the derivation principle as a basis for fiscal federalism. The main tenet of the derivation was that revenue should be shared, in proportion to the contribution each region made to the central government (Temi Haruna 2006). Derivation became the only principle used to allocate revenues among the regions.

In 1946, the Phillipson Commission recommended that 50 percent of the revenue be retained by the region where such revenue was generated. 15 percent of the revenue went to the central government, while 35 percent was shared among all the other regions including the revenue-generating region. After independence in 1960, the derivation formula continued. The 1964 Binn Commission still recommended 50 percent to the region where the revenue was generated (Dafinone, 2006).

Until the Nigerian civil war, revenues generated from each region attracted a 50 percent derivation for the revenue-generating region. The 1960 and 1963 Constitutions accounted for rapid development and healthy competition among the regions. The Northern region produced cotton, hides and skin, and groundnut that led to the famous groundnut pyramid. The Eastern region produced palm oil and petroleum. The Western region and Midwest region produced cocoa, rubber, timber, palm oil and petroleum. The famous groundnut pyramid of the Northern Nigeria and the cocoa beans from Western Nigeria, all commanded a 50 percent derivation. With the decline in groundnut and cocoa trade and the increasing potential for crude oil in the Niger Delta, General Yakubu Gowon, the then military Head of States reduced derivation to 45 percent. He initiated Section 140 (6) of the 1963 constitution dealing with payment of derivation of oil proceeds from the continental shelf to the region by promulgating decree No. 9 of 1971.

This greatly reduced the derivation paid to the oil bearing or producing states by the Federal Government of Nigeria from the proceeds of petroleum products. This singular legislation removed 5 percent from the 50 percent derivation guaranteed under the 1963 Constitution (Temi Haruna, 2006).

The said offshore oil revenues decree No. 9 of 1971, vested all offshore Oil Revenue and the Ownership of the Territorial Waters and the continental shelf in the hand of the Federal Military Government. The trend of reduction in the derivation fund continued in the hand of General Olusegun Obasanjo in 1977, when he took over the government as the military Head of State after the assassination of General Murtala Mohammed. The Obasanjo administration, through a Technical Committee on Revenue Allocation headed by Late Professor Abovade, went ahead to reduce states share on derivation to 40 percent and in 1978. He enacted the contentious Land Use Act of 1978, basically taking over community lands and turned them to government ownership.

The Shehu Shagari civilian administration in 1981, further reduced derivation to 5 percent. Later, General Mohammadu Buhari pegged it at 1.5 percent in 1984. The administration of General Ibrahim Babangida showed little mercy by raising the revenue from 1.5 percent to 3 percent (Omotala 1980, p51).

It is important to note that none of all the military head of states changing the derivation formula were from the Niger Delta that produces the oil petroleum. Apart from Olusegun Obasanjo from the West, others were from the Northern part of Nigeria. Since the downward curved of derivation allocations, the oil-producing states of the Niger Delta have been agitating for increase in allocation to enable them fight poverty, improve the environment massively degraded by hydrocarbon extraction, and for general socio-economic, and infrastructural development.

In addition, the oil boom in 1970s saw some of the state government policies, part of which has been mentioned above, point to the fact that the priority of the Nigeria government was basically the oil industry. One of such policies was the nationalization of the oil industry in 1971, known as Nigerian National Petroleum Corporation (NNPC) today which has 55% shares in the oil industry. The nationalization policy meant that government officials effectively became the sole decision makers as it relates to oil matters. Furthermore, the NNPC was created in partnership with foreign oil companies which ensure that the government acts in the interest of foreign oil companies and to meet oil needs rather than the needs of Nigerian society (Frynas, 2001). Nigerian oil is one of the lowest cost sites for oil exploration and extraction in the world making it attractive to multinational and transnational oil companies.

It is not strange that Nigerian government and the oil companies collaborate for mutual benefits. Oronto Douglas (2010) described the activities of State government and the oil companies as “a symbiotic relationship between the Military government and the multinational companies who grease the palms of those who rule.... They are assassins in foreign lands. They drill and kill in Nigeria”. Such mutual benefit was discovered in 1996 when one of the oil companies (Shell) was used to import arms for Nigerian police force. On the other hand, Nigerian police force was released to protect Shell staff. In reality, the police force was used to repress and suppress any anti-oil activism. Any anti-oil activism in Nigeria is regarded as a fight against the government of the day (Okeagu, 2006).

In the case of Ogoni community in the Niger Delta, they sought for better protection of their environment and adequate compensation for the destruction of their homeland; loss of farmland and fisheries, done by Shell and Chevron. Their campaign against multinational Companies that has extracted more than US \$30 billion of oil from

their land since 1958 was met with lots of force and extreme violence by Nigerian government through the security force. Protesters were jailed, silenced from demonstrating against the multi-national oil companies. In 1994, the Nigerian military was sent into Ogoni (a major oil producing community in Niger Delta). They raided and razed 30 villages, arrested hundreds of protestors, and an estimated 2,000 people were killed. In 1995, the leader of the Movement for the Survival of the Ogoni People was arrested, jailed with 8 others and later executed by the military government of the day for interrupting the activities of the oil companies, and at the same time, against the oil interest of the federal government (Karen, 2000). Furthermore, in February 2005, a protest was staged at Chevron Escravos oil terminal in which soldiers opened fire on the protestors. A man was killed and 30 others were injured (Amnesty International, 2006).

The ability of the multi-national oil companies and Nigerian leaders to use the act of violence against oil communities in the Niger Delta region is best explained by Nicos Poulantzas (1978) that “in a class-divided society, it is always the State, as the practitioner of legitimate violence and physical repression, which takes precedence over law”. Till date, Shell is still the prevailing force in the Niger Delta. Shell acts as the defacto state, providing major services like education and some level of transportation in the region are being regulated and mostly controlled by the oil company (Shell).

Environmental destruction leads to social-economic conflicts. The social-economic conflict in the Niger Delta region has disrupted the activities of oil industry. In order to remedy the situation and guarantee smooth exploitation of oil resources, a strategy tagged Sustainable Community Development was introduced by Shell. Allowing oil companies to ratify development plans for the oil communities, means that the Nigerian government has de-legitimized itself in the Niger Delta. Over the years, oil has

dominated the political and economic life in Nigeria. Politics in Nigeria has been described as “authoritarian governmentality” and “petro-capitalist” (Gandy, 2006). In other word, the Nigerian government functions and operates with corporate oil interest, not considering the livelihood of its citizens in mind.

It is well known that corruption is rampant among African countries, including Nigeria. Most African countries that have valuable resources- Oil in Nigeria and Angola, diamond in Sierra Leone and Congo as well as Liberia, happens to be among the poorest and violent countries on the continent of Africa. According to World Bank (2007), most of Nigeria’s oil wealth gets siphoned off by 1 percent of its population, condemning more than half of the country to subsist on less than a dollar per day. By standard, it is one of the poorest countries in the world. Since the country gained independence from the British in 1960, it is estimated that over \$400 billion of oil revenue has been stolen or misused by corrupt government officials. On the scale of 1 to 10 with one being the more perceived corruption and 10 is regarded as the least perceived corruption, Nigeria scored a 2.5 and ranked 130 out of 180 on the global perception corruption index. Any score below 3.0 reflects a high level of corruption in the country (BBC News, 2000; Corruption Perception Index, 2009). Wealth is concentrated in the hands of a few, mainly those in government.

The display of wealth by government officials both at the federal, state, and local level has been one of the major factors of violence and unrest in the Niger Delta region. Seeing millions of petro-dollars leaving their land, with essentially none of it reaching the ordinary people has created condition for violence, insurrection and civil disobedience. According to Jeff Koinage of CNN (2007), his interview with a leader of the foremost militant group, Movement for the Emancipation of Niger Delta (MEND) operating in the

Niger Delta region spoke on why the militants fight against the oil companies and the government. “We are in the struggle for the liberation of the Niger Delta, the most devastated, poorest and the most threatened region in the world”

2.4 Strategic importance of Niger Delta

Niger Delta simply buttresses the significant and pivotal position of the region to the political and economic existence of the Nigerian State. It is located in the Atlantic Coast of Southern Nigeria where River Niger divides into numerous offshoots and (Awosika, 1999) falls within the tropical rain forest zone. The area regarded as the Niger Delta is the fan-shaped area at the southern part of the country through which the River Niger empties into the Atlantic Ocean. This area covers about 70,000 kilometers and it is “the third largest wetland in the world and the largest in Africa (CLO, 2002). The region is divided into four ecological zones namely coastal inland zone, mangrove, freshwater zone and lowland rain forest zone (ANEIJ, 2004).

According to the geopolitical description, the region is made up of 9 states out of the 36 states in Nigeria with 185 Local Government Councils (Eyinla and Ukpo, 2006). In 2007, the population of the region was estimated to be about 28million. An overwhelming majority of the people of Niger delta is poor and lives in rural communities. Majority of the inhabitants of this region live in Rivers, Delta and Bayelsa states. The core oil producing states of the region are Bayelsa, Delta, Rivers, and Akwa Ibom states cover about 45, 00sq.km, accounting for more than three-quarters of onshore oil production. There are at least 40 different ethnic groups, about 250 languages and dialects in the region with Ijaw tribe as the majority. The other occupants of the Niger

Delta are scattered among other states like Cross River, Akwa Ibom, Abia, Imo, Edo, and Ondo states (Okonta and Douglas, 2003).

Map of Nigeria numerically showing states typically considered part of the Niger Delta region: 1. Abia, 2. Akwa Ibom, 3. Bayelsa, 4. Cross River, 5. Delta, 6. Edo, 7. Imo, 8. Ondo, 9. Rivers

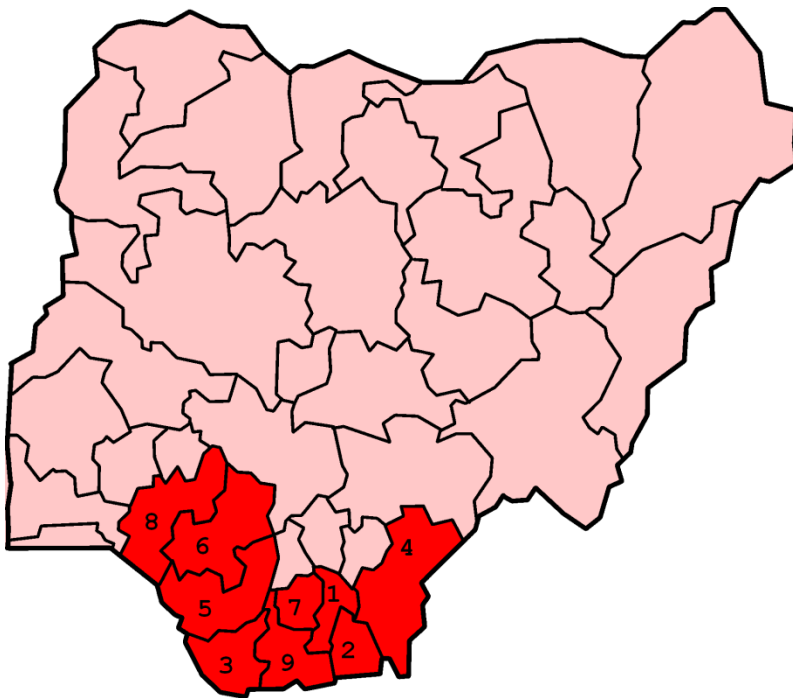


Figure 2.1 Map of Nigeria showing 9 states considered to be Niger Delta

Wikipedia.com

Furthermore, the area lies between the estuaries of the Benin River to the West and Cross River to the East of the River Niger itself. The Niger Delta stretches about 4.32 (270 miles) along the Atlantic Coast. The region is criss-crossed by a network of creeks that link together the main rivers of Benin, Bonny, Brass, Cross, Forcados, Kwa-Ibo, Nun, and other rivulets and streams (all estuaries of the Great River Niger). Its mangrove

forest covers about 20,000 square kilometers with high biodiversity species of flora and fauna. The land is endowed with human and natural resources. It “flows with milk and honey” (Okonta and Douglas, 2009).

Below is a map of Nigeria showing major areas of oil exploration and exploitation in the Niger Delta region.



Figure 2.2 Map of Nigeria showing areas of oil exploration in Niger Delta States

Source: Quarterly Review Vol. 1 Issue 1, July 2007

The Niger Delta area of Nigeria could be rightly referred to as the oil and natural gas capital of Nigeria, where most of the petroleum and natural gas in Nigeria are currently extracted. Oil and natural gas production in Nigeria account for about 95 percent of the country’s foreign exchange earnings, and generates about 80 percent of total national revenue. The abundance of oil resources deposited in the Niger Delta region has gained Nigeria prominence in international community (Elias Courson, 2009). As a member of the Organization of the Petroleum Countries (OPEC), Nigeria is the world’s

11th oil producer and the 7th exporter of oil pumping well over 2.42 million barrel of oil into the international market daily. About two third of the production is onshore while the remainder is explored offshore from the continental shelf in shallow and deep water all in Niger Delta (Watts, 2008). Nigeria is the 5th oil exporter to United States (EID, 2009).

Although oil exploration and production is the major largest industry in the Niger Delta, numerous other subsectors are operational in the region as well. They include steel works, metal fabrication, food processing, rubber and plastics, petroleum refineries and paints. Two out of three operating refineries in Nigeria and two petrochemical plants are located in the Niger Delta. The Delta Steel facility located outside of Warri is the largest steel plant in West Africa.

The Niger Delta contributes to the Nigeria economy not only in petroleum and gas, but also in agricultural production. According to Federal Office of Statistics (F.O.S, 1985), Crop farming and fishing activities account for about 90% activities in the area. About 50% to 68% of the active labor force is engaged in one form of activity or the other including fishing and farming. (Achi, 2003) Agricultural land covers about 278,000ha in Rivers State (about 16 percent of the state) which employs the largest percentage of the work force in the state (The Rivers Chiefs, 1992).

Niger Delta accounts for 53.41% of the total fish farmers in the country. Out of the total fish production in the country which is approximately 434,830 tones, Niger Delta states collectively account for 51.08%. The region is the breeding ground for more than 61% of the fish caught along the west coast of Africa (Pilot Newspapers 2011). In 2008, the sector contributed \$60million to the nation's economy and accounts for 40% of total animal protein intake in Nigeria. Furthermore, the sub-sector contributes about 5%

to the GDP and over 20% of the agricultural components of the GDP (African Financial Newspaper 2010).

With the amount of natural resource bestowed on the region, the region is therefore strategic to the growth of national economy of the Nigerian state. Sustained exploration and production activities in the Niger Delta without well-conceived strategic or adequate plans for managing the impacts of these activities in a structured manner in the long run have resulted in unplanned and undesirable environmental consequences, social disturbance and violence. As a result, the Niger Delta has become an unstable area of Nigeria where access to oil revenue has become the catalyst for violence. Any conflict in the Niger Delta has its spillover effects. It does not end at the region, but has the proclivity of spilling into other parts of the country. For example, the bombing that took place at capital territory Abuja on 1st of October 2010, a day set aside for the celebration of independence from the British colonial rule was said to be carried out by this group of armed hooded rebels operating under MEND which is an extension of their grievance of the deplorable situation of the Niger Delta people.

2.5 Global Environmental Protection

The emergence of environmental degradation, on the agenda of international affairs, has posed a major concern for nation-states. The first concern over human induced environmental degradation became a global issue in the 1960's. The increasing knowledge of the complex interactions between economic development and ecological harm made the environment a prominent international issue during the early 1970's (Caldwell, 1991). The recognition of the importance of the environment and the introduction of global environmental policy began from the United Nation General

Assembly Resolution of December 3, 1968. They gathered to convey a UN Conference on the human environment in 1972, also known as the Stockholm Conference (Caldwell, 1984). Although before Stockholm Conference, some couple of multilateral agreement and declaration had existed on specific issues such as oil pollution at sea, nuclear testing. These declarations and agreements were not seen as part of a broader environmental context, but they provided precedents for more comprehensive environmental treaties (UNEP, 1991).

The Stockholm Conference of 1972 elevated the issues of environmental protection on the official agenda of international policy and law. The conference did not only create institutions design to formulate international law on the environment, but several treaties were formulated for the international protection of the environment. 114 nations participated during the conference, though with divisions, confrontations and disagreements (Speth, 1992). Another vital summit that was a landmark in the international environmental co-operation was the Rio de Janeiro Earth Summit (UNED) of 1992. It brought together more than 150 nations and 1400 NGO's. This summit was able to shape the international agenda for the coming years. In other words, it defined the new international values of equity and environment (Haas and Person 1992, p26-33).

Problems of environmental protection have made many countries headed to the clarion call to avoid further depletion of environmental resources. Africa is not left out. United Nations Environmental Program exists in a number of Africa countries to coordinate the negotiation and implementation of international environmental treaties. In August 2002, the Earth Summit was held in Johannesburg, South Africa. It brought different countries, NGO's, Multinational Companies, Research Organizations and Development Agencies together to discuss issues on environment. Scholars have argued

that all countries, rich or poor, should regard and protect their resource and environment because they will last forever (Webster, 1990). The impact of this statement is that care in the exploitation of the environment is not only an economic but a social and ecological necessity. As a development institution, the World Bank upholds and supports the idea of conservation of resources and environmental integrity.

In their analysis on the environment, Serageldin and Steer (1993, p3), argued that environmental assessment is now integral to the preparation and implementation of all the projects that is been finance. Lending for environmental purpose is the fastest growing segment of the institution's portfolio, amounting to \$2 billion in 1993 fiscal year of the institution. According to them, the World Bank believes in adopting the main message of World Development Report 1992 and Rio Earth Summit which is to promote development and protect the environment.

Furthermore, there are broader philosophical interpretations of why development has led to the degradation of environmental systems. These arguments also link to the destruction of cultural systems. It is obvious that what has threatened the world environment mostly is industrialization. As Akinfosoyo (1999) posits, "Due to rapid development of industries, air pollution resulting from industrial activities has become a problem of vital importance". He noted that there is constantly up to 9million tones of aerosols in the earth atmosphere. He further observed that further industrial development is inevitable and consequently, so is the amount of noxious substances released into the atmosphere. Environmentalists have argued that most environmental problems can be solved by using energy more efficiently.

CHAPTER III

OIL RELATED ENVIRONMENTAL DEGRADATION AND HUMAN DISPLATION IN THE NIGER DELTA

As mentioned in chapter 2, literature on development shows that man relies on the environment survival and sustenance. Resources from the environment give meaning to man's productive activities. As a result of this, the productivity of man clearly depends on the quality of the environment. Hence, development cannot succeed upon a deteriorating environment resource base (Ibaba and Opukri, 2008).

For the people of the Niger Delta region, the quality of the environment and its sustainability are crucial to their overall wellbeing and development. According to UNDP (2006), more than 60 percent of the people in the Niger Delta region depend on the natural environment for their livelihood. Pollution and environmental problems, consequently, create significant risks and danger to the people of Niger Delta. Furthermore, a study conducted by a team of international environment experts in 2006 revealed that the Niger Delta is "one of the world's most severely petroleum impacted ecosystems". "The damage from oil activities is chronic and cumulative, and has acted synergistically with other sources of environmental stress to result in a severely impaired coastal ecosystem and compromised the livelihoods and health of the region's impoverished residents" (Amnesty International, 2009).

The Niger Delta is endowed with enormously rich natural resources in form of land, water forest and fauna. These resources, though, have encountered extreme

degradation due to oil exploitation in the region. For the Niger Deltans, this loss has been a direct route to poverty, as natural resources have traditionally been the primary source of sustenance. Although, there are in fact several other ways in which the environment is degraded, Oil spills and gas flaring are the most frequently oil related pollution that degrade the environment which have become endemic and devastating in the Niger Delta region(UNDP, 2006). These environmental problems related to oil operations in the region are examined in this section.

3.1 Oil Spill

Oil spillage is the common of all the environmental impacts of oil exploration. Is defined as uncontrolled release of any product relating to oil production including crude oil, chemicals, or waste caused by equipment failure, human error, or intentional damage to facilities(CRP, 1999). Spills are potentially and mostly devastating on agricultural lands and waters. According to UNDP (2006) report, most of the environmental pollution in the Niger Delta occurs due to oil spillage caused by human error and equipment failure.

Findings from reports show that a total of 6, 817 oil spills occurred between 1976 and 2001, with a loss of approximately 3 million barrels of oil. More than 70 percent was not recovered. Furthermore, report from the Ministry of Petroleum Resources also indicates that between 1976 and 1996, a total of 4, 835 incidents resulted in the spillage of at least 2, 4 barrels of oil of which about 1. 8 million barrels were not recovered. An average of one spill occurs every week and three oil spills are recorded each month in most of the oil bearing areas of Niger Delta. According to available data from a group of independent environment and oil experts that conducted a research in the Niger Delta in

2006 put a report that recorded oil spill, onshore and offshore, at 9 to 13 million barrels of oil over the past 50 years (WWF and IUCN, 2006).

The table below shows a scenario of oil spill that have occurred in some of the states in the Niger Delta region.

Table 3.1 Summary of some oil spills in the Niger Delta: 1979-2005

Episode	Year	State	Quantity spilt in barrel
Forcados Terminal oil spills	1979	Delta	570, 000
Funiwa No.5 well blow out	1980	Rivers	400,000
Oyakama oil spillage	1980	Rivers	10,000
System 2c Warri-Kaduna pipeline ruptured @Abudu	1982	Edo	18,000
Sohika oil spill	1983	Rivers	10,000
Idoho oil spill	1983	Akwa Ibom	40,000
Jones creek oil spill	1993	Delta	21,000
Jesse oil spill	1998	Delta	10,000
Etiamia oil spill	2000	Bayelsa	11,000
Ughelli oil spill	2005	Delta	10,000

Source: United Nations Development Program (UNDP), Niger Delta Human Development Report, Abuja, Nigeria, 2006

Oil companies have attributed the cause of oil spills to the deliberate action of sabotage. Such sabotage is categorized as the willful damage to facilities by the local people in protest against the operations of the oil companies in their communities.

According to Shell petroleum Development Company (SPDC), about 1, 137 cases of sabotage involving 17,644 barrels of spilt oil was reported (SPDC annual Report, 200).

However, the regulatory agency in Nigeria known as the Department of Petroleum Resources (DPR), argued that one of the causes of oil spillage in the Niger Delta is due to the use of weak and old pipelines by oil companies. Some are reported to be over 40 years old which are laid across oil communities. Most of them are rusty and poorly maintained posing serious problems and damages in the oil communities and to the entire region. According to report, 88% of oil spill incidence is traceable to equipment failure (South-South Express, 2002). Mobil's Idaho oil rig spill in January 1999 resulted in spilling 40,000 barrels of oil. Although it was considered small, the spill spread from the immediate environment in Akwa-Ibom State to Rivers, Cross-Rivers, Edo, Delta and Ondo States. It also spread 85 kilometers into the Atlantic Ocean, going as far as Benin, Togo, and Ghana (Aworawo, 1999). In some cases, oil spill sets the entire community on fire. Oil spill that took place at Osima, near Nembe in 1998, ignited a fire that lasted for eight days, which destroyed the community and resulted in displacing about 130, 000 members of the community (Ibaba and Opukri, 2006). Oil spills have negatively impacted lands and waters resulting to declining productivity in farming and fishing. The long term effect is the destruction of crops and marine life which reduces the nutrient value of the soil and makes the waters inhabitable by fishes.

Where oil exploration and exploitation take place, chances of oil spill is always on the increase. Oil spill need not be devastating. A swift and effective process of clean-up, remediation and compensation should minimize damage to livelihood. However, oil spillage becomes a major concern when it is not cleaned or properly cleaned up after its occurrence. Oil spills and pipeline fires are regular features and has been estimated that there are at least 300 incidents each year in the Niger Delta region (John Donovan, 2011). In Niger Delta, clearing of oil spillage are delayed by the operating companies due to

their insensitivities and bureaucratic bottlenecks. In most cases, they are not properly cleaned up. There are numerous cases where oil spillage took months and years before it was cleaned up. For instance, oil spill that occurred in Epubu community in 1998 was left unattended to until after one year. In the case of Aleibiri community in 1997, the protest staged by the youth of the community compelled the operating company in the area to clean up the spill after six months (Aaron, 2006).

Oil spillage has exposed local people to severe hardship. It destroys vegetation, reduces nutrient value of the soil, and destroys mangrove forest, food/cash crops, fishing ground and marine life. Spills and leaks destroy agricultural lands. Many of the Niger Delta people rely heavily on agriculture as their means of livelihood. Traditional staples grown in the region include cassava, yam, cocoa, pumpkin and other types of fruits. Oil pipelines run through farmlands including other infrastructures like well heads and flow stations are most often close to agricultural lands (UNDP, 2006).

The existence of well heads and flow stations alone within a reasonably heavily populated rural area can cause some difficulties for farming purposes. For example, the people of Ohaji-Egbama local government area in Imo State pointed out that pipeline laid across some reasonable amount of their farmland have reduced farming activities. The effects of spills on agricultural land are usually overwhelming. Plants planted in the ground hardly survive. The immediate impact is the destruction of any crops that come in contact with the soil. According to research conducted on eight sites affected by oil pollution in the Niger Delta by Amnesty International in March 2008, it was reported that the level of damage as a result of oil pollution on agricultural land was alarming. Agricultural land damaged as a result of oil pollution was visible on each of the sites (Amnesty Int'l, 2008).

A reasonable problem for the rights of farmers in the Niger Delta is the failure to address the long-term effects on soil fertility and agricultural productivity of oil pollution. In some cases, soils recover in a short time depending on the nature of the soil, whereas in others, the effect can last for decades (Hedlim, 1996). For example, Ebudu community shows a typical example of how longstanding the effects of oil spill pollution can be in the Niger Delta. According to scientific discovery published in 1992, they found that the soil had not still recovered from the spill that took place in the 1960s, some 20 years later. At the time of study, oil was still seeping into the nearby river where the people sourced water for drinking and other domestic activities. After 40 years of its original spill, the site has still not been adequately cleaned up (Emmanuel Asuquo, 1992). In many cases, the long-term effects associated with oil spill have resulted in damaging families only source of livelihood. Long term effects include delayed germination of plants, stunted growth in trees and smaller fruit, and in some cases, land is rendered unusable for many years.

As noted earlier, thousands of people in the Niger Delta also depend on fishing for both their income and food. Oil exploration has caused many damages to the aquatic life in the region. Oil spill kills fish, their food source and fish larvae, and damages the capacity of fish to reproduce, which result to both immediate and long term consequences. Discharge of oil and waste into the river can cause fishes to move away from such a vicinity of oil polluted area but fish eggs and larvae constantly suffer the effect (UNDP, 2005). As a result of this, a major decline in overall stocks is set to happen.

Many in the region also engage in aquaculture, normally in small ponds, where fish are harvested for food and for sale. Oil spills usually get into the pond resulting to a

great damage and loss to the key source of livelihood of the people living in these communities. For example, an oil spill from a high-pressure pipeline operated by Shell, in Oruma, Bayelsa State in 2005, was reportedly spread into many fish ponds killing large amount of fish on which the people of the community relied on for their livelihood and food. As fishing is the main source of income, the people were compelled to demonstrate in to draw public attention to their plight (Sogbon, 2005). The other implication of this is that, given that human health is tied to the web of food, the ingestion of hydrocarbon directly or indirectly through contaminated food leads to poisoning (Udoette, 1997). The incessant oil spills and other negative associations with the oil industry continue to be a source of public agitation and concern in the Niger Delta region.

3.2 Gas flaring

Gas flaring is another major environmental problem faced by the people of Niger Delta. For better understanding, pointing out why gas is flared will be necessary. Oil and natural gas are mixed in every oil deposit. The natural gas called associated gas must be removed from oil before it could be refined. Burning of this associated gas is what is called gas flaring. According to Watts, (2001), gas flaring is the deliberate burning of natural gas that is produced which creates a ceaseless, high intensity flame. This act is at present illegal in most developed countries of the world. It could only occur in some situations such as emergency shutdowns, unplanned maintenance, or disruption to the processing system (Hyne, 1999).

Due to lack of utilized infrastructure and policy implementation, more gas is flared in Nigeria than anywhere else in the world (Africa News Service, 2003).

According to UNDP (2006) report, Nigeria flares about 75% of gas produced. Figures are shown in the table below.

Table 3.2 Flare of National Gas in Major Producing Countries in 1991

Country	Percentage Flared
United States	0.6
Holland	0.0
Britain	4.3
Former Union of Soviet Socialist Republic (USSR)	1.5
Mexico	5.0
Libya	21.0
Saudi Arabia	20.0
Nigeria	76.0
Algeria	19.0

World Bank Report, 1995, 2000/2001

The figure above shows that Nigeria flares more gas than all the other eight countries put together. Although, with the gas utilization program in place, the flame rate is said to have been reduced to 54 percent, the quantity flared is still significant in global terms.

According to Okonta and Douglas (2001), there are various reasons why gas flaring is still on-going in the Niger Delta. For oil companies to gain maximum economic profit, flaring is the most efficient way to dispose of the associated gas. Also, Nigeria has huge natural gas deposits, so it is more economical to use non-associated gas to produce the natural gas as energy source. Indeed, associated gas recovery costs four times more than the straight extraction of non-associated gas (ESMAP, 2001). In addition, because the Nigerian government is politically unstable and non-transparent, it is difficult for them to enforce the proper policies and to make coherent government policies to

checkmate the activities of the oil companies. Also, oil companies and the government of Nigeria are willing to gain the short-term profits rather than long-term profits (Africa News Service, 2003). These driving forces have led to keep the oil flowing at minimal cost without considering the local environment and the people. Gas flaring is a consequence of cost minimization strategy. There is no question that gas flaring is ubiquitous in the Niger Delta.

From a social perspective, the oil-producing communities have experienced severe marginalization and neglect. The environment and human health have frequently been a secondary consideration for oil companies and the Nigerian government. However, although there may be reasons for the continuous gas flaring, there are many strong arguments suggesting that it should be stopped (Watts 2000). Corporations' accountability to the people and environment surrounding them imply that oil companies should be required to reinject gas, to recover it, or to shut down any extraction facilities in which gas flaring is occurring.

It has been estimated that the total emission of carbon dioxide (Co₂) from gas flare in the Niger Delta is totaled at about 35 million tons per year. Furthermore, in 2001, World Bank estimated that 87% of all associated gas was flared in the Niger Delta atmosphere by oil companies operating in Nigeria. About 80 billion cubic feet of gas are flared in the Niger Delta yearly. Gas flaring happens to be the singular highest contributor to the problem of global warming. It has negative effects on the immediate environment as it adversely affects plant growth, wildlife, and human beings (World Bank report, 2005). It is still the same in the Niger Delta region.

The close proximity of gas flares to residential areas, forests, and waterways has further contributed to the deplorable situation in the Niger Delta. For example, the gas

flare at the Eleme/ Okirika refinery is less than a kilometer away from residential areas. A study on the impact of gas flaring on agriculture at Izombe flow station in Imo state shows a close and significant relationship between gas flaring and productivity declines in agriculture. See table below.

Table 3.3 Impact of gas flaring on agricultural output

Distance of Farmland from Flare Site	Percentage Loss in Yield of Crops
200 meters	100 percent
600 meters	45 percent
1 kilometer	10 percent

Source: Ibaba and Opukri, 2006

One of the most worrisome aspects of oil pollution in Niger Delta is the rise in occurrence of certain ailments that were previously unknown in some oil producing communities. It has been reported that there is correlation between oil pollution and development of health problems in the region. According to research conducted by scientists from the Faculty of Pharmacy, University of Lagos in 2000, they found that water samples collected from bore holes, rivers – especially in Delta and River States, indicates that more than 70% of the water in the Niger Delta contains Benzo pyrene chemical, with a high concentration of 0.54 to 4ug per liter, far above the World Health Organization recommendation of 0.7ug/1 for drinking water (WHO, 2004).

The report further asserted that if the level of harmful chemicals could be this high in ordinary waters, the sediments which fish and other aquatic creatures feed on are definitely higher in Benzo pyrene concentration, and the people dependent on these

marine creatures for food, automatically take in much more higher level of the cancerous chemical. This report is consistent with the experience that people of the area have had in the past thirty years who had lived to see an increase in the occurrence of cancer and other respiratory problems traceable to environment pollution in the region. The diseases include respiratory problems, skin ailments such as rash and dermatitis, eye problems, gastro-intestinal disorders, water borne diseases and nutritional problems associated with poor diet. Gas flare is identified as the major cause of respiratory infection among the Niger Delta people (Ekwaikhide and Aregbeyen, 1999).

Another problem associated with gas flaring is Light Pollution. Light pollution subjects the living organism around the vicinity of the flare to 24-hour daylight. This affects diurnality and night-time patterns in animals. The flares drive away games and it affects the reproduction of fish as well as sending them to deep sea areas. This results to the depletion in the quantity of game animals and the reduction of rewards that use to accrue to hunters in the area (Human rights watch, 1998).

An increase in land fragmentation has resulted to decline in agricultural productivity. Most activities associated with oil extraction and explorations, including laying of pipelines, building infrastructures and road constructions leading to the areas where oil explorations take place, have done much damage to the Niger Delta environment. Oil facilities and installations directly took land from the people. Indirectly, people have also lost their lands through pollution and land despoilment by quarrying activities (World Bank, 2001). Companies that have the requisite oil exploration and production licenses and leases from the Nigerian government are entitled to build infrastructures across large areas of the delta, including land used for farming and fisheries. Communities have no means of preventing the activities of the oil companies,

regardless of the damage they inflict or cause to livelihoods and food sources (UNDP, 2006).

According to statistics, lots of farmlands have been lost by oil producing communities as a result of oil exploration in the region. Okirika community in Rivers State is one of numerous examples of communities that have been affected and their farmlands to oil activities. Access to lands in the Niger Delta has become a major social-political issue. Members of the communities where oil activities take place have complained bitterly about the amount of land lost to oil operations in their various communities. Oil facilities and installations directly took land and waterways away from the people (UNDP, 2005).

On the whole, it can be said that the Niger Delta region has lost more than it has gained from the discovery of oil in the region. The impact of exploration has been devastating. The level of degradation caused as a result of oil production in the region has caused ecological problems that damage the economies of oil producing communities. It is clear that oil associated environmental degradation has caused the fall and collapse of local economies. People of the Niger Delta who once depended on natural sectors such as farming and fishing had to change their means of livelihood. Because of the degradation of their environment, they can no longer engage in farming and fishing as they use to do. As a result, this has led to occupational displacement which could be regarded as internal displacement. Some have become traders while others migrate (Naanen, 1995).

Agricultural sector in the region is affected as a result of change in occupation. As noted earlier, more than 50% of the fish consumed in Nigeria come from the Niger Delta. With the increase in change of means of livelihood from natural sectors to non-natural sectors, this will amount to drastic decrease in fishery and agricultural products (Pilot

Newspapers 2011). Change in occupation appears to be one of two ways many people in the affected areas can cope with the changes affecting their environment. The major reason why many of the people in the region change their occupation from natural sectors is to raise their income to meet at least their basic needs. However, the high cost of living in the region seems to have weakened this objective. Many of the inhabitants still live below the poverty line of less than one Dollar per day (World Bank, 2006).

3.3 Poverty in the Niger Delta

The people of the Niger Delta are highly dependent on their environment for their source of livelihood. The region has been described as the richest wetland in the world and the home of numerous species of aquatic and terrestrial plants and animals. Before the discovery of oil in the Niger Delta, the people depended so much on the resources from their natural environment. They made their living from the exploitation of the resources of their land, water and forest as farmers, fishermen and hunters. They were attached to their environment. The economic activities of the people were soon distorted as a result of the environmental degradation caused by exploration and exploitation activities of multinational oil companies.

These devastating effects on their farmlands, crops, creeks, lakes, economic crops and rivers are so severe that the people can no longer engage in productive farming, fishing and hunting as they used to do. Hence, the dominant economic activity of the people is trading. Only very few are employed in industries and in the civil service. Though some still engaged in farming and fishing, they work more with little in return. Their fishing and farming have been impaired by the deplorable environment in the region. This is a major cause of poverty in the region. The cost of goods and services

are quite high compared to other parts of the country. For example, the cost of table water is 200 Naira (about US\$1,20cent) in Port-Harcourt while in other parts of the country it is sold for 80 naira (Less than US\$1).

The high cost of living in the Niger Delta is caused by the presence of the multinational companies; their workers earn huge sum of money and are willing to pay for goods and services irrespective of their cost. But this is at the detriment of the local people, causing them much poverty. The more costly the prices of goods and services the more the local people are impoverished. Most painful to the people is the fact that indigenes are not employed by the companies operating in the area. The few that are employed are given appointment at the lower position in some of the companies.

According to World Bank (2001) report, despite the vast oil resources in the Niger Delta, the region remains poor. GNP per capita is below the national average of US\$280. Unemployment in Port Harcourt, the capital of Rivers State, is 30% and is believed to be equally high in the rural areas. The rural population commonly fish or practice subsistence agriculture, and supplement their diet and income with a wide variety of forest products. Education levels are below the national average and are particularly low for women. While 76% of Nigerian children attend primary school, this level drops to 30-40% in some parts of the Niger Delta. The poverty level in the Niger Delta is exacerbated by the high cost of living. In the urban areas of Rivers State, the cost of living index is the highest in Nigeria (Iyayi, 2004). The table below shows the Poverty Levels by Geopolitical Zones in Nigeria.

Table 3.4 Poverty by Geopolitical Zone Percentage

Zones	1985/6	1992/3	1997
North East	53.2	N/A	68.0
Middle Belt	48.4	N/A	62.0
South-East	30.9	N/A	53.0
South-West	42.0	N/A	79.5
South- South	38.0	N/A	78.6
Nationwide	43.0	34.10	69.2

Source: National Policy on Poverty Eradication, 2000

Informal sector jobs such as fishing, farming, trading and artisanship dominate the communities. Apparently, income levels in many of the communities are low because of the dominance of informal sector jobs over the formal sector jobs (formal sector job includes employment by companies and civil service). According to a survey conducted by NNDP (2006) in Ogoni community, it was found that about 22% of the respondents earned N5000 (approximately US \$39) or less per month.

According to the World Bank (2006), anybody living on less than US\$1.00 a day must be considered poor. The most popular occupation in many communities is fishing. In some rural communities especially those located in the riverine areas, about 100% of the population are fishermen. Those involved in informal sector jobs were estimated to be about 70% while those involved in formal sector jobs like the civil service were estimated to be about 15%, with only about 2% employed in companies. The dominance of the informal sector jobs has implications for income levels in the communities. This is because the informal sector is plagued by low productivity and low income. Recent studies in Nigeria and other parts of sub-Saharan Africa showed that whereas the

informal sector accounts for as high as around 75% of employment, the sector accounts for only 25% of overall income.

Poverty as defined by World Bank (2006) is hunger. Poverty is being sick and not able to see the doctor. It includes not having access to school and not knowing how to read. It is not having a job, is fear for the future, living one day at a time. Poverty is losing a child to illness brought about by unclean water. The people of Niger Delta have lots of definitions on what poverty is, according to their different experiences. To them, a poor person is one who cannot pay school fees for his children, who cannot meet any needs including food. Who has no farmland and cannot farm to make a living. A poor person is one who has nothing. Consequently, he has no voice in the community (ERML, 2005).

Based on the above definitions of poverty by the Niger Delta people, it will be ideal to say that poverty has many faces, changes from place to place over time, and has been described in many ways. The above descriptions and definitions indicate that the people of the region suffer from inadequate, unavailable and poor quality infrastructure and social services, ranging from water supply, housing, education, transportation, telecommunication, power and fuel, and good health care facilities. For instance, data (Federal Office of Statistics, 2005) shows that 34% of the people in the region use electrical lighting while 61% resort to using kerosene or a lantern. Those that fall within the 34 are majorly government officials and those that work for oil companies in the region. According to data from the National Bureau of Statistics (2005) shows that water in most part of the region comes from unsafe supply facilities such as rivers, lakes, ponds, and unprotected wells and boreholes.

Poor access to safe drinking water poses enormous danger to health, environment, economic activity and sustainable livelihood (NDES, 2000). While poverty may seem to cause serious dispossession and hampers individual development, it is also the consequence of a couple of social and national factors, such as poor governance and years of marginalization (UNDP, 2006).

The above illustration basically, is a graphic and realistic situation obtainable in some major oil producing communities in the Niger Delta. It has become obvious that the activities of the oil industries have led to loss of means of livelihood and has caused the collapse of local economies. When means of livelihood are destroyed, it causes or leads to occupational displacements, which means that they become internally displaced.

Oil exploration and exploitation has resulted in the destruction of the Niger Delta environment. This has led to unsustainability of land for the traditional economic livelihood patterns that once thrived in the area (Legborsi Saro, 2004). As noted earlier, farmland and fishing constitutes the indispensable of the people's productive forces. Destroying their farmlands and fishing grounds means separating them from their means and source of livelihood. When this occurs, they look elsewhere for their means of survival.

Change in occupation has caused the rate of rural-urban and rural- rural migration while some still stay behind. Those who move to the urban area seek to be employed in the public or private sectors of the economy. The predicament however is that often times, they do not find jobs, either because jobs are hard to be found or they are not employable due to low level of education or lack of skills (Ibaba and Opukri, 2008). Many end up doing menial jobs, and largely settle in the slumps. Because of their poor economic status, they to take up accommodations in shanties, slums and waterfronts with

its attendant risks especially in terms of rights protection. In recent times, these slums have been facing demolitions by government.

Some community members displaced occupationally move from rural areas to another rural areas in search of better lives. For instance, a farmer whose farmland has been destroyed as a result of oil exploration moves in search of a productive farmland in another rural area in order to make a living. Some settle in the host communities permanently when it favors them while others keep searching till they find suitable and productive farmlands.

Migration has particularly affected the workforce in the rural communities. Many people of youthful age migrate from the rural areas to the urban areas to seek for jobs in the formal sectors and to involve in trading creating a scenario where the urban areas are highly populated with people belonging to the country's workforce. The elderly men and women are left in the rural communities (UNDP, 2006). Migrants have also created social and political situations in the urban areas. They have worsened congestion in both urban and rural areas. Situations like poor housing conditions, low levels of personal hygiene and environmental sanitation.

The displaced persons who still reside in rural areas have engaged in various illegal activities in order to make a living. They engage in activities like rent-seeking from oil operations in the form of oil bunker, hostage-taking and sabotage of oil pipelines. Recently, idle youths have formed more organized militant groups agitating for resource control and the liberation of what they see as internal colonialism by the Nigerian government and multinational companies operating in the region (Anayochukwu Agbo, 2008).

CHAPTER IV

NIGERIAN ENVIRONMENTAL POLICY; NIGER DELTA EXPERIENCE

The previous section describes the widespread of oil pollution problems in the Niger Delta and the impacts of oil operations and activities to the environment and the people of Niger Delta. This chapter set out to examine major state's environmental regulations in the Niger Delta, why such regulations have not been able to address and solve most environmental problems in the Niger Delta region.

4.1 State Legislations on Environment

Environmental protection regulations are meant to protect the environment from excesses exploitations and for sustainable development. In the case of Nigeria, it could be traced back to the colonial era. There were two basic environmental problems that drew the attention of the colonial administration: Flood control and forest conservation.

The flooding situation in the Niger Delta became a major interest to the colonial administration because it was affecting their shipping operations and restricting their movement to the interior part of the region in search of natural resources (Emeribe, 2000). In order to have access to natural resources in the remote areas, it became fundamental not just to observe flooding, but necessary to plan the waterways to track the flow of sandbanks and keep the waterways open for navigation (Word Bank, 2000). This saw the enactment of waters works act of 1915. Forest ordinance (1937) was created in order to protect and preserve the ecosystem and its biodiversity. Almost all the nature reserves in the region presently have their origin in the colonial period (UNDP, 2005).

There was no adequate legal and institutional body and framework by which problems of environmental degradation could be tackled until recently. The persistent case of oil spillage, gas flaring and environmental pollution that have resulted in destroying the ecosystem were never given enough attention by the Nigerian government until the secret dumping of toxic waste in Koko port in Bendel State, now Delta State. This was followed by the promulgation of the Harmful Wastes Act of 1999 (Ignatius Ade, 2008). As a result of this incident, an institutional framework was established with the responsibility of dealing with environmental problems. By Decree 58 of 1988, the Federal government created the Federal Environmental Agency (FEPA). This Decree was later amended by FEPA under Decree No.59 of 1992.

FEPA in 1989 established the National Policy on the Environment (NPE), with the policy goal of achieving sustainable development. It established other sectoral regulations including the National Environmental Protection Regulation 1991 in which Environmental Impact Assessment (EIA) was also established and was made compulsory only when is demanded by FEPA. States and Local Government Councils (LG) which comprise the second and third tiers of government were encouraged under Decree 59 of 1992 to set up their own environmental protection agencies.

Decree 86 of 1992 was promulgated establishing FEPA as the highest regulator, making EIA mandatory for all developmental purposes. Under it FEPA has published various sectoral EIA procedures together with EIA procedural guidelines in 1995.

Despite these legislations and policies on environmental protection and preservation, environmental degradation has continued to worsen in the Niger Delta. Dominant views blame this on the ineffective execution of environmental protection laws in the country. According to the World Bank (1995), the lack of enforcement of

environmental laws is one of the major problems that have caused the degree of environmental degradation in the Niger Delta. Also, there are flaws and weaknesses in most of these laws and regulations that oil companies have taken advantage of in polluting and despoiling the environment thereby creating unfavorable conditions for the communities. Enforcement agencies lack the mechanism for monitoring and evaluating the impacts of industrial pollution with a view to controlling them (Adibe and Essaghah, 1999).

It will be of fundamental importance to analyze some of these environmental laws and why they have not been able to live up to their purpose and usefulness in the region.

4.1.1 The Federal Environmental Protection Agency Act OF 19988 (FEPA)

Decree No. 58 of 1988, established the Federal Environmental Protection Agency (FEPA). The Legislation empowered FEPA with the strict responsibility of the protection and development of the environment in general (Ndukwe, 2000; Ikein, 1990). It was also to initiate policy in relation to environmental research and technology. Its functions include establishing standard for water quality, air quality, atmospheric protection, noise and hazardous substance, among other functions (Aghalino, 2004).

There are some specific functions of the organization spelt out by Section 4 of the law. They are as follows. (i) To advise the federal government on national environmental policies and priorities and on scientific and technological activities affecting the environment; (ii) To prepare periodic master-plans for the development of environment and technology and advise the federal government on the financial requirements for the implementation of such plans; (iii) Promote co-operation in environmental science and technology with similar bodies, connected with the protection of the environment; (iv)

Cooperate with federal and state ministries, local government councils, statutory bodies and research agencies on matters and facilities relating to environmental protection; and (v) To carry out such other activities as are necessary or expedient for the full discharge of the functions of the agency under this Act (Decree No. 58 of 1988).

A significant feature of the FEPA law is the emphasis placed on pollution control and prohibition. Accordingly, section 20 prescribes penalties for the discharge of hazardous substances into the environment. Subsection 2 of section 20 recommends N100, 000 (US\$ 600.00) fine or 10 years imprisonment for an individual offender, while subsection 3 specify a fine not greater than N500,000 (US\$ 5,000) and an additional fine of N10,000 (US\$ 74) for everyday the offence subsists” for corporate offenders (Decree No. 58 of 1988). Obviously, the penalty is not tough enough to deter offenders from violating the law, as it is evident by the worsening and deplorable environmental situations in the Niger Delta area.

The FEPA Law that seemed to be the most comprehensive attempt endowed with legal power at the protection and sustainable development of the Nigerian, especially the Niger Delta environment has not faired very well. For example, FEPA has not carried out an initial baseline ecological audit of the oil-bearing enclave of the Niger Delta without which, it is impossible to monitor the impact of oil and gas exploration and production over time (Ayaegbunam, 1998; Aghalino, 2004). It is also important to note that despite the enormous powers bestowed on FEPA, it has not been able to apply legal sanctions on any oil firms in Nigeria that have gone contrary to some of the environmental laws.

When the civilian administration came into power in May, 1999, the Federal Ministry of Environment was put in place and FEPA was absorbed into it. The decision to create a full –fledged ministry of environment was informed by the need to bringing

together all activities within the government machinery that are related to environmental and sustainable development. Environmental matters at this time became a top priority in the development agenda of the civilian administration and to carefully control the activities of government and avoid over-lap of functions was also considered.

The relevant department and units of some Federal Ministries were transferred to balance the activities of the newly created ministry. The new ministry guided by a policy driving force predicated upon Environmental Renewal and Development Initiative (ERDI) was to take full inventory of the nation's resources, assess the level of environmental damage and design and implement restoration measures (The Guardian, 2000).

Over the years, the Federal Ministry of Environment has been witnessing the pollution and degradation of oil operations in the Niger Delta region by oil multinationals. According to Nigerian laws, in the event of spill emanating from sabotage, oil firms are not liable to pay compensations but are enjoined to clean up the environment where such spills occurred (Etikerentse, 1985). Oil companies in Niger Delta have taken advantage of this sabotage excuse and absence of effective regulations to perpetrate irresponsible practices and adopt production methods which maximize profit and minimize investment in environmental safety. The oil companies in the Niger Delta have adopted the most direct and inexpensive methods of waste disposal. According to Aghalino (2004), these include indiscriminate dumping of drilling mud, drill cuttings, and dumping of sludge, practices which differ from stringent environmental regulations in major oil developed countries (TELL, 1997).

Furthermore, there are inadequate technical know-how and administrative personnel when compare with the nature, scope and enormity of work available. There

are also limited capacity and lack of experience, insufficient information regarding environmental issues particularly among environmental regulators (Lettington et al, 2003). Underfunding by the government is basically another major problem facing the ministry. They sometimes rely on the good will of foreign donors and international organization for funding and also to attend some capacity building workshops (Ignatius, 2008). All these have contributed to incapacitating the ministry from discharging its mandate.

4.1.2 The Environmental Impact Assessment Act (EIA)

The crucial tool that is used by companies in Nigeria to predict and alleviate some possible negative impacts of oil exploration and production is known as the Environmental Impact Assessments (EIA). Environmental Impact Assessments are widely used around the world, and in Nigeria they are legally mandatory for most activities in the oil and gas sector (EIA Decree, 1992). These tools are meant to help identify possible negative impacts before a proposed project is implemented or carried out. If damage is likely but can be lessened, then a mitigation plan is put in place.

The Federal Ministry of Environment Regulations like EIA Act No. 86, 1992 mandates the Federal Ministry of Environment (FMENV) to regulate EIA in Nigeria. It sets out the procedures and methods that enable the prior consideration of EIA for certain public or private projects.

The Act specifically requires an EIA for any project that involves: Seismic exploration activities, drilling operations (exploratory, appraisal, and development wells) in onshore, near-shore and offshore locations construction of crude oil production, tank-farm and terminal facilities, laying of crude oil and gas delivery lines, flow line and

pipeline in excess of 50km in length, and hydrocarbon processing gas plant (Lawrence, 2004). The Act also requires EIA for non-oil and gas activities, including land reclamation, dredging and construction (housing estate, sewage system, landfill, road construction, etc.). In addition, all major upgrades of facilities must pass through the EIA process (Enwegbara, 1999).

The EIS Act, section 2 (i) states that: The public or private sector of the economy shall not undertake, embark or authorize projects or activities without prior consideration, at an early stage, of their environmental effects. Similarly, section 1(2) provides that: Where the extent, nature or location of a proposed project or activity is such that is likely to significantly affect the environment, its environmental impact assessment shall be undertaken in accordance with the provision of this Act.

The minimum content of environmental impact assessments were given as follows: (i) A description of the proposed activities; (ii) A description of the potentially affected environment including specific information necessary to identify and assess the environmental effect of the proposed activities; (iii) A description of the practical activities, as appropriate; (iv) An assessment of the likely or potential environmental impacts of the proposed activity the alternatives, including the direct or indirect cumulative, short term effects; (v) An identification and description of measures to mitigate adverse environmental impacts of proposed activity and assessment of those measures; (vi) An indication of gaps in knowledge and uncertainty, which may be encountered in computing the required information; (vii) An indication of whether the environment of any other state or local government area or areas outside Nigeria is likely to be affected by the proposed activity or its alternatives” (EIA Decree, 1992).

In line with the above, it is left with the federal ministry of environment to evaluate any proposed projects and make consultation with experts after which a final decision is reached. When such decision is taken, it remains final. It has been noted that the EIA system in the Niger Delta is seriously flawed. The quality and use of EIAs does not meet the global, national or the company's standards in the Niger Delta (Bayelsa State Ministry of Environment, 2000), meaning that the law is not obeyed strictly. Sometimes, oil companies are the ones that obey the laws to an extent. Even at that they undertake unethical practices, which contravene the law. Most companies in the private sector such as the manufacturing companies barely carry out EIA studies for their activities, even though such activities impact greatly on the environment. It does not only end with the private sectors. Public projects undertaken by Federal, State and Local governments hardly go through EIAs before they are implemented (UNDP, 2005).

There are some instances where oil companies violate the conduct of EIAs. EIAs are required to be done at the early stage when decisions have not been taken and options could be looked at before taking final decisions on its implementation. But in Nigeria, the case is different. EIA is mostly and often done after decisions have been taken. Sometimes the EIA is conducted after work has already been commenced. For instance, the Shell Petroleum Development Company (SPDC) started a 58 multi-billion dollars project in Bayelsa and Delta State which cut across communities in these states before EIA was conducted (Environment Watch, 2001).

Furthermore, EIA studies has its negative impacts when is not properly done. It creates huge problems for communities. For example, the Gbarain link road (in Bayelsa State) constructed by the Shell Petroleum without adequate EIA study ended up creating environmental and socio-economic problems for some communities in the region (Opolo,

Onopa, Gbaratoru, etc). Problems that were identified include severe flooding of forest and farmlands which leads to the destruction of food crops, economic trees; a reduction in available farmland, consequently creating land fragmentation in the affected locality; permanent flooding of fishponds, lakes and creeks, which prevents the owners from harvesting them; a reduction of games and wildlife populations in the forest; and the blockage of access routes among the neighboring communities (Environment Watch, 2002).

At the level of government, compliance with the EIA Act is nearly zero. Even when done, it becomes controversial. While the government is satisfied with the report and is poised to commence the project, the people consider the report to be fraudulent. Their contention is that the EIA report does not assure them of adequate mitigating measures to safeguard the environment from possible disasters arising from the dredging of the river (Bayelsa State Ministry of Environment Report, 2000).

The penalty for violating the provisions of the act is weak to prevent offenders from causing harm to the environment, especially corporate bodies. Section 62 of the Act that basically deals with offence and penalty provides N100, 000(US\$625.000) fine or five years imprisonment for an individual offender, and a N1m(US\$6,350.00) for corporate offenders. Undoubtedly, one million naira (US\$6,350.00) is not reasonable enough to oblige corporate bodies like the oil companies and government organizations to work according to the provision of the law.

The Federal Ministry of Environment has the prerogative of enforcing the EIA laws. The states only perform secondary functions. This is clearly unsuitable as it mainly rule out the regulatory institutions of states in the projects for which EIA are required

(Environment Watch, 1998). Major complaint at the state level is that the federal agency is too slow to respond to their inputs, complaints and observations.

The local communities in the Niger Delta who are hosts to projects for which EIA studies are conducted are either not consulted, or not are not involved effectively in such studies. Hence, the benefit of involving the people, immense knowledge on the ecological process that can be incorporated to improve project design, team spirit that would reduce the commitment of stakeholders, and cooperation, is lost (Adibe and Essaghah, 1999). Consequently, the EIA Act has done very little to protect the Niger Delta environment.

There are some other dormant laws that have been put in place by the Nigerian government to fight the plague of pollution and other oil related issues, but have failed to fulfill the purpose in which they were established. One of these laws is the Petroleum Act of 1969. The Act, with other responsibilities, gives power to the Commissioner (Ministry of Petroleum) in charge of Petroleum to make regulation on the prevention of pollution of water courses and the atmosphere. The Decree also requires that in accordance with good oil field practices, the owner of license and lease should take every possible and practical means to avoid oil from spilling into the water ways thereby causing damages as to the surface conditions (Aghalino, 2004).

The Associated Gas Re-injection Act Cap 26 (Laws of the Federation, 1980) was another law formulated to protect the environment. The Act requires oil and gas producing companies in Nigeria to submit preliminary program for gas reinjection. Generally, the above laws have neither been effective in the decrease of ecological damage caused by oil pollution and gas flaring nor have they been able to prevent activities by oil operations harmful to the environment. These laws are meant to underestimate the long term problems of environmental damage. Indeed, the laws deal with

only measures to prevent pollution while they are quiet on the consequences that should follow when pollution occurs (Aghalino, 2004).

As noted earlier, oil operations and activities in the Niger Delta comprises of the government and multinational companies. The multinational companies, nevertheless, are the major operators. Research conducted in the Niger Delta in the past have demonstrated that the Nigeria government has over the years failed in its responsibility to protect the Niger Delta people from the effects of oil exploration and preserve the environment from degrading (Amnesty International, 2009; UNEP, 1991; UNDP, 2006). The inability of the Nigerian government to ensure the protection of the environment has resulted to the level of environmental degradation and human displacement that is evident in the Niger Delta.

CHAPTER V

CONCLUSION AND RECOMMENDATION

Obviously, Niger Delta is the richest parts of Nigeria when it comes to natural resources endowment. The region is well endowed with large oil and gas deposits, as well as extensive forests, good agricultural land, and plentiful aquatic resources. However, the oil communities in Niger Delta remain marginalized from mainstream environmental, economic, and social activities in Nigeria.

The findings of this paper include the fact that more than 75 per cent of the people residing in the Niger Delta region depend on natural endowments for a living. But air, water, soil and forest resources have been devastated by the exploitation of oil and gas resources by joint ventures, foreign oil companies and the Nigerian Government. Particular problems result from gas flares and oil spills. Local people suffer harm to their health, productivity, incomes and welfare.

Both Federal and State government has not been able to take into account the interests and human rights of the grassroots oil producing areas. Instead, the government continues to leave out the people and their voices in the effort to develop the country. The government lacks the political will to ratify and enforce tough environmental laws that will regulate the environmental cost of oil and gas production and exploitation in the Niger Delta region. As a result of Nigerian government's negligence and inability to enact and enforce stringent environmental laws, oil companies operating in the region

have taken undue advantage of the weak regulatory system in the area to destroy the ecosystem of the Niger Delta region.

Efforts by the people of Niger Delta to achieve economic and ecological sustainability have been in constant threat. High level of environmental devastation has displaced many from their occupation particularly majority of the people in the oil producing areas that depend mostly on the environment for their sustenance. Those displaced occupationally – from farming and fishing as a result of air pollution and oil spillage- mostly the youths have left their place of origin in search for better life either to the urban areas or to other rural areas leaving the elderly at home. The fear that sooner or later, they will all have to leave the land that sustained their ancestors to relocate to another area as a result of a land so negatively affected by the presence of oil companies and their oil operations exists among the oil producing communities. Despite the abundant natural resources that exist in the region, the possibility for development is still in question. The reason is that the region is in constant threat by environmental destruction and worsening economic, social, and political conditions.

Furthermore, environmental pollution and degradation, and lack of access to basic infrastructures such as education, clean water, a diversified economy, good transportation system, constant power supply, and healthcare delivery which hold the major keys to unlocking poverty's grip are other forms of human dispossession. Consequently, marginalization and segregation from the ownership of possessions and lack of access to social amenities can be a yardstick to in defining poverty. To alleviate poverty from the region in its entirety could be achieved only if development strategies are adopted to address these factors.

The Niger Delta people, mostly the oil producing areas have demonstrated high level of tolerance over the years. But their recent reactions and agitations to years of deprivation and marginalization suggest that they can no longer leave with the unpleasant social infrastructural neglect, poverty, ecological residue, and other deprivations they face in spite of their large and major contribution to the development of Nigeria.

Numerous illegal activities such as destruction of oil pipelines, kidnapping of oil company workers, illegal oil bunker, and bombing of government properties have been mostly some of the means with which the people on the region have resorted to in response to the obvious failure and inability of previous and present governments in Nigeria to protect their lands and the people from the exposure and dangers of hydrocarbon activities such as pollution, oil spillages, persistent gas flaring, human right violations, and subsequent economic deprivation and impoverishment. This explains the deep seated conflict situation that has ravaged the region.

If the existing rate of environmental degradation continues unchecked, human development will not be sustainable. Some impacts of it will extend beyond the Niger Delta region. The continuing gas flares and oil spills have national and global environmental consequences, including through their destructive effects on the ozone layer. The level of pollution in the Niger Delta today reflects a failure of the state and market and of the institutions and incentive systems entrenched in them.

Evidence provided in this paper may not be conclusive, but it is logical to argue that oil-bearing communities are displaced from their traditional development process and they live without the gains or proceeds of oil that is being generated from the system. The occupationally displaced, whose capacity for competition has been diminished and who live as alien in their own communities could be evidence of gross dehumanization.

This again brings to the front burner the urgent need to address the environmental problems of the host communities.

The panacea to some of the environmental problems discussed above is to adopt a policy of sustainable development. Sustainable development as defined previously is the development that meets the needs of the present without compromising the ability of future generations to meet their needs (UN 1990). To achieve sustainable development involves a judicious use of natural resources such that the carrying capacity and the productive capacity are not overexploited (Odiette (1993). In order to address the problems of poverty, rural neglect and the general despondence situation of the Niger-delta area, there is need for a concentrated effort of all stakeholders in the region to tackle the problems headlong. E.g. The state governments, oil companies, the federal government and other relevant bodies; governmental or otherwise.

Along this direction, it is not just enough to create agencies like Niger Delta Development Commission (NDDC) for the development of the region as done in the past but efforts must be made to ensure through regular monitoring as well as personnel overhaul, that the body does not deviate from their objectives and become money making avenues for members, at the expense of the communities in the area who are supposed to benefit maximally from the establishment of such agencies.

Development planning should also be from below, that is, the various tiers of government; federal, state and especially local as well as other intervention agencies should ensure that the people are carried along when plans are made about their welfare. This will ensure that plans are not at variance with the hopes and aspirations of the people. Planning should be with the people and not for the people (Omeje, 2006).

Government should create an environment for democratic participation, social inclusion and improved access to social services – a major concern is the nation's longstanding exclusion of some people from the mainstream of Nigeria's socio-economic and political activities. The majority of the people in the Niger Delta live on the margins. Reducing exclusion and achieving more even handed development implies the empowerment of socially marginalized groups and individuals, stronger social institutions and infrastructure, and the development of the capacity of existing local groups. They should also promote environmental sustainability to preserve the means of people's sustainable livelihoods – the mainstreaming of environment sustainability into all development activities must be complemented by proactive steps to conserve natural resources, to reduce pollution, especially from oil spills and gas flares; and to set and achieve adequate targets for clean air and water and soil fertility. These should be backed by rigorous enforcement of environment laws and standards.

The establishment of the Niger Delta Development Commission (NDDC) that has succeeded the moribund Oil Minerals Producing area Development Commission (OMPADEC) had been a welcome idea with positive results. It is however important that government should ensure that the body should not be made rudderless because of political power play. There is no reason why anyone who is not from the area should be a member of the agency for two important reasons. First, only residents of the region can know what the problems of their people are and secondly for purposes of accountability, such that the people can always know who to hold responsible in their local communities in case of failure (Okukpon, 2000/2001).

Since the major reason for youth restiveness in the area is the perception of the youths about the general hopelessness of their communities, as well as the issue of mass

unemployment of the indigenes of the area. The governments of the states as well as the various local governments should embark on mass education and propaganda to enlighten the local populace in the area and disabuse their minds as well as create a future hope in them through creation of employment.

Equally important is the vigilance of the people. Instead of creating warlords in a few militants who are mere opportunists, the people should be vigilant; monitor their representatives at all levels of governance as well as the members of the various intervening agencies to make sure that they live up to the responsibilities bestowed on them.

Both national and state governments should embark on programs and projects that have direct bearing on the people of the region (Stewart, 2006). Such programs and projects should be such that would empower the people particularly the restive youth to make a decent living. Furthermore, government should address seriously issues of lack of social amenities and provide infrastructures to host communities. Investment in human capital development, in the form of education, health and nutrition, creates knowledge, broadens skills and improves health. This is fundamental to economic growth, raising living standards and enriching people's lives. Public spending should focus on essential social services, such as basic education and literacy, primary health care, reproductive health, nutrition and safe drinking water, with a view to making social services pro-poor.

Furthermore, Federal government should compel the oil companies operating in the region to comply strictly with both the international and national standard operational procedures required for oil exploitation and exploration. Equipment and technologies used by oil companies should be inspected annually to ensure that they are all in a good functioning capacity. Meeting up with modern technologies for oil extraction should be

the main reason for these inspections. When modern technologies are used for oil operations, the implication is that the negative effects of oil activities on the environment and its impacts on the people will be reduced drastically compared to when old technologies are in use (Emeseh, 2003).

There is a need for a better understanding of the coastal ecology so as to evaluate the significance of the impacts generated by oil spill incidence. A thorough environmental impact assessment should be conducted prior to oil exploration and exploitation in the region. More funds should be provided for by government and oil multinationals for environmental research and environmental protection.

Almost all environmental laws and regulations put in place to ensure the preservation of the environment are largely weak. Especially the penalty spelt out for violators. Equipment and technologies used by oil companies should be inspected annually to ensure that they are all in a good functioning capacity. The organizations responsible for the enforcement of the laws should be equipped both financially and human capacity to enable efficiency.

The Federal Government needs to de-emphasize confrontation and military approach in handling dispute with the people of the area. Incidents like Odi Massacre, Umuechem killing and others gave bad image to the state. The order to shoot at sight recently given by the Federal Government to its security apparatus in the area and the subsequent incidents of violence all give the indication that the State is still bent on using confrontation in resolving the crises in the region against peaceful dialogue (Donpedro and Patrick, 1999).

However, the fact still remains that violent confrontation cannot solve the problem rather it is an all-inclusive peaceful dialogue that can take the state and the people of the region out of their present predicament.

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