

**THE INTERFACE BETWEEN LAW AND RENEWABLE
ENERGY IN THE MITIGATION OF ENVIRONMENTAL
VIOLENCE IN THE NIGER DELTA**



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CERTIFICATION

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DEDICATION

This work is dedicated to God Almighty.

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ABSTRACT

Niger Delta region of Nigeria is naturally endowed with huge oil and gas deposits, fauna and flora. However, unsustainable exploitation of its oil and gas since 1956, has led to breaches of environmental standards, human and environmental rights. The existence of obnoxious laws have all contributed to the huge destruction of its ecosystem, endangered its biodiversity, human health and its people's means of livelihood. These have created a two-pronged environmental violence problems; namely; violence against renewable natural resources within the environment by MNOCs and violent agitations by indigenous people against the degradation of ecological biodiversity within their environment. The use of physical violence to stop protests against renewable natural resource exploitation has not helped but compounded the problem.

A plethora of literature on Niger Delta research including Niger Delta environmental degradation, Conflicts and Niger Delta, Internationalisation of the conflict, Niger Delta and human rights, Bill of Rights and Resource control has proliferated but there exists a gap in the literature, which this research fills. It is the utilization of combined legislation and renewable energy regulation in the mitigation of Niger Delta environmental violence. This study contributes to this knowledge as a multidisciplinary new perspective on Niger Delta research.

The study establishes a nexus between the contributory legal loopholes, energy crisis and unsustainable mining activities as joint causations of the Niger Delta environmental violence. This necessitates the meeting of legal and energy solutions at an equilibrium point for effective mitigation of the crisis. The objectives of this study include developing resource control based and environmentally friendly legal reforms in Nigeria; evolving a renewable energy policy and legal regimes that promote energy mix and mitigate environmental violence in Niger Delta.

This study adopted both quantitative and qualitative research methods where. Primary data were generated through questionnaires and interviews while secondary data were sourced through books, journals, articles, newspapers and the internet. About 280

people constituted the sample size of the population of the study, as well as Focus Group Discussion (FGD).

Findings from respondents reveal that 90% of MNOCs and Government resource exploitations are below international best practices in oil exploitation; 47% do not consider dialogue for resolving the problem. Over 96% are convinced that Government's failure to ensure MNOCs compliance with standards is a major cause of the crisis. Focus Group Discussants (FGD) were in consensus that resource control based legal reforms and development of huge renewable energy resources in Nigeria (particularly in the Niger Delta and Northern Nigeria) could mitigate Niger Delta environmental violence.

In conclusion, Niger Delta's two pronged environmental violence could effectively be mitigated using a multidisciplinary problem-solving model that combines legal reforms and renewable energy solution driven approaches. The researcher recommends that Nigeria should commence a legal reforms process in favor of fiscal federalism and resource control; pass into law the pending Petroleum Industry Bill (PIB); enact a renewable energy law and establish a regulatory authority to set renewable standards, create massive employment opportunities to engage restive Niger Delta youths, create forest harvests to implement reforestation and afforestation projects for the mitigation of effects of emissions. Finally, strict enforcement of existing environmental laws and standards is also recommended.

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2013: "The question of the Niger Delta in the Post-Military Era in Nigeria", Democracy and the Niger Delta in the Post-Military Era in Nigeria. African Institute of South Africa.

Under review:

2014: "The Political Economy of Regulatory Institutional Change in Nigeria's Electricity Supply Industry: The Nemsu Versus Nerc Debate, (Paper) Presented at the Nigerian Economic Society, 55th Annual Conference, Sheraton, Abuja.

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2002 Declaration of the Johannesburg World Summit on Sustainable Development

1982 Law of the Sea Convention

National Environmental Management Act (NEMA), 1998

1972 UN Declaration on the Rights of Indigenous Peoples

United Nations General Assembly Resolution 3129 (XIVIII) of 13 December 1973

1979 Convention on Long-Range Transboundary Air Pollution

1992 Framework Convention on Climate Change

1987 Montreal Protocol to the Ozone Convention

1997 Kyoto Protocol to the Climate Change Convention

1973 CITES Convention

1972 London Dumping Convention

1946 International Convention for the Regulation of Whaling

Electric Power Sector Reform (EPSR) Act, 2005

Rural Electrification Policy (REP), 2005

National Electric Power Policy (NEPP), 2001

Law No. 13-09 on Renewable Energy, 2010

Ghana Renewable Energy Act, 2011 (Act 832)

TABLE OF ABBREVIATIONS

ACHPR	-	African Commission on Human and People's Rights
ADB	-	African Development Bank
AGRA	-	Associated Gas Re-injection Act
AGO	-	Automotive Gas Oil
APPA	-	African Petroleum Producers Association
ATG	-	Army Task Group
ATSDR	-	Agency for Toxic Substances and Diseases Registry
AU	-	Africa Union
Bpd	-	Barrel per Day
CBOs	-	Community Based Organizations
CEESP	-	Commission on Environmental, Economic, and Social Policy
CESR	-	Center for Economic and Social Rights
CFCs	-	Chlorofluorocarbons
CFL	-	Compact Fluorescent Light
CFRN	-	Constitution of the Federal Republic of Nigeria
CITES	-	Convention on International Trade in Endangered Species of wild fauna and flora
CLO	-	Civil Liberties Organization
CNA	-	Clean Nigeria Associates
CNN	-	Cable News Network
CSR	-	Corporate Social Responsibility
DC	-	Direct Current
DMU	-	Decision Making Unit
DPK	-	Dual Purpose Kerosene
DPR	-	Department of Petroleum Resources
DRC	-	Democratic Republic of Congo
ECN	-	Energy Commission of Nigeria
ECOWAS	-	Economic Community of West African States

EGASPIN	-	Environmental Guidelines and Standards for Petroleum Industries in Nigeria
EHV	-	Extra High Voltage
EIA	-	Environmental Impact Assessment
EIS	-	Environmental Impact Statement
EMA	-	Environmental Management Act
EPG	-	Environmental Protection Group
EPI	-	Environmental Policy Integration
ERA	-	Environmental Rights Action
EU	-	European Union
FAO	-	Food and Agricultural Organization
FEC	-	Federal Executive Council
FEPA	-	Federal Environmental Protection Agency
FME	-	Federal Ministry of Environment
GATT	-	General Agreement on Tariffs and Trade
GBA	-	Global Biodiversity Assessment
GDP	-	Gross Domestic Product
GDR	-	Generation Disclosure Rules
GHG	-	Greenhouse Gas
GTL	-	Gas-To-Liquids
HAZID	-	Hazard Analysis Statement or Hazard Identification
HV	-	High Voltage
ICRC	-	Infrastructure Concession Regulatory Commission
ICTP	-	International Centre for Theoretical Physics
IEA	-	International Energy Agency
IFAD	-	International Fund for Agricultural Development
IIED	-	International Institute for Environment and Development
ILC	-	International Law Commission
INC	-	Ijaw National Congress
INGOs	-	International Non-Governmental Organizations

IP	-	Indigenous Peoples
IPCC	-	Inter-government Panel on Climate Change
IRIN	-	Integrated Regional Information Network
IS	-	Internal Security
IUCN	-	International Union for the Conservation of Nature and Natural Resources
IYC	-	Ijaw Youth Council
IYM	-	Ikwere Youth Movement
JTF	-	Joint Task Force
JTFLC	-	JTF Land Component
kWh	-	Kilowatt Hour
LED	-	Light Emitting Diodes
LEEDS	-	Local Economic Empowerment and Development Strategy
LNG	-	Liquefied Natural Gas
MDGs	-	Millennium Development Goals
MDGs	-	Millennium Development Goals
MEND	-	Movement for the Emancipation of the Niger Delta
MNOCS	-	Multinational Oil Companies
MOOTW	-	Military Operation Other Than War
MORETO	-	Movement for Reparation to Ogbia
MOSIEND	-	Movement for the Survival of the Ijo in the Niger Delta
MOSOP	-	Movement for the Survival of the Ogoni People
MV	-	Medium Voltage
MW	-	Megawatt
MWh	-	Megawatt Hour
NAFTG	-	Nigerian Air Force Task Group
NCERD	-	National Center for Energy Research and Development
NCF	-	Nigerian Conservation Foundation

NDDC	-	Niger Delta Development Commission
NDHDR	-	Niger Delta Human Development Report
NDVF	-	Niger Delta Volunteer Force
NDWC	-	Niger Delta Wetland Centre
NEEDS	-	National Economic Empowerment and Development Strategy
NEMA	-	National Environmental Management Act
NEMP	-	National Energy Master Plan
NEP	-	National Energy Policy
NERC	-	Nigerian Electricity Regulatory Commission
NESCO	-	Nigerian Electricity Supply Company
NESREA	-	National Environmental Standards and Regulations Enforcement Agency
NGLs	-	Natural Gas Liquids
NGOs	-	Non-Government Organizations
NIPP	-	National Integrated Power Project
NLNG	-	Nigerian Liquefied Natural Gas
NNC	-	Nigerian National Committee
NNDC	-	National Nuclear Data Center
NNPC	-	Nigerian National Petroleum Corporation
NNTG	-	Nigerian Navy Task Group
NOSCP	-	National oil spill Contingency Plan
NOSDRA	-	National Oil Spill Detection and Response Agency
NPIRD	-	National Policy on Integrated Rural Development
NREL	-	National Renewable Energy Laboratory
OBR	-	Ogoni Bill of Rights
OECD	-	Organization for Economic Co-operation and Development
OPEC	-	Organization of Petroleum Exporting Countries
OPEC	-	Organization of Petroleum Exporting Countries
PBF	-	Public Benefit Fund

PHCN	-	Power Holding Company of Nigeria
PIB	-	Petroleum Industry Bill
PMS	-	Premium Motor Spirit
PV	-	Photovoltaic
RE	-	Renewable Energy
REA	-	Rural Electrification Agency
REMP	-	Renewable Energy Master Plan
RPS	-	Renewable energy Portfolio Standards
SDN	-	Stakeholders Democracy Network
SEA	-	Supreme Assembly
SERAC	-	Social and Economic Rights Action Center
SERC	-	Sokoto Energy Research Center
SHP	-	Small Hydropower
SIT	-	Social Identity Theory
SON	-	Standard Organization of Nigeria
SPDC	-	Shell Petroleum Development Company
SSTG	-	State Security Service Task
STAND	-	Strengthening Transparency and Accountability in Niger Delta
TCN	-	Transmission Company of Nigeria
U.S.	-	United States
UCS	-	Unified Computing System
UN DRIP	-	UN Declaration on the Rights of Indigenous People
UN	-	United Nations
UNCLOS	-	United Nations Convention on the Law of Sea
UNDP	-	United Nations Development Programme
UNDPHDR	-	United Nations Development Programme Human Development Report
UNEP	-	United Nations Environmental Programme
UNESCO	-	United Nations Educational, Scientific and Cultural Organization

UNFCCC	-	United Nations Framework Convention on Climate Change
UNGA	-	United Nations General Assembly
UNIDO	-	United Nations Industrial Development Organization
UNPO	-	Unrepresented Nations and Peoples Organization
UNU-IAS	-	United Nations University Institute for Advance Study of Sustainability
USA	-	United States of America
WAGP	-	West African Gas Pipeline
WAPP	-	West African Power Pool
WCED	-	World Commission on Environment and Development
WEC	-	World Energy Council
WHO	-	World Health Organization
WMO	-	World Meteorological Organization
WNBC/WNTV	-	Western Nigerian Broadcasting and Television services
WRI	-	World Resources Institute
WSP	-	World Solar Programmes
WTO	-	World Trade Organization
WWF UK	-	World Wildlife Fund, United Kingdom

CHAPTER ONE

BACKGROUND AND SIGNIFICANCE OF THE STUDY

1.1 BACKGROUND OF THE STUDY

Located in the southernmost part of Nigeria, and covering around 70,000 kilometers surface area, the Niger Delta, according to World Bank (1982), is the largest river Delta in Africa. The United Nations Environmental Programme asserts that the Niger Delta is a continuous rainforest of the coastal belt of swamps, stretching northwards to the land and gradually merges with wood land Savanna grassland in Central Nigeria, occupying 12 per cent of the Delta's surface (UNDP, 2011). It is also one of the 10 most important wetlands and coastal marine ecosystems in the world, flowing abundantly in renewable natural resources such as mangroves, fresh water, crop lands, rain forest, different species of fish, and non-renewable natural resources such as petroleum.

The Niger Delta was naturally endowed with mangroves, freshwater, timber, palm oil, fisheries, fertile agricultural lands, flora, fauna and other renewable natural resources which have continually depleted due to biodiversity alteration, creating a situation in which the means of livelihood of the inhabitants continue to deplete with malice aforethought. Thus, talking along the line of marginalization, the economy of the people fell apart into jeopardy through the effect of the explorative and mining activities of the multinational oil companies (MNOCs) on the farming and fishing occupation of the people. In reaction to this, the people of the Niger Delta (Nigeria), have over the years, been perceived as engaging in unconstitutional acts of agitations and rebellions against the Federal Government of Nigeria through militancy, kidnappings, oil bunkering, braking of pipelines and other illegal acts.

Their actions are apparently illegal but in self defence. They justify their actions by claiming that they have been deprived of their inalienable rights to life such as clean air, water and food, ownership of property, means of livelihood, and the unabated degradation of their environment by MNOCs in their communities and consequently,

causing depletion of their renewable natural resources. Should they indeed be excused? Or are the MNOCs¹ and Government unsustainable exploration, mining activities and negligence justified because they are acting within the ambits of the law? Whose acts are indeed immoral?

All over the world, unsustainable human interactions with the environment, arising from either human activities or natural disasters have impacted negatively on natural resources and resulted into varying human reactions.

Thus, through unsustainable exploration or exploitation of natural resources, and neglect to its harmful consequences on renewable natural resources, mankind has continued to harm the environment and deplete its natural resources. This necessitates the need to search for the most plausible and safest ways of human interaction with the earth, while at the same time, tapping its natural resources for the benefit of mankind. This brings into focus the inevitable correlation between the environment, natural resources and human activities.

Construction, pollution, exploration, mining and deforestation are part of human activities that induce violent environmental changes. Homer-Dixon (1991, 1994) refers to this as environmental stress.

Homer-Dixon (1991, 1994) maintains that the powerful links between environmental stress and civil violence have stood the test of time. He makes a distinction between non-renewable resources such as oil and Minerals, and renewable resources such as freshwater, forests and fertile soil. He opines that renewable resources can be further divided into two groups as follows: those that provide goods; and those that provide services. The ocean provides fish and other goods, the forest provides timber while the stratosphere (ozone layer) protects life from high levels of ultra violet radiation.

¹ MNOCs (Multi-National Oil Companies). It is important to explain at this stage that MNOCs include all oil companies operating in the Niger Delta.

The environmental crisis of the Niger Delta can be located within the Homer-Dixon hypothesis as a product of environmental stress induced by unsustainable human activities which have led to civil violence in the region.

The Niger Delta has suffered tremendous stress arising from the exploitation of non-renewable energy resources by MNOCs licensed by the Nigerian Government to extract oil from the region. These MNOCs have in the process, devastated the ecosystem and neglected to preserve its renewable natural resources. This endemic situation was deepened by the increasing global energy needs that multiplied the demands and pressure on the oil in the Niger Delta. The MNOCs began their exploration and exploitation of oil in the region in the 1950s with the discovery of oil in Olobiri, without engaging in international standard Environmental Impact Assessment, and strategic planning to preserve the environment, and renewable natural resources in the region. This dangerous trend of not sparing a thought for the future of the people and natural resources in the area (that were the main stay of their sources of livelihood), became a time bomb that naturally had to explode, when it did. The story of the Niger Delta, therefore, gives a good case study of the likely outcome of civil violence that can arise whenever non-renewable resources are exploited at the detriment of renewable natural resources.

Indeed, the environment related catastrophe of the Niger Delta is not only traceable to mindless environmental degradation and dissipation of renewable energy, but also a neglect of the region with impunity, by many stakeholders who were and are expected to enforce laws and implement policies that will ensure environmental sustainability and preservation of renewable natural resources in the Delta.

It follows, therefore, that oil exploitation in the Niger Delta is carried out against the gross neglect for renewable natural resources. If only the Multinational oil companies had strategized their oil exploitation in such a way that ensured that preservation of renewable natural resources that the Niger Delta people utilised for their daily survival, it is most likely that the story today is told in a different way.

1.2 HOW OIL EXPLORATION BEGAN IN NIGERIA

One can trace the exploration of oil in Nigeria to the early twentieth century when traces of oil seepage were noticed in Araromi community which is currently in Ondo State. This made the Nigerian Bitumen Corporation, an enterprise Germany to commence exploration of oil in that vicinity, back in 1908 while making their pioneering attempts to search for hydrocarbons. Charles, Abasi-Ifreke and George (2009) reveal that that pioneering did not endure as the German outfit suspended and later completely wound up its operations effort following the commencement of the First World War in 1914.

A joint English-Dutch consortium came to Nigeria as Shell D'Arcy later arrived some twenty years after to start exploring in 1937 following their award of sole concession rights of exploration throughout the entire Nigerian territory. This company is the forerunner of the Shell Petroleum Development Company of the (SPDC) that currently operates in Nigeria. Again, the World War 2 seriously disturbed the operations of the Shell D'Arcy, thwarting resumption of exploration till 1947. Petroleum was much later in 30 years, precisely 1956, discovered at Oloibiri community of the Niger Delta in 1956. The Shell Petroleum Development Company commenced operation in 1958, exporting an average 5000 barrels of crude oil per day. The volume increased in double fold in the year that followed and so continued till 1979 when the production of crude oil increased to 2.44 million barrels per day. (Charles, Abasi-Ifreke & George, 2009).

In 1959, the sole concession rights over the whole country granted to SPDC was reviewed and extended to companies of other nationalities in line with the policy of increasing the pace of exploration while at the same time, ensuring that the country was not too dependent on one company or nation (Charles, Abasi-Ifreke & George, 2009).

Owing to the boom noticed towards the SPDC, other oil companies soon joined in the oil deal, by 1961, precisely Mobil, Gulf, Agip, Safrap (now ELF), Tenneco and Amoseas (now Texaco/Chevron) were fully in the number of companies exploring oil from the Nigeria Delta. It was Gulf which in 1964 first discovered onshore substance from the

Okan structure of the then Bendel State, now Delta State as a host of the new oil companies continued to make discoveries (Charles, Abasi-Ifreke & George, 2009).

This development led to the tremendous development of regional economies, and the developments were to some extent sustained until all attention withdrew into oil. Regions developed their socio economic infrastructures through agricultural income. Education, electricity water and health were not left behind (Ogunlawo, 2008).

It is commonplace that sales proceeds from only cocoa, rubber and palm oil were used to fund the idea of revolutionary free education programme that came up from the then Western Region. Nigeria never needed international assistance or aid to build great universities and stadia, amongst which are the Ahmadu Bello University, Zaria; the Obafemi Awolowo University, Ife; and University of Nigeria, Nsukka; the Liberty Stadium, the Cocoa House and the Western Nigerian Broadcasting and Television Services (WNBC/WNTV) all located at Ibadan. Proceeds from groundnut, cotton, palm oil and rubber were used in different places to achieve all these which availed the people of ample employment and educational opportunities. Even at the centre of the nations, Charles, Abasi-Ifreke and George, (2009) so observe, the Nigerian economy benefited immensely from the expertise of highly qualified and well trained leaders.

This trend was to change in 1956 following the period when exportable oil was discovered and produced, and since that time till date, the country of Nigeria has almost solely depended on export of crude oil. The table in what follow says it all.

Table 1.1: Percentage of crude oil in Nigeria’s total export (1960-1997)

YEAR	PERCENTAGE
1960	2.7
1966	32.4
1968	17.5
1970	57.6
1971	73.7
1972	82
1973	83.1
1974	92.6
1975	93.6
1976	93.6
1977	93.4
1978	89.1
1979	93.8

1980	96.9
1981	97.5
1982	94.3
1983	97.3
1984	93.8
1985	97.1
1986	93.8
1987	92.9
1988	86.7
1989	92.2
1990	97.6
1991	96.6
1992	97.9
1993	97.7
1994	97.4
1995	97.3
1996	98.2
1997	97.6

Source CBN, 2000

The target production for the medium term is 2.480 mbpd, 2.550 mbpd, 2.570 mbpd and 2.600 mbpd for the years 2012, 2013, 2014 and 2015 respectively. Table 1.2 shows oil production from 2007 to the medium term projections. 2007 to 2010 are actual figures while the others are projections.

This projection appears to be realistic as shown by current data and increased output compared to previous years. Indeed, the Combined Budget Implementation Report for the first and second quarters of 2011 reported production figures of 2.43 mbpd and 2.36 mbpd for the first and second quarters of 2011 respectively. This brought the average for the half of the year to 2.40 mbpd. These figures are above the budget figure of 2.30 mbpd. Going by the success of the Amnesty Programme in the Niger Delta, and the peace pervading the region, the projections are realistic and achievable.

Table 1.2: Crude oil production in Nigeria (2007 - 2015)

Year	Output in mbpd
2007	2.15
2008	2.10
2009	2.13
2010	2.462
2011	2.30
2012	2.480
2013	2.550
2014	2.575
2015	2.600

Source: BOF/FMF: First and Second Quarter Budget Implementation Report and MTEF 2012 – 2015 (in Analysis of the 2012-2015 MTEF undertaken by the Centre for Social Justice Limited by Guarantee (CSJ))

1.3 RENEWABLE ENERGY

It is important to note that nature has highly gifted Nigeria with huge renewable energy resources, which if tapped into, will reduce the energy crisis in Nigeria and the pressure on the Niger Delta. This aim of this study examine the role of the law and its relationship with the development of renewable energy resources in Nigeria as a mitigation measure to environmental violence in the Niger Delta caused by the exploitation and distribution of non-renewable energy resources (petroleum products).

Since independence, the Nigerian government energy sector and energy-related sub-sectors policies have been in existence. They are, however, scattered and in some cases, conflicting each other and, therefore, have failed to help achieve the goals and objectives of government in the supply of national energy (Sambo, 2009).

Renewable energy resources are those that are available on a continuous or cyclic basis and are replenished and, therefore, inexhaustible. They include solar, wind, hydro and biodegradable biomass (fuel, animal crop residues, and energy crops). They are non-depletable and suitable for sustainable development (Sambo, 2007)². Aside from large hydro and some form of biomass, utilisation of renewable energy has relatively little negative impacts on the environment (Sambo, 2009).

Table 1.3: Renewable energy resources in Nigeria

S/N.	TYPE OF RESOURCES	RESERVES (NATURAL UNITS)	PRODUCTION LEVEL (NATURAL UNITS)	UTILIZATION (NATURAL UNITS)
1.	Crude oil	36.22 billion barrels	2.06 million barrels/day	445,000 barrels/day
2.	Natural gas	187 trillion SCF	7.1 billion SCF/day	3.4 billion SCF/day
3.	Coal and lignite	2.734 billion tonnes	Insignificant	Insignificant
4.	Tar sands	31 billion barrels of oil equivalent	-	-
5.	Large hydro-power	11,250 MW	1,938 MW (167.4 million MWh/day)	167.4 million MWh/day
6.	Small hydro-power	3,500MW	30MW (2.6 million MWh/day)	2.6 million MWh/day
7.	Solar radiation	3.5-7.0kWh/m ₂ /day (485.1 million MWh/day	Excess of 240 kWp of solar PV or 0.01	Excess of 0.01 million MWph/day of PV

² Professor A.S. Sambo is the Director General/CEO of the Energy Commission of Nigeria, Abuja.

		using 0.1% Nigeria land area)		million MWh/day	
8.	Wind	(2-4) m/s at 10m height		-	-
9.	Biomass	Fuel wood	11 million hectares of forest and woodland	0.110 million tonnes/day	0.120 million tonnes/day
		Animal waste	245million assorted in 2001	0.781million tonnes of waste/day in 2001	Not available
		Energy drops and agricultural residues	72 million hectares of agricultural land and all waste lands	Excess of 0.256 million tonnes of assorted crops residues/day in 1996	Not available
10.	Nuclear element	Not yet quantified		-	-

Sources: (i) Nigerian National Petroleum Corporation (NNPC), 2007

(ii) Renewable Energy Master Plan (REMP), 2005

(iii) Ministry of Mines and Steel Development, 2008

Notwithstanding the abundance of energy resources (renewable and non-renewables) in Nigeria, electricity generation is mainly from large hydro, natural gas and diesel. The supply is so short that only about 40% of the 150 million people have access to grid electricity. In rural areas, about 70% of the population does not have access to electricity (Sambo, 2007). Also, the NEP has a policy framework on renewable energy, mini and micro hydropower silemas, integration of solar energy into the Nigeria's energy mix, harnessing of non-fuel, wood, biomass energy resources, commercial development of wind energy resources and other renewable energy resources. The NEP has also put in place, a REMP as a road map for the planned implementation of the renewable energy components of the NEP with timelines, targets and milestones.

Despite these strategic and high robust policies of the NEP on renewable energy, it is regrettable that the Nigerian economy is still highly non-renewable energy-driven. This continues to put undue pressure on the Niger Delta. Practical and workable efforts have not been made to implement these policies.

The development of renewable energy resources is sustainable in supply, distribution and consumption. Its sustainability includes the exploitation, processing and utilisation. It is used in a manner that meets human energy needs, while preserving the present environment and sustaining the same for posterity (Sambo, 2008).

Although Nigeria has developed a Renewable Energy Master Plan (REMP), for renewable energy development, which if fully implemented, has the potential of providing alternative energy sources for the country and improving the environmental degradation in the Delta, yet its economy is still largely fossil fuel-driven.

The REMP articulates Nigeria’s vision and sets out a road map for increasing the role of renewable energy in achieving sustainable development in Nigeria (UNDP and Energy Commission of Nigeria (ECN), 2005). This policy is anchored on the mounting convergence of values, principles and targets as embedded in the National Economic Empowerment and Development Strategy (NEEDS), the National Energy Policy (NEP), the National Policy on Integrated Rural Development (NPIRD), the Millennium Development Goals (MDGs) and International Conventions to reduce poverty and reverse global environmental change (ECN, 2005). Nigeria is blessed with abundant natural energy resources (crude oil, natural gas, bitumen, nuclear elements, hydro, solar, wind and biomass). These renewable energy resources are inexhaustible and non-depletable and suitable for driving sustainable development (Sambo, 2007).

The REMP admits and identifies Nigeria’s huge potentials of renewable energy resources to have to include large and small hydroelectric power, resources, solar energy, biomass, wind and potentials for hydrogen utilisation, and development of geothermal and ocean energy.

Table 1.4: Huge potentials of Nigeria’s renewable energy resources

ENERGY SOURCE	CAPACITY
Hydropower, large-scale	10,000MW
Hydropower, small-scale	734MW
Wood	13,071,464 hectares (forest land)
Animal waste	61 Million tones/year
Crop residues	83 Million tones/year
Solar radiation	3.57.0KWH/m²/day
Wind	2.4m/s (Annual average)

Source: Energy Commission of Nigeria, Renewable Energy Master Plan, November, 2005

Table 1.5: Renewable energy resource potentials in Nigeria

Resource	Potential
Large-scale hydropower	10,000MW
Small-scale hydropower	734.2MW
Solar radiation	3.5-7Kwh/m²/day
Wind	2-4m/s

Wood	43.3 tons/year
Animal waste and crop residues	144 Million tones/year

Source: Renewable Energy Resources in Nigeria: Sources, Problems and Prospects by C.N. Ezugwu; Journal of Clean Energy Technologies, Vol. 3, No. 1, January, 2015

The REMP also sets out broad targets for electricity and non-electric sub-sectors of renewable energy.

The Table below gives a breakdown of targets for each of the five renewable energy sub-sectors as a proportion of projected energy demands according to the ECN High Growth Scenario.

Table 1.6: Breakdown of targets for each of the five renewable energy sub-sectors

SOURCES		2007	2015	2025
Wind		1	20	40
Solar PV		5	75	500
Solar thermal		-	1	5
Solar hydro		50	600	2000
Total		56	746	2945
ECN high growth projections		7000	14000	29000
Percentage share of projected energy		0.8	5	10

Source: Energy Commission of Nigeria, Renewable Energy Master Plan, November, 2005

When implemented, the target contributions to the electricity supply mix from renewable energy sources, solar, wind, small hydro and biomass will be 56MW, 701MW, and 3060MW in the short, medium and long-term respectively. This represents an achievement of 0.8%, 5% and 10% of total electricity demand in 2007, 2015 and 2025 respectively. Expected percentage contribution of non-electricity renewable energy sources to the overall projected energy demand will eventually decline in the period of the plan. These figures will decline from 41% in 2007 to 16% and 9% for 2015 and 2025 respectively (Energy Commission of Nigeria, 2005).

The renewable energy plan, when implemented, will impact on the environment, the economy and the security situation of Nigeria in the following ways:

- It will reduce the present pressure from the Niger Delta as the sole source of energy resources for the whole of Nigeria;
- It will mitigate the present environmental degradation of Nigeria in general and particularly the Niger Delta since it is environmentally friendly;

- It will provide an additional source of revenue into the account of the Nigerian Federation, and thus, reduce the sole dependence on Niger Delta oil as the main stay of Nigeria's economy;
- It will provide a balance in the revenue derivative formula in other parts of Nigeria, particularly in Northern Nigeria where there is a high potential for renewable energy resources;
- It will promote peace in Nigeria, particularly in the Niger Delta; and
- Some MNOCs may channel their resources to renewable energy development, thus reducing environmental degradation of the Niger Delta, and creating jobs for unemployed youths of the Niger Delta.

Also, it has been estimated that 76% of the natural gas reserves of sub-Saharan Africa and 88% of the region's bituminous coal reserves are in Nigeria and South Africa respectively (Kerekezi, 1994).

It is worrisome that given the existing renewable energy policies put in place in Nigeria, the Niger Delta oil remains the major source of energy needs and revenue for the Nigerian state. This is largely due to lack of political will for implementation of renewable energy politics and the absence of renewable energy legislation enforceable by the courts.

1.4 SIGNIFICANCE OF THE STUDY

Several studies have been conducted on the conflict in the Niger Delta from different perspectives. Some scholars have examined the the problem from the point of view of scarcity of resources, while others have discussed the violence in the region (see Ikelegbe, 2005; Ojajorotu & Okeke, 2006). Other studies have focused on the role of MNOCs in the environmental degradation of the Niger Delta (Frynas, 2001; Aworawo, 1999), and some on the proliferation of arms and social movements (Obi, 2004; Jike, 2004).

It is worth noting that most theses, reports and books on the Niger Delta, have focused on environmental degradation, human rights violations and poverty alleviation. Very few studies have focused on the depletion of renewable natural resources and existing legal loopholes.

Furthermore, there are no known systematic studies on the combined effect of filling this legal vacuum in the Nigeria's laws and establishing a legal regime of renewable energy that could set legal standards that will re-focus Nigeria from a fossil fuel-driven economy to a green economy, where emphasis will no longer be placed solely on oil but also on energy mix that makes for environmental sustainability. This study fills this gap between renewable energy law and policy for the sustainability of the Nigerian environment (which the Niger Delta is part of).

This study intends to unravel the place of the combined effects of effective legal and policy regimes of renewable energy and actual development of renewable energy resources in solving the seemingly endemic crisis in the Niger Delta. The study seeks to provide a curative interface between law/policy and renewable energy resources for effective mitigation of environmental degradation and conflicts in the Niger Delta. Result of this study will not only contribute to knowledge, but also provoke and provide working tools for policy and law makers in Nigeria in terms of addressing the question of the Niger Delta and the energy crisis. Also, the models generated from this study could be adapted by African countries that have similar ecological terrains, energy and security challenges such as Nigeria (Angola and Sudan).

1.5 STATEMENT OF THE PROBLEM

1.5.1 Environmental Violence

The researcher posits that the concept of environmental violence can basically be defined in two-pronged dimensions: First, the destruction of renewable natural resources through unsustainable industrial activities without remediation of the environment and replenishment of those resources for future generation is industrial environmental violence. Second, violent human activities in agitations against environmentally unsustainable industrial activities which have detrimental impact on

the same environment, its natural resources and humanity which are part of the environment that ought to be protected constitutes civil or human environmental violence. These two scenarios are practically at play in the case of Niger Delta of Nigeria hence this study.

1.5.2 Energy crisis

Aside from the global energy crisis that has taken a toll on the Niger Delta, the Nigerian national energy crisis is also contributory factor to the prolongation of the conflict. The Niger Delta is not the only region that produces oil in Nigeria. The country earns about 95% of its foreign exchange and 81% of its national revenue through the oil produced in this region (World Bank, 1982). The running of the Nigerian Government (from Federal, State to Local Government) is largely dependent on revenue generated from oil in the Niger Delta. Also, electricity in Nigeria is performing far below capacity. Most homes, private and public organisations and sometimes government offices, are run by generators powered by fossil fuel/diesels.

The above energy problem calls for the declaration of a state of emergency in the Nigerian energy sector. This study, therefore, examines the possibility of setting up standard legal and policy regimes of renewable energy that can contribute to solving the energy crisis in Nigeria, which will in turn, impact positively on the crisis in the Niger Delta and by extension, the global energy crisis.

As laudable as the Nigerian Renewable Energy Policies geared towards developing renewable energy resources as alternative energy sources and mitigation of Nigerian degradation are, the burning questions are as follows: "Why is Nigerian Energy source still mostly non-renewable and largely sourced from the crude oil in the Niger Delta? Why is the Nigerian Government slow in developing the huge renewable energy potentials of the country in order to meet the much needed energy mix and reduce the pressure on the Niger Delta? Why have MNOCs not invested in renewable energy deposits to diversify their energy products? What is hampering the envisioned transition from a crude oil economy to a renewable energy environmental friendly economy?

During the preliminary visits by the researcher to the Energy Commission of Nigeria (ECN) and the Ministry of Environment, Renewable Energy Programme Unit and interviews conducted with officials of these institutions, it was discovered that there were pieces of renewable energy policies in Nigeria that are awaiting implementation. These policies are evaluated, with the view to discovering whether or not they meet international standards. Also, during a different preliminary visit to the Nigeria Senate Committee on Environment, it was discovered that there is no existing legislation on renewable energy in Nigeria. Therefore, the renewable energy frameworks of other jurisdictions are evaluated by the researcher with the view to adapting and recommending a model renewable energy framework that could be applicable to Nigeria.

As the economy of Nigerian suffers from poor energy amongst many of its infrastructural problems, the natural gas and other renewable energy resources that the country has in abundance is either daily wasted or carelessly unutilised. In the Niger Delta region where Nigeria's crude oil is mainly found, the hydrocarbon is often extracted along a high quantity of associated gases which are often flared in routine the MNOCs licensed by and which are partners of the Nigerian Federal government. World Bank report of 2008 states that Nigeria flares more gas than any other county in the world. This brings pollution that contributes to greenhouse emissions and global warming. This is why the Nigerian government and its partners in oil business indeed need to support any alternative that contributes towards ending gas flaring and then use, rather than waste available associated gas to provide energy and subsequently eradicate poverty (Olise & Nria-Dappa, 2009).

As the desirable target of oil increase is yet to be met by Nigeria, government continues to desire reaping more incomes through an anticipated increase in global demand for oil. The resistance and agitation in and from the Niger Delta communities remains one of the reasons the dream is still elusive (Olise & Nria-Dappa, 2009).

Nigeria's electricity consumption per capita has been observed to be quite low as she ranks far behind many other African countries when it comes to provision of energy

access. Nigeria's generation of electricity is in the neighborhood of 20 watts per person³ which is four times lower than the average found in African as well as nineteen times lower than the world average (Sambo, 2009).

The 2004 World Conventional Energy Supply showed the highest supply of electricity in Africa putting Nigeria at 3,500 MW while other African countries such as South Africa has 30,020 MW, Egypt 14,250 MW, Algeria 6,188 MW, Libya 4,710 MW and Morocco 3,592 MW. Even at that, power generation in Nigeria oscillated between 2,600 MW and 3,000 MW between 2005 and 2009, a serious indication that the less than fifty million South Africans have access to electricity twelve times beyond Nigerians who are well over 140 million people. (Olise & Nria-Dappa, 2009). Olise & Nria-Dappa, (2009) asserts that leadership and corruption have been widely blamed for the poor power situation in Nigeria President Olusegun Obasanjo's government was reported to have spent in 2008, over 16 billion US dollars only to generate darkness instead of electricity (Daily Trust, 2008). Conventional systems of coal, gas and hydropower are responsible for public power generation in Nigeria (Olise & Nria-Dappa, 2009), but the greatest problem of the country remains transmission during which a huge quantity of electricity is often lost⁴.

Resolving Nigeria's energy crisis indeed should be highly prioritized by the federal, state and local governments and this often starts by eliminating energy waste and theft as well as sourcing alternative means of energy in order to eradicate poverty among Nigerians, especially the more than 70 percent who are rural dwellers (Olise & Nria-Dappa, 2009).

1.5.3 Legal loopholes

(a) Legal deprivations of access to natural resources

The first legal aspect that has contributed to the crisis in the Niger Delta is the fundamental denial of the inalienable rights of the people and access to natural resources within their lands and aquatic environment. This deprivation has been made

³ <http://news.bbc.co.uk/1/hi/business/4650924.stm>

⁴ <http://news.bbc.co.uk/1/hi/business/4650924.stm>.

possible through different legal instruments viewed by the researcher as anti-people oriented.

It is evident that the combined effects of the Land Use Act, 1978, the Petroleum Act, 1990, Laws of the Federation of Nigeria, and the 1999 Constitution of the Federal Republic of Nigeria provide a legal foundation for depriving the people of the Niger Delta of their rights over renewable and non-renewable natural resources. Also, they give undue powers to the state and federal governments over land and mineral resources. This is in contravention to known International Laws.

Like other global environmental issues, the environmental problem in the Niger Delta has both national and international legal dimensions. Since 1981, when the United Nations assembled senior government officials and experts in environment in Montevideo (from 28 October to 6th November, 1981) *"to establish a framework, methods and programme, including global, regional and national efforts, for the development and periodic review of environmental law, and to contribute to the preparation and implementation of the environmental law, component of the system wide medium – term environment programme"* (United Nations Environmental Programme, 1981), environmental issues have assumed a global dimension and have become sensitive international relations issues. Environmental pollution and its consequences, transverse borders either by land, air or marine. The United Nations' Basel Convention on the control of transboundary movements of hazardous waste and their disposal attests to this issue (United Nations Environmental Programme, 1989).

Although there are existing environmental laws in Nigeria, the Niger Delta environment has continued to be devastated. This is because some of the existing laws are oppressive to the people (as they fail to uphold the rights of the people over land and other natural resources). In some cases, where certain laws exist, they need to be enforced in the courts as there is lack of judicial "free hand" to decide environmental cases in favour of oppressed people. The national oil revenue accruable from MNOC, into the federation account. The government, therefore, is weighed to be more important than the economic benefits and rights of the people (Amnesty International,

2009). This, therefore, hampers on the independence of the judiciary from making judicial decisions against MNOCs.

In 2005, Jonah Gbemre, supported by the Environmental Rights Action (Friends of the Earth, Nigeria) and the Climate Justice Programme, filed a case in the Federal High Court of Nigeria to stop gas flaring in the Iwerekán community in Delta State. On 14 November 2006, the court ruled that gas flaring was a violation of the constitutionally guaranteed rights to life and dignity and ordered that flaring should stop in Iwerekán. On 10th April 2006, the court granted a conditional stay of execution of the order. Three conditions were attached to the order as follows: that Shell and Nigerian National Petroleum Corporation (NNPC) stop flaring activities by 30th April 2007; that the managing director of SPDC and NNPC as well as government officials should appear in court on 31 May 2006; and that Shell and NNPC should produce and present to the court a detailed plan of action indicating how they would stop gas flaring in Iwerekán.

On the next date of the adjournment (30th April 2007), the Plaintiffs and their legal representatives were in court only to discover that not only had Shell and NNPC failed to produce the plan in court as ordered by the court, but also, the presiding judge had been transferred to another court district and the case file was no longer available. It has been observed that part of the odds against the people in seeking justice has both political and economic biases. Politically, the government lacks the political will to insist on justice against MNOCs while economically, the nation depends almost solely on oil revenue. Also, no representatives of Shell and NNPC were present in court. Subsequently, SPDC obtained another stay of execution without any conditions attached (Amnesty International, 2012). Gas flaring has continued in Iwerekán until today.

(b) Resource control

The second legal issue that this study seeks to address is the existing legal lacuna in Nigeria. The people of the Niger Delta and other southern federating units in Nigeria are calling for fiscal federalism that provides a constitutional arrangement, whereby, federating units exploit and control their natural resources (renewables and non-renewables) and contribute to the central or federation account.

(c) Absence of a legislation on renewable energy

The third legal problem is the absence of legal frameworks on renewable energy in Nigeria. The study explores existing renewable legal regimes in other jurisdictions with the view to involving renewable legal models that could be adopted to the Nigerian situation; institute constitutional changes, legislation and policies that will bring about the development of Nigeria's huge potential of renewable energy resources and consequently, achieve a sustainable environment, development and peace in the Niger Delta region and Nigeria in general.

The problem of environmental degradation (caused by industrialisation) has become the greatest threat to humanity in the twenty-first century. So much has been said and written about global warming, ozone depletion, the emission of excess green-house-gases, deforestation, desertification, carbon-dioxide, carbon monoxide, emission of chlorofluorocarbons, general pollution and other consequences of industrialisation. Governments all over the world have woken up to the reality of the dangers of global environmental change (right from the 1972 Stockholm Declaration). Laws have been developed with regimes for the regulation and control of industrial activities with a view to stemming the dangerous tide. Although there has been various legal principles enunciated over the years, for the purposes of holding perpetrators of environmental degradation (corporations) responsible, for example the "Polluter Pays Principle" (through Common Law principles and statutory provisions), not much has been done or achieved by way of advancement of the protection of human rights of indigenous people who suffer the harsh realities of the effects of degradation due to industrialisation. This study advocates the protection of the environment through the enforcement of the rights of (indigenous people) victims against corporations in cases of degradation caused by corporate activities (Ehusani, 2009).

Whether environmental protection is considered as aiming at the preservation of the environment as the "*cadre de vie*" of human beings – which is an anthropocentric approach – or whether humans are to be protected indirectly as components of the environment from which they cannot be isolated, the right to a healthy environment is

closely related to the basic concept of human rights, namely, the “dignity inherent to all members of the human family”. Indeed, an environment degraded by population and defaced by the destruction of all beauty and variety is as contrary to satisfactory living conditions and the development of personality, as the breakdown of the fundamental ecological equilibrium is harmful to physical and moral health. There is of course, an integral link between the right to a healthy environment and other human rights. The deterioration of the environment affects the rights to life, health, work, dignity of human beings, privacy of the home and education, among other rights (Ehusani, 2009).

Although there were attempts to develop international environmental law in the 19th century, this mainly focused on the conservation of wildlife and not the individual’s right to a healthy environment. It was not until the Stockholm Conference of 1972⁵ that the right to a healthy environment was especially recognised in an international environmental law document. The Stockholm Conference is considered an important starting point in developing the right of an individual or a group to a healthy environment at the global as well as at national level (Ehusani, 2009). The principle of the Stockholm Declaration linked environmental protection to human right norms as follows:

Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.⁶

According to Alexandre Kiss:

The right to environment also completes the other rights guaranteed to each human being in another way: It contributes to equality among citizens, or at least, to the reduction of inequalities in their material conditions. Indeed, environmental degradation aggravates the differences between the richest class, which will be able to escape degraded conditions of life such as polluted air, noisy or unhealthy areas, while the most disfavoured group must accept to live in inhuman agglomerations, slums or other heavily polluted areas.

⁵ Held from 5 to 16 June, 1972

⁶ Principle 1, Stockholm Declaration: II International Legal Materials (1972) p.1416

(d) Provision of environmental right in National Constitutions

The obligation of states to adopt the principles of the Stockholm and Rio Declarations has induced many of the national constitutions to acknowledge the right to a healthy environment. Many of the domestic courts too have made references to the principles of these declarations (Ehusani, 2009). Countries such as South Africa have developed constitutional provisions that guarantee the right to a healthy environment. **Chapter 2 Article 24** of the South African Constitution⁷, provides as follows:

Everyone has the right (a) to an environment that is not harmful to their health or well being; and (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that (i) prevent pollution and ecological degradation; (ii) promote conservation; and (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable and economic and social development.

The South Korean Constitution contains provisions that acknowledge the fact that “all citizens have the right to a healthy and pleasant environment”. Other countries which have adopted constitutional provisions for the right to a healthy environment include Ecuador, Hungary, Peru, Portugal, India⁸ and the Philippines⁹. Countries such as Mexico and Indonesia, recognise the right in their national legislation (Ehusani 2009).

Article 15(xii) further reiterates the right and mandates the competent authorities to take measures to guarantee the right (Ehusani, 2009). The Indonesia Environmental Management Act (EMA) also recognises the right to a healthy environment. Article 5 (1) stipulates that:

Every person has the same right to an environment which is good and healthy

This is accompanied by a provision that guarantees a “right to environmental information” and the “right to participate in environmental decision-making process”. In order to assist victims and NGOs to fight for the right to a healthy environment, the Indonesian EMA also guarantees various environmental procedural rights (such as the

⁷ Adopted on 8 May, 1996 and amended on 11 October, 1996

⁸ Supra

⁹ Supra

right of NGOs) to bring law suits as class/representative actions. As a result of the pressure from pro-democracy and pro-reform activists in Indonesia, the Special Session of the People's National Assembly held in October 1998, promulgated the National Human Rights Charter, which also includes "every person's right to a good and healthy environment" (Ehusani, 2009).

However, in Nigeria, Section 20, Chapter II of the 1999 Constitution makes it desirable for government to ensure a healthy environment, not an obligation that can be enforced should government fail. The entire provisions of Chapter II are not justiciable or enforceable (Ehusani, 2009).

Communities and individuals in the vicinity of petroleum operations are the direct victims of whatever emission into the environment or pollution of the environment. Since these communities and persons are lawfully present (residents, ownership or occupation) on the land, they have a stake that must be protected. The laws which vest ownership and control of petroleum in the Federal Government and land in the State Governor, recognise surface rights of third parties (owners and occupiers of land) which are required to be compensated for in the event of damage or loss (Ekiterense, 1999). It is beyond dispute that oil operations are major industrial activities, which can cause damage to the environment and private properties. This could arise at any stage of operations (exploration, mining, production or transportation). When damage to private property occurs, it is only fair and just that compensation be paid to victims in order to make amends for the loss suffered (David, Morehouse & Wykie, 1993).

According to the provisions mentioned above, there is a curtailment to the fundamental right to own property as well as the right to compensation for the compulsory acquisition of the property. In plain terms, no citizen of Nigeria can own minerals, mineral oils (petroleum) or natural gas found in, under or upon his land. They are owned by the Government of the Federation. But who owns the land in, under or upon which these natural resources are found? Is there any compensation payable for the compulsory acquisition of the mineral, petroleum or natural gas? For the ownership of the land, it is now controversial, by virtue of Section 1 of the Land Use Act, 1978 which

purports to vest all the land comprised in the territory of the state in the Governor of that State, though he is to hold it in trust. As for compensation, there is provision in all the statutes governing natural resources, including the Land Use Act, 1978, though not for natural resources *per se* but for any damage done to the land surface and buildings, crops or economic or productive trees (Gowon, 2009).

The controversies trailing compensation oil and gas matters is further heightened by the provisions of Section 25(1)(n) of the 1999 Constitution, which confers exclusive original jurisdiction on the Federal High Court to the exclusion of the State High Court, including the High Court of the Federal Capital Territory (Gowon, 2009).

Gbemre v. Shell: A litmus test for environmental human right claim in Nigeria

As a result of the environmental effect of gas flaring, the Iwhrekan community in Delta State filed a suit to enforce their fundamental right to life and dignity of the human person (Umukoro, 2009). The applicant (Jonah Gbemre), on behalf of the Iwhrekan community, claimed, *inter alia*, as follows:

"A declaration that the actions of the 1st and 2nd Respondents (i.e. SPDC and Nigerian National Petroleum Corporation (NNPC) respectively) in continuing to flare gas in the course of their oil exploration and production activities in the Applicant's community is a violation of their fundamental rights (including healthy environment) and dignity of human person guaranteed by Sections 33(1) and 34(1) of the Constitution of the Federal Republic of Nigeria, 1999 and reinforced by Articles 4, 16 and 24 of the African Charter on Human and Peoples Rights (Ratification and Enforcement) Act."

The Applicant also sought a declaration that the provisions of Section 3(2)(a), (b) of the AGRA and Section 1 of the AGRA Regulations under which the continued flaring of gas in Nigeria may be allowed, are inconsistent with the Applicant's right to life and/or dignity of human person enshrined in Sections 33(1) and 34(1) of the 1999 Constitution and Articles 4, 16 and 24 of the African Charter on Human and Peoples Right (Ratification and Enforcement) Act and are therefore, unconstitutional, null and void by virtue of Section 1(3) of the same Constitution (Umukoro, 2009).

The Applicant's grounds for bringing this application¹⁰ *inter alia* were as follows:

That the burning of gas by flaring in their community had given rise to the following:

- (a) poisons that pollute the environment leading to the emission of carbon dioxide, the main green-house gas, the flares contained a cocktail of toxins that affected their health, lives and livelihood;
- (b) exposed inhabitants to increased risks of premature deaths, respiratory illnesses, asthma and cancer;
- (c) contributed to adverse climate change as it emitted carbon dioxide and methane which caused global warming of the environment, polluted their food and water;
- (d) caused painful breathing, chronic bronchitis, decreased lung function and death; and
- (e) caused acid rain, their corrugated house roofs corroded by the composition of the rain caused by gas flaring, the acid rain and consequently acidified their lakes and streams as well as and damaging their vegetation.

The Federal High Court sitting in Benin City, granted all the reliefs as requested and ordered the Attorney-General of the Federal Republic of Nigeria to immediately set into motion, after due consultation with the Federal Executive Council, necessary processes for the enactment of a bill for an Act of the National Assembly for the speedy amendment of the relevant sections of the AGRA and the AGRA Regulations made thereunder to quickly bring them in line with the provisions of chapter 4 of the Constitution (Umukoro, 2009). However, the question still remains whether there is any correlation between environmental harm and fundamental human right to life? In answering this question, it is imperative to first of all, understand the gamut of the term "right to life" (Umukoro, 2009).

(e) Corruption in the judiciary

The recent history of the Nigerian legal system is replete with allegations of judicial corruption. The socio-economic effect of such corruption is more dangerous than the other forms of official corruption (Damfebo, 2009). The court is said to be the last hope

¹⁰ The Applicant brought this application in representative capacity under the Human Rights (Enforcement) Rules, 1979.

of the common man and if that last hope is lost, the society has no choice than to return to the primitive age. Justice Omotunde Ilori, the former Chief Judge of Lagos, while commenting on the implementation of Justice Kayode Eso's report declared:

When you go the judiciary, the cry of distress is a summon for relief. The judiciary must relieve this distress. If a judge is bent and compromises that your distress, it is very evil in any society. Therefore, by the time Eso's Panel was set up, the judiciary was becoming a disaster area because there were a number of bad eggs (Sun Newspaper, 2003).

When a rural farmer sues a multinational oil company for damages to his or her property, the contest is between the poor and sometimes, illiterate farmer and the very powerful oil company. A corruption prone judge who has little or no integrity may be induced by the oil company to give a decision that would favour the company. One of the most fundamental factors hindering access to justice is corrupt judiciary (Damfebo, 2009).

1.6 AIM OF THE STUDY

The aim of this study was to establish a nexus between the legal lacuna and energy crisis as joint causes of the prolongation of the crisis in the Niger Delta in order to arrive at an equilibrium point where legal and renewable energy solutions could be used to address the crisis in the Niger Delta.

1.7 OBJECTIVES OF THE STUDY

The objectives of this study are to:

- a. To establish that unsustainable mining activities of MNOCs and violent illegal activities of indigenous people in protest thereof both constitute environmental violence and to provoke stringent Governmental actions, policy implementation, legislative and regulatory environmental standards enforcements against all defaulters towards the remediation and prevention of further environmental violence.
- b. Bring about major legal reforms in Nigeria that would restructure the federation to a fiscal federalism where indigenous peoples through their regions or states have

access to and control their natural resources, pay taxes to the central government as a sure way of mitigating violent agitations and achieving sustainable peace in the Niger Delta and other federating units in Nigeria.

- c. Establish that the development of Nigerian renewable energy resources in the Niger Delta region, Northern Nigeria and other parts of Nigeria through renewable energy policies, laws and regulatory frameworks, would help to mitigate the present environmental violence in Niger Delta. This will also provide an alternative, environmentally friendly and cleaner energy source that will make Nigeria less dependent on Niger Delta oil and preserving the Niger Delta environment and its renewable natural resources for future generations.

1.8 RESEARCH QUESTIONS

The following research questions were asked in the course of study:

1. Can environmental degradation and deprivation of the indigenous people's access to renewable natural resources in the Niger Delta environment through unsustainable oil and gas extraction activities by MNOCs cause violent agitations thereby constituting environmental violence in the Delta?
2. Can the systemic denial and deprivation of the Niger Delta people's inalienable rights and access to renewable and non-renewable natural-resources and means of livelihood through the constitution and other legal instruments and failure of Nigeria Government to stop MNOCs from continued degradation of the Niger Delta environment through the rule of law lead to the people's frustrations and violent agitations contributory to the Niger Delta environmental violence?
3. Can major legal reforms in favour of a fiscal federalism and resource control in Nigeria, Government strict enforcement of environmental laws and standards mitigate environmental violence in Niger Delta by assuaging aggrieved Niger Delta people to stop violent agitations, embrace peace and push for sustainable development?

4. Can the development of Nigeria's huge renewable energy potentials and implementation of effective renewable energy policies, legislations and regulatory frameworks interface with resource control oriented legal reforms to mitigate environmental violence in the Niger Delta?

1.9 LIMITATIONS OF THE STUDY

Limitations of a study are characteristics of design or methodology that set parameters on the application or interpretation of the results of the study; that is, constraints on generalisation and utility of findings that are the result of the devices of design or methods that establish internal and external validity (Mitchell, Wirt & Marshall 1986). Limitations of a study also include constraints of findings that are the result of the ways in which the study is designed.

The limitations of this study are as follows:

1. Constraints in sourcing data. Considering the fact that there is no existing study on the interface between law and renewable energy in the mitigation of environmental violence in the Niger Delta, the main challenge faced was the absence of relevant empirical and historical data (there are very few articles and books that have been published in this particular area of study).
2. The absence of a handy legal document that codified renewable energy legislation in Nigeria constituted another limiting factor to this study. However, the author leveraged on existing renewable energy policies, regulations and legislations from different secondary data sources within and outside Nigerian jurisdiction.
3. Access to core communities in the Niger Delta due to difficulties in the ecological terrain of creeks of the Niger Delta and hostility of armed militants also posed a major challenge in terms of collecting primary data from indigenous people of Niger Delta.
4. The unwillingness of MNOCs and individuals to release information on security concerns in the Niger Delta for fear of being blacklisted and attacked by Niger Delta militants was another challenge encountered in this study.

5. Corporate/official secrecy/confidentiality policies and bureaucratic bottle-necks by governmental agencies identified for interviews and the administration of questionnaire limited the scope of the data collected for the study.
6. The number and geographical spread of government agencies identified, NGOs, professional bodies, community organisations, and MNOCs from which primary and secondary data were supposed to be collected, had huge financial implications on the researcher. This financial limitation hampered further travels, administration and collection of questionnaires, interviews and organization of FGDs that would have enhanced more data gathering.

1.10 HYPOTHESES

The following hypotheses were made in this study:

1. There is a relationship between the destruction and depletion of natural resources through oil extraction activities by MNOCs and violent conflict in the Niger Delta which deprived the people of their means of livelihood and inalienable rights.
2. There is a relationship between lack of a people-oriented policy and legal framework which confers on the people the right to access their natural resources by the Nigerian state and the crisis in the Niger Delta.
3. There is a likelihood of reduced environmental crisis situation in the Niger Delta if the Nigerian state reduces its total dependence on hydro-carbon based energy by harnessing and tapping into its huge renewable energy resource potentials as well as developing and implementing appropriate renewable energy policies and laws.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 LITERATURE REVIEW

Scholars and researchers have written extensively on various perspectives of conflict, be it personal, interpersonal, intra-ethnic, intra-state or inter-state (international). David (2006) defined conflict as the pursuit of incompatible interests and goals by different groups. This implies that conflict is a natural and unavoidable part of human existence, which may not always be negative, depending on how it is handled (Isard, 1992; Weeks, 1992). This contradicts the assumptions of some scholars who maintained that conflict is pervasively destructive and used only negatively for the purpose of injuring, neutralizing and subverting the aspirations of opponents (Coser, 1956; Boulding, 1977).

Conflict is classified into the following four types namely interpersonal conflicts which occur among individuals, intrapersonal conflict which occurs within an individual, intragroup conflict which occurs among individuals within a team, and then intergroup conflict which takes place when a misunderstanding arises among different teams within an organisation.

Conflict may seem to be a problem to some, but this is not how conflict should be perceived. On the other hand, it is an opportunity for growth and can be an effective means of opening up among groups or individuals. However, when conflict begins to draw back productivity and gives way to more conflicts, then conflict management would be needed to come up with a resolution¹¹.

2.1.1 Niger Delta Conflict

The conflict in the Niger Delta region of Nigeria has attracted extensive attention from several scholars. Some scholars have written on the effects of the activities of MNOCs on the environment. Others have written on the policies of the Nigerian state towards

¹¹ <http://www.typesofconflict.org/>

the Niger Delta. Research studies also abound on the subjects of human rights, arms proliferation, social movements (Environmental NGOs), national security, violence and youth restiveness in the Niger Delta. Very few studies have been conducted on the internationalisation of the conflict in the Niger Delta, with emphasis on the role of domestic and international NGOs; and only one academic research has been conducted on the issue of ethnic militias and democracy in Nigeria (see Obi 2000; Aworawo 2000; Frynas 2001; Onduku 2001; Egbeleke 2004; Jike 2004; Frynas 2001; Ibeanu 2002; Ibeanu 2000; Ikelegbe 2001; Oyerinde 2001; Obi 2002; Jike 2004; Ikelegbe 2005; Omeje 2006; Oyefusi 2006; Ojakorotu & Okeke 2006; Uzodike 2006; Agbu 2000; Ojakorotu 2006; Sesay *et al.* 2003).

Virtually all studies on the Niger Delta have emphasised neglect, environmental degradation and poverty as not only the reasons for the commencement of armed struggle by the militias but also for the recent escalation and continued sustenance of conflicts in the region. Unfortunately, there are no systemic studies that assess the extent to which economic benefits from hostage taking and illegal trading in petroleum resources (illegal oil bunkering) with international commercial networks attracted (an is still attracting) opportunistic recruits into the ethnic militias¹², thereby occasioning the escalation of violence, armed conflicts and its sustenance in the region. It is this gap in the existing literature on ethnic militia and the Niger Delta conflict that this study seeks to fill.

The topic enabled the researcher to systematically carry out an in-depth and empirically grounded study in the phenomenon of ethnic militias in the Niger Delta. Considering the fact that economic opportunism for hostage taking, external trade networks and crude oil predation are not the root cause of violent conflicts in the Niger Delta, to what extent have these boosted the multiplication of violence, and aided the consolidation and sustainability of ethnic militias in the region? This study, therefore, seeks to do the following: investigate the reasons for the recent phenomenal upsurge in armed resistance by ethnic militias in the Niger Delta; establish the correlation between armed

¹² Most of these recruits are often ill suited for the task of fighting for resource control or self-determination for the Niger Delta people.

conflicts and economic gains; and ascertain the extent to which international commercial interests have contributed to, and are sustaining the militia insurgency.

2.1.2 Niger Delta and environmental violence

Conflict in the Niger Delta arose in the early 1990s due to tensions between foreign oil corporations and a number of minority ethnic groups in the Niger Delta who felt they were being exploited, particularly the Ogoni as well as the Ijaw in the late 1990s. Annual production of both cash and food crops dropped significantly in the latter decades of the 20th century, cocoa production dropped by 43% (Nigeria was the world's largest cocoa exporter in 1960), rubber dropped by 29%, cotton by 65% and groundnuts by 64%. In spite of the large number of skilled, well-paid Nigerians employed by the oil corporations, the majority of Nigerians, especially the people of the Niger Delta and the far north have become poorer since the 1960s¹³.

The Niger Delta region has a steadily growing population estimated to be over 30 million people as of 2005, accounting for more than 23% of Nigeria's total population. The population density is also among the highest in the world with 265 people per square kilometre (NDDC). This population is expanding at a rate of 3% per year and the oil capital, Port Harcourt, along with other large towns, are growing faster. Poverty and urbanisation in Nigeria are on the rise, and official corruption is considered a fact of life. The resultant scenario is one in which there is urbanisation but no accompanying economic growth to provide jobs. This has ironically, forced the growing populace to begin destroying the ecosystem that they require to sustain themselves¹⁴.

What today is known as the Niger Delta conflict is a reflection of the contradictions created by the politics of oil and environmental governance in the state of Nigeria. Indeed, and that depends on the involved stakeholders at any point, one may have different unpacking and categorization of the crisis. The conflicts between the *oil companies* and the *host communities* comes first, followed by that which comes as the

¹³ See: <http://forgottendiaries-nigeria-niger-delta.blogspot.com/2008/09/nigeria-history-of-niger-delta-crisis.html>

¹⁴ See: <http://forgottendiaries-nigeria-niger-delta.blogspot.com/2008/09/nigeria-history-of-niger-delta-crisis.html>

Nigerian state versus the militants and environmental activists; then, the hostilities generated among the different host communities as a result of the politics from the first two compartments. Between and among various local communities. In this section the basis of conflicts within the rank of the major stakeholders is highlighted.

In the view of Ojakorotu (2008), it is difficult to explain the political economies of Africa's without mentioning the scourge of colonialism. The same can be said in the light of the Niger Delta. In most cases, governments in post-colonial Africa have continually glossed over the issues or, in most other cases, window dress it. The minority majority divide is often given ethnic coloration and this causes division in the society, putting the minority in frequent antagonism to the majority. This idea gives the illusion that the problem is socio political and economic, rather than ethno cultural, and had prevented most federal constitutions from dealing with it appropriately. That is why Sir Willink's Commission wrote a report in 1957 as a capable factor for crises and separatist radicalism.

What is popularly held within the Niger Delta is that the Nigerian Federal Government collaborates with other nationalities to undermine and strategically exclude Niger Delta from mainstream politics. Ever since oil was discovered in Oloibiri in 1956, in an Ijaw community of Ogbia Local Government of the current Bayelsa State, people of the place have constantly had frictions with the oil companies and the MNOCs, calling for abrogation of existing laws especially on land ownership (Ojakorotu, 2008).

Indeed, there has to be an acceptable way of resolving the control of resources in Nigeria in order to guarantee peace in the Delta since it is the main reason behind the unending crisis (Ojakorotu, 2008). This has over the years been aggravated by lack of practical mechanism to address ecological disaster both at institutional and structural levels (Onduku, 2001).

Moreover, fiscal centralization remains a key deformity of Nigerian federalism as it has subjected the Niger Delta oil-producing minorities to alienation, exploitation and environmental neglect (Ojakorotu, 2008). This dysfunctionality is what the Niger Delta

communities have attempted to resist for many years. For decades as multinational oil companies and successive Nigerian governments stand aloof.

Consequently, environmental activists and other began to respond by forming radical groups such as the Environmental Rights Action (ERA), the Pan-Niger Delta Resistance Movement, CHIKOKO, the Movement for the Survival of the Ogoni People (MOSOP), the Ijaw Youth Council (IYC), the Movement for the Survival of the Ijo in the Niger Delta (MOSIEND) as well as the Movement for Reparation to Ogbia (MORETO). All these groups have consistently for decades, agitated against corporate irresponsibility, environmental degradation, and domination (Ojakorotu, 2008). Ojakorotu (2008) argues that this scenario reduced Nigerian economy to a rentier one and the above groups formed to address the situation, because they have ethnic identities, eventually emerged as instrument of protest against the Nigerian state and the oil companies.

The Federal Government of Nigeria has been generating the bulk of her revenues and foreign exchange from exploration and exploitation of oil which is marketed by foreign oil companies, but hardly spend enough to develop the communities that bear the oil (Oyeshola, 1995). This has been the main cause of the agitation and it was in a bid to globalise the struggle that the MOSOP resorted to the conspiratorial policies and operations of Shell and the Nigerian state. There will be need to examine in details, the activities and networks of MOSOP and a group like the IYC demand detailed investigation (Ojakorotu, 2008).

2.1.3 Internationalisation of the conflict in the Niger Delta

The earliest group to internationalize the Niger Delta struggle is MOSOP, especially by presenting to the Nigerian government in 1990, the Ogoni Bill of Rights (OBR). This was under the auspices of the Ogoni Central Union coordinated by Ken Saro-Wiwa (Ojakorotu, 2008). The main demands in the bill are

- political control of Ogoni affairs;
- the right to control and use of a fair proportion of Ogoni economic resources for Ogoni development;

- the right to protect the Ogoni environment and ecology from further degradation; and
- adequate and direct representation as of right in all Nigerian national institutions (The Ogoni Bill of Rights, 1990).

There was an addendum in August 1991 when the OBR mandated the MOSOP take the struggle to international level. By December 1992, a representative of the people of Ogoni handed over to Shell, Chevron, the Nigerian National Petroleum Corporation (NNPC) and other oil companies operating in Ogoniland an ultimatum to pay within 30 days some royalties and compensation failure which they should completely quit Ogoniland (The Ogoni Bill of Rights, 1990). After this, the issue went further to the Conference of the United Nations Human Rights, the Unrepresented Nations and Peoples Organisation (UNPO) (Ojakorotu, 2008).

Indeed, globalizing and internationalizing the Ogoni Niger Delta struggle benefitted from ICT and assisted in disseminating the information to the world. This, among other things, led to the visit to Ogoni by the INGOs' missions for on-the-spot assessment. Mossop also took advantage of international seminars, workshops and symposia that were targeted at addressing parliaments politicians and pressure groups to share the sentiment (Obi, 2001b), and it is instructive to note that as MOSOP continued in this advocacy, it attracted many human rights groups and NGOs to the issue. Some institutions such as Book Aid International, the Africa Policy Information Centre, World Council of Churches, Both Ends, Trocaire and Delta, identified with MOSOP at the time (Ojakorotu, 2008).

2.1.4 The Niger Delta and Human Rights

The internal laws of a nation cannot justify a government's violation of the obligations of international human rights. The resource law in Nigerian places the control as well as ownership of all minerals, mineral oil natural gas and mines in a land, as well as the land itself on the government. This law, which is grounded in the constitution, denies the Ogoni and Urhobo as well as others in Nigeria, the ownership of land. But the international human right recognises indigenous minority as the proper owner and

controller of all resources found in the geographical location of their ancestry while expressly prohibiting the state from either denying the people access to such resources, or taking them over completely except compensations have to be paid.

The global best practices is that where and when there is conflict between human rights laws are domestic laws on issue of resources, the government violate her international obligations if she acts in contrast. In the case of Nigeria, successive governments have been exploiting the vulnerability of the Urhobo and Ogoni peoples; continually violating their privileges and rights.

Apart from the right to ownership and control, international laws also guarantee a people the rights to develop themselves through a safe environment. People have a right to conducive living environments, they have a right to be protected from environmental degradation such as deforestation and pollution, and they should not be discriminated against in terms of religion and culture (Lassen, 2006). But, again, the relationship of the Nigerian governments with the Ogoni and Urhobo peoples over the years have stood in clear contradictions to these laws.

In spite of the laws, for decades the Nigerian governments and the MNOC have continued to degrade the environments of the minority ethnic groups in oil-rich Niger Delta. As the people saw no end in sight and sensed the futility of further legal solution and, have resorted to violence as a means of protest and resistance targeted towards the oil companies. The Nigerian government responded through militarization of the peoples' communities in a clear contradiction to their internationally guaranteed right excessive militarisation, rape and state violence. On this issue the Nigeria-Human Rights Watch World Report of the year 2000 urged the governments of Nigeria to be responsible and make appropriate corrections.

2.1.5 Niger Delta and the Rights of Minority and Indigenous People

The United Nations Declaration on the Rights of Indigenous People (UN DRIP) as well as other internationally recognised instruments of human rights is yet to gain a favourable recognition by the Africa Union (AU), especially in the area of the

indigenous people, IP. This obvious lacuna on the part of the African Union has continually aggravated the problems faced by Africa's indigenous peoples who have continually been dehumanised through discrimination, destruction of historically sacred ancestral sites, their identity and culture while at the same time facing extreme poverty, political marginalisation, environmental degradation and dehumanising economic injustice inflicted manipulated by the ethnic majorities.

Many organizations, including the Committee on Racial Discrimination continue to express concern towards the problems of the indigenous people in Africa as expressly submitted by S. Saugestad's that who pointed out the inequality in the state-indigenous minority relationship in Nigeria (Avwomakpa, 2009). The people of Ogoni and Urhobo of the Niger Delta continue to be victims of the above circumstances, being forced to resort to hostility and violence towards the f the Nigerian state and the MNOC in such a way that has led to property and lives loss, sharp fall in national income as well as what Ibori (2002) calls failure of democratic institutionalisation in Nigeria.

Avwomakpa (2009) has conceived that a simple way out of the problems Africa's indigenous peoples is change the nomenclature to Indigenous minorities, giving the majority ethnic groups too their own recognition in the "indigenous" concept all over the country. This he argues will ensure the right-of Ogoni and Urhobo peoples as indigenous minorities while at the same time enhancing their protection as indigenous peoples. This will be a panacea to the majoritarian arrogance and national minorities contempt often exhibited by the modern state (Viljoen, 2007).

On a recall, the 1957 Minority Rights Commission led by Sir Henry Willink-asserts that it is a special effort requiring issue which needs intergovernmental cooperation, rather than leave to the region. The idea is that the areas concerned are locked in two Regions and the people there neglected, and consequently poor as well as backward. The Willink's Commission suggested inauguration of a Federal Board to consider the problems of the peoples and communities in the Niger Delta.

Obiagwu and Odinkalu rightly observe that the recommendations of the Willinks commission which was set up when Nigeria was negotiating its independence, was to

investigate complaints of minority ethnic groups in Nigeria, and it was the architect of the provisions for human rights in the Independence Constitution of 1960 (An-Naim (ed.) 2003). In paper, other constitutions have done the same (Avwomakpa, 2009).

The Niger Delta is rich in resources and appears to be the cooking pot for the entire country of Nigeria (Alamieyeseigha, 2005), and the minorities who inhabit the area have been critical of the Hausa-Fulani, the Igbo and the Yoruba who are the majority controlling federal economic and political resources. This, as Tebekaemi (1982) observes, they have done through production halt, property damage, hostage taking and the 'Ogele procession'. The Urhobo and the Ogoni peoples continued to suffer from the Nigeria's Federal government refusal to accord them with international standard treatments though minorities continue to face similar problems in Europe and the Americas, though with different level of severity.

2.1.6 Niger Delta and corporate social responsibility

Corporate social responsibility refers to the various welfare packages which companies ought to provide for their host communities and to the environment. Most often, the provision of these welfare packages can only serve as a palliative measure because some damages caused by these companies are irreversible and irredeemable (Itsueli, 2009). A determination of who are the actual victims of environmental pollution is imperative. The environment into which noxious or toxic substances are injected is apparently the first victim. It is, however, not important for its own sake, but for the sake of human, animal and plant life that it sustains (Itsueli, 2009).

Once the environment is polluted, man stands at the receiving end. In this case, host communities – that is, persons living within the environment that is polluted – become victims. Whether the pollution is from toxic waste as was the case in Koko, Delta State of Nigeria, or oil spillage in water bodies or from gas flaring that increases the temperature of the air and injects chemicals into the air that chemically combines with rain and falls as acid rain, or from oil spillage that destroys plant life in its trail leaving the land barren and agriculturally useless, the form it takes is immaterial, here, the host communities are the victims (Itsueli, 2009).

These are the direct victims of environmental pollution. The government is also a victim. This is because environmental pollution has given birth to various militant groups in the Niger Delta, and the government, both at the state and federal levels, has had to pay dearly in terms of human resources (kidnappings), material resources (the destroyed environment) and attempts to curb violence in the region (military personnel have been killed in clashes between militants and military personnel). The companies are not left out. They are the cause of environmental pollution and degradation. The spate of expatriate kidnappings and closing of flow-stations by militants is enough evidence that even the companies are also victims. Even the university lecturer vexed by such pollution and choosing to write about it is a victim. In summary, one way or the other, we are all victims whether we are affected directly, indirectly or only remotely by ties of conscience (Itsueli, 2009).

The issue of corporate social responsibility as against individual responsibility is at the root of company law. From the time of *Salomon v. Salomon* to present day, the position is much the same. Although individuals *stricto sensu*, are responsible for the acts that pollute the environment, and individuals form the machinery to provide welfare services to host communities and also safeguard the environment, the law would prefer to veil the individual(s) and demand responsibility from the companies. This is the reason for corporate social responsibility (Itsueli, 2009).

In the Niger Delta (in Nigeria), and in most parts of the world, the issue of corporate social responsibility needs to be revisited. It would be untrue to say that companies generally do not show any form of social responsibility, the issue is, how much social responsibility have they shown to both the host communities and the environment? Christian Amanpour remarked that "the Niger Delta region has given so much but has reaped only very few rewards in return" (Itsueli, 2009).

The idea of good corporate citizenship is traceable to James Burnham's thesis in his leading book, *Managerial Revolution*. Burnham's main thesis, which dominated company law and the social sciences for several decades, was that modern large companies have evolved to a stage where professional managers with little or no

ownership, are in charge of their affairs and manage without reference to the interest of the capitalists who, in theory, are the real owners (Itsueli, 2009). As a result of this “managerial revolution”, he contends that, the essential nature of capitalism has been displaced and this transformation has “infused industry with a new sense of social responsibility” (Blackburn, 1973) which transcends the maximisation of profits for shareholders (Berle, 1954; Drucker, 1946; Bowen, 1953).

As earlier pointed out, the true position is not that there is a total absence of corporate responsibility but the real problem is that the level of corporate social responsibility still leaves much to be desired in Nigeria, especially in the Niger Delta (Itsueli, 2009). Some of the most prominent shows of corporate responsibility in Nigeria include the building by Guinness Nigeria Limited of an Eye Hospital in Onitsha, equipping the Eye Clinic (now named after it), in Ahmadu Bello University Teaching Hospital in Kaduna and more recently, funding the Guinness Eye Centre project at the Lagos Teaching Hospital to which the sum of four million Naira was appropriated. Shell, Chevron and Mobil give scholarships and bursaries to students in tertiary institutions of learning in Nigeria. These companies have also in some cases, constructed roads in rural areas (if only to provide good access for their own use to production sites), and provided water, electricity, built classrooms and schools. It is sad, however, that, the provision of these amenities do not even cater for the needs of these host communities. Ironically, they are the goose that lay the golden eggs but they have only received little help from oil companies operating in their area. Most often, these companies carve a niche for themselves and their staff within these communities, building beautiful houses with uninterrupted power supply from turbines, portable water and other social amenities and fence-off the communities, so that in some cases, the members of the communities are in the dark or left to epileptic power supply from the Power Holding Company of Nigeria (PHCN). However, they have the “privilege” of looking into these companies camps, well-lighted. Little wonder, that in their indignation, these host communities have also formed themselves into militant groups to protest against this unfair treatment (Itsueli, 2009). Shell had to leave Ogoni and the people overjoyed their departure. They literally carved a coffin and performed funeral rites for Shell as they

departed their community and they do not wish for Shell's return in the future. Many villages in Bayelsa State have not suffered a better fate (Itsueli, 2009).

The more serious damage to the environment or pollution is perpetrated by corporations, not by private individuals. The companies wield a lot of political and financial power making it difficult to deal with them or get them to be more socially responsible. These corporations are known to parley with government and even traditional rulers who reciprocally shield them due to the benefits they derive from these corporations (Itsueli 2009).

So far, the national policy thrust and the focus of the law are essentially for criminal sanctions, as if criminalisation *per se* will ensure a safer environment for all or compel companies to be socially responsible. Apart from the fact that it is usually very difficult to get all the facts needed to indict these big corporations, they have the money to employ the best legal services to help them manipulate the law and get off the hook. Where a transnational company is involved, it is even more difficult. For instance, legal proceedings against the Union Carbide of India or the parent company in the United States of America for the Bhopal disaster in India have not been successful. The only compensation the company has paid, they have made clear, that it is *ex gratia*, not conceding liability (Itsueli 2009).

The companies and the Allied Matter Act also provide that the monies of the company cannot be dissipated on charity except for the furtherance of the objects of the company (Itsueli 2009). This situation constitutes a handicap for companies in terms of fulfilling social responsibility. However, with the vesting of the day-to-day running of the company with the directors empowered to engage in any activity which will promote the interest of the company, it is plausible that the directors can apply such funds to social investments as long as it is not done *mala fide*.

Chapter 2 of the Constitution of the Federal Republic of Nigeria makes environmental pollution and social responsibility non-justiciable matters. This is certainly a gap that would need to be addressed. It is suggested that a transfer of this provision to Chapter 4

would meet the challenges (Itsueli 2009). Statutes regulating environmental pollution in Nigeria do not expressly or particularly provide for the kind of welfare services that these companies should provide for host communities. This makes social responsibility largely discretionary. Such flexibility is, however, considered good if employed in a purposive manner (Itsueli 2009).

Protection of the environment and corporate social responsibility should be made justiciable in the Constitution. Also, rather than resort to criminal prosecution or criminalisation of environmental offences, the enabling statute that empowers these companies to operate should particularly make certain welfare provisions mandatory for corporations operating in host communities. It should be noted that even where the companies are forced out of the host communities, members of the host communities would still make some losses even if small in terms of employment and other welfare packages, "half bread", it is said, "is better than none". These companies should be encouraged, especially by government, to be more socially responsible (Itsueli 2009).

Government should not hide behind corporate responsibility to shirk its responsibility. It is more the duty of the government than corporations to cater for the welfare of citizens. Government should also play its part. Besides regulating the activities of these companies, government must take proactive steps to make the country healthier, more progressive and happier (Itsueli 2009).

On the issue of gas flaring, Nigeria comes after Russia in terms of environmentally destructive gas flaring. There have been many attempts at legislation on gas flaring in Nigeria. It is time to take concrete action, and at this time, so that posterity will not adjudge us as wicked (Itsueli 2009).

There appears to be no commonly accepted definition of corporate social responsibility (CSR) as different perceptions of the concept exist depending on the environment to which it is being applied (that is, whether business, political or social environment) (Umukoro, 2009). For the purpose of this study, the researcher adopts the definition by the European Union (EU). The European Union defines CSR as:

...the concept that an enterprise is accountable for its impact on all relevant stakeholders. It is the continuing commitment by business to behave fairly and responsibly and contribute to economic development while improving the quality of life of the work force and their families as well as of the local community and society at large.

From an environmental perspective, CSR is defined as:

...the duty to cover the environmental implications of the company's operations, products and facilities, eliminate waste and envision; maximise the efficiency and productivity of its resources; and minimise practices that might adversely affect the enjoyment of the country's resources by future generations (Piotr Mazurkiewicz).

The question now is how and why corporations (Duruigbo 2008) should incorporate environmental concerns into their business policies. It is not in dispute that environmental protection is in the public interest and of great concern to private individuals as well. Traditionally, government assumes principal responsibility for ensuring a safe environment and when environmental problems arise, the government usually bears responsibility for mitigating the effect. This, no doubt, compounds government's commitments to the governed, especially as some corporations, by the nature of their businesses, generate such environmentally – unfriendly substances for which the government ought not to take responsibility. To this extent, it becomes imperative that corporations be placed under obligations to adopt an environmentally sound behaviour, and this has been attempted through statutory regulations, sanctions and sometimes through incentives (Umukoro, 2009).

In Nigeria, corporations, more often than not, indulge in the promotion of sport, provisions of cars to the public through raffle draws. All these are inextricably tied to profit making and do not represent pure CSR, especially in terms of respect for human rights. It has been generally observed that multinational oil companies rarely voluntarily engage in CSR in terms of providing a clean and habitable environment for communities where they operate (Umukoro, 2009). The provision of scholarships, employment, training and empowerment schemes which some oil and gas companies in Nigeria seldom indulge in still do not completely demonstrate commitment on the part of the oil companies to ward the environment. Furthermore, oil and gas companies have been known in Nigeria to have occasionally absolved themselves from the

desolation of the Niger Delta by claiming to be tenants of the Federal Government (Umukoro, 2009). These companies do not feel a genuine sense of responsibility to the local community as they often claim that they are meeting all their contractual obligations to the Nigerian government. This attitude undermines the relevance of environmental maintenance to economic growth (Boczar, 1994), as well as the fact that the effect of the activities of oil and gas companies are mostly felt in the immediate communities where they operate.

Admittedly, oil companies operating in Nigeria are facing genuine difficult political and economic environments at all levels. This is particularly so as the Nigerian government and successive government leaders have not been responsive to the needs of the local people in whose communities the oil is being exploited. Government leaders have severally misspent and misappropriated the oil wealth without any reasonable investment on education, health and other social investments. The government has seldom played one oil company against the other so as to play down on its responsibility which should arise from the quota or share of the joint venture being operated by multinational companies. The resultant effect of this is hostage-taking, closure of flow-stations, sabotage and incessant armed conflicts in the Niger Delta (Umukoro, 2009).

Notwithstanding, oil companies are not absolved from the share of responsibility for the preservation of the environment where they operate (Bronwen 1999). Various legislation exists in Nigeria which attempt to control the behaviour of multinational companies whose activities are harmful to the environment. Due to lack of political will to enforce these laws and over dependence on oil and oil companies, these enactments have not brought about the desired environmental protection that can guarantee quality air in the Niger Delta.

Corporations, especially multinational oil companies, have become so large and more powerful over the past three decades (Wouters & Chanet, 2008). This shows that host countries, especially developing nations such as Nigeria, which wholly depends on oil, cannot naturally possess the will and means to complement and enforce strict standards

on these companies. It is suggested that considering the fact that environmental degradation and its effects on humans are of global concern (Shinsato, 2005), the international community should create a legal mechanism for claims against environmental harms which are violations of human rights. For example, in *Lopez Ostra v. Spain* (Lee, 2008), the European Court of Human Rights found that Spain had violated Article 8 of the European Convention of Human Rights because the State failed to stop the activities of a waste-treatment plant whose operations caused nuisance and health problems for nearby inhabitants (Umukoro, 2009).

It is further suggested that multinational companies in Nigeria should be placed under an obligation to set for themselves, a set of codes or voluntary guidelines which will impute corporate human rights responsibility into the policies and business ideologies of these companies. These principles will also set a minimum standard for the observance of environmental human rights in their area of operation. While these guidelines may not be binding or self-enforcing, at least NGOs, news media and individuals can on the basis of such rules, mount public shaming campaigns against any company found wanting or not committed to the observance of such guidelines (Umukoro, 2009).

It has also been widely suggested that inhabitants of local communities should have access to information on the nature of activities of oil companies, especially those that pose environmental threats to the public. It has been rightly identified that the right to access information encourages openness (Ikoja & Dick, 2006), enables citizens to participate meaningfully in decisions that directly affect their livelihood and provides the basis for monitoring government and activities of the private sector (Umukoro, 2009).

The dynamic nature of human rights (especially the right to life) demands the continuous evolution of laws, rules and regulations at international, regional and national levels and among non-states to maintain relevance in a rapidly changing world. If a reasonable degree of environmental responsibility must be achieved, especially in terms of gas flaring in Nigeria, the Nigerian government must tighten its

knots against oil and gas companies by coming out with a clear deadline for the flaring of gas in Nigeria. The importance and sanctity of human life demands a complete stoppage, and not the setting of some ambiguous conditions for the continuation of gas flaring (Umukoro, 2009).

2.1.7 Niger Delta and resource control

The history of the Niger Delta is characterised by agitations for resource control. First, after the abolition of slave trade in 1807, local traders engaged in 'resource control' struggles in order to actively participate in oil palm trade (Ako & Okonmah, 2009). Similarly, resource control was one of the highlights of the Ijaws' representation to the Willink Commission to Enquire into Fears of the Minorities and the Means of Allaying Them in 1957. Resource control struggles in the post-crude oil era that began with the botched Boro-led attempt to create the Niger Delta Republic in 1966 culminated in contemporary oil-related restiveness in the region (Ako, 2011). Since Ijaw representatives failed to achieve their desired results to be left out of independent Nigeria, or, alternatively, have a state created,¹⁵ subsequent 'resource control' struggles have suffered a similar fate. However, the Ijaws' argument that the peculiar problems of those living in the creeks and the swamps of the delta were not understood and indeed was deliberately neglected by both the regional and federal governments (Okafor 1974) remains true till date and feeds into the resource control struggle (Ako, 2012).

2.1.8 Niger Delta and conflict management

The military has been deployed in several operations to manage conflicts in the Niger Delta since 1966 (Obasi, 2005). Six major types of military operations have been identified. These are: the military clampdown on Isaac Boro's revolt (February - March 1966); Rivers State Internal Security Task Force of 1993-1998 and Operation HAKURI II of December, 1998; the military Task Force deployed to quell the November Odi uprising; the Operation FLUSHOUT III, 2004; and the JTF operation RESTORE HOPE (from 2003-2011) (Albert, 2012).

¹⁵ See generally, Human Rights Watch, *The Price of Oil: Corporate Responsibility and Human Rights Violations in Nigeria's Oil Producing Communities* (Washington DC: Human Rights Watch Africa, 1999), 92.

- **The military clampdown on Isaac Adaka Boro's revolt (23 February - 06 March 1966)**

On 23 February 1966, Major Isaac Adaka Boro and a gang of 158 youth volunteers tagged the Niger Delta Volunteer Force (NDVF), sought to pull the Niger Delta region out of the Nigerian Federation. Within 12 days, the force overran many communities and disrupted socio-economic activities of the populace, including expatriates working on oil installations. The military responded immediately by deploying a unit of the Nigerian Army to clampdown on the rebels (Karl, 2000).

- **The Rivers State Internal Security Task Force (1993-1998)**

The Rivers State Internal Security (IS) Task Force was set up in May 1993 by the Rivers State Government. This was in response to the violent clashes between cult groups and incessant communal clashes, particularly involving the Ogonis and their neighbours (notably, the Afams, the Okrikas and the Andonis). The inability of the NPF to contain the situation, led to the deployment of the military under the auspices of the Rivers State IS Task Force. The active involvement of this Task Force in the Ogoni crisis rendered it suspect and was, therefore, accused by both local and international communities of high handedness and various human rights abuses such as indiscriminate road blocks, extortion, torture and rape. The force was later withdrawn with little or no success (Albert, 2012).

- **Operation HAKURI II for Ijaw Kaiama Declaration (December 1998 -January 1999)**

On 11 December 1998, the Ijaw Youth Congress (IYC) was formed at a meeting in Kaiama, Bayelsa State (Isaac Olawale Albert, 2012). The meeting, in its communiqué referred to as "Kaiama Declaration", condemned the underdevelopment and environmental degradation of Ijaw land by oil companies. The Declaration attributed the crisis in the Niger Delta to the struggle for the control of oil mineral resources in the region (The Guardian 2007). The Declaration also called for the withdrawal of all oil companies from Ijaw land by 30th December 1998 (Ojo, 2002). The youths declared as follows:

We are tired of gas flaring, oil spills, blowouts and being labeled saboteurs and terrorists. It is a case of preparing the nose for our hanging. We reject this labeling. Hence, we advise all oil companies' staff and contractors to withdraw from Ijaw territories by 30th December 1998.

Following this threat, the Federal Government established a Joint Task Force codenamed Operation HAKURI II to curtail the Kaiama Declaration by the IYC and mandated to protect lives and property, particularly the oil platforms, pipelines and power installations in the Niger Delta (Albert, 2012).

- **The military deployment to quell the November 1999 Odi Uprising**

On 20th November 1991, the Federal Government ordered the military to restore law and order in Odi town, following the killings of some security forces hitherto dispatched to the town for official assignment (Albert 2012).

The operation was supposed to be jointly conducted by the Nigerian Army and the Nigerian Navy troops, but the Navy did not take part due to the operational exigencies of the Port Harcourt naval base. This lapse, arising from a communication gap, could have been averted if there had been appropriate liaison between the two Services. In effect, failure to conduct joint operations, poor contingency plans and entry strategy, poor leadership at the tactical level and ineffective application of information operations were cited to have impacted negatively on Odi operations (INFANTRY, 2011). The collateral damage in Odi sparked off propaganda war against the Nigerian Army and the Federal Government for allegedly razing Odi town and killing thousands of innocent people (Albert, 2012).

- **Operation RESTORE HOPE (2003-2009)**

The history of the Nigerian JTF Operation RESTORE HOPE could be traced to the struggle for socio-economic and political dominance of Warri and its adjoining maritime areas by the three major ethnic groups of Ijaw, Itsekiri and Urhobo. This has been the major cause of the violent conflicts that have taken place in the Niger Delta. These crises has resulted into wanton destruction of lives and property, pipeline vandalism and disruption of oil production in the region, thus forcing

multinational oil companies to either relocate or completely shut down operations (Albert, 2012). The situation in Warri and the general insecurity in the Niger Delta region led to the establishment of the Joint Task Force codenamed Operation RESTORE HOPE on 19 August 2003.

- **Operation FLUSHOUT III (2004-2009)**

Militant and criminal activities in Rivers State were at their lowest in early 2004. However, from May 2004, inter-militant conflicts broke out in Buguma and Okrika during which sophisticated weapons were used. The violence escalated to Port-Harcourt city and its environs, resulting in the killing and maiming of innocent citizens, hostage taking and economic sabotage (Albert, 2012). The high level of insecurity, therefore, warranted the establishment of Operation FLUSHOUT III on 4th September 2004. It was tasked to “checkmate the activities of militant groups and provide an enabling environment for both government and socio-economic activities to thrive in Rivers State”.

The operation started in 2004 with very little riverine and amphibious equipment and only about a battalion of troops, mainly from the Nigerian Army. The contingency plan and entry strategy were ineffective because the forces deployed could not contain the threats, even within Port-Harcourt city (Albert, 2012). For instance, on 31st December 2004, militants attacked two police stations, killing four policemen and thirteen civilians in Port-Harcourt. Hence, the leadership at the strategic level did not assess the threat correctly before deciding on the size of the force for the operation. Thus, the ineffective contingency plan impacted negatively on the professional conduct of the operation (Albert, 2012).

Following a series of requests, the number of troops was gradually increased. By July 2008, the number had increased to about a brigade of all ranks. Thereafter, JTF operations recorded some successes, including dislodging some militant cult groups from their enclaves within Port-Harcourt and its environs. Likewise, the JTF confiscated some arms and ammunitions belonging to the militants. For example, on 17 December 2008, Operation FLUSH OUT III troops raided the Mbiama hideout of

some oil bunkers in Ahoada West Local Government Area of Rivers State¹⁶. The gang escaped into the bush, and abandoned 9 boats loaded with crude oil (Albert, 2012).

Likewise, on 28th December 2008, Operation FLUSHOUT III reported that JTF troops had succeeded in arresting one militant leader, Sogboma Jackrich (alias Egberipapa) in Buguma, Rivers State¹⁷. The militant, who was aligned to another militant leader, Fara Dagogo, was responsible for the series of kidnappings, piracy, armed robberies and attacks on security forces and oil installations. Further probing of the area of operation of the militants, led to the discovery of 3 AK47 rifles, 6 AK47 rifle magazines and some ammunition. The Assistant Director of Public Relations, Lieutenant Colonel Sagir Musa, confirmed the arrest and the handing over of arrested militants to State Security Services for further interrogation. Thus, increase in the strength of troops enhanced professional conduct of JTF operations (Albert, 2012).

- **Operation RESTORE HOPE (2009-2011)**

The merging of the activities and duties of JTF Operation RESTORE HOPE and Operation FLUSHOUT III was, therefore, borne out of the need for coordinated and harmonised efforts to sustain the modest achievements recorded. It was also to stamp out the trend and waves of criminality in the Niger Delta. It was designed to achieve a high level of operational and professional competence through effective coordination, synergy of efforts, judicious utilisation of resources and effective management of information. However, as the new JTF was taking shape, the unprovoked militants' attack on two separate JTF Land Component (JTFLC) patrols on 13 May 2009 and the subsequent rescue operation conducted by JTF on 15 May 2009 changed the entire landscape (Sunday Sun 2009). These incidents nurtured the basis of the Presidential unconditional amnesty granted to militants in the Niger Delta (Albert, 2012).

¹⁶ Interview with the Commander of JTF Operation FLUSHOUT III on 27 December 2008.

¹⁷ Conflict in the Niger Delta, <http://www.facebook.com/home>, accessed on 14 January 2009.

During the amnesty period of 2009, the JTF observed absolute ceasefire as directed by higher Headquarters to enable militants respond positively to the Presidential amnesty offer. To the JTF, the amnesty period was a window for capacity building to upgrade its state of combat efficiency. It was a period for building intelligence data base, appraising plans and deployments. The period also provided an opportunity for acquisition and repair of equipment and platforms as well as acquisition of logistics, distribution and dumping. According to the Commander of the JTF Land Component, Brigadier General Ugwu Chima, "it has done all within its operational capacity to prepare for the post-amnesty challenges". He maintained that the mandate of the JTF is clear and unambiguous; "to stop illegal oil bunkering activities, pipeline vandalism and stamp out sundry crimes being perpetrated by renegade and ex-militants within AOR in all its ramifications" (Albert, 2012).

The Headquarters is located in Yenegoa, Bayelsa State. The mandate of JTF covers only the three core States of the Niger Delta, namely: Delta, Bayelsa and Rivers States. For ease of command and control therefore, the AOR has been divided into three sectors with each covering a state (Albert, 2012).

There is no doubt, the Niger Delta conflict has been researched into by several scholars, each scholar from his or her own perspective. Previously, existing literature on the Niger Delta dwelt so much on environmental degradation and human rights violations but many contemporary 21st century scholars have researched the problem from the perspective of scarcity and violence (see Ikelegbe, 2005; Oyerinde, 2001; Ojaborotu & Okeke, 2006), others have written on the role of MNOCs in the environmental degradation of the Niger Delta (Frynas, 2001; Aworawo, 1999), while others have examined the proliferation of arms and social movements in the area (Obi, 2004; Jike, 2004). Very few studies have examined the existing legal loopholes that have contributed to the crisis in the Niger Delta.

However, no known single study has interrogated the interface between energy crisis and loopholes in Nigerian constitutional framework as root causes of the crisis in the

Niger Delta. The statement of the problem as shown in chapter one above, had identified environmental degradation through unsustainable oil exploitation by MNOCs, existing legal loopholes in Nigerian legal system, energy crisis and non-utilization of Nigerian renewable energy resources as contributory causes or prolongation factors of Niger Delta environmental violence. Undoubtedly, there are no known single systematic studies undertaken where these issues are interrogated with a view to arriving at findings that can achieve combined impact on mitigating the Niger Delta crisis. This study attempts to fill this existing gap in the Niger Delta intellectual discourse towards resolving the endemic Niger Delta environmental crisis.

This is the main thrust of this study. The investigation at stake is whether culling the exiting lacunae in Nigeria's legal system which is contributory to the Niger Delta crisis, developing Nigeria's renewable energy resources and implementing an effective renewable energy policy, regulatory and legal frameworks could mitigate the Niger Delta Environmental violence? The researcher posits that given a people oriented constitutional changes in favour of resource control and fiscal federalism, effective implementation of renewable energy policy and legal regimes in Nigeria shall to a very large extent mitigate the Niger Delta environmental violence.

This is the gap this study seeks to fill.

The critical need for this study is underpinned by the global concern for mitigation of climate change and green house effects through a paradigm shift from fossil fuel-driven economy to a global green economy, where emphasis is no longer placed on unsustainable extraction and use of oil and gas but on environmentally friendly energy mix that makes for sustainable development and environmental justice. Thus this study seeks to provide an intellectual contribution that may challenge the Nigerian authorities, MNOCs and the international community to look towards adopting a workable domestic legal framework and utilization of Nigeria's abundant renewable energy resources as more effective mechanisms in achieving sustainable environmental peace and justice in the Niger Delta and greener energy driven economy in Nigeria.

This is targeted at providing better environmental violence mitigating and peace building options in the Niger Delta.

The findings from this study as laid out in chapters three and four of this thesis and the recommendations in the seventh chapter constitute new contributions this study is adding to knowledge in Niger Delta research.

2.2 THEORETICAL FRAMEWORK

2.2.1 Conceptualization of interdisciplinary theories of this study

This is an interdisciplinary study that interrogates multidisciplinary issues in law, environmental conflict and energy studies and as a result attracts an inter-play of theories. Although this study focuses on environmental violence in the Niger Delta, however, energy and legal solutions are considered as curative measures to this complex environmental conflict. Interdisciplinary research issues in this study are interwoven and, therefore, cannot be studied in isolation. Consequently, the researcher considered theories of conflict, environmental conflict theories as well as legal theories. After due consideration the researcher found Rational actor approach and the causal relations approach (model) more applicable to this study and accordingly adopted them. Reasons for these choices shall be stated in the course of examining the considered theories one after another.

2.2.2 Theories of causes of conflict

Due to the multidisciplinary nature of conflict research, scholars are divided on the nature, causes and impact of conflict. It is not surprising that the resulting variety of approaches has led to the proliferation of theories (see Sandole, 1992: 9-10 & Faleti, 2006:20). Structural conflict theory, for example, argues that conflict arises from the ways societies are built, organised and structured. It argues that factors such as exploitation, political and economic marginalisation, injustice and poverty are the sources of conflict (see Galtung, 1990; Ross, 1993; Scarborough, 1998; Faleti, 2006).

a. Innate Theory

Another set of conflict theories – generally referred to as innate theory – considers that conflict is inherent in human beings and can be explained from the hormonal composition of man. Whenever man is challenged or provoked, he or she becomes aggressive and this could degenerate into violence if not checked. Theologians and religionists also generally believe that there is an inner flaw in mankind known as sin which is responsible for bitterness, hatred, violence and conflicts. Similarly, the Frustration-Aggression theory, developed by John Dollard in 1939, is also one of the variants of innate theories. It relies on the use of psychological theories of motivation and behaviour, as well as frustration and aggression (see Berkowitz, 1962; Yates, 1962; Anifowose, 1982).

b. Social Learning Theory

Social learning theory, on the other hand, is based on the hypothesis that aggression is not innate or instinctual but actually learned through the process of socialisation. One acquires aggressive attributes by learning them at home, in school, and by interaction with the environment in general. Interaction in society helps to focus and trigger stored aggression onto enemies. This is an important concept, particularly when the conflict is ethno-national or sectarian in nature. Socialisation into a violent environment like the Niger Delta, for example, has detrimental effects on childhood development. This is the precursor to aggressive and anti-social behaviour in teens and early adult years. This aggression can escalate if unchecked or encouraged (Cunningham, 1998).

c. Social Identity Theory (SIT)

The Social Identity Theory (SIT) is based on the assumption that people create social identities for the purpose of simplification of external relations, and there is a human need for positive self-esteem and self-worth, which one transfers to respective groups. Furthermore, one also orders the environment by social comparison between groups. The concept of *ingroups* and *outgroups*, *them and us*, is important in this analysis. Conflict theory helps one at least, to recognise that individuals are different in groups and that it is this difference that produces recognisable forms of group action. In other words, Social Identity Theory outlines a process, which places an individual in a group and at

the same time, places the group in the individual (Cairns 1994). Social Identity Theory is very relevant for the analysis of ethnic, religious and diverse kinds of group conflicts.

d. Human Needs Theory

Another theory of conflict worth mentioning is the Human Needs Theory, which argues that all humans have basic needs they seek to fulfill, and that the denial of these needs by other persons or groups could affect them immediately or later, thereby, leading to conflict. Scholars have identified needs such as physiological, safety, belongingness and love, esteem and self-actualisation. It is believed that the deprivation of these needs could cause conflict (see Rosati *et al.*, 1990; Maslow, 1970; Burton, 1979).

e. The Enemy System Theory

The Enemy System Theory, which is also one of the numerous conflict theories, was developed in the late 1980s by a group of psychiatrists and international relations practitioners (former members of the American National Security Council and the U.S. State Department), as a model to explain the intractable conflicts and complexities of group behaviour. Its key hypothesis is that humans have a deep-rooted psychological need to dichotomize and establish *enemies* and *allies*. This phenomenon happens on individual and group levels and is an unconscious need, which feeds conscious relationships, especially in group lives. This theory requires a penetrating examination of how the human mind is reflected in the process of decision-making by a large group. It explores the following phenomenon: the psychological need to have enemies and allies, the intertwining of the individual's sense of self and that of the group's identity with the concepts of ethnicity and nationality; and the ways in which wars, with all their logistical planning, are connected to man's primitive and unconscious impulses. In terms of large-group interaction, most of these processes are involuntary (see Volkan, 1998; Montville, 1990; Cunningham, 1998).

f. Economics of Conflict Theories

Economics of conflict theories provide an economic explanation for the existence and sustenance of conflicts. Economics of conflict or war theorists hold the assumption that though issues in conflict may be packaged as political, racial, ideological or even

religious in nature, at the most basic level; they are usually contests for control over economic resources and assets. It is their contention that some conflict entrepreneurs (both national and international) actually benefit from violence to the detriment of the populace, and the prolongation of conflicts is always the wish of such persons (see Berdal & Malone, 2001; Collier, 2003; Faleti, 2006). In the context of this study, it is worth mentioning that the economics of conflict or war theory offers part of the theoretical explanation for the ongoing phenomenon of ethnic militia in the Niger Delta region of Nigeria. However it in the case of Niger Delta most stake holders are no more interested n it's prolongation because of its damaging effects to both the public sector, private sector and host community' health, means of livelihood and development.

2.2.3 Environmental conflict theories

Environmental conflict

It is important to explain the concept of environmental conflict before delving into its theories. Environmental conflicts have emerged as key issues challenging local, regional, national and global security. Environmental crisis and problems throughout the world are widespread and increasing rapidly (Urmilla & Bronkhorst, n.d). Causes of environmental conflicts vary across the globe and their manifestations differ considerably. Causes can range from control over vital environmental resources such as fossil fuels to contestations over natural resources at the community and/or household level (Urmilla & Bronkhorst, n.d).

Environmental conflicts are caused by environmental scarcity of a resource (that is, caused by a human-made disturbance of its normal regeneration rate). Environmental scarcity can result from the overuse of renewable resources¹⁸ or from overstraining of the sink capacity of the eco-system, that is, pollution. Both can reach the stage of destruction of the space of living (Libiszewski, 2004). Conflicts caused by physical,

¹⁸ Overuse is defined by the consumption rate being higher than the replenishment rate, or to formulate it in economic terms, a use rate depleting the resource's 'capital stock'. As non-renewable resources consist only in a capital stock, the term 'overuse' makes sense only when related to renewable ones.

geopolitical or socio-economic resource scarcity are not environmental conflicts but traditional conflicts of resource distribution.¹⁹

This definition has two crucial implications as follows: First, it excludes non-renewable resources from specific interests. These resources can only be physically, geopolitically or economically scarce; second, in the case of renewable resources, the definition forces to a differentiation. Since their scarcity can also have a physical, geopolitical or economic origin, the emphasis is not primarily on the characteristic to be renewable. The emphasis is on the specific context of an environmental degradation in which renewable resources become environmentally scarce and relevant for a conflict (Libiszewski, 2004).

Several authors (Castro & Nielson, 2003; Yasmi *et al.*, 2006) argue that conflict emerges when stakeholders have irreconcilable differences or incompatible interests, values, power, perceptions and goals. Furthermore, if unresolved or not managed, conflicts are likely to escalate and intensify.

Some examples of expressions of conflicts are threats, beating, appropriation, insurgency, skirmishes and interstate wars (Reuveny, 2007). Competition for finite environmental resources, divergent attitudes and beliefs as well as institutional factors triggers and exacerbates such environmental conflicts (Hellström, 2001). The issue of scarcity, whether perceived or actual, is a crucial component of understanding environmental conflicts. Broadly, scarcity conflicts characterise most environmental contestations and disputes addressed in this issue (Urmilla & Bronkhorst, n.d).

Environmental conflict theories

Different theories of environmental conflict were examined but not all of them were considered appropriate for this study. Two causal models are discussed here.

¹⁹ In a similar way, distinguishing (traditional) “struggles over access to and control over resources” from (new) conflicts “over the rapid deterioration of their quality”, argue Renner/Pianta/Franchi: “International Conflict and Environmental Degradation ...” p.109. But the distinction between different dimensions of scarcity seems to be more precise. Since environmental conflicts often take the form of “struggles over access and control over resources” even though or just because the problem lies in “the deterioration of their quality”.

Rational Actor Approach: In the view of David Dessler, the rational actor approach asserts that scarcity of the environment scarcity has a high potentiality of influencing an individual, a group or an organisation, which he calls DMUs (Decision Making Units); units which reciprocally produce certain social effects such as migrating for example, attacking another group to obtain more resources or even outright changing the consumption behaviour and patterns of resources.²⁰ Dessler (1994) asserts further factors of the environment are capable of affecting whether differently or together, all of the foregoing components, either.

In line with the position of Dessler (1994), Homer-Dixon (1995) also asserts that scarcity of the environment is obviously capable of influencing the aforementioned as well as the salience of perceived options or obstacles (Homer-Dixon, 1995).

After due considerations of this model and applying same to the environmental conflict in the Niger Delta, the researcher found this model unsuitable. This is because in the case of the Niger Delta, the people who suffer environmental scarcity and consequently violence, are the poor, marginalised people and not the Decision Making Unit, which could be the Local, State or Federal Governments. These authorities and elites in the society rather feed fat from oil exploration in the Delta, and therefore, can neither migrate, change their resource consumption behaviour, nor attack any other group to obtain additional resources.

The Causal Relations Model: This second approach to the analysis of the environment focuses on connect and nexus between cause and effect. According to Homer-Dixon, multicausality, necessity, proximity, strength, interactivity, non-linearity and erogeneity are some of the variables that can differently or in combination, characterize causal relationship (Homer-Dixon, 1995).

²⁰ Dessler disaggregates the DMU and its environment in four components, each of which influences the ultimate choice that the DMU makes. First, the DMU confronts an "opportunity structure", which is an external and objective set of constraints and pressure that determines its set of feasible actions. Second, the DMU's cognitive process and circumstantial factors in the DMU's environment will influence the perceptual silence of opportunities and obstacles in its environment. Third, the DMU has certain relevant beliefs about the causal consequences of its various possible actions. And fourth, the impression the DMU has regarding the various outcomes. That its beliefs will arise from its action.

2.3 LEGAL THEORIES

Considering the legal perspective of this study, the researcher believes that it is necessary to consider relevant legal theories to situate the violent conflict in the Niger Delta. In the search for an applicable legal theoretical framework, different theories were considered but were not appropriate legal theories or jurisprudence that could address the Niger Delta question.

Two legal theories were considered; positive and natural law theories. Only the relevant aspects of these theories are discussed in this study considering the nature of the research.

- **Positive theory/legal positivism**

Several meanings have been attributed to the term legal positivism (Hart, 1958; Jori, 1992). However, the term raises difficult questions such as: How do we know? What is reality? What is God?

In order to respond to these questions, Philosophers of the first 2000 years of the existence of legal positivism theory depended on rational speculations, traditions, myths and authority (such as religious systems or authority figures) (Kroeza, 2004). The primary concern of positivism was to respond to the question “how do we know?” This was the period referred to as epistemological concern, when science became a guarantee for a better life for all. As a social science theory, positivism was first set out by August Comte between 1798 and 1857 in his *Cour de Philosophie positive* (Kroeza, 2004).

The attempt to make social sciences more scientific provided the impetus for legal positivism. It is a rejection of metaphysics. The point of departure for positivism from science is that science is based on empirical facts which laws of nature can be deduced from and these laws provide the basis for accurate predictions. The clear meaning of positivism has not been agreed upon, however, Hartz (1958) reduced it into five aspects as follows:

- i) The view that laws are commands;

- ii) The idea that there is no necessary connection between law and morality;
- iii) A study of legal concepts;
- iv) The view of a legal system as a “close logical system”; and
- v) Non-cognitivism in ethics.

On the other hand, Raz (1979) acknowledged three basic theses or theories of positivism that form the core of what may be understood as legal positivism. These three theses or theories are set out as follows:

- **The epistemological thesis:** This is based on the positivist assertion that knowledge of facts and knowledge of values are acquired in different ways and therefore, the description of the law must be distinguished from the description of the values or morality of a person or a legal system. The neutral (or value-free) description of law is thus not only possible but necessary. This is the basis for the distinction between law and morality. This thesis is also referred to as the “separatists thesis (Sebok, 1995) or the semantic thesis (Raz, 1979)”.
- **The social thesis:** This thesis holds that what law is and is not depends not on metaphysical, but on social facts: example – decision-making process for the creation of commands or rules that are enforced and followed. This idea of the contingency of laws is the basis for the denial of ‘absolute’ or ‘natural’ rights and institutions found in natural law thinking (Raz, 1979). This is also sometimes referred to as the source thesis (Sebok, 1995).
- **The command thesis:** This thesis is based on the premises that are essentially a command by sovereign to those who are in a habit of obedience. This is linked to the social thesis, so that the power to command is to that which is socially and empirically desirable.

The crisis in the Niger Delta is not to be situated within the purview of positivism. As a matter of fact, the Nigerian state and MNOCs base their actions or inactions in the Niger Delta on the written law but sometimes fail/refuse to comply with the provisions of the law where it does not favour them.

- **Natural law theories**

Natural law, which dates back to the pre-medieval era, has undergone several metamorphoses in terms of definitions and meanings attributed to it by successive philosophers or theorists. The Sophists, Plato and Aristotle, in succession, were the early natural law theorists who propounded and interpreted natural law from their different perspectives. Aristotle, in amplifying Plato's version of natural law, modified some important aspects. As a botanist and not a mathematician, Aristotle preferred, instead, to locate the objective foundation of justice in the observation and study of biological growth (Thomson, 1975).

Aristotle further maintained that the unique function of human beings which sets them apart from other living beings is to live a rational life of complete virtue over the course of a complete life time. He believed that the determination of just solutions to human affairs, however, the form of reason in the issue is not that involved in science or mathematics, but what he calls prudence or practical wisdom (phronesis).

The medieval era witnessed natural law thinking, influenced by Augustine's philosophical thinking and writing. His book, "The city of God" was written to defend Christians against the charge that it was responsible for the fall of Rome. Augustine maintained that every human being is a citizen of two countries, the country of birth and the Kingdom of the city of God, which is represented by the church. This idea of dual citizenship has great impact on natural law.

Aquinas (1225 - 1274) introduced a synthesis between Christian faith (theology) and reason (Aristotelian natural science and ethics). He maintained that human reason 'participated' in Divine Reason or the Eternal Law in an imperfect manner. The first principle is that good is to be done and purposed while evil is to be avoided. According to Aquinas, natural law is not a set of rules (like the Decalogue) but a guide to, or method of reasoning about practical affairs.

In addition to the Natural and Eternal Law, Aquinas identified two additional aspects of law – Divine Law and Laws revealed by God in the Holy Scriptures, and positive or human law.

Aquinas illustrated the relationship between Natural Law and Human Law, with the example of ownership. He maintained that Natural Law prescribes the possession of all things in common, but Human Law recognises private property and individual ownership. Human Law has not changed Natural Law but only added further details to it for the benefit of human life.

In his influential book entitled “the Leviathan”, Hobbes takes up the challenge of proving man as equal to God in his ability to create and maintain order in a world otherwise devoid of meaning. Hobbes describes the state of nature as a state of “war of all against all” and the life of human beings in that state as solitary, poor, nasty, brutish and short. The state of nature is completely devoid of justice, and the categories of right and wrong do not apply, as there is no sovereign power to impose a law which would define them. There is for the same reason, no property or ownership. Distribution is regulated by the principle that every man who wishes can get what he or she wants so long as he or she can keep it.

Hobbes identified three steps of natural law as follows: a law of nature (*Lex naturalis*), is a precept or general rule, found out by reason, by which a man is forbidden to do that, which is destructive of his life. He further deduced the following – the first duty of law is to seek peace, when necessary, to defend yourself by all the means you can; the second law of nature is to enter a social contract in order to mutually restrict the power of each person. Caveats should be obeyed; gifts should be received with gratitude, nobody should engage in hate speech, that no person should be referred to arbitration; and that no person should serve as his or her own judge. His understanding of natural law is opposed to anything that can pose a disturbance to the state of nature. It also forbids drunkenness.

- **John Locke's natural law theory**

John Locke disagreed with the absolute powers which Hobbes ascribed to sovereign authority. Therefore, to counter Hobbes' view, he tried to re-interpret natural law in his famous and most influential political work entitled "Two Treatise of Government" (Locke 1690). He combined natural law with the new theory of subjective right developed by Grotius and others.

The product of this combination is inalienable or natural rights. It was in form, as a theory of rights, that modern natural law found its most influential and enduring formulation (Roederer & Moellendorf, 2004). Locke maintains that natural law makes provision for persons to enjoy natural or pre-political rights to life, liberty and prosperity. These rights are not dependent on a sovereign law-giver as but are an intrinsic part of human existence as such. However, because there is no central authority in the state of nature, every person has the right and power to execute the law of nature by punishing offenders and exacting reparation. This also means that the legislative power of parliament is limited by the law of nature, which does not terminate with the creation of civil society, but is on the contrary, made more secured to the establishment of a central enforcement agency.

Locke's re-instatement of natural law provides the citizens of the state with the ability to assert the inviolability of their natural rights against the positive law of the state. These rights belong to the isolated, pre-political individuals and serve only to protect and further private interests. Natural law no longer contains any objective limits on the private pursuit of property and other interests, except may be, the similar natural rights of others.

John Locke's conception of natural rights eventually led to the modern conception of fully justifiable constitutional rights (both the American and French revolution derived from the impact of John Locke's natural rights). The first and second paragraphs of the American Declaration of Independence (1776) set out the "Law of Nature" and the "Self - Evident Truths" which justify the American rejection of English rule.

These natural law truths were distilled directly from John Locke's work and included:

that all men are created equal, that they are endowed by their creator with certain inalienable rights, that to secure these rights, governments are instituted, and that whenever a government becomes destructive of these, and it is the right of the people to alter or abolish it and institute a new government (American Declaration of Independence 1776) see (Roux 2004).

Also, the free revolution was founded upon the natural truths as outlined by John Locke. The French revolutionaries issued a Declaration of the Rights of Man and the Citizen (1789) (see also Roux 2004) wherein, it highlighted the radical impact which the modern natural law doctrine has in the dying years of the old feudal order. The declaration starts with the bold assertion that ignorance, forgetfulness or contempt for the rights of man are the sole causes of public misfortune and government depravity, and, therefore, that the French people have resolved to expound in a solemn declaration, the natural, inalienable and severed rights of man.

The French declaration impacted heavily on the internalisation of human rights during the 20th century. It has been said that those that drafted the Universal Declaration of Human Rights (adopted by the United Nations in 1948), followed the model of the French Declaration. It is also worth mentioning that the African Commission on Human and People's Rights was also conceived after John Locke's natural law principles.

It is evident from the foregoing that John Locke's theory of Natural Law fits into the environmental conflict in the Niger Delta. It is therefore adopted in this study in order to analyse the legal perspective of this thesis, particularly, as it affects inalienable rights of Niger Delta people to their natural resources, economic rights, property rights, environmental rights, right to life, freedom of expression, and right to self defence.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

In any research endeavour, it is necessary to apply all the methods that facilitate systematic investigation and reaching scientific conclusions in the study. This is because each researcher determines models that facilitate the validity and reliability of the research results.

3.2 STUDY AREA

The geographical study area of this study is Nigeria. The Niger Delta Region of Nigeria constituted the research site of this study. Subject areas covered included law, environmental conflict and renewable energy.

Niger Delta is made up of nine (9) states comprising; Abia, Akwa-Ibom, Bayelsa, Cross River, Delta, Edo, Imo, Ondo and Rivers states. However, the study centred its Focus Group Discussions (FGDs) and interviews generally on respondents from the nine (9) states of Niger Delta where over 200 questionnaires were administered in three (3) states – Bayelsa, Rivers and Delta states only. However, 120 data from respondents in Ogoni land, Rivers state were particularly analyzed because of the applicability of Ogoni land environmental crises to this study and the uniformity in character of environmental degradation in all Niger Delta states. The Questionnaire is hereby annexed as 'Appendix A', Interview questions and FGDs questions are hereby annexed as 'Appendix C', and Questions and answers of one (1) of the FGDs has been transcribed and is hereby annexed as 'Appendix F'.

Further reasons for narrowing down the study are as follows: The nine (9) Niger Delta states are geographically very vast and environmentally very difficult terrain with a lot of insecurity situations. A study of this nature would require the deployment of huge

funds and personnel beyond the reach of the researcher. Consequently, the field survey was narrowed down to two (2) states and findings applied to the Nine (9) states.

The criteria for selecting Ogoni land Local Government Areas (LGAs) are as follows:

First, Ogoni land particularly, Khana and Gokana L.G.As have been internationally acclaimed as the most polluted environments in Niger Delta that have generated global attention and condemnation especially with the execution of the Ogoni "9" led by late Ken Saro-Wiwa who were environmental activists that were executed by Nigerian government for reasons associated with protest against environmental pollution of Ogoni land.

In addition to the above stated research setting, Abuja the federal capital territory of Nigeria, was visited to elicit responses from members of the staff of relevant government agencies and parastatals (details are stated below).

3.3 POPULATION OF THE STUDY

The sample population for this study comprised six of the Niger Delta States as well as Abuja (the federal capital territory) these include: Akwa-Ibom, Imo, Cross Rivers, Delta, Bayelsa and Rivers State. The justification for this sample size (203) is due to the high rate in environmental crises, hence they are representatives of the research universe (Niger Delta).

Furthermore, three (3) members of the Niger Delta Community Leaders, three (3) members of the Non-Governmental Organization (NGOs) and three (3) members of the Community Based Organization (CBO) working on environmental human rights, community development, women and youth development formed part of our research population. Other important departments which also formed part of our research population include: Multi-National Oil Companies (MNOCs), Niger Delta Development Commission (NDDC), Ministry of Environment, Energy Commission of Nigeria (ECN), Senate and House Committees on Environment on Niger Delta as well as some professional bodies, such as human right groups and environmental activists.

3.4 SAMPLE SIZE AND METHOD OF SELECTION OF PARTICIPANTS

3.4.1 Sample size

The validity of any research endeavour is rooted in the sample size and sampling technique. This study makes methodological investigations from 203 participants selected for this study. A questionnaire was administered to 203 key informants and four (4) FGDs were held with participants. Over 200 set of questionnaires were administered to respondents in Bayelsa, Delta and Rivers States (in flash point local government areas such as Khana and Gokana L.G.As of Rivers State), sixty-three (63) interviews were held with key informant interviews were conducted with leaders and representatives of MNOCs, relevant government agencies and parastatals, non-governmental organisations and community-based organisations as well as ex-militants.

In this study, a total of twenty (20) participants were involved in four (4) FGDs held at four (4) different times with different number of participants from nine (9) states of Niger Delta. Annexed as 'Appendix F' was one of the transcribed recorded discussion in one of the FGD sessions where nine (9) participants focused on the issue of the relevance of renewable energy, policies and legal framework in mitigation of environmental violence in Niger Delta.

3.4.1.1 Method of selection of the sample size

Two different but complimentary sampling techniques were used as follows:

- i) **Cluster sampling:** This research sampling method was used to divide the study population into smaller communities within Khana and Gokana L.G.A. of the Niger Delta. The population size was divided into thirty-three (33) clusters while seven (7) households made up each cluster. The clusters selected were as follows: B'dere, K'dere, Bodo city, Mogho, Kpor, Gbe, Bomu, Lewe, Bere, Biara, Barako, Nweol, Nwebiara, Deeyor, Deken, Yeghe and Goi communities in Gokana L.G.A while in Khana L.G.A, the communities selected were: Lueku, Nyokuru, Bane, Okwale Berri, Taabaa, Uwarra, Sogho, Wuyaaka, Bagha, Lorre Luebe, Kpaa, Blanu, Kalaoko, Nyo-yem, Bo_ue and Zaakpo communities within the Niger Delta.

ii) **Simple random sampling:** This technique was used to select households within the clusters selected for the study.

Simple random sampling was used in order to enable each of the elements in the population to have an equal opportunity of being included in the sample. The names of the communities and number of households were written on pieces of papers, and selected on the discretion of the interviewer in order to arrive at a systematic result.

Interviews were used to elicit responses from interviewees such as the youth and women leaders as well as opinion leaders in Khana and Gokana L.G.As of Rivers State.

Interviewees in Khana L.G.A and Gokana L.G.A included representatives from the Movement for the Survival of Ogoni People (MOSOP) and the apex socio-cultural group of Ogoni land (KAGOTE).

The researcher also used this technique, particularly in selecting samples from the population to be interviewed on issues relating to oil spillage and gas flaring in the Niger Delta. Experts from MNOCs, NOSDRA, NESREA, UNEP, the Energy Commission of Nigeria (ECN), the Federal Ministry of Environment, NNPC, NDDC, environmental lawyers and human right activists were selected through expert sampling technique.

3.5 RESEARCH PARADIGM

A research paradigm is “the set of common beliefs and agreements shared between scientists about how problems should be understood and addressed” (Kuhn, 1962).

There are three most common research paradigms explained as follows:

1. **Positivism:** The believe that there is a single reality, which can be measured and known, and therefore they are more likely to use quantitative methods to measure and this reality (Patel, 2015).

2. **Constructivism/Interpretativism:** It believe that there is no single reality or truth, and therefore reality needs to be interpreted, and therefore they are more likely to use qualitative methods to get those multiple realities (Patel, 2015).
3. **Pragmatism:** The believe that reality is constantly renegotiated, debated, interpreted, and therefore the best method to use is the one that solves the problem (Patel, 2015).

This research adopted Positivism and Constructivism research paradigms.

This being a social science research, the researcher needed to be objective and detached from the object of the research in order to capture the reality through the use of research instruments like questionnaires. This was aimed at offering explanations leading to control and predictability of the research outcome.

The reason for adopting constructivism/interpretativism paradigm is that in line with Weber (2004), Niger Delta environmental violence research being a social research needed to be historically situated. Being a study that adopted both qualitative and quantitative, this research needed to be interpreted using many variables, and interpretivism provides many variants such as hermeneutics, phenomenology and symbolic interactionism.

3.6 METHOD OF DATA COLLECTION

This study used both qualitative and quantitative research methods. Quantitative research aims at testing a research hypothesis and involves analysis of numerical data. The interest of this research approach was to understand how a particular phenomenon might be generalised to a larger population (Allen, Titwork & Hunt, 2009).

A qualitative research approach has to do with the collection of extensive narrative data (non-numerical data) on many variables over an extended period of time in a naturalistic setting. The rationale for using the two methods is for one method to complement the deficiency of the other.

3.6.1 Primary sources of data collection

The following methods were used to collect data:

- **Questionnaire:** A structured questionnaire is an articulated list of questions purposefully prepared to receive feedback on the questions asked. It captures a large number of people and could be less capital intensive depending on the number of people targeted and their geographical spread. It helps to easily solicit responses from respondents who write down their responses in the comfort of their privacy. Responses are standardised and can be easily compared. It also facilitates easy interpretation of responses and allows the researcher to analyse results quantitatively. Through this method, the researcher is able to cover a large population.

Data for this study were collected through the administration of well structured questionnaire, key information interviews as well as Focus Group Discussions. With regard to the questionnaire, a well-formulated open-ended questionnaire reflecting the aims and purpose of the study was designed and administered to respondents. Respondents who could neither read nor write were assisted by a research assistant in completing the questionnaire while literate respondents were issued with the questionnaire to provide their responses. The completed questionnaires were returned to the researcher or the assistant.

- **Personal interviews:**

Interviews were used to solicit information from the following key informants (opinion leaders): Five (5) Ex-militants, three (3) members of the Niger Delta Community leaders, one (1) interviewee from the office of the Nigeria Renewable Energy Programme, one (1) interviewee from the office of Senate Committee on the Environment, one (1) interviewee from the office of the Nigeria Climate Change Agency (Abuja), one (1) interviewee from the office of the Ministry of Environment (Abuja), one (1) interviewee from the office of the National Environmental Standard and Regulations Enforcement Agencies (NESREA), one (1) interviewee from the office of the National Oil Spill Detection and Response Agency (NOSDRA), and one (1) interviewee from the office of Energy Commission of Nigeria (Abuja). A tape recorder was used to record interviewees who gave their consent for the recording to be done.

Three (3) Representatives each from MOSOP and KAGOTE, three (3) youth and three (3) representatives of women leaders of Khana and Gokana L.G.As were interviewed for information on the topic.

It is worth mentioning here that observations were done simultaneously with the interviews. This contributed in no small measure, in verifying most of the perceptions and experiences gleaned from the interviewees.

Table 3.1: List of key Informants/Interviewees

S/N.	KEY INFORMANTS/INTERVIEWEES	NUMBER
1.	NGOs	3
2.	CBOs	3
3.	Ex-militants	5
4.	Representatives of MOSOP	3
5.	Representatives of KAGOTE	3
6.	Youths	3
7.	Women leaders	3
8.	Members of Niger Delta Community Leaders	3
9.	Nigeria Renewable Energy Programme	1
10.	Senate Committee on the Environment	1
11.	Nigeria Climate Change Agency (Abuja)	1
12.	Ministry of Environment (Abuja)	1
13.	National Environmental Standard and Regulations Enforcement Agencies (NESREA)	1
14.	National Oil Spill Detection and Response Agency (NOSDRA)	1
15.	Energy Commission of Nigeria (Abuja)	1
16.	Interviews on Renewable Energy	30
	TOTAL	63

3.6.2 Secondary sources of data collection

Secondary sources of data complemented information obtained from primary sources (Bhattacharjee, 2012).

In this study, secondary source of data were collected from gazette statutes, development statistics such as World Bank, United Nations, World Resources Institute, etc.

Table 3.2: Research Methodology Mind Map

Paradigm	Methods	Theories	Assumptions/ Hypotheses	Methodologies		
				Population	Sample	Data Collection
Positivism and	Quantitative	1.Causal relations	1. There is a relationship	1. Community leaders.	280 participants	1. Primary sources –

Constructivism/ Interpretativism	and Qualitative	approach (model) of Environmental conflict theories 2. John Locke's natural law theory	between the destruction and depletion of natural resources through oil extraction activities by MNOCs and violent conflict in the Niger Delta which deprived the people of their means of livelihood and inalienable rights. 2. There is a relationship between lack of a people-oriented constitutional or legal framework which confers on the people the right to access their natural resources by the Nigerian state and the crisis in the Niger Delta. 3. There is a likelihood of reduced environmental crisis situation in the Niger Delta if the Nigerian state reduces its total dependence on hydro-carbon based energy by harnessing and tapping into its huge renewable energy resource potentials as well as developing and implementing appropriate renewable energy policies and laws.	2. NGOs. 3. CBOs. 4. Women. 5. Youths. 6. MNOCs 7. Ethnic groups. 8. Ex-militants. 9. Officials of NDDC, Abuja. 10. FME. 11. ECN. 12. Senate Committees on Environment in the Niger Delta. 13. House Committees on Environment in the Niger Delta. 14. Legal professionals. 15. Human Rights and Environmental Activists.	ts	Questionnaire & Interview. 2. Secondary sources – Books, Journals, Report, etc.
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3.7 METHOD OF DATA ANALYSIS

There are different methods of data analyses. The method used to analyse data in this study was determined by the research method adopted. However, in a study of this

nature, where both quantitative and qualitative methods were used, the researcher adopted different methods of data analysis that were considered helpful in identifying emerging themes and patterns from the data collected.

3.7.1 Qualitative data analysis

In qualitative research, the information obtained from participants is not expressed numerically. The emphasis is on the stated experiences of participants and on the stated meanings they attach to themselves, to other people and to the environment.

Cardinal principle of qualitative data analysis

The cardinal principle of qualitative analysis is that causal relationships and theoretical statements clearly emerge from and are grounded in the phenomenon studied. The theory emerges from the data and is not imposed on the data (Patton, 1980; Coolican, 1994).

1. **Evaluation analysis:** Qualitative analysis is often less influenced than quantitative analysis by the biases and theoretical assumptions of the investigator. The researcher used the evaluation method to analyse qualitative data collected.
2. **Content analysis:** The first stage in content analysis is to take a firm decision on what to reject and what to select from enormous materials. It is concerned with who says what? To whom? Why? And to what extent and with what effect? This is used when there are many texts to analyse. This method was used in the study to analyse data obtained from the literature reviewed and the transcribed responses obtained from the research participants.
3. **Mixed method analysis:** This entails adopting a qualitative approach of including numerical qualities and analysing such data using qualitative techniques. For example, while qualitative data from an interview transcript can be analysed qualitatively using content analysis, qualitative data collected during the same process can be analysed quantitatively using measures of central tendency.
4. **Coding techniques:** Coding is a process of classifying and categorising text data segments into concepts of “codes”, which can then be used to uncover patterns in the data (Bhattacharjee, 2012). There are three coding techniques as described by

Strauss and Corbin (1998) as follows: open coding; axial coding; and selective coding.

Open coding is a process aimed at identifying, uncovering and naming concepts that are hidden within textual data which can later be used to explain a social phenomenon (Bhattacharjee, 2012). Axial coding on the other hand, is when categories and sub-categories of data are assembled into causal relationships or hypothesis that tentatively explain the phenomenon of interest. The relationship between categories may be clearly evident on the data or may be more subtle and implicit. In the latter instance, researchers may use a coding scheme (also called coding paradigm). Thirdly, selective coding is used to identify a central category or a core variable and systematically and logically relating to this central category to other categories.

3.7.2 Quantitative data analysis

Numerical data can be analysed using two different methods as follows: descriptive and inferential analysis.

- i. **Descriptive analysis:** Descriptive means statistically describing, aggregating and presenting the constructs of interest or associates between these constructs.
- ii. **Inferential analysis:** This refers to the statistical testing of hypothesis (theory testing).

A quantitative descriptive simple percentage method was used to analyse the data generated during the study. This was done by calculating the percentage values for each responses proportionate to the total responses rate per 100. This is presented in the analysis table and charts in Chapter Four. Analysis of key informant interviews and FGDs were done by direct and factual method. This is because the study involved an ethnographic survey concerned with qualitative data analysis. The data collected were analysed using descriptive statistics such as mean median and mode. In addition, some tables and charts were also used in the presentation of the results of the analysis of the data generated during the field visit.

3.8 ETHICAL CONSIDERATIONS

High profile confidential information was sought from sensitive agencies and government officials. The researcher further interviewed representatives of MNOCs, Senate Committees on Environment, the Niger Delta and Energy. Other agencies such as ECN and ministries were visited. Policy decisions and some sensitive official information were sought by the researcher. The researcher exhibited a high degree of ethical standards.

3.9 CHOICE AND RATIONALE OF RESEARCH DESIGN

The researcher noted the diverse nature of the variables under study and adopted a descriptive design on the basis of convenience and for easy measurement (Baridam, 1990). Also, the technique is uncomplicated, simple and scientific using questionnaires, key informant interviews (KII) and focus group discussions (FGDs).

3.10 RATIONALE FOR THE STUDY

The rationale for this study is to establish a nexus between law, renewable energy, environmental sustainability and peace in the Niger Delta in particular and Nigeria in general. In order to achieve this purpose, the researcher explored an interface between the constitution, environmental laws, renewable energy law and policy in achieving the aims and objectives of this study.

3.11 JUSTIFICATION OF THE STUDY

This topic is valuable to the Nigerian society because it provides new insights into the menace of ethnic militia. Secondly, the study proffers useful suggestions in dealing with the phenomenal rise of violent conflicts in the Niger Delta. Thirdly, the study is important for Africa where resource-driven violence has wrecked havoc, destroyed and ruined the lives of several millions of people. Clearly, a better understanding of the dynamics of this conflict would provide policy makers in Africa (including Nigerian officials), the global international community and organisations with valuable ammunition for crafting interventionist strategies for containing and defusing such

conflicts wherever they occur. Finally, it is a worthy contribution to academic research on the topical issue of ethnic militias not only in the Niger Delta region of Nigeria but also wherever they may occur around the world.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND FINDINGS IN RELATION TO IMPACT OF ENVIRONMENTAL VIOLENCE ON NIGER DELTA

4.1 DATA PRESENTATION AND ANALYSIS

This chapter analyses the data collected from the field. The analyzed data includes the field work from Gokana and Khana L.G.As of Rivers State.

While section A of the KII and questionnaire is concerned with the socio-demographics of respondents, section B, C and D address the main issues in the thesis.

The analysis is done via presentation of charts, tables and graphs as shown below.

In this section, the results of the analysis are presented. It involved the analysis of data obtained through the administration of questionnaire to the respondents and the FGD conducted during the field visits. The section also includes data obtained from secondary sources.

Section A: SOCIO-DEMOGRAPHIC DATA OF RESPONDENTS IN GOKANA and KHANA LGAs OF RIVERS STATE.

Table 4.1: GOKHANA (N=66)

AGE	FREQUENCY	PERCENTAGE
20-29	26	39
30-39	24	36
40-49	7	11
50-59	5	8
60-69	2	3
70-79	2	3
TOTAL	<u>66</u>	<u>100</u>

Table 4.2: KHANA (N=54)

AGE	FREQUENCY	PERCENTAGE
20-29	17	31
30-39	22	41
40-49	5	9

50-59	6	11
60-69	2	4
70-79	2	4
TOTAL	54	100

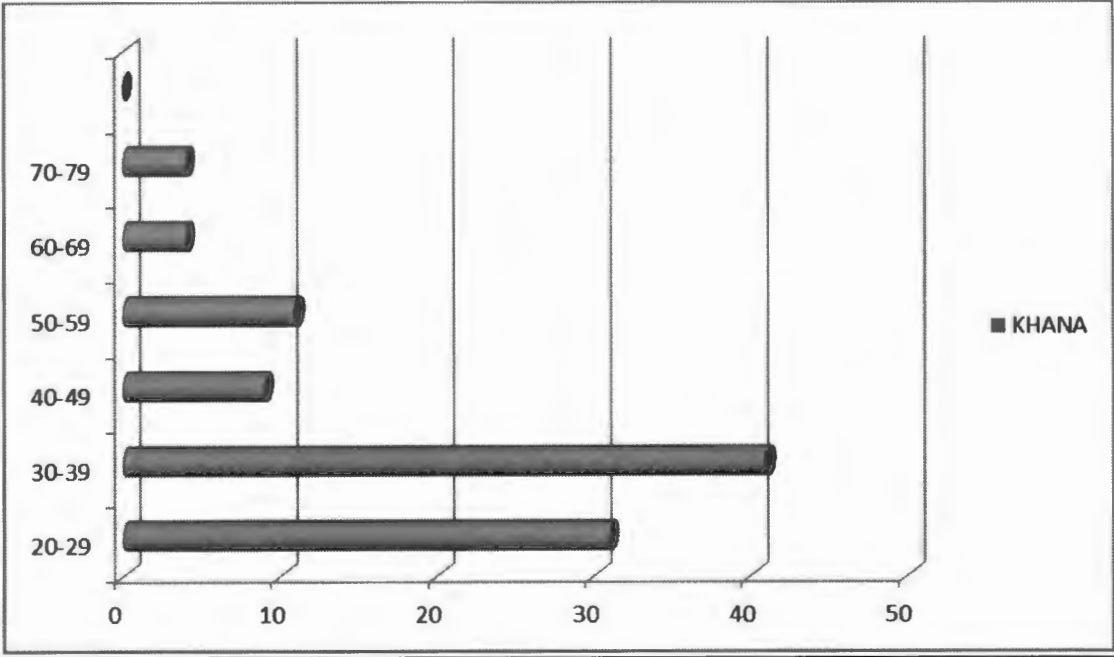
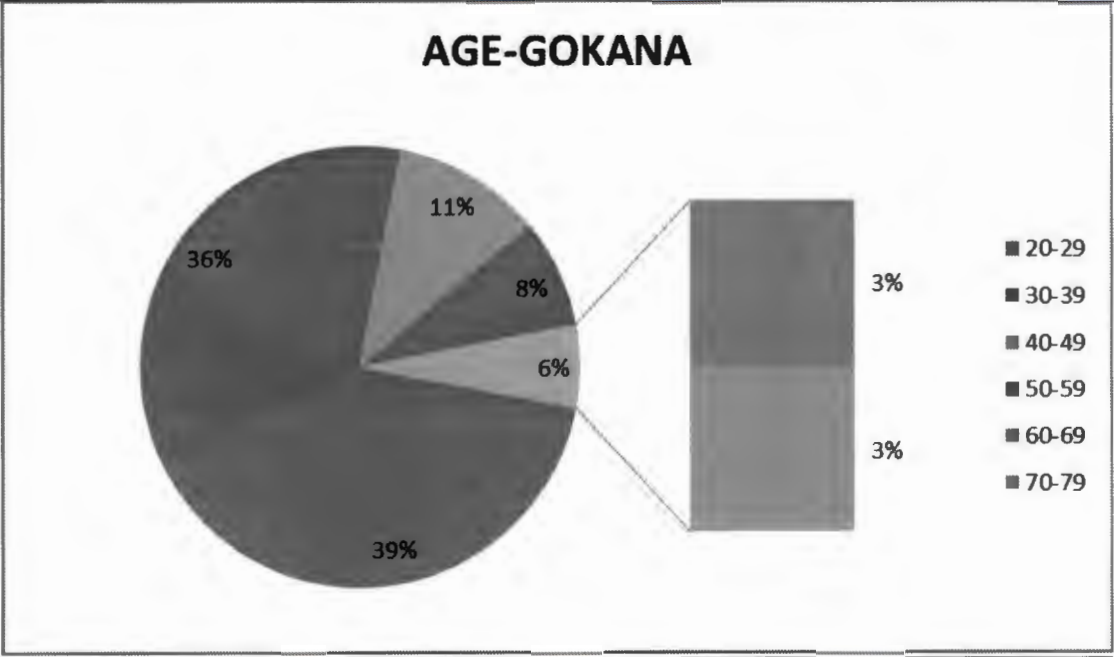


Table 4.3: Gender (N=66)

Gender	FREQUENCY	PERCENTAGE
MALE	47	71 %
FEMALE	19	29%
TOTAL	66	100%

Table 4.4: KHANA (N=54)

SEX	FREQUENCY	PERCENTAGE
MALE	37	69
FEMALE	17	31
TOTAL	54	100

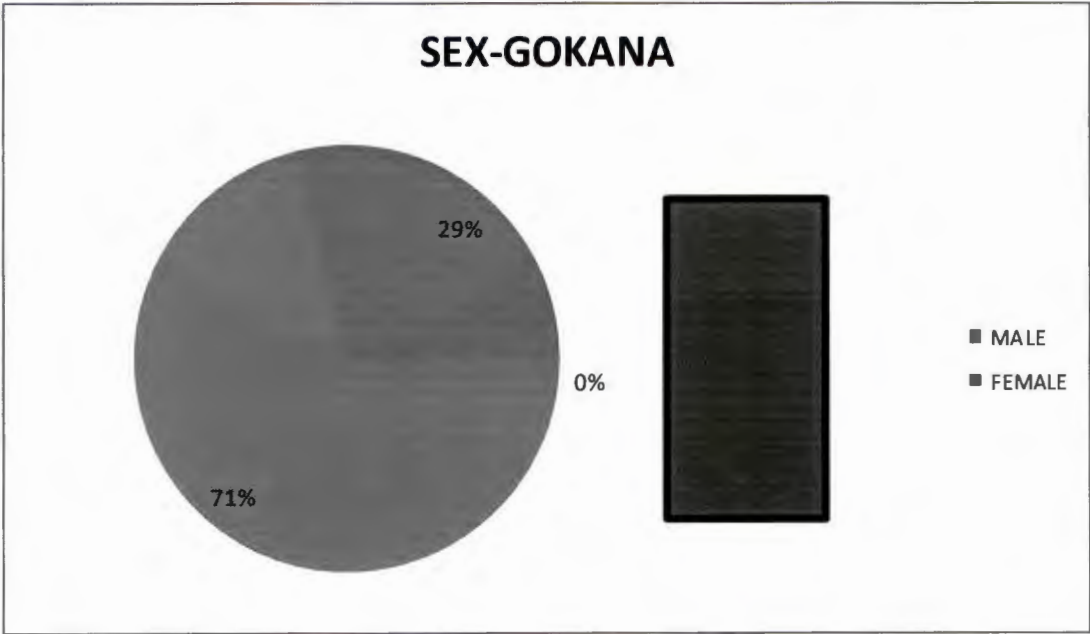


Figure 4.1: KHANA

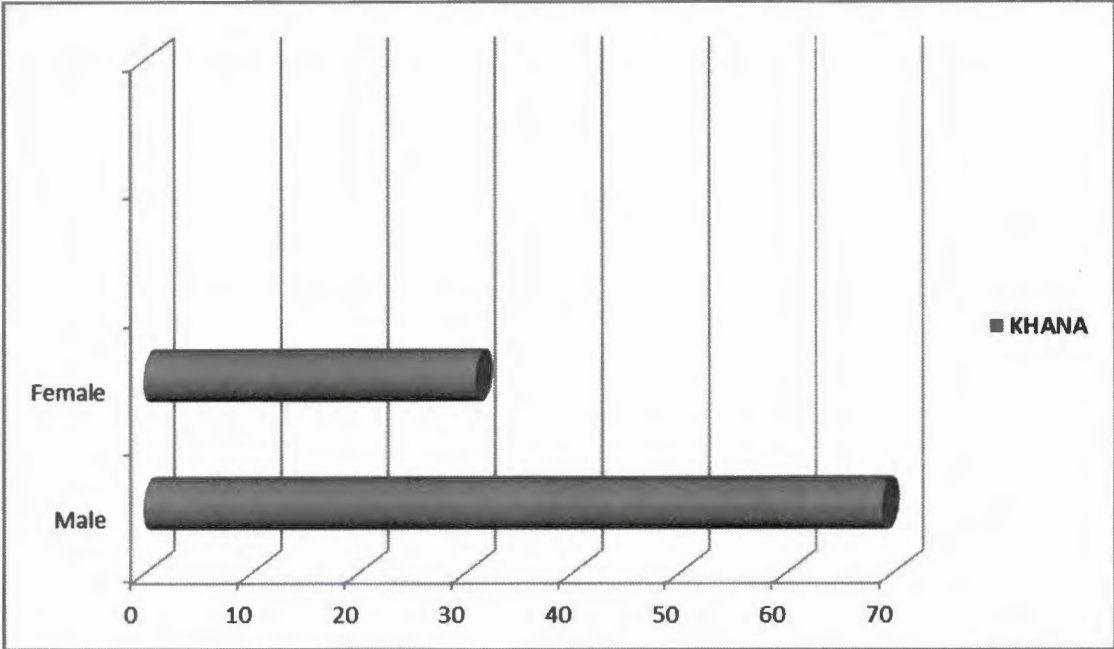


Table 4.5: Level of Education in Gokana

LEVEL OF EDUCATION	FREQUENCY	PERCENTAGE
Non Formal	5	8
Adult Literacy	4	6

Primary School	9	13
Secondary School	21	32
University Education	27	41
TOTAL	66	100

Table 4.6: KHANA

LEVEL OF EDUCATION	FREQUENCY	PERCENTAGE
Non Formal	3	6
Adult Literacy	4	7
Primary School	7	13
Secondary School	23	43
University Education	17	31
TOTAL	54	100

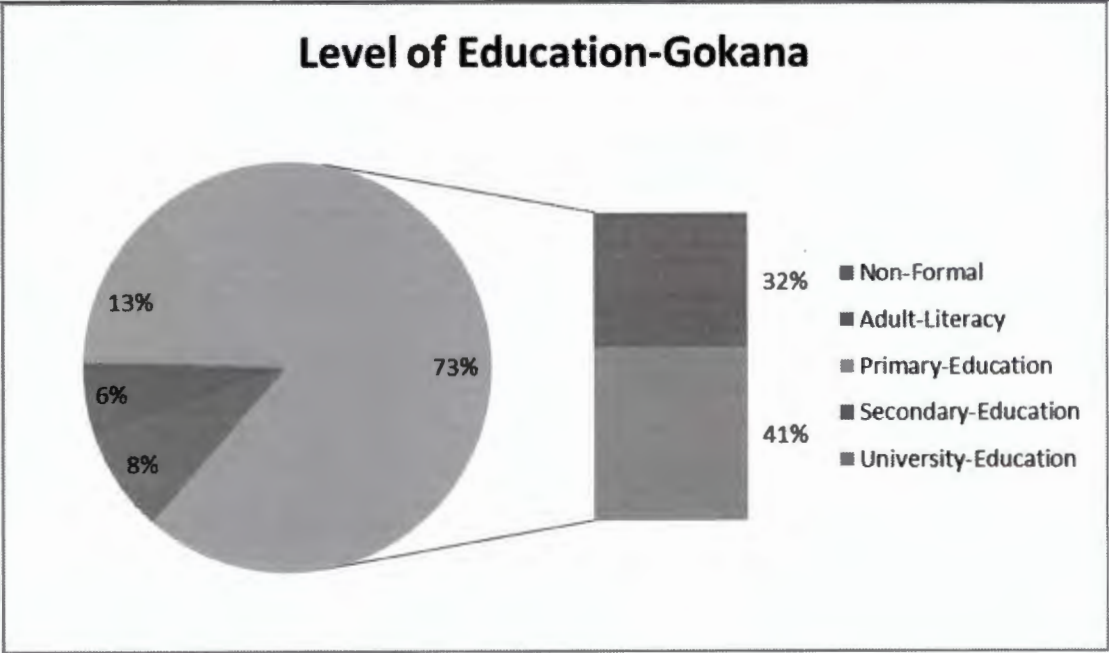


Table 4.7: Employment Status Gokana

Employment Status	Frequency	Percentage
Unemployed	20	30
Public service	8	12
Private sector	3	5
Self employed	35	53
TOTAL	66	100

Table 4.8: KHANA

Employment Status	Frequency	Percentage
Unemployed	25	46
Public service	6	11
Private sector	3	6
Self employed	20	37
TOTAL	54	100

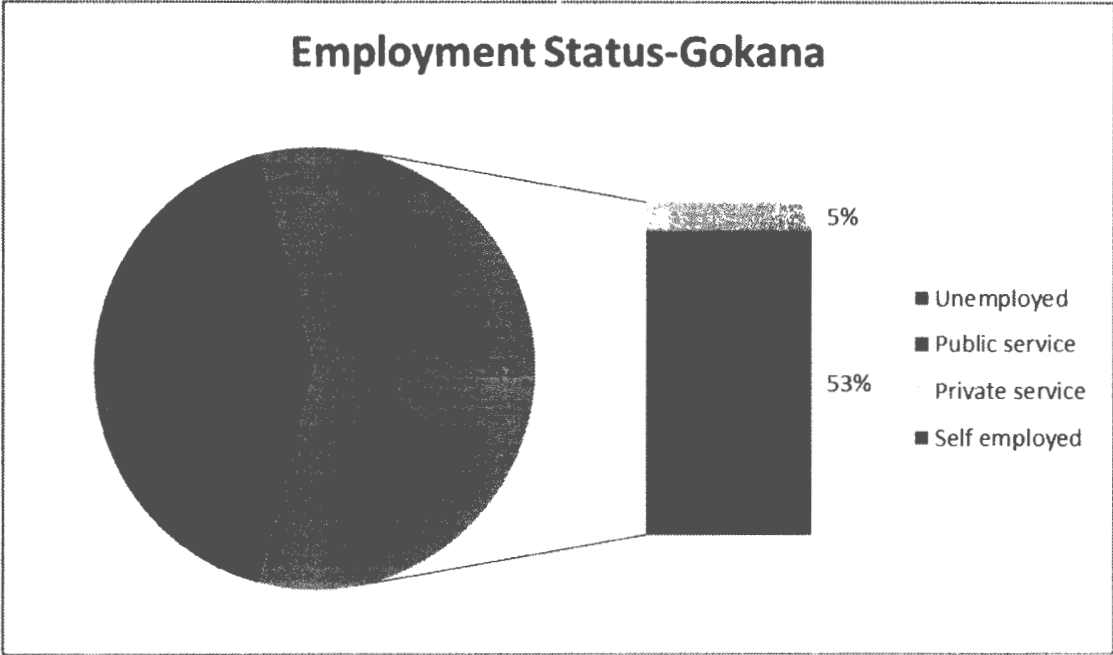


Figure 4.2: KHANA

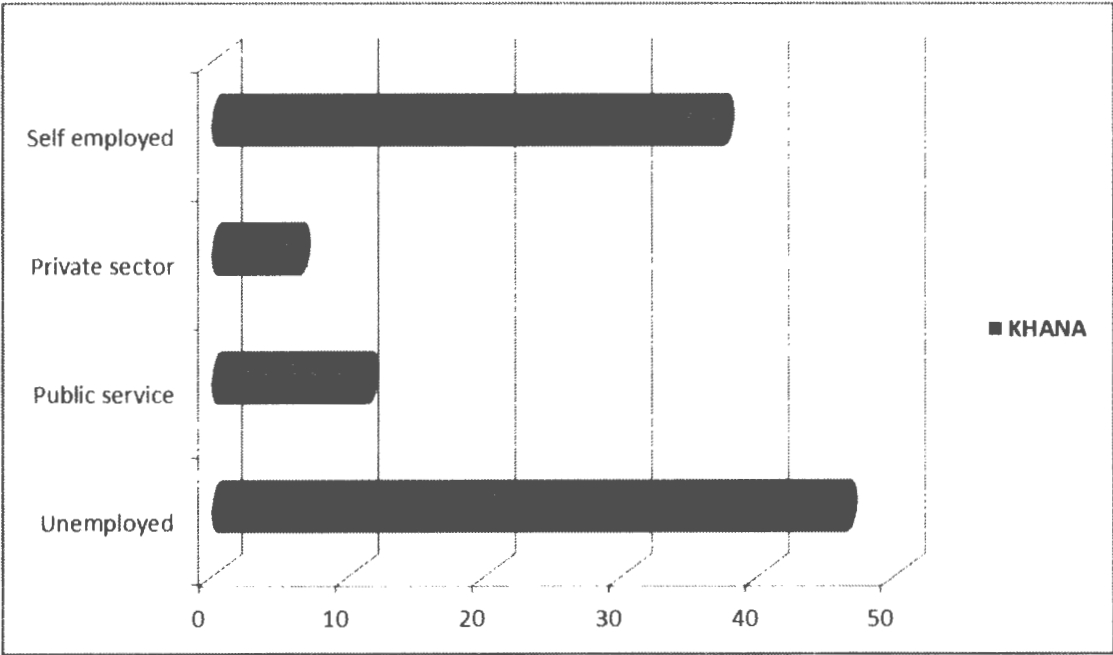


Table 4.9: Occupational/Professional Status-Gokana

Occupational/ Professional Status	Frequency	Percentage
None	5	8
Politician	6	9
Professional	6	9
Student	3	5
Trader/Business	21	32
Artisan/Technician/Craft/Tradesman	14	21
Oil company worker	1	1
Others	10	15

TOTAL	66	100
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Table 4.10: KHANA

Occupational/ Professional Status	Frequency	Percentage
None	3	6
Politician	3	6
Professional	6	11
Student	3	5
Trader/Business	17	31
Artisan/Technician/Craft/Tradesman	9	17
Oil company worker	3	5
Others	10	19
TOTAL	54	100

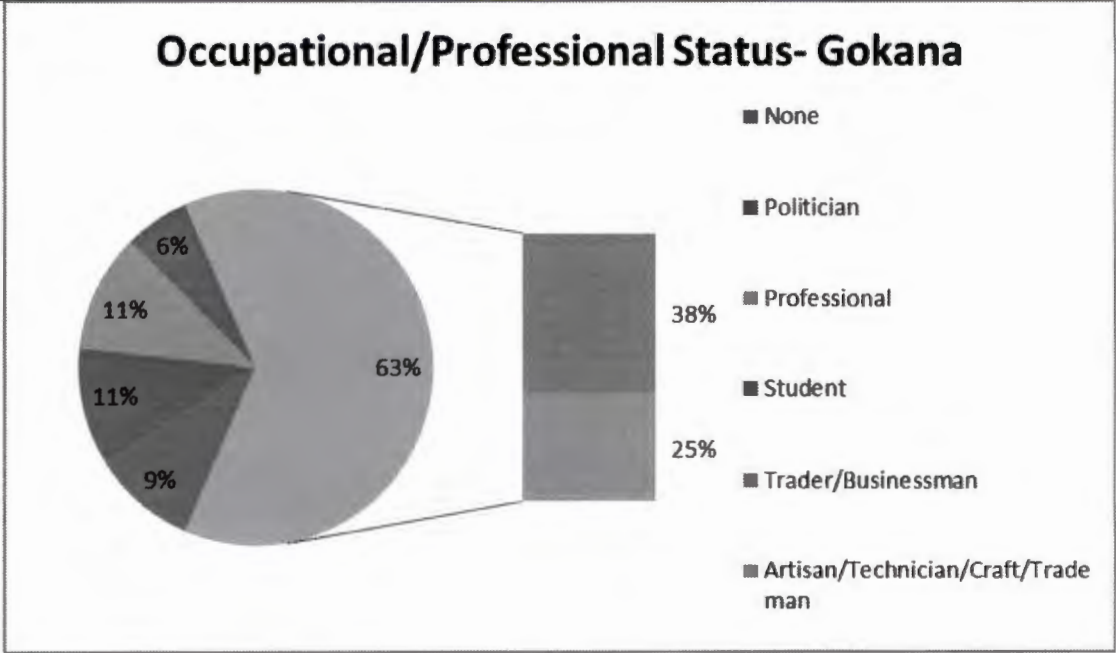


Figure 4.3: KHANA

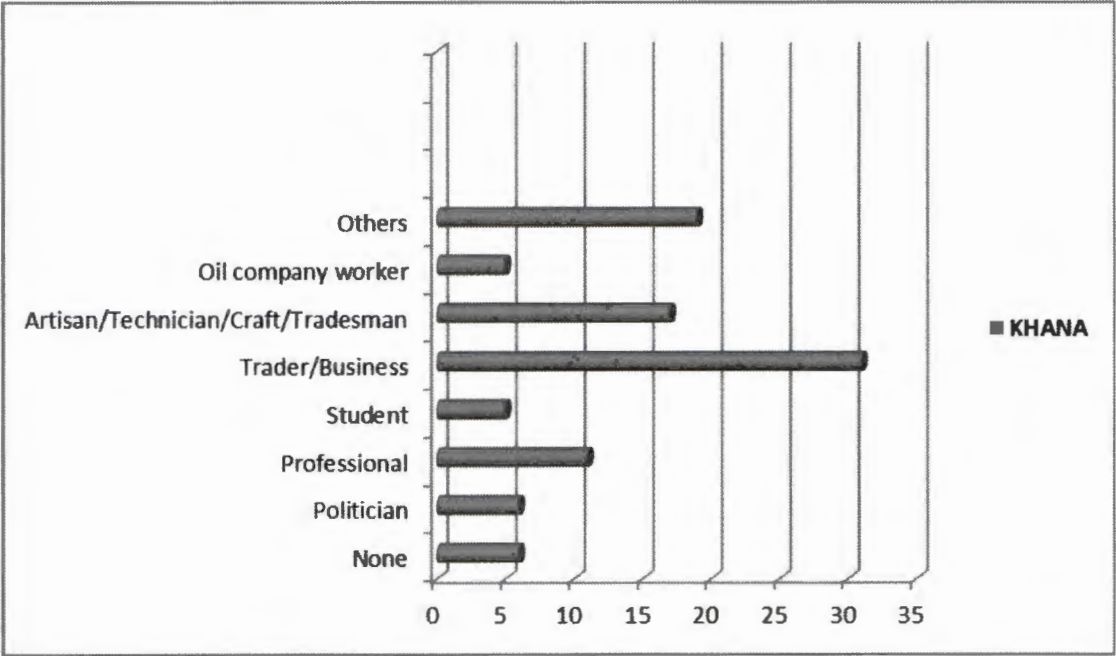


Table 4.11: Group Affiliation-Gokana

Group Affiliation	Frequency	Percentage%
Yes	32	48
No	34	52
Total	66	100

Table 4.12: KHANA

Group Affiliation	Frequency	Percentage%
Yes	20	37
No	34	63
Total	54	100

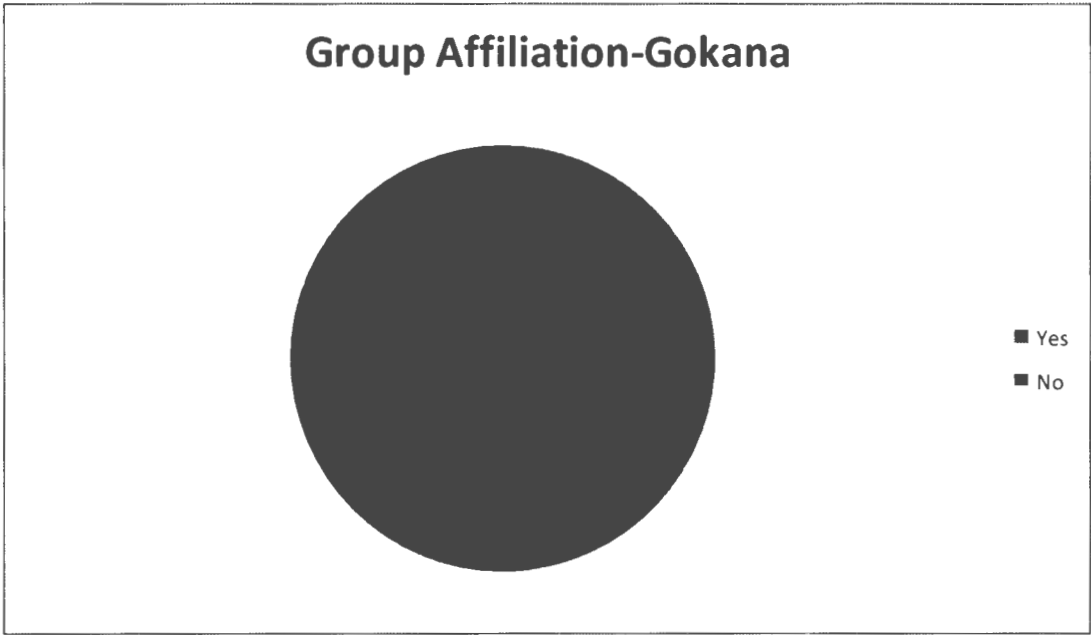


Figure 4.4: KHANA

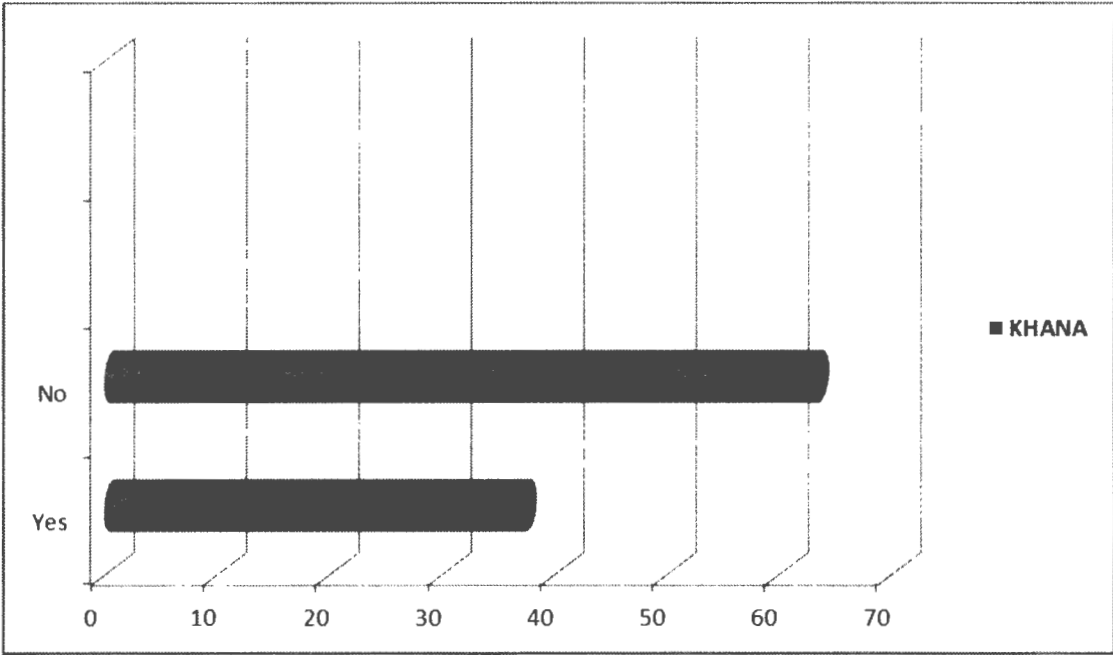
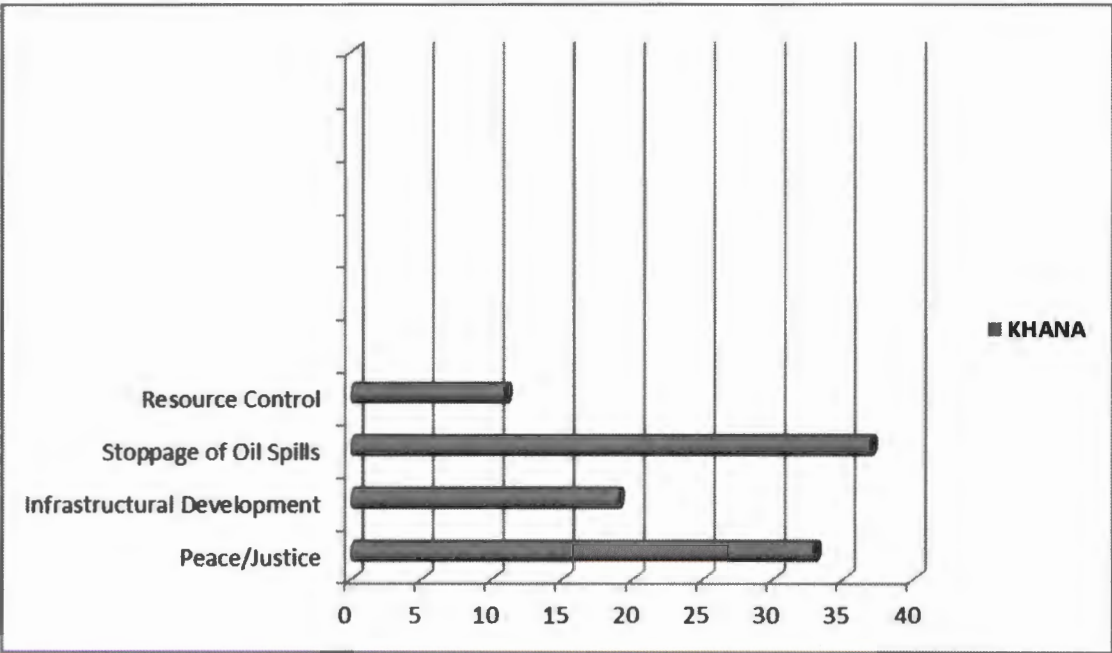
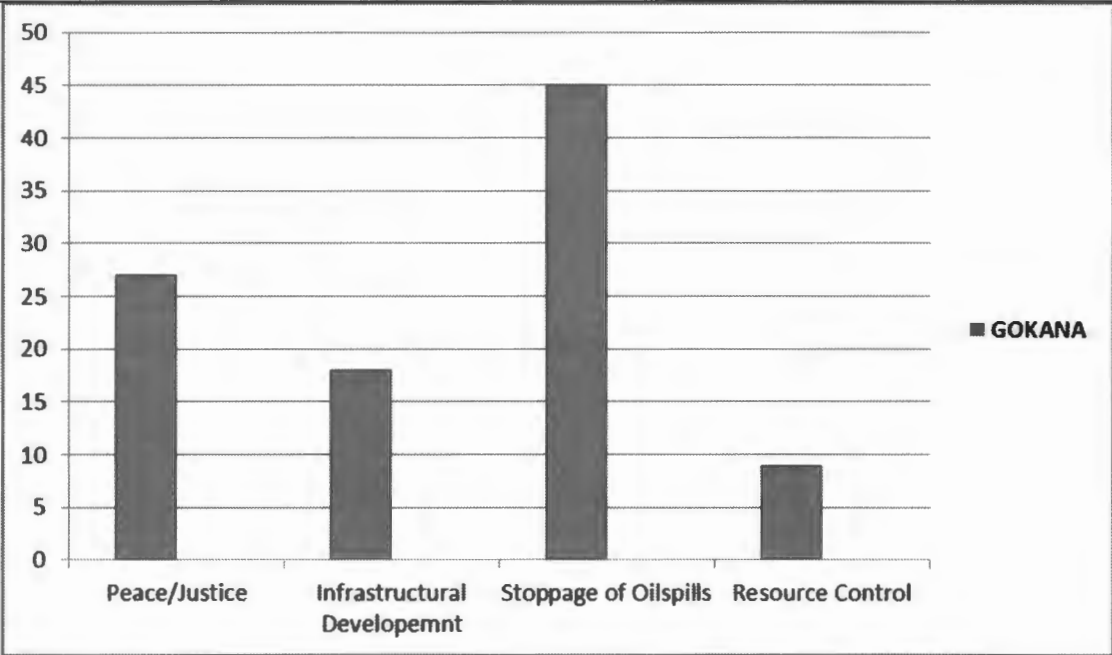


Table 4.13: Major Aims of Group-Gokana

Major aim of Group	Frequency	Percentage%
Peace/Justice	18	27
Infrastructural Development	12	18
Stoppage of Oil Spills	30	45
Resource Control	6	9
Total	66	100

Table 4.14: KHANA

Major aim of Group	Frequency	Percentage%
Peace/Justice	18	33
Infrastructural Development	10	19
Stoppage of Oil Spills	20	37
Resource Control	6	11
Total	54	100



SECTION B: Questions for community, local, environmental and human rights groups

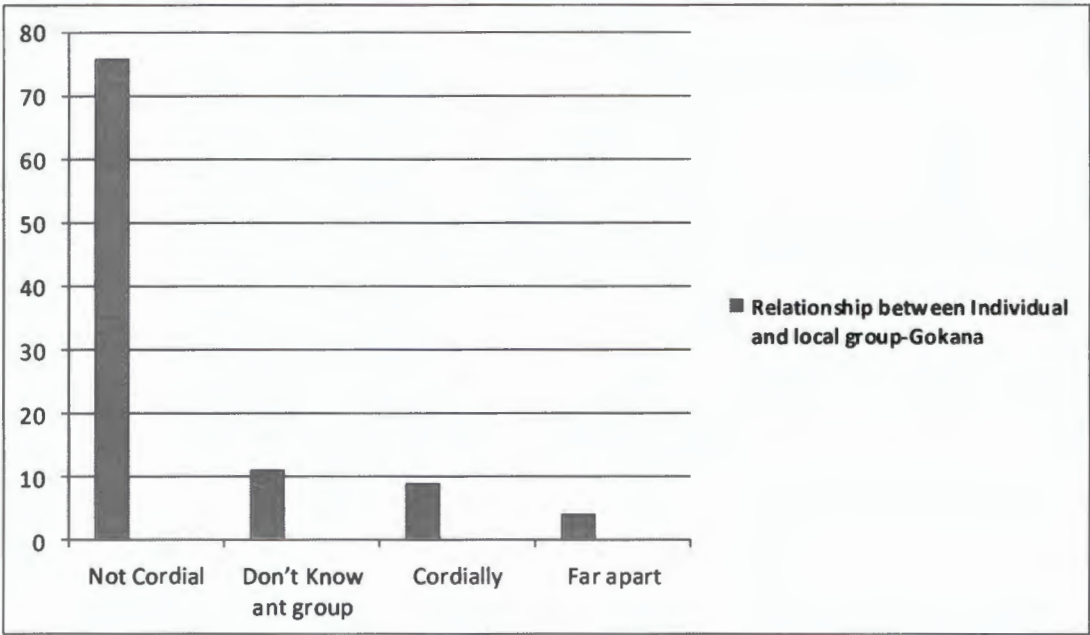
1. Relationship between individual and Local Environmental group

Table 4.15: Relationship between individual and Local Environmental group

Relationship between Individual and Local Environmental group	Frequency	Percentage%
Not Cordial	50	76
Don't know any group	7	11
Cordial	6	9
Far apart	3	4
Total		100

Table 4.16: KHANA

Relationship between Individual and Local Environmental group	Frequency	Percentage%
Not Cordial	40	74
Don't know any group	5	10
Cordial	6	11
Far apart	3	5
Total		100



2. Relationship between oil companies and local environmental groups

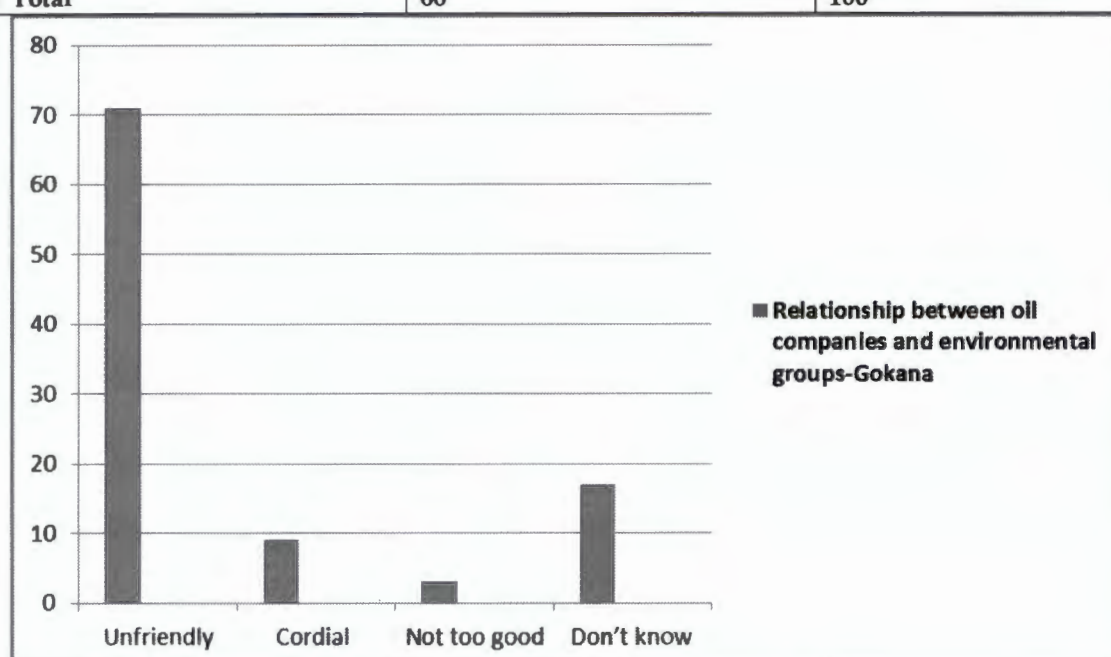
Table 4.17: Relationship between oil companies and local environmental groups

Relationship between oil companies and local environmental groups	Frequency	Percentage%
Unfriendly	47	71

Cordial	6	9
Not too good	2	3
Don't know	11	17
Total	66	100

Table 4.18: KHANA

Relationship between oil companies and local environmental groups	Frequency	Percentage%
Unfriendly	40	74
Cordial	3	6
Not too good	2	3
Don't know	9	17
Total	66	100



3. Specific grievances against Nigerian government.

Table 4.19: GOKANA

Specific grievances against Nigerian government	Frequency	Percentages%
Collaboration with Shell to impoverish Ogoni	7	11
Negligence/ non provision of employment	18	27
Non implementation of UNEP report	20	30
Violation of our cultural right/resource control	10	15
Governments are corrupt	11	17
Total	66	100

Table 4.20: KHANA

Specific grievances against Nigerian government	Frequency	Percentages ⁰ %
Collaboration with Shell to impoverish Ogoni	7	13
Negligence/ non provision of employment	13	24
Non implementation of UNEP report	20	37
Violation of our cultural right/ resource control	8	15
Governments are corrupt	6	11
Total	54	100

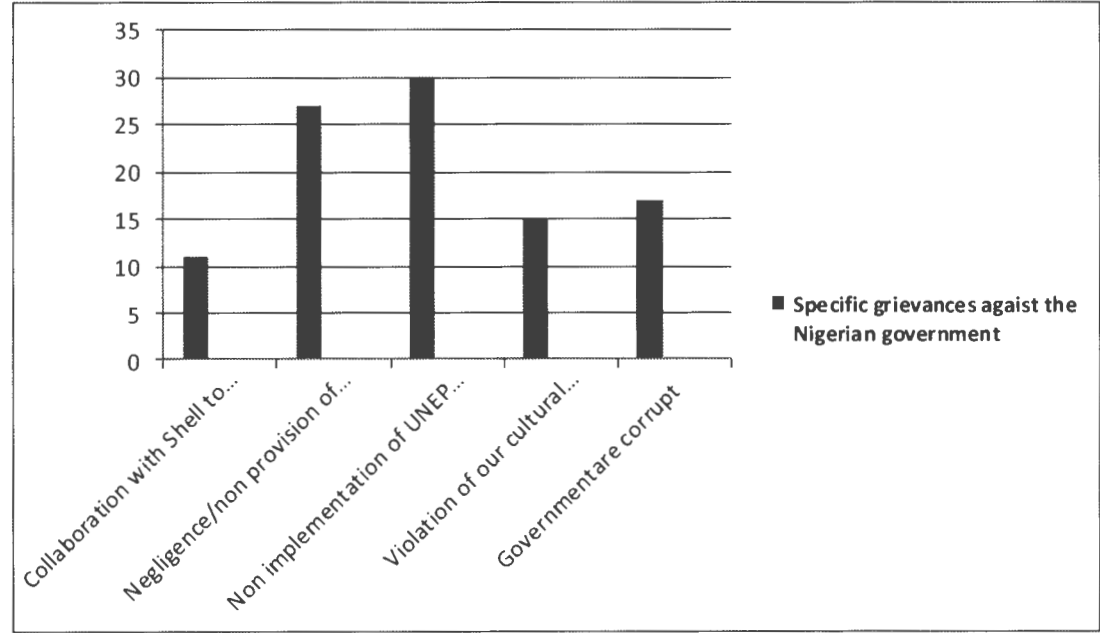


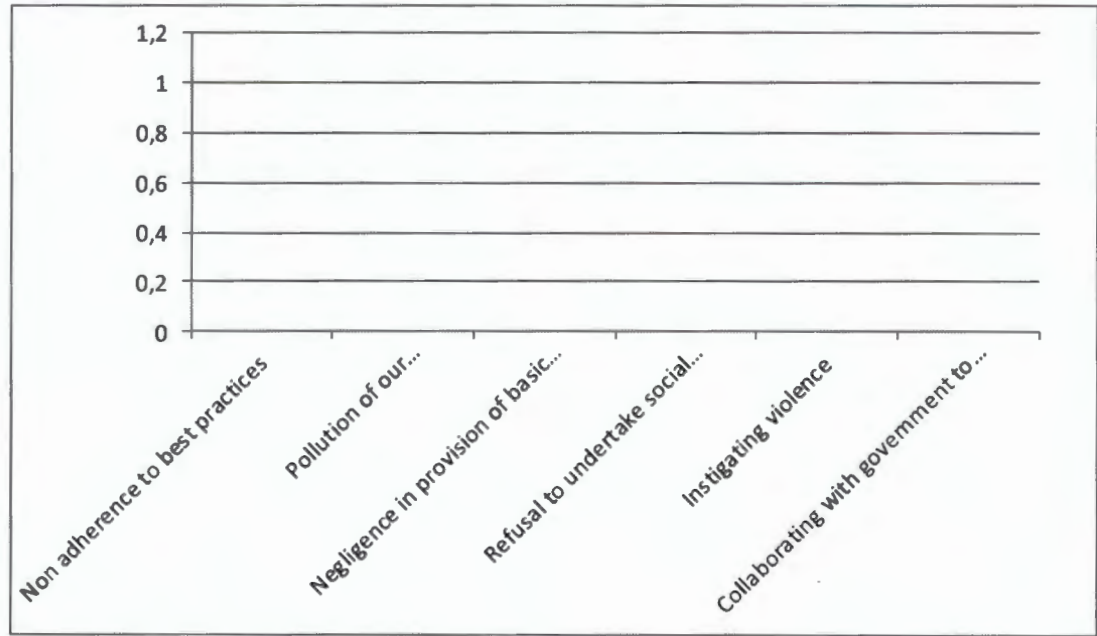
Table 4.21: 4a Specific grievances against oil companies

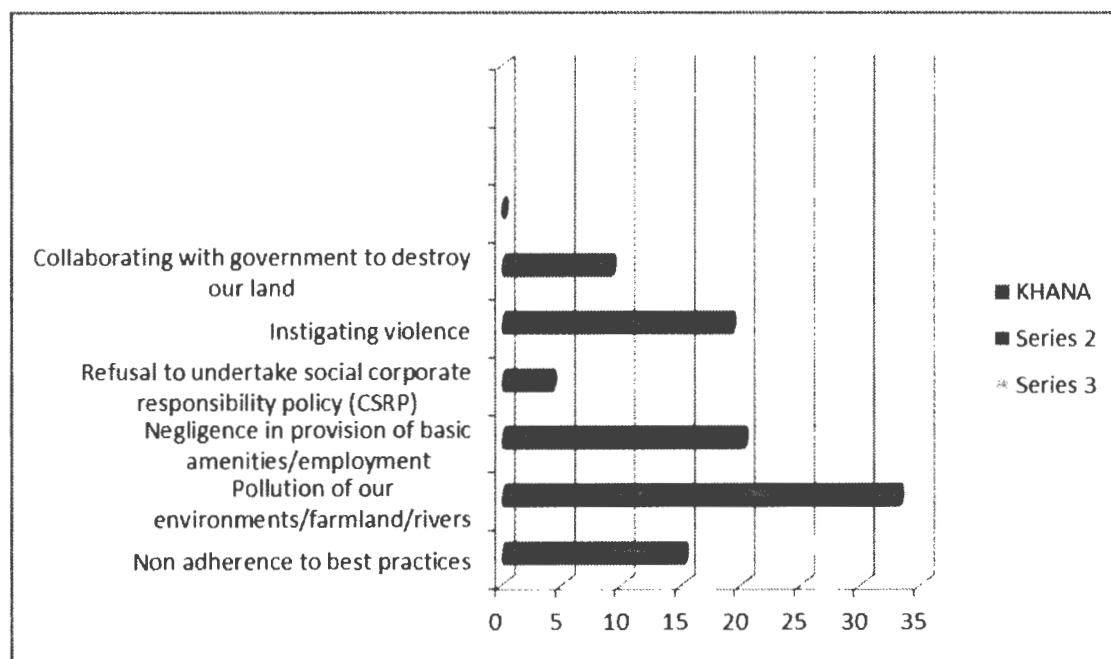
Specific grievances against companies	Frequencies	Percentages %
Non adherence to best practices	11	17
Pollution of our environments/ farmland/ rivers	20	30
Negligence in provision of basic amenities/employment	15	23
Refusal to undertake social corporate responsibility policy (CSRP)	4	6
Instigating violence	10	15
Collaborating with government to destroy our land	6	9
Total	66	100

Table 4.22: KHANA

Specific grievances against companies	Frequencies	Percentages %
Non adherence to best practices	8	15
Pollution of our environments/ farmland/ rivers	18	33
Negligence in provision of basic amenities/ employment	11	20
Refusal to undertake social corporate responsibility policy (CSRP)	2	4
Instigating violence	10	19
Collaborating with government to destroy our land	5	9
Total	66	100

Figure 4.5: GOKANA





4b Activities of oil companies and effect on livelihood

Table 4.23: GOKANA

Activities of oil companies and effect on livelihood	Frequencies	Percentages%
Destruction of biodiversity	24	36
Destruction on of farmland and rivers for Farming and fishing	40	61
No effect	2	3
Total		100

Table 4.24: KHANA

Activities of oil companies and effect on livelihood	Frequencies	Percentages%
Destruction of biodiversity	12	22
Destruction of farmland and rivers for Farming and fishing	40	74
No effect	2	4
Total	54	100

Figure 4.6: GOKANA

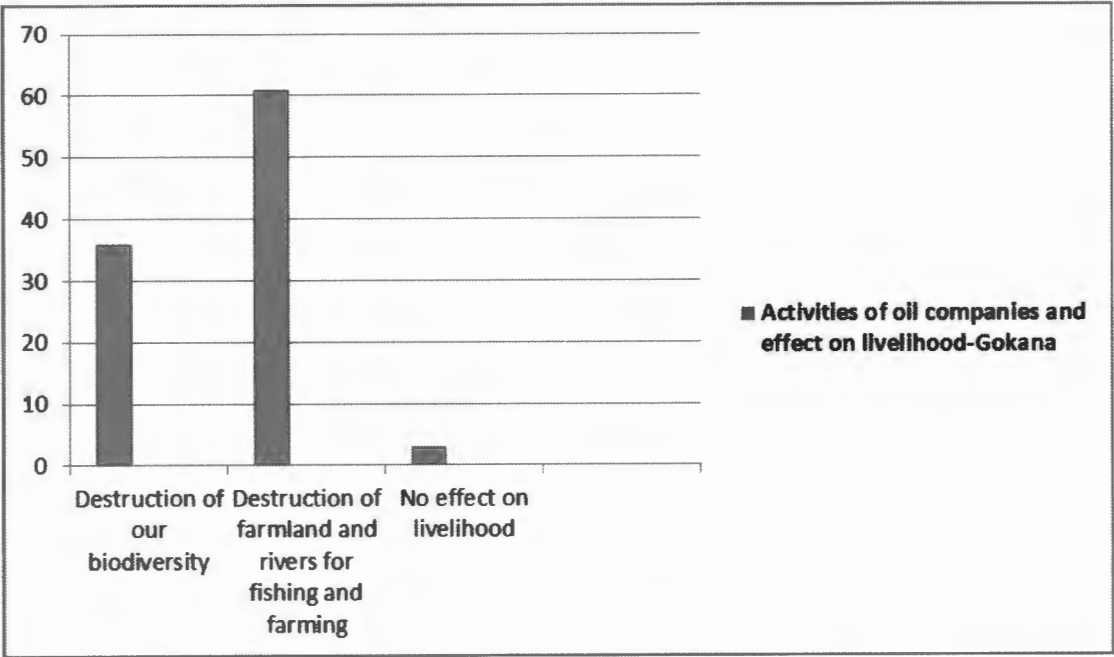
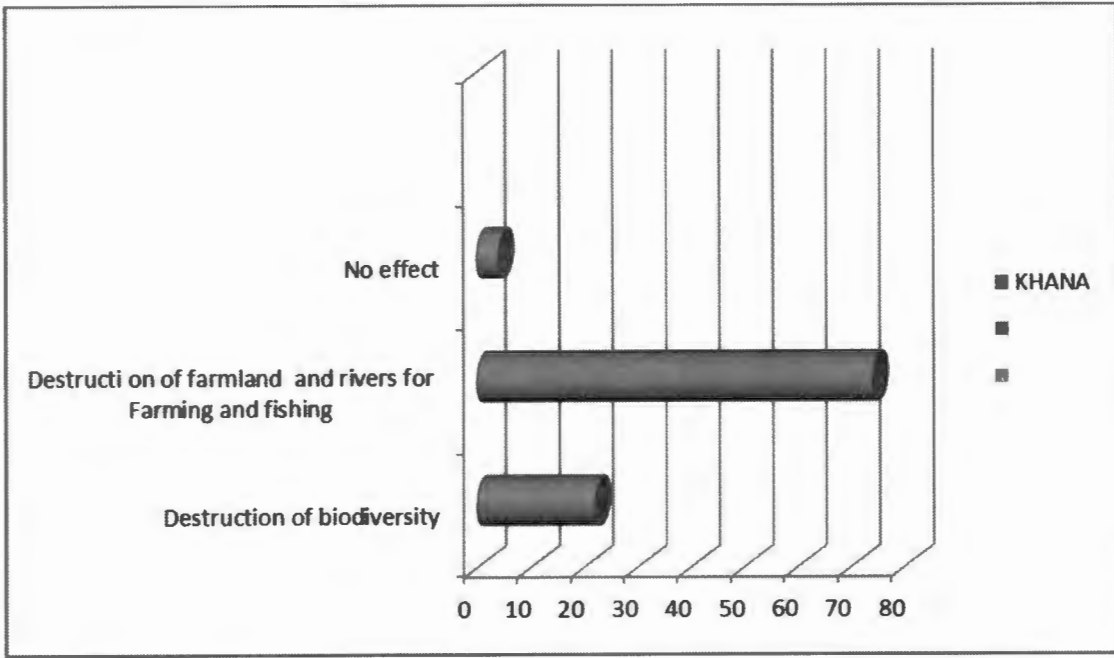


Figure 4.7: KHANA



4 Grievances in order of seriousness by groups

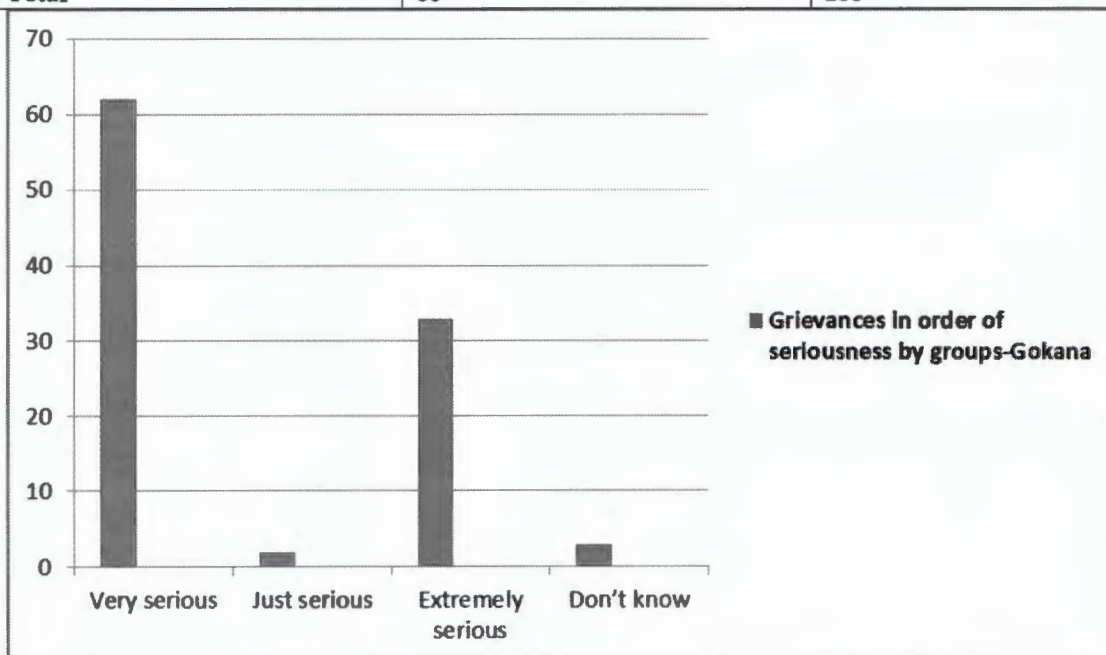
Table 4.25: Grievances in order of seriousness by groups

Grievances in order of seriousness by groups	Frequencies	Percentages%
Very serious	41	62
Just serious	1	2
Extremely serious	22	33

Don't know	2	3
Total	66	100

Table 4.26: KHANA

Grievances in order of seriousness by groups	Frequencies	Percentages ⁰ %
Very serious	32	59
Just serious	1	2
Extremely serious	19	35
Don't know	2	4
Total	66	100



5 Actions taken to show willingness to work with government

Table 4.26: Actions taken to show willingness to work with government

Actions taken to show willingness to work with government	Frequencies	Percentages ⁰ %
Conducted myself peacefully/nonviolent and law abiding	39	59
Dialogue	11	17
Peaceful demonstrations	4	6
Nothing	12	18
Total	66	100

Table 4.27: KHANA

Actions taken to show willingness to work with government	Frequencies	Percentages ⁰ %
Conducted myself peacefully/nonviolent and law		

abiding	31	57
Dialogue	11	20
Peaceful demonstrations	4	8
Nothing	8	15
Total	54	100

6 Actions taken to show willingness to work with oil companies

Table 4.28: Actions taken to show willingness to work with oil companies

Actions taken to show willingness to work with oil companies	Frequencies	Percentages%
Conducted myself peacefully/nonviolent and law abiding	47	71
Dialogue	11	17
Peaceful demonstrations	4	6
Nothing	4	6
Total	66	100

Table 4.29: KHANA

Actions taken to show willingness to work with oil companies	Frequencies	Percentages%
Conducted myself peacefully/nonviolent and law abiding	38	70
Dialogue	8	15
Peaceful demonstrations	4	5
Nothing	4	5
Total	54	100

8. Response to government failures to put in place appropriate environmental policy frameworks

Table 4.30: GOKANA

Response to government failure to put in place appropriate environmental policy framework	Frequencies	Percentages%
Staging a peaceful protest and demonstration to stop oil explorations	42	64
Written to government/ United Nations	17	26
No action	7	11
Total	66	100

Table 4.31: KHANA

Response to government failure to put in place appropriate		
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environmental policy framework	Frequencies	Percentages⁰%
Staging a peaceful protest and demonstration to stop oil explorations	35	65
Written to government/ United Nations	12	22
No action	7	13
Total	54	100

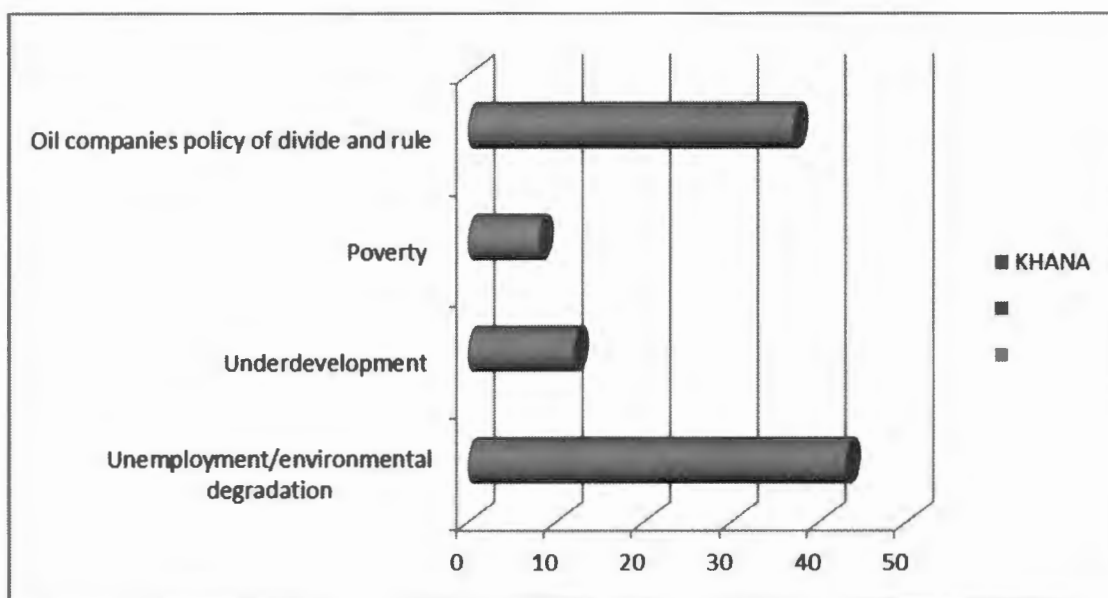
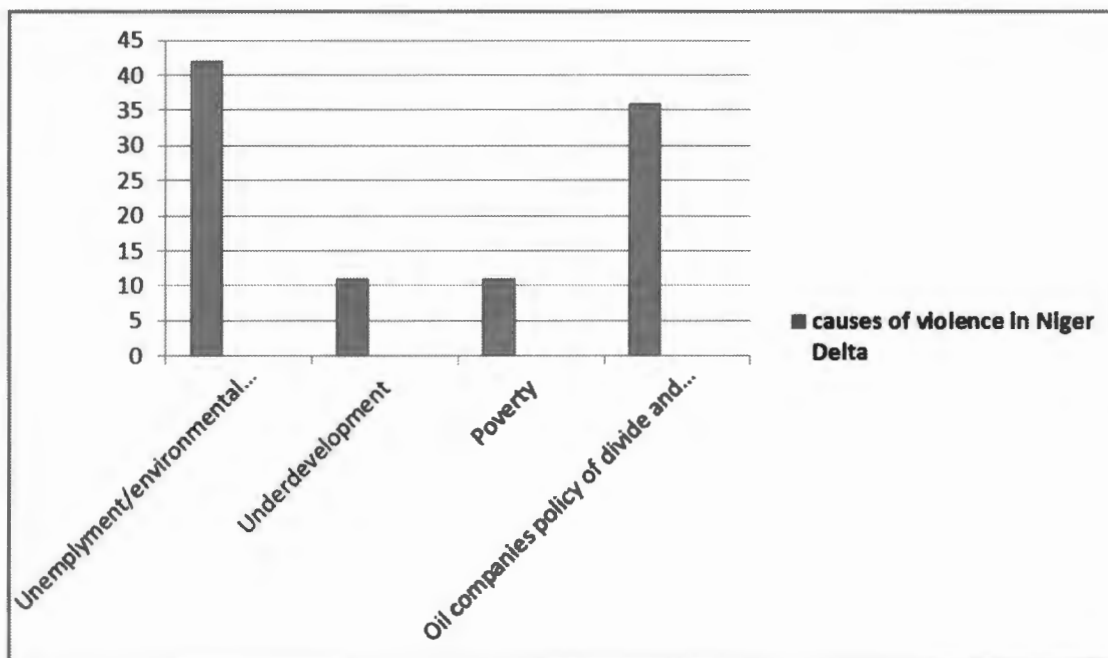
9 Causes of violence in Niger Delta

Table 4.32: GOKANA

Causes of violence in Niger Delta	Frequency	Percentages⁰%
Unemployment/environmental degradation	28	42
Underdevelopment	7	11
Poverty	7	11
Oil companies policy of divide and rule	24	36
Total	66	100

Table 4.33: KHANA

Causes of violence in Niger Delta	Frequency	Percentages⁰%
Unemployment/environmental degradation	23	43
Underdevelopment	7	12
Poverty	4	8
Oil companies policy of divide and rule	20	37
Total	54	100



10 Relevance ascribed to the failure of Nigerian Government to enforce key environmental policies related to oil business

Table 4.34: GOKANA

Relevance ascribed to the failure of Nigeria government to enforce key environmental policies	Frequency	Percentages&
Increase in poverty	41	62
Oil companies influence	4	6
Greediness and corruption	8	12
Connivance	9	14
Don't know	4	6

Total		100
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Ascribed to failure of Nigeria government to enforce key environmental policies	Frequency	Percentages&
Increase in poverty	34	63
Oil companies influence	4	8
Greediness and corruption	8	15
Connivance	4	7
Don't know	4	7
Total		100

SECTION C

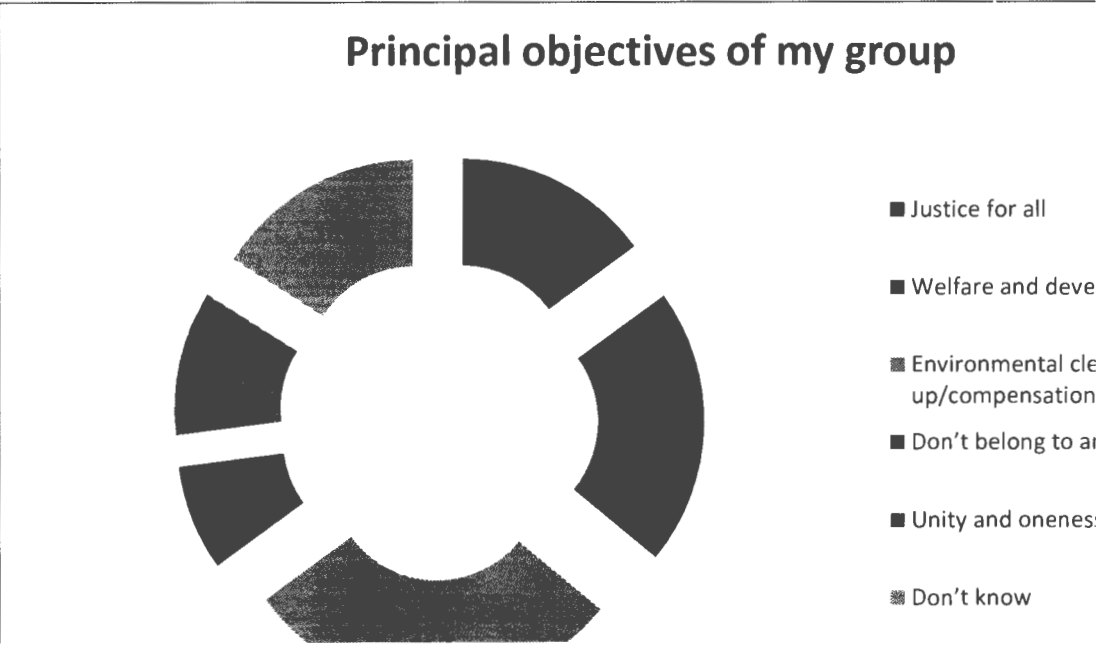
1. What are the principal objectives of your group in your community?

Table 4.35: GOKANA

Principal objective of my group	Frequency	Percentages %
Justice for all	10	15
Welfare and development	14	21
Environmental clean-up/compensation/resource control	19	29
Don't belong to any group	5	8
Unity and oneness	7	11
Don't know	11	16
Total	66	100

Table 4.36: KHANA

Principle objective of my group	Frequency	Percentages %
Justice for all	10	18
Welfare and development	11	20
Environmental clean-up/compensation/resource control	12	22
Don't belong to any group	5	10
Unity and oneness	5	10
Don't know	11	20
Total	54	100



2 Means to achieve objectives

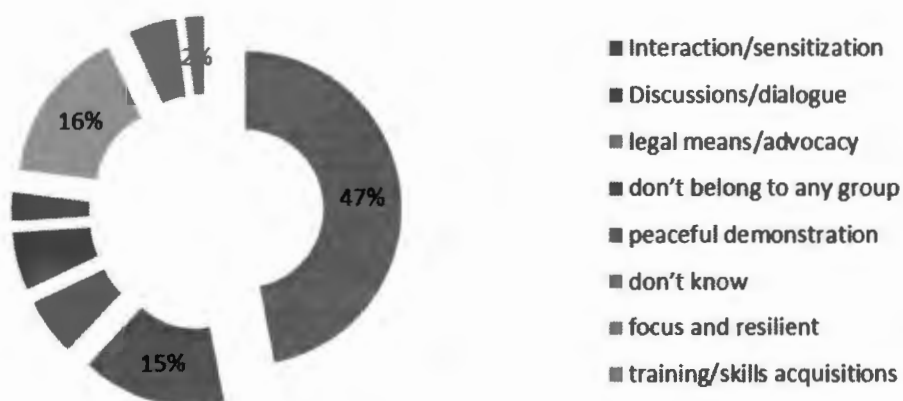
Table 4.37: Means to achieve objectives

Means to achieve objectives	Frequency	Percentage%
Interaction/sensitization	31	47
Discussions/dialogue	10	15
Legal means/advocacy	4	6
Peaceful demonstration	2	3
Don't belong to any group	4	6
Don't know	11	16
Focus	3	5
Training/ skills acquisition	1	2
Total	66	100

Table 4.38: KHANA

Means to achieve objectives	Frequency	Percentage%
Interaction/sensitization	21	39
Discussions/dialogue	10	19
Legal means/advocacy	4	7
Peaceful demonstration	2	4
Don't belong to any group	4	7
Don't know	9	17
Focus	3	6
Training/ skills acquisition	1	1
Total	54	100

Means to achieve Objectives by groups- Gokana



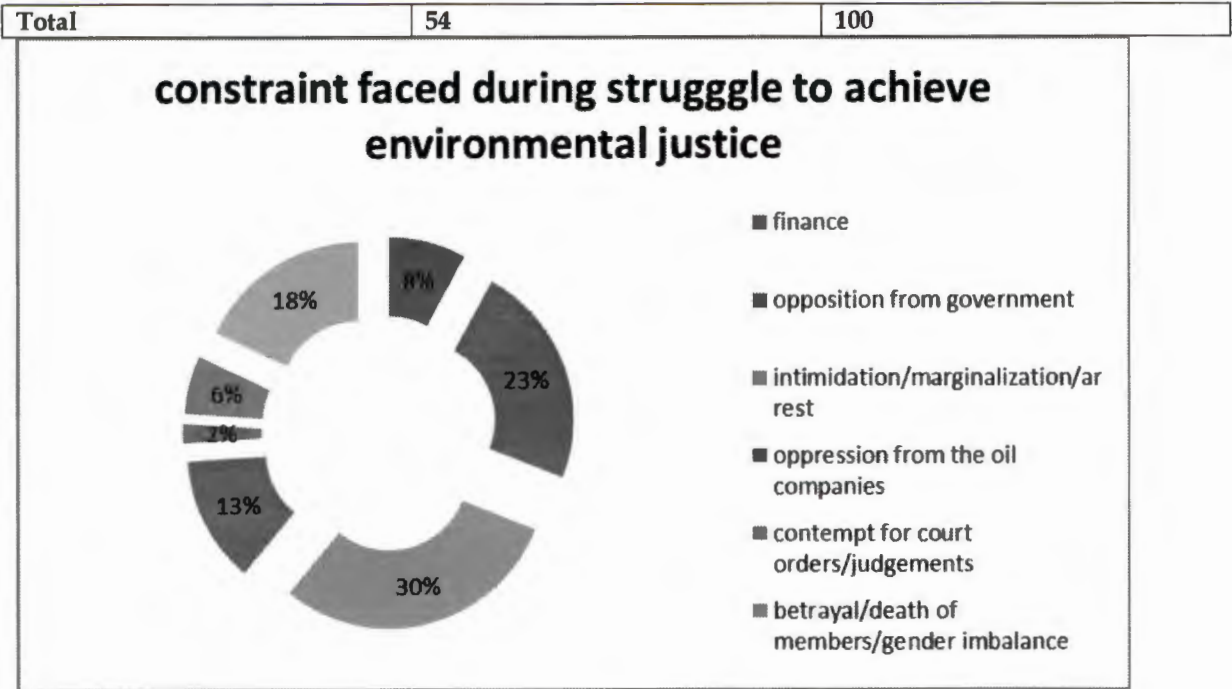
4 Constraint faced during struggle to achieve environmental justice

Table 4.39: GOKANA

Constraint faced during struggle to achieve environmental justice	Frequency	Percentages ⁰ %
Finance	5	8
Opposition from government	15	23
Intimidation/marginalization/arrest	20	30
Oppression from the oil companies	9	13
Contempt for court orders/judgments	1	2
Betrayal/death of members/gender imbalance	4	6
Don't know	12	18
Total	66	100

Table 4.40: KHANA

Constraint faced during struggle to achieve environmental justice	Frequency	Percentages ⁰ %
Finance	5	9
Opposition from government	10	19
Intimidation/marginalization/arrest	20	37
Oppression from the oil companies	9	17
Contempt for court orders/judgments	1	2
Betrayal/death of members/gender imbalance	4	7
Don't know	5	9



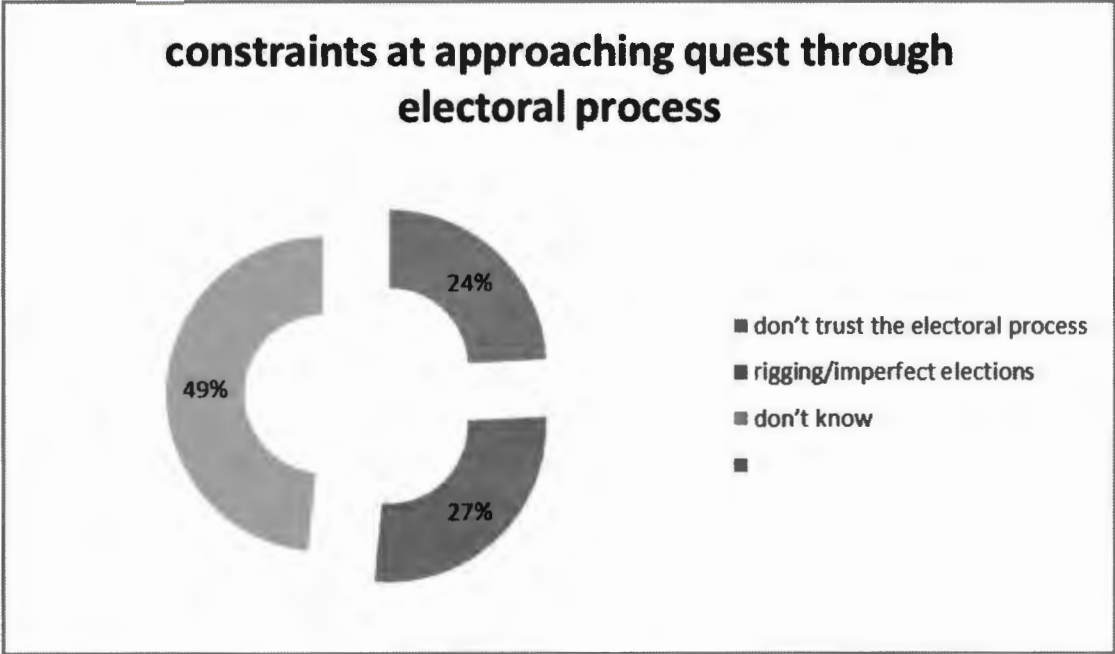
5 What constraints me approaching resolution through electoral process

Table 4.41: GOKANA

What Constraints you approaching quest through electoral process	Frequency	Percentage%
Don't trust the electoral process	16	24
Rigging/ imperfect elections	18	27
Don't know	32	48
Total	66	100

Table 4.42: KHANA

What constraints you approaching redress through electoral process	Frequency	Percentage%
Don't trust the electoral process	13	24
Rigging/ imperfect elections	19	35
Don't know	22	41
Total	54	100



6 Using political arena in place of violence if political system becomes more democratic

Table 4.43: GOKANA

Using political arena in place of violence	Frequency	Percentages%
Yes	55	83
No	5	8
Don't know	6	9
Total	66	100

Table 4.44: KHANA

Using political arena in place of violence	Frequency	Percentages%
Yes	51	94
No	2	4
Don't know	1	2
Total	54	100

Using political arena in place of violence



7 What constraints me approaching quest through judicial process

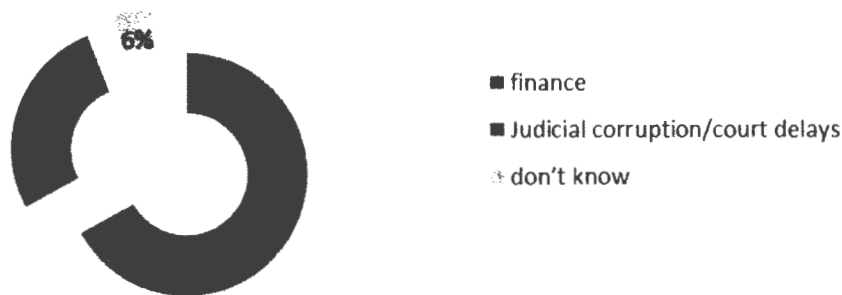
Table 4.45: GOKANA

What Constrains you approaching quest through judicial process	Frequency	Percentage ^{0/0}
Finance	44	67
Judicial corruption/ court delays	18	27
Don't know	4	6
Total	66	100

Table 4.46: KHANA

What constrains you approaching quest through judicial process	Frequency	Percentage ^{0/0}
Finance	36	67
Judicial corruption/ court delays	14	26
Don't know	4	7
Total	54	100

What Constraints you approaching quest through judicial process



8. Willingness to use the court if the legal system becomes transparent

Table 4.47: GOKANA

Will you use the court if the legal system becomes transparent	Frequency	Percentages%
Yes	62	94
No	1	1
Don't know	3	5
Total	66	100

Table 4.48: KHANA

Will you use the court if the legal system becomes transparent	Frequency	Percentages%
Yes	51	94
No	2	4
Don't know	1	2
Total	54	100

Willingness to use the court if the legal system becomes transparent



9 Why have you not tried other less violent means such as peaceful demonstrations, boycotts and appeals to state authorities?

Table 4.49: GOKANA

Have not tried other less violent means such as peaceful protest, boycotts-reasons	Frequency	Percentage %
Did not achieve result	31	47
Don't know	27	41
Don't believe in it	8	12
Total	66	100

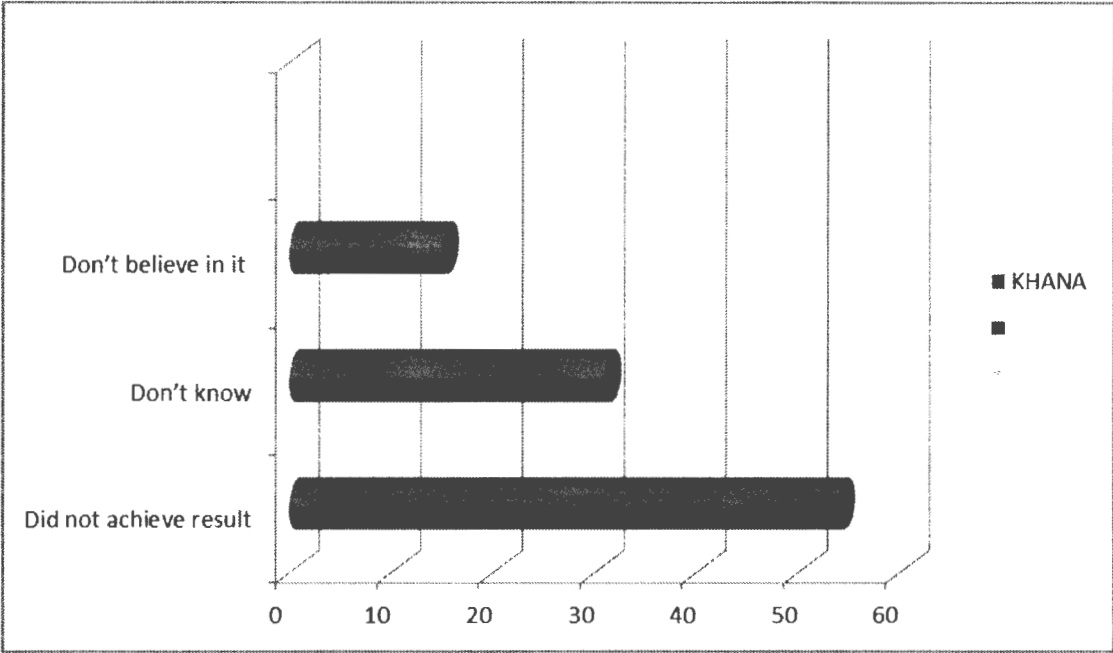
Table 4.50: KHANA

Have not tried other less violent means such as peaceful protest, boycotts-reasons	Frequency	Percentage %
Did not achieve result	29	54
Don't know	17	31
Don't believe in it	8	15
Total	54	100

Have not tried other less violent means such as peaceful protest, boycotts-reasons



KHANA



10 successes achieved through violence

Table 4.51: GOKANA

Successes achieved through violence	Frequency	Percentage %
Don't know	57	86
Stoppage of oil explorations	8	14
Total	66	100

Table 4.52: KHANA

Successes achieved through violence	Frequency	Percentage %
Don't know	44	81
Stoppage of oil explorations	10	19
Total	54	100

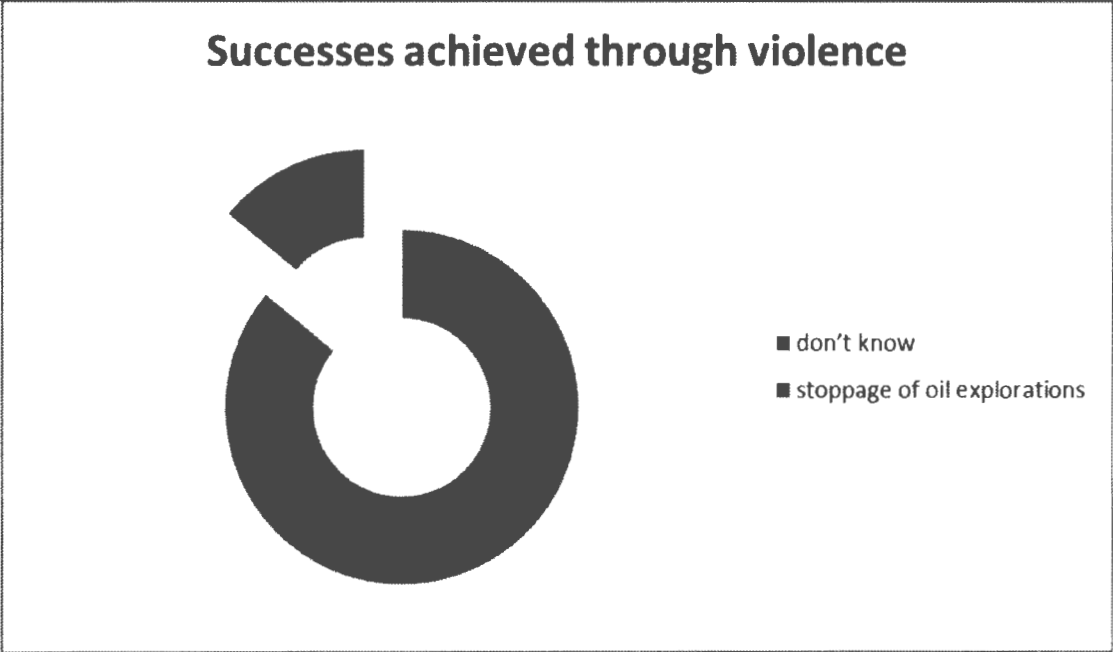
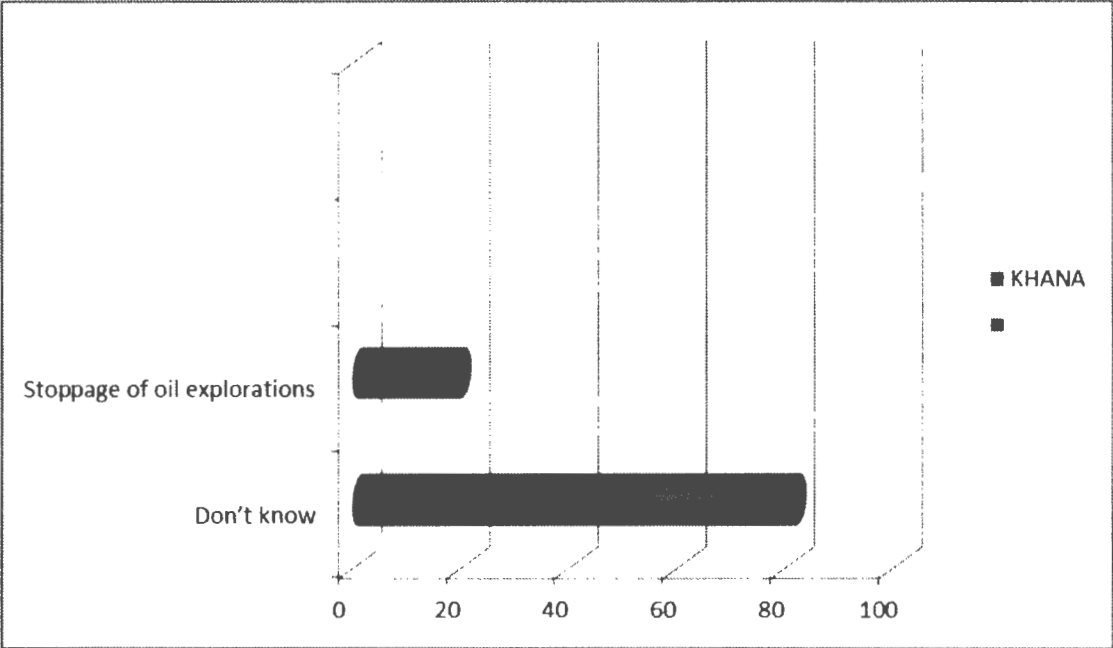


Figure 4.8: KHANA



SECTION D

Question 1: What are the government and oil companies doing to ensure that they have adequate environmental policy guidelines for dealing with challenges of oil explorations and productions in the Niger Delta?

Table 4.53: GOKANA

Government and oil companies efforts to ensure that they have adequate environmental policy guidelines	Frequency	Percentage ⁰ %
Setting up of HYPPREP	12	18
PIB	7	11
Don't know	1	2
Nothing	46	69
Total	66	100

Table 4.54: KHANA

Government and oil companies efforts to ensure that they have adequate environmental policy guidelines	Frequency	Percentage ⁰ %
PIB	9	17
Don't know	1	2
Nothing	44	81
Total	54	100

2 Extent environmental policies has measured up to global standard

Table 4.55: GOKANA

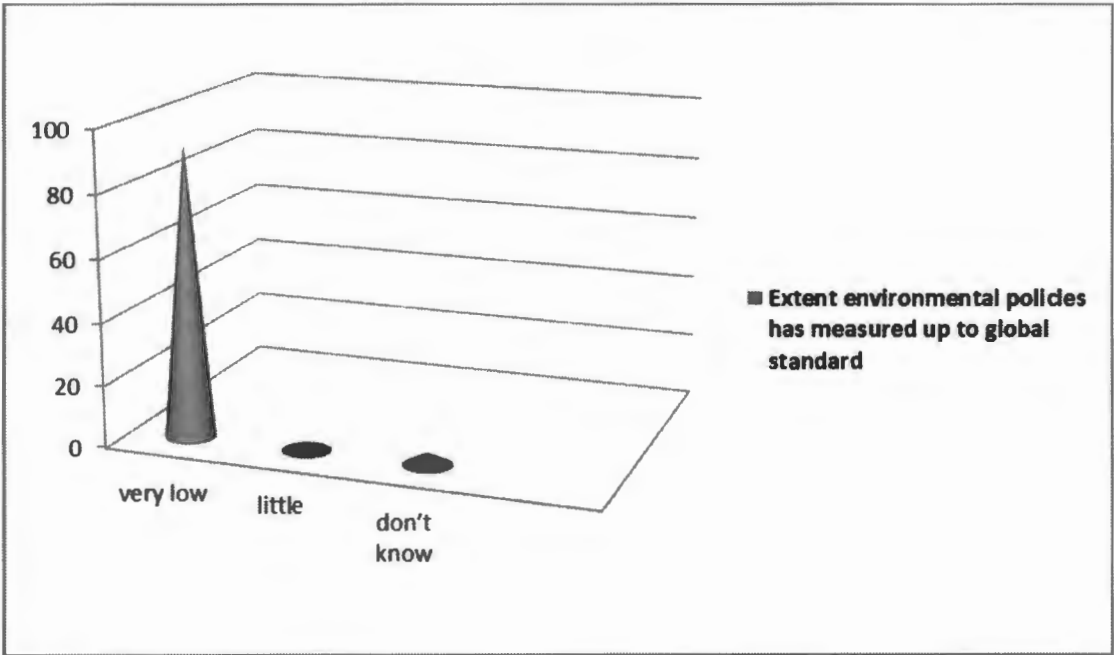
Extent environmental policies has measured up to global standard	Frequency	Percentage %
Very low	62	94
Little	1	1
Don't know	3	5
Total	66	100

Table 4.56: KHANA

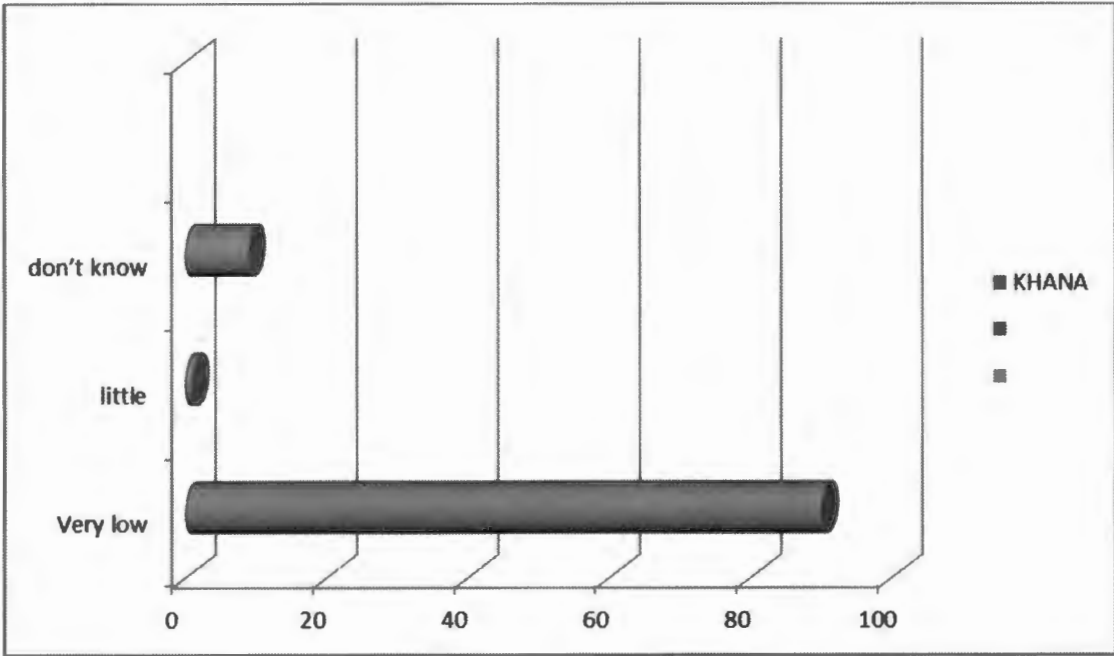
Extent environmental policies has measured up to global standard	Frequency	Percentage %
Very low	49	90
Little	1	1
Don't know	5	9

Total	66	100
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Figure 4.9: GOKANA



KHANA



3 Government and oil company effort to ensure that oil mining activities in Nigeria impose minimum environmental impact

Table 4. 57: GOKANA

Government and oil company effort to ensure oil mining activities in Nigeria impose		
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minimum environmental impact	Frequency	Percentage %
No efforts	63	95
Don't know	3	5
Total	66	100

Table 4.58: KHANA

Government and oil company effort to ensure oil mining activities in Nigeria impose minimum environmental impact	Frequency	Percentage %
No efforts	52	96
Don't know	2	4
Total	54	100

Figure 4.10: GOKANA

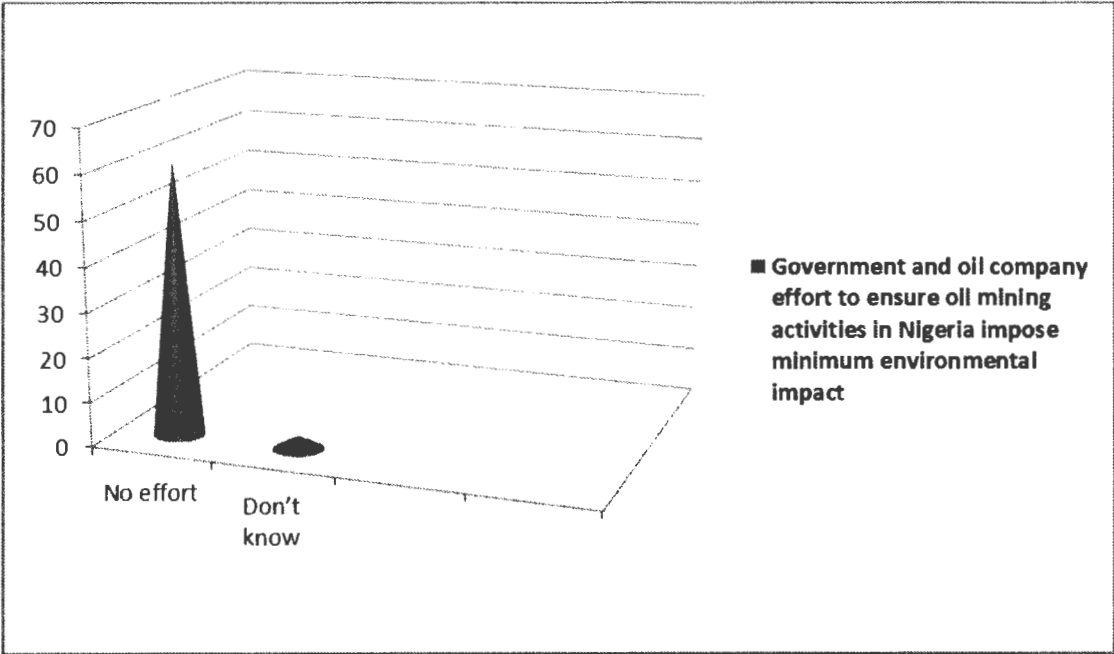
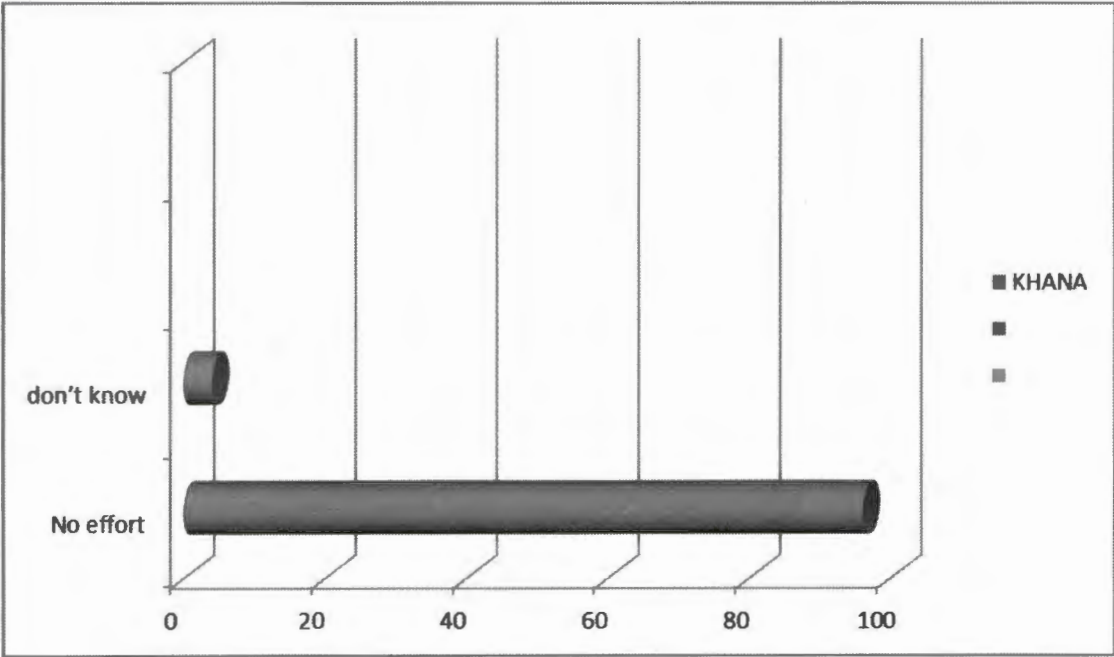


Table 4.11: KHANA



4 Offices and oil companies that approach the communities and group in attempt to address environmental concerns

Table 4.59: GOKANA

Offices and oil companies that approach the communities and group in attempt to address environmental concerns	Frequency	Percentage %
Department of petroleum resources(DPR)	3	4
NESREA	1	2
HYPPREP	1	2
SPDC	1	2
Don't know	59	89
Government researchers	1	1
Total	66	100

Table 4.60: KHANA

Offices and oil companies that approach the communities and group in attempt to address environmental concerns	Frequency	Percentage %
Department of petroleum resources(DPR)	3	6
NESREA	1	2
SPDC	1	2

Don't know	49	90
Total	54	100

Figure 4.12: GOKANA

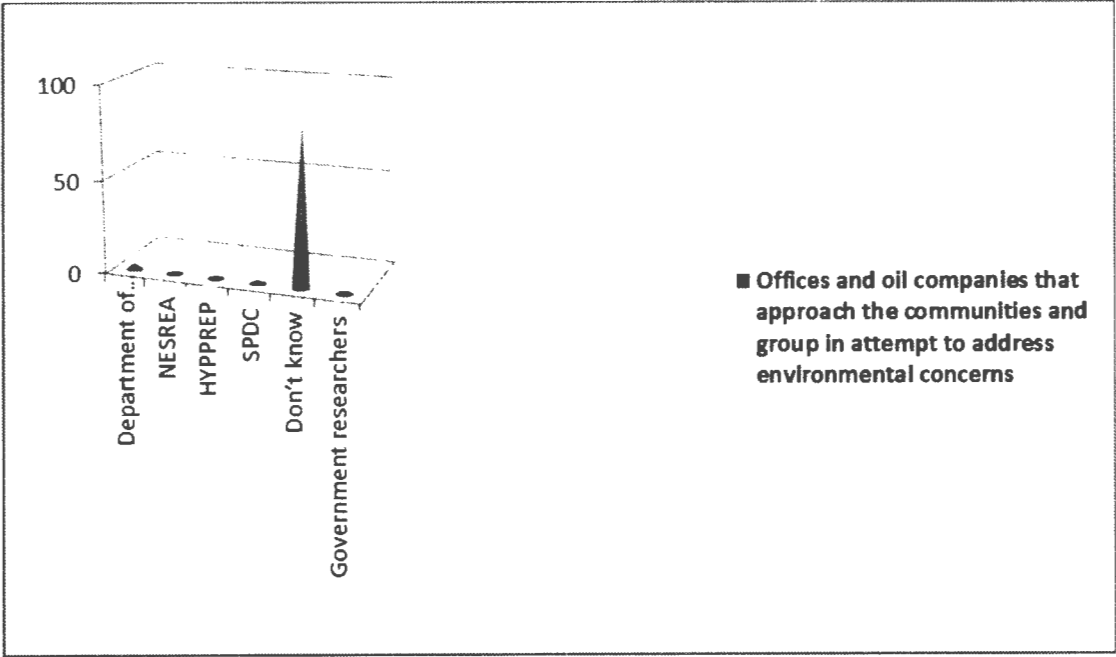
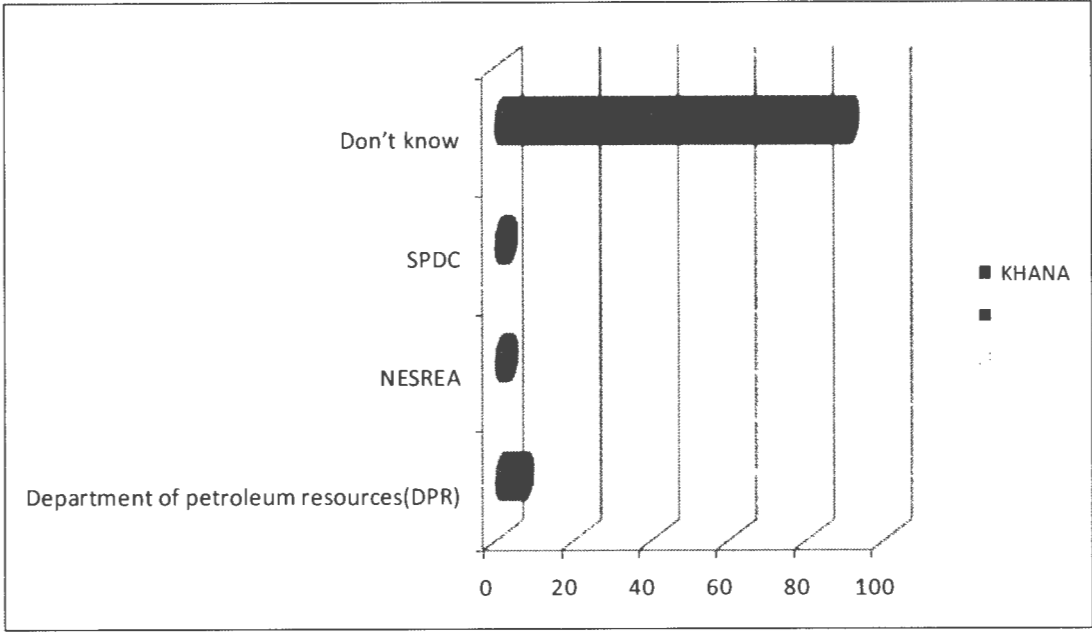


Figure 4.13: KHANA



5 Specific efforts identified by government to ensure compliance with key environmental policies in the Niger Delta

Table 4.61: GOKANA

Specific efforts identified by government to ensure compliance with key environmental policies in the Niger Delta	Frequency	Percentage
No efforts	61	92
Don't know	4	6
PIB	1	2
TOTAL	66	100

Table 4.62: KHANA

Specific efforts identified by government to ensure compliance with key environmental policies in the Niger Delta	Frequency	Percentage
No efforts	47	87
Don't know	7	13
TOTAL	66	100

Figure 4.14: GOKANA

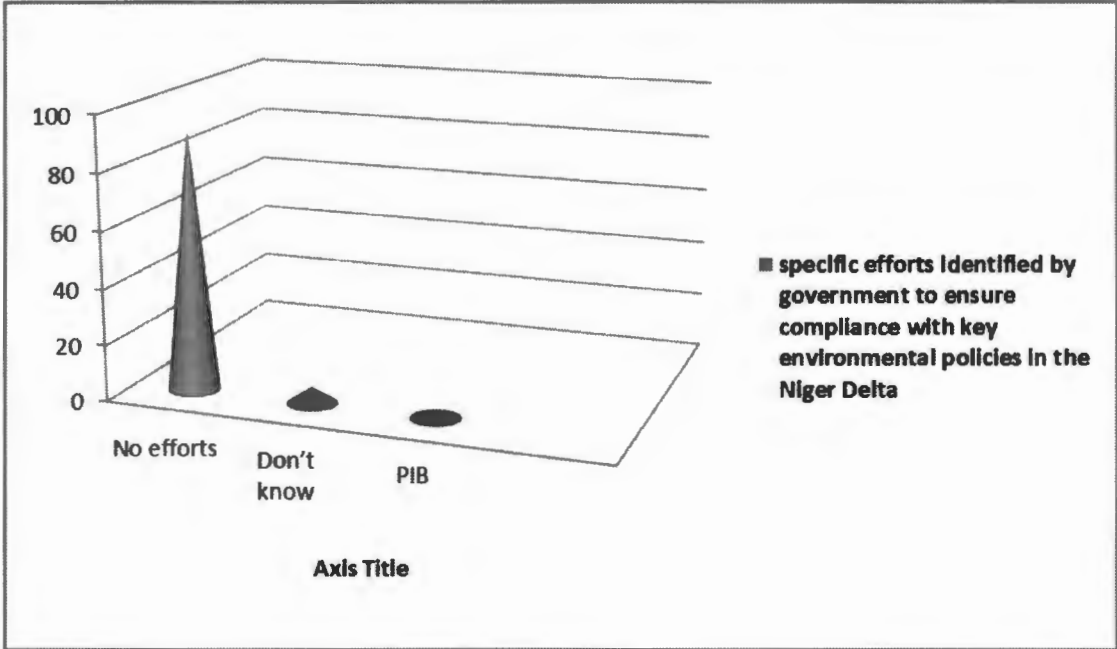
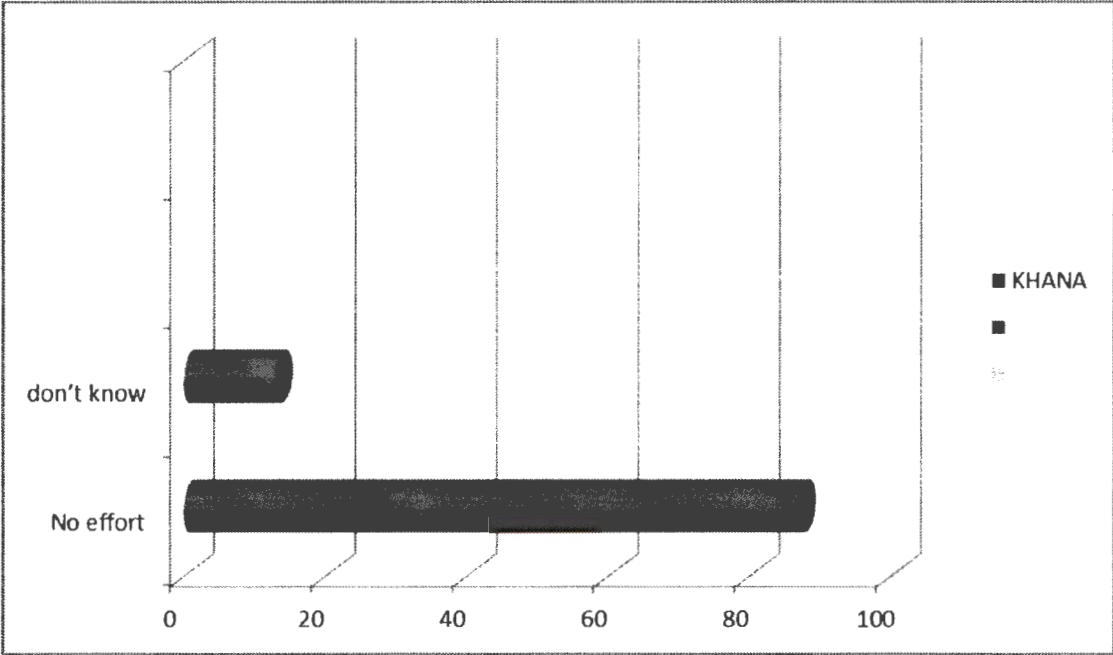


Figure 4.15 KHANA



7 What government is doing in regards to oil spillage in the area

Table 4.63: GOKANA

What government is doing in regards to oil spillage	Frequency	Percentage %
Channeling of spill to an acquired piece of land	6	9
Little efforts	52	79
Compensations	8	12
Total	66	100

Table 4.64: KHANA

What government is doing in regards to oil spillage	Frequency	Percentage %
Little efforts	52	96
Compensations	2	4
Total	54	100

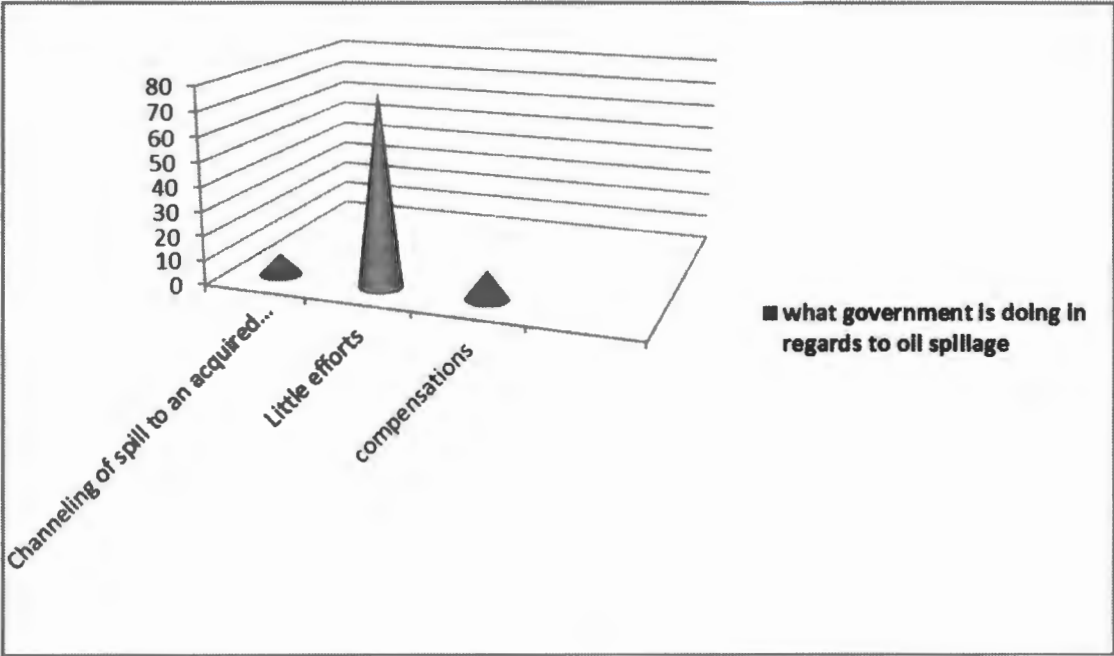
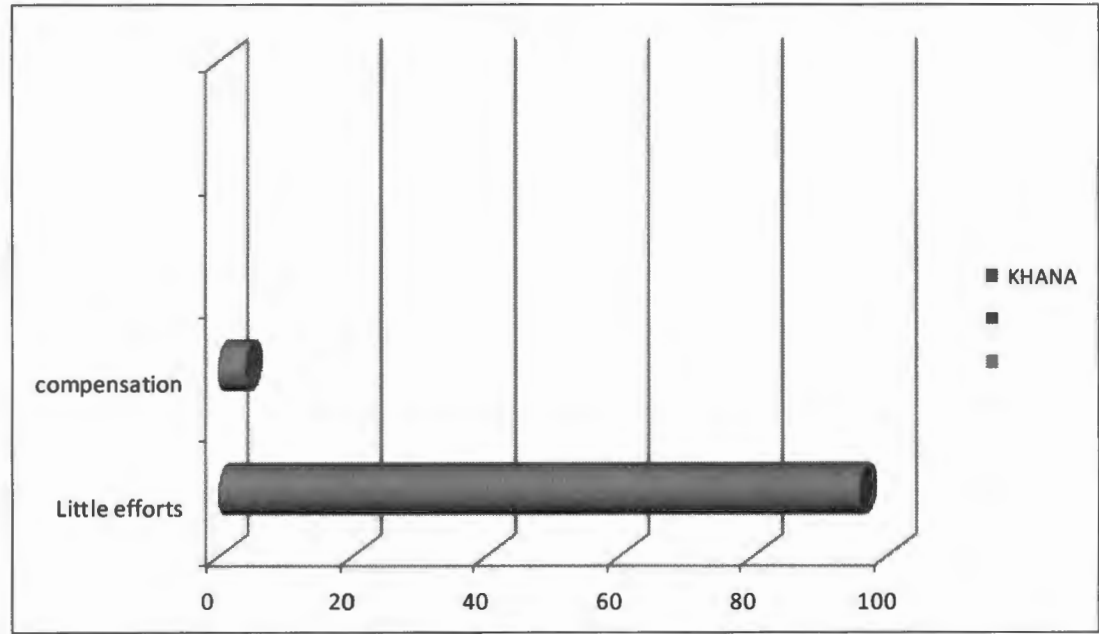


Figure 4.16: KHANA



9 What government is doing in regards to gas flare

Table 4.65: What government is doing in regards to gas flare

What government is doing in regards to gas flare	Frequency	Percentage %
Nothing	66	100
Total	66	100

*Questions 10-21 all have a same frequency and percentage analysis. This is as a result of the respondent’s uniformity in response. They all responded by choosing “NOTHING” as their option.

22 What government have done to engage communities to address the matter of adequate compensations for the appropriation of resources?

Table 4.66: Engage communities

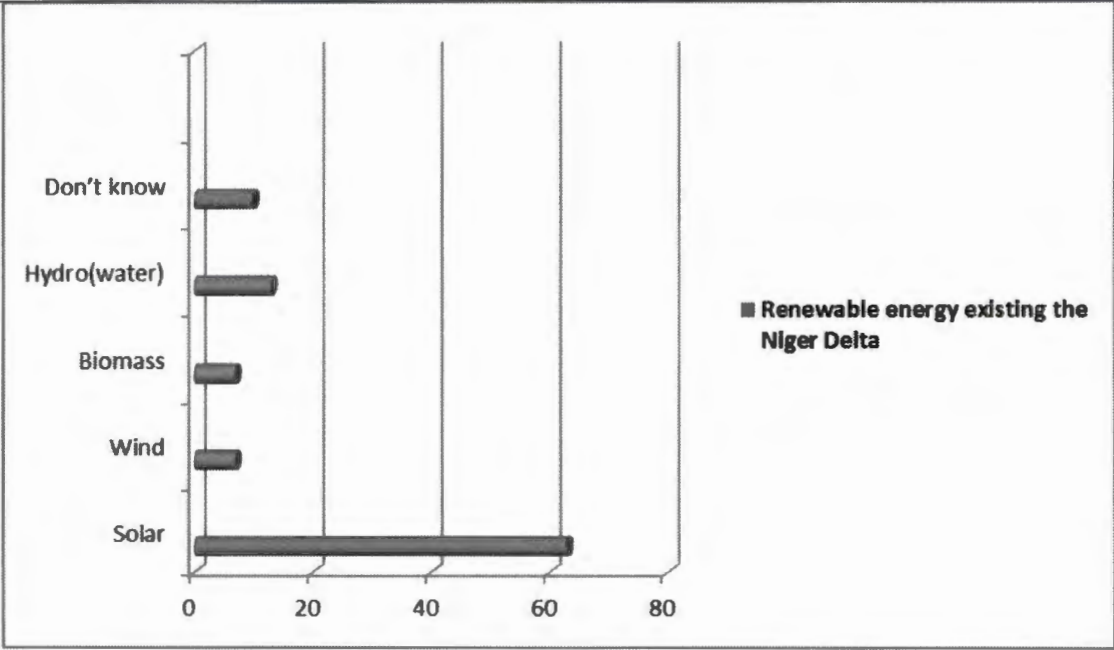
What government have done to engage communities to address the matter of adequate compensations for the appropriation of resources	Frequency	Percentage %
Dialogue with community leaders	21	32
Nothing	16	24
Facilitating the process of compensations	29	44
Total	66	100

INFORMATION ON RENEWABLE ENERGY IN THE NIGER DELTA

12. Renewable energy that exists in the Niger Delta

Table 4.67: Renewable energy that exists in the Niger Delta

Renewable energy that exists in the Niger Delta	Frequency (f)	Percentages (%)
Solar	19	63
Wind	2	7
Biomass	2	7
Hydro (water)	4	13
Don't know	3	10
Total	30	100

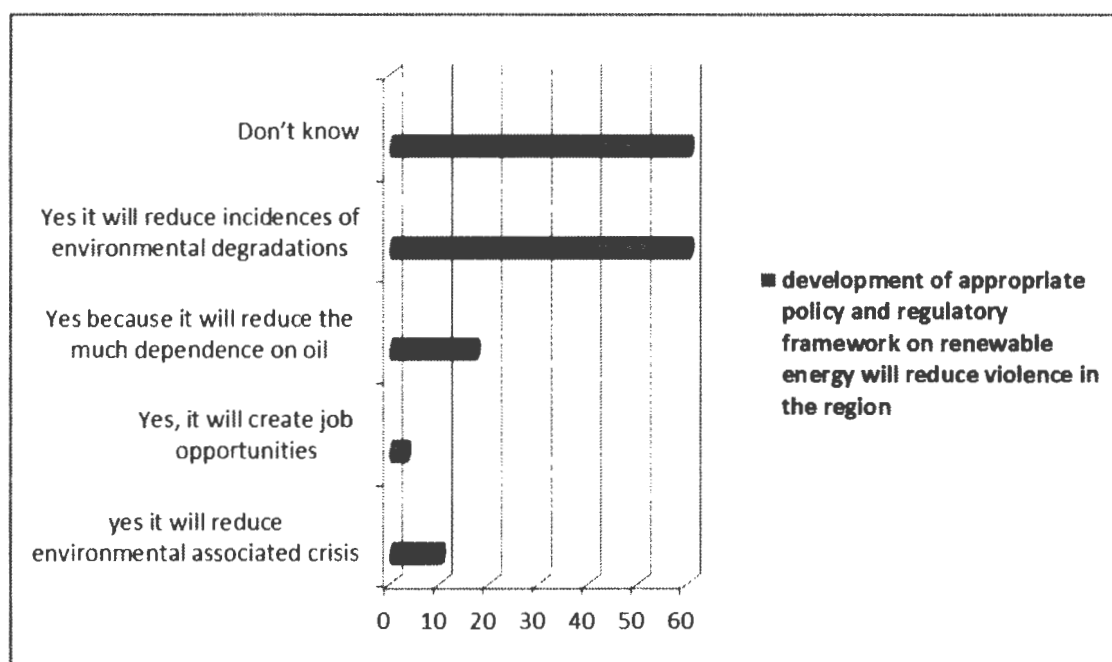


About 63% of the interviewees on Renewable energy, asked about the potentials of renewable energy sources in the Niger Delta, said that solar energy is one source of the renewable energy existing in the Niger Delta, even as less than 14% of the respondents said Hydro (energy) and 10%of the respondents saying they do not know. A smaller part of the respondents at 7% said wind and Biomass are the renewable energies existing in the Niger Delta.

13. Would you think that the development of appropriate policy and regulatory framework on renewable energy resources in the Niger Delta will mitigate environmental violence in the region?

Table 4.68: Development of appropriate policy and regulatory framework on renewable energy will reduce violence in the region

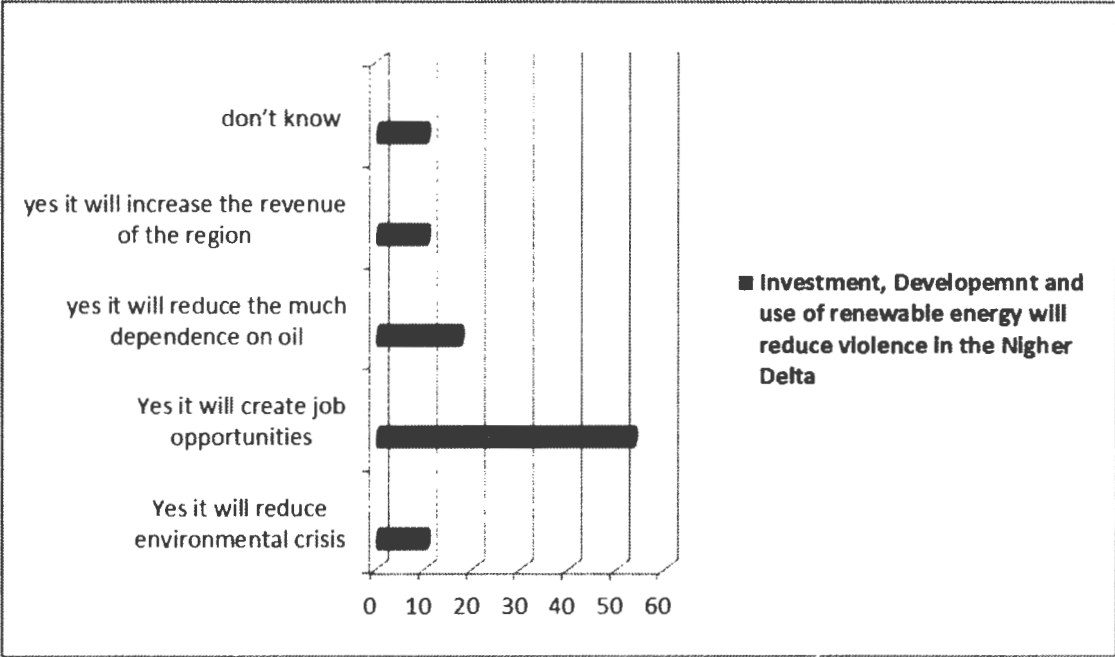
Development of appropriate policy and regulatory framework on renewable energy will reduce violence in the region	Frequency (f)	Percentages (%)
Yes it will reduce environmental associated crisis	3	10
Yes, it will create job opportunities	1	3
Yes because it will reduce the much dependence on oil	5	17
Yes it will reduce incidences of environmental degradations	18	60
Don't know	3	10
Total	30	100



14. Would you think that the investment, development and the use of renewable energy resources by MNOC will mitigate violence and reduce degradation in the Niger Delta?

Table 4.69: Investment, development and use of renewable energy will reduce violence in the Niger Delta

Investment, development and use of renewable energy will reduce violence in the Niger Delta	Frequency (f)	Percentages (%)
Yes it will reduce environmental associated crisis	3	10
Yes, it will create job opportunities	16	53
Yes because it will reduce the much dependence on oil	5	17
Yes, it will increase the revenue of the region	3	10
Don't know	3	10
Total	30	100

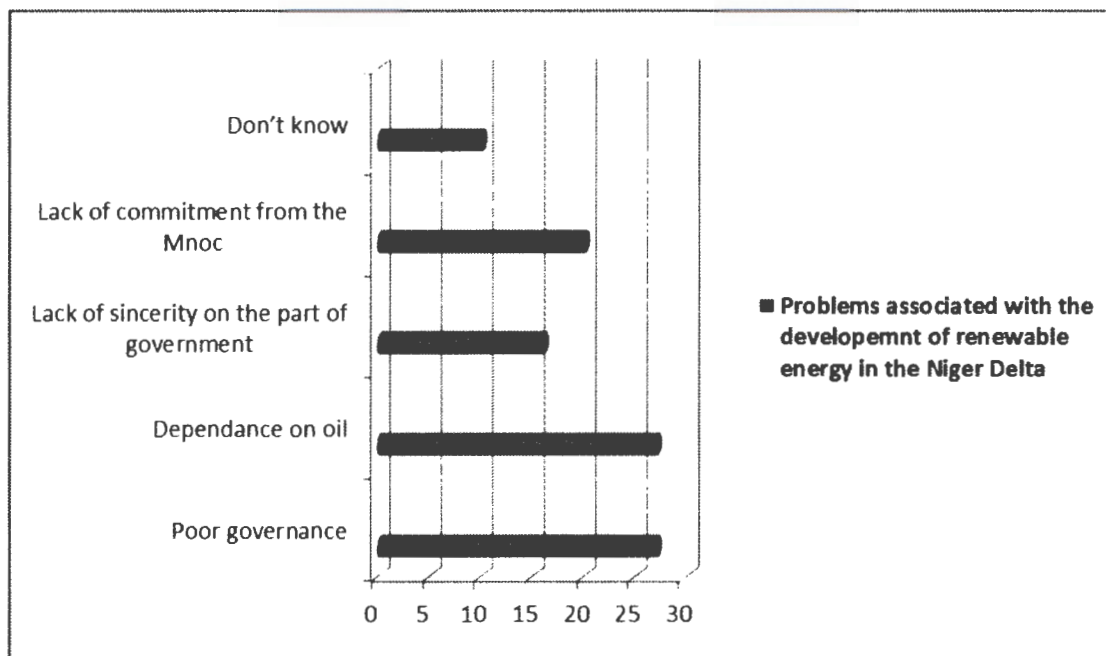


Information on development and use of renewable energy to reduce violence in the Niger Delta showed that 53% of the respondents agreed that development and investment in renewable energy will create job opportunities, this followed by 17% of the respondents who agreed that it will reduce the much dependence on oil. The remaining 20% of the respondents affirmed in a same proportion that it will increase the revenue of the region, reduce environmental crisis and remaining 10% said they don't know.

15. What are the problems with the development of renewable energy in the Niger Delta?

Table 4.70: Problems associated with the development of renewable energy in the Niger Delta

Problems associated with the development of renewable energy in the Niger Delta	Frequency (f)	Percentages (%)
Poor government policies	8	27
Dependence on oil	8	27
Lack of sincerity on the part of government	5	16
Lack of commitment from the MNOCs	6	20
Don't know	3	10
Total	30	100



54% of the respondents at 27% each said that the dependence on oil and poor governance is one of the problems associated with the development of renewable energy in the Niger Delta. 20% said lack of commitment from the MNOCs, while 17% said lack of sincerity on the part of government. 10 % of the population said they don't know.

4.2 DISCUSSIONS OF FINDINGS

Data retrieved on the employment status of respondents in Gokana and Khana revealed that more than 50% of the respondents are self-employed. A less figure at 37%, especially for Khana, were unemployed at the time of research. Some 32% of the respondents for Gokhana and 31% for Khana were engaged in trading and while 21% for Gokhana and 17% for Khana were artisans/technician and craftsmen.

In Khana and Gokhana areas respectively, many (63%) and some (52%) of the respondents had no group affiliations as of the time of research. Also, 48% of the respondents in Gokhana said they had group affiliation while it was 37% for Khana area.

Data retrieved also showed that the major aims of the identified group were the stoppage of oil spills, maintenance of peace and justice of the people. 45% of the

respondents in Gokhana attested to this while 37% of respondents in Khana attested to it too, even as 27% of the respondents from Gokana and 33% from khana said peace and justice.

Majority of the respondents (76%) for both Gokana and Khana described the relationship between individual and local environmental group as not cordial. even as more than 74% of the respondents from both Gokana and Khana said the relationship between oil companies and environmental local groups is unfriendly. More than 37% of the respondents from Gokhana and Khana said the non-implementation of the UNEP report is one of the specific grievances against the Nigerian Government, while 27% of the respondents said government negligence and non-provision of employment. 15% if the respondents from both local governments said violation of cultural rights and the issue of non-implementation resource control is the major grievances against the government. Pollution of the environment and farmlands, more than 33% of the respondents said is their grievance on the oil companies. This is as about more than 23% of the respondents from both local governments who said negligence, non-provision of basic amenities and employments is their grievances on the oil companies. A smaller proportion of the respondents at 19% said oil companies' instigation of violence is the grievances against oil companies. More than 74% of the respondents in the study area said the destruction of farmlands, rivers for farming and fishing is one of the major activities of oil companies and their effects on livelihoods of the people.

More than 62% of the respondents from the study area identified that their grievances as a group was very serious. Though more than 57% of the respondents said they conducted themselves peacefully as one of the actions taken to show willingness to work with governments. More than 15% of the respondents said dialogue is one of the major actions taken to show willingness to work with governments. Majority of the respondents at 71% for Gokhana and 70% for Khana also said they conducted themselves peacefully to show willingness to work with oil companies. Though a smaller proportion of the respondents at 17% for Gokana and 15% for khana said they engage in dialogue. Majority of the respondents at more than 64% for both local governments have at one time staged a peaceful protest in response to government

failure to put in place appropriate environmental policy. A small number of the respondents at more than 22% had written to the United Nations.

More than 42% of the respondents said unemployment and environmental degradation was the cause of violence in the Niger Delta. This is as more than 36% of the respondents in Gokhana and Khana who said oil companies' policy of divide and rule was one of the causes of violence in the Niger Delta. Environmental clean-up, welfare and development, justice for all, were the principle objectives of the groups. More than 29% of the respondents in the study area attest to this. Even as more than 20% said they don't know. Majority of the respondents 47% from Gokana and 39% from Khana said interactions and sensitizations is one the means to achieve objectives. More than 15% of the respondents said discussions and dialogues.

Some 30% of the respondents in Gokhana and 37% of the respondents in Khana said intimidation, marginalization and arrest is one of the constraints faced by groups during struggle to achieve environmental justice, while 23% of respondents from Gokhana and 19% from Khana said oppositions from governments is one of the constraints faced during struggle to achieve environmental objectives more than 13% of the respondents said oppression from oil companies. Not trusting the electoral process is one of the reasons they refused to approach quest through electoral process. 24% of the respondents attested to this. More than 27% said rigging and imperfect elections are one of the reasons constraining them to approach quest through election. More than 41% of the respondents said they don't know. More than 83% of the respondents said yes they will use political arena in place of violence if political system becomes more democratic. This just as 67% of the respondents said finance is one of the constraints in approaching quest through judicial process. More than 27% of the respondents said judicial corruptions and court delays are one of the constraints in approaching quest through judicial process. Even as majority of the respondents standing at 94% are willing to use the court if the legal system becomes transparent.

More than 47% of the respondents have not tried other less violent means such as peaceful demonstration, boycotts and appeals to state authorities because it did not

achieve results. Respondents did not identify if they have achieved success through violent means. Comments have been that they are nonviolent.

Data retrieved to show government and oil companies' efforts to ensure that they have adequate environmental policy guidelines revealed that more than 80% of the respondents believed that governments and oil companies have done nothing in this regard, though 20% of the respondent said that government have set up the Hydrocarbon prevention and restoration project (HYPREP) and the Petroleum industry bill (PIB). More than 90% of the respondents believed that extent to which environmental policies has measured up to global standard is very low, and that Government and oil company have not made any effort to ensure that oil mining activities in Nigeria impose minimum environmental impact. Few of the respondents in the study area identified the Department of Petroleum Resources, NESREA and SPDC as offices and oil companies that approached the communities and group in attempt to address environmental concerns. Majority of the respondents said they don't know of any offices and companies that have approached them, even also as they don't know any specific efforts identified by government to ensure compliance with key environmental policies in the Niger Delta. Apart from channeling of oil spills to acquired land by governments as few of the respondents identified, more than 96% of the respondents believed that governments have carried out little efforts to ensure compliance with key environmental policies in the Niger Delta. Majority of the respondents also believed that government is doing nothing in regards to oil spillage and gas flaring in the area. Some of the respondents said government have dialogued and are in the process of facilitating for compensation to address the matter of adequate compensations for the appropriation of resources.

Majority of the respondents believe that the implementation of the appropriate policy and regulatory framework on renewable energy will reduce violence and incidences of environmental degradations in the region.

Most (53%) of the respondents also believed that investment, development and use of renewable energy by MNOCs will reduce violence in the Niger Delta and create job

opportunities, while more than 42% of the respondents said unemployment is the product of depletion of renewable natural resources and destruction of the people's means of livelihood, thereby confirming hypothesis 1 which states that "there is a relationship between the destruction and depletion of natural resources through oil extraction activities by MNOCs and violent conflict in the Niger Delta which deprived the people of their means of livelihood and inalienable rights".

Asked during the research as to what the government and oil companies are doing to ensure that they have adequate environmental policy guidelines (policy begets the law) for dealing with challenges of oil explorations and productions in the Niger Delta? 69 % of respondents believe that the Government and MNOCs are doing nothing to put in place appropriate policies that would safeguard the environment during oil exploitation and guarantee the rights of the people to their means of livelihood and inalienable rights. Again 94% of the respondents believe that the Nigerian legal system is not transparent, but if it were transparent, they would be willing to pursue their grievances through the rule of law rather than violent agitations.

While 27% believe the judicial system is corrupt and cases suffers undue delays 67% believe they do not have the financial capacity to approach the judiciary (court system) for legal redress, hence the resort to violent agitations.

More than 90% of the respondents believed that extent to which environmental policies and regulations have been complied with does not meet global standards, and that Government and oil companies have not made any efforts to ensure that oil mining activities in Nigeria impose minimum environmental impact.

Hypothesis 2 which states that "there is a relationship between lack of a people-oriented policy and legal framework which confers on the people the right to access their natural resources by the Nigerian state and the crisis in the Niger Delta" is also hereby confirmed.

In the course of the research, respondents were asked this question, would you think that the development of appropriate policy and regulatory framework on renewable

energy resources in the Niger Delta will mitigate environmental violence in the region? Information on development and use of renewable energy to reduce violence in the Niger Delta showed that 53% of the respondents agreed that development and investment in renewable energy will create job opportunities, this followed by 17% of the respondents who agreed that it will reduce the much dependence on oil. The remaining 20% of the respondents affirmed in a same proportion that it will increase the revenue of the region, reduce environmental crisis and remaining 10% said they don't know. Further the findings revealed that, majority of the respondents believe that the implementation of the appropriate policy and regulatory framework on renewable energy will reduce violence and incidences of environmental degradations in the region. Most of the respondents also believe that investment, development and use of renewable energy by MNOCs will reduce violence in the Niger Delta, reduce too much dependence on oil and create job opportunities. Also in (FGD) attached Appendix 'F' it was a consensus of opinion that development of renewable energy resources and implementation of appropriate renewable policy, regulation and law will certainly mitigate environmental violence in Niger Delta and create jobs also. Hypothesis 3 which states that "There is a likelihood of reduced environmental crisis situation in the Niger Delta if the Nigerian state reduces its total dependence on hydro-carbon based energy by harnessing and tapping into its huge renewable energy resource potentials as well as developing and implementing appropriate renewable energy policies and laws" is hereby confirmed.

4.3 IMPACT OF ENVIRONMENTAL VIOLENCE IN THE NIGER DELTA

Oil exploration in the Niger delta region has not left the environment unperturbed. Its impacts are very glaring and on the rise with the increase in mining activities in the region. These impacts have been studied by many researchers and some of the negative and hazardous consequences are as follows:

4.1.1 Impact on flora and fauna (natural resources)

There are diverse flora and fauna in the Niger Delta region, which accounts for about 60-80% of all the plant and animal species in Nigeria. It has been discovered that the

region is the most extensive and complex lowland forest and aquatic ecosystem in West Africa. Therefore, its biodiversity transcends national importance, thus, considered to be regional and global importance (International Union for the Conservation of Nature and Natural Resources, 1992). In addition, it has been found that Nigeria has 205 endemic species, and the greatest number is found in the Niger Delta (Ebeku, 2005). The faunal and floral composition of the region are described below (Ugochukwu & Ertel, 2008):

Fauna: The Niger Delta is proven to have distinct terrestrial and aquatic faunal zones and species hitherto unknown in Nigeria. It is believed that the full range of these species are still unknown as new ecological zones and species are being discovered, while major groups such as higher plants and birds remain unstudied in large areas. For example, the mona monkey, speckle-throated otter, and marsh mongoose are found in the mangrove forest of the Niger Delta region. Also, clawless otters, genets, black squirrel, antelopes, different species of monkeys and apes, as well as elephants have been found in the region. It has been verified that the commonest fish species in the region are croakers, barracuda, shining nose and catfish, while crustaceans and molluscs are also in abundance. Powell (1993) has posited that the Niger Delta has more species of freshwater fish than any other coastal region in West Africa. Similarly, the Niger Delta Wetland Centre (NDWC) discovered 26 fish species that are peculiar to the region, while another 29 species are said to be near-endemic.

There are over 330 different species of birds in the Niger Delta (World Bank, 1995) which includes parrots and palm-nut vulture. Species which have been classified as vulnerable such as Hammer Kop (*scopus umbretta*) are found in abundance in the region (Ebeku, 2005). The region is also a habitat for trans-hemispheric migratory bird species (World Bank, 1995). Therefore, the region is rich in biodiversity and naturally distributed in different ecological zones. However, this biological diversity is concentrated in the freshwater and barrier island ecological zones.

Flora: The Niger Delta's floral composition is one of the least documented in West Africa (World Bank, 1995). However, studies have shown that the mangrove forest of

the region consist mostly of red mangrove trees (*Rhizophora racemosa*). Other species of trees include the smaller black mangrove and white mangrove (Ebeku, 2005). Ecologically, the mangrove floor is very important to many of the smaller flora and fauna and to the human and general ecological food chain. The higher mangroves are inhabited by salt ferns, while spiny false dates (*Nypafruticans*) are found in cleared areas. There are also freshwater raphia swamps, flood plain forests and upland rainforests (Ebeku, 2005).

It is well reported that the Niger Delta region suffers from scourge of oil spillage. It has been reported that between 1976 and 1997, 5,334 cases of oil spillage released around 2.8million barrels of oil into the land, swamps, estuaries and coastal waters of Nigeria (Dublin-Green *et al.*, 1998). However, most of these oil spills occurred in the mangrove swamp forest of the Nigerian Niger Delta region. The mangrove is one of the most productive ecosystems in the world with a rich community of fauna and flora.

Oil spills in the Niger Delta are seldom reported because most of them are considered 'minor'. However, some of the spills are documented and the prominent amongst them are: the Bomu II blowout (1970); the Forcados terminal spillage (1980); the Funiwa 5 oil well blowout (1980); the Oyakana pipeline spillage (1980); the Okoma pipeline spillage (1985); the Oshika pipeline spillage (1993); and the Goi Trans Niger pipeline oil spill (2004) (Ugochukwu & Ertel, 2008).

Oil spill has a devastating effect on biotic and ecosystem health. Oil interferes with the function of various systems of plants and animals. It adversely affects the environment which invariably impact negatively on living condition. An example is, oil on water surface forms a layer and prevents the penetration of oxygen into water bodies, which in turn leads to suffocation of certain aquatic organisms. Similarly, crude oil contains toxic elements, which endangers plants and animals, by causing mortality and other sub-lethal damage. Generally, the toxicity depends on the nature and type of crude oil, the level of oil contamination, the type of environment and the selective degree of sensitivity of individual organisms (Ugochukwu & Ertel, 2008).

Gas flaring is another dangerous activity related to oil production in the Niger Delta region. It is very unfriendly to natural ecosystems and biodiversity. It is proven that gas flares contain over 250 toxins. The Environmental Rights Action (ERA), Nigeria and the Climate Justice Programme, UK (2005) have documented the environment and economic implications of gas flaring in Nigeria. It is found in a study that there was almost 100% loss in yield of all crops cultivated about 200metres away from the Izombe station, 45% loss of those about 600 metres away, and around 10% loss in yield for crops one kilometer away from the flare (Okezie & Okeke, 1987).

Another problem associated with gas production and transportation is leakages and fire incidents. In 2004, the Nigerian Liquefied Natural Gas (NLNG) pipeline traversing the Kala-Akama and Okirika mangrove swamps leaked and caught fire, burning for three consecutive days and killing local plants and animals in the area. It is pertinent to note that these incidents can eliminate a whole population of endangered species (Ugochukwu & Ertel, 2008).

The invasion of the natural habitat of plants and animals through pollution and other human activities have impacted negatively on these, and endangered the species of flora and fauna. During the construction of the NLNG gas plant in Bonny, footprints of hippopotami were discovered (Zabbey, 2004). However, these rare breed of animals have since vanished from the finima area (present location of the NLNG plant complex). It is unclear if these rare finima hippopotami populations all died or embarked on forced migration.

4.1.2 Impact on human health

Carcinogens are known to be hazardous to human health. However, carcinogens such as benzo(a)pyrene and polycyclic aromatic hydrocarbon (PAH) were found in the surface water and soil of impacted communities in the Niger Delta region. Even few molecules of these carcinogens are dangerous and can be genotoxic (ATSDR, 1996). The review also showed that oil spill could cause a 45% increase in the normal level of background radiation. The radiation contamination caused by oil spill in the region is often so

widespread that the surface water (Meindinyo & Agbalagba, 2012) and crops grown in the impacted environment are contaminated beyond the maximum permissible limit.

Oil spills in the region have resulted in contamination of water, air, and food crops with hydrocarbon and trace metals. Contact with constituents of spilled crude oil through ingestion, dermal contact and inhalation have long-term effect on the health of inhabitants. Furthermore, lead added to petrol and emitted by car exhaust has been eliminated in so OECD countries and being phased out in some others, while it is still heavily used in developing countries. The substance continues to have human health and permanently impair children’s development (United Nations Development Programme, 2006).

Table 4.1: Child and infant mortality rates by regions in Nigeria

	Neonatal mortality	Post-neonatal mortality	Infant mortality	Child mortality	Under- five mortality
National	53	56	109	121	217
North- Central	53	49	103	70	165
North- East	61	65	125	154	260
North- West	55	59	114	176	269
South- East	34	32	66	40	103
South- South	53	68	120	63	103
South- West	39	30	69	47	113

Source: NDHS 2003

4.1.3 Impact on the economy of indigenous people of the Niger Delta

With the destruction of this main source of income and productive activities of the region, one of the economic concerns of the region is the increasing unemployment (Okon & Egbon, 1999), as most of the farm lands are destroyed and the rivers polluted leading to death of fish. Most of these indigenous farmers and fishermen who are dependent on farming and fishing, are thrown into confusion and joblessness.

Poverty has many faces, changing from place to place and across time, and has been described in many ways (World Bank 2006). It has been proved that poverty has become a way of life, especially in the Niger Delta due to the following: economic stagnation; agricultural underdevelopment from soil infertility; unemployment; poor quality of life due to shortages of essential goods, facilities and money; isolation and poor communication; government insensitivity; and an unhealthy environment spreading disease and malnutrition. When poverty is measured in terms of these and access to necessary amenities, the level is high and thereby evident in the Human Development Index of the region compared to other parts of the country (that are free from environmental violence, poor management of resources and governance that fails in the responsibilities and duties to drive policies and regulations).

Although there is a Human Development agenda for the Niger Delta projected by the NEEDS, LEEDS, NNDC and UNDP, however, the deplorable state of the Niger Delta environment and the people's health and economic conditions are a far cry from this development agenda.

CHAPTER FIVE

MUNICIPAL AND INTERNATIONAL ENVIRONMENTAL LAW AND THE NIGER DELTA

5.1 INTRODUCTION

The role of the law, whether municipal or international, civil or criminal in protecting the environment, including human life, cannot be overemphasised. There are so many municipal laws in Nigeria aimed at either protecting the environment from harmful human activities or regulating activities of Multinational Oil Companies (MNOCs) for sustainable oil exploration and transportation in Nigeria. There are also a number of international conventions and treaties with environmental concerns assented to and domesticated by Nigeria. However, an unabated unsustainable oil exploration and mining activities have continued in the Niger Delta. The major legal challenge therefore, is not the absence of environmental laws and regulations but the absence of political will and institutional mechanisms for effective implementation and enforcement of these legal instruments. Consequently, the Niger Delta has continued to suffer unwarranted degradation despite the existence of laws in the country.

This chapter seeks to examine some of the relevant municipal and international laws in order to critically appraise their effective implementation and enforcement towards the preservation of the environment of the Niger Delta and its abundant renewable natural resources. These laws are discussed under two broad headings as follows: Nigeria's Municipal Laws; and International Environmental Laws and the Niger Delta.

5.2 NIGERIA'S MUNICIPAL LAWS AND THE NIGER DELTA ENVIRONMENT

Some of the domestic legislation applicable to cases of oil pollution are the Criminal Codes (1916), the Harmful Waste (Special Criminal Provisions) Act (formerly Decree No. 42 of 1988), the Federal Environmental Protection Agency Act (formerly Decree No.

58 of 1988), the Oil Pipeline Act, the Petroleum Act, the Minerals Act (1990) and the Land Use Act (1978), among others. The criminalisation of environmental pollution pre-dates Nigeria's independence which dates back to the Nigerian Criminal Code of 1916.

Section 245 of the Criminal Codes stipulates as follows:

Fouling water. Any person who corrupts or fouls the water of any spring, stream, well, tank, reservoir, or place, so as to render it less fit for the purpose for which it is ordinarily used, is guilty of a misdemeanor and is liable to imprisonment for six months.

Section 247 of the Criminal Codes stipulates as follows:

Noxious acts. Any person who – (a) vitiates the atmosphere in any place so as to make it noxious to the health of persons in general dwelling or carrying on business in the neighbourhood or passing along a public way; or (b) does any act which is, and which he knows or has reason to believe to be, likely to spread the infection of any disease dangerous to life, whether human or animal, is guilty of a misdemeanor and is liable to imprisonment for six months.

International conventions signed and ratified by Nigeria which do not form part of Nigeria's domestic laws constitute secondary sources. This is not within the scope of this study, although such conventions or treaties on oil pollution are part of the formal sources of law on oil pollution in Nigeria. The secondary or material sources, as mentioned earlier, were considered after primary sources. Environmental planning regulations are executive regulations on the development and preservation of the environment for the maximum benefit of the present and future generations. Such regulations are binding where they are not inconsistent with any of the formal sources and are applicable in oil pollution cases where they concern or provide for such cases. The same holds true of other government policies. International conventions or treaties signed by the government, but are yet to be ratified by the National Assembly, are legally speaking not binding, though they are of a persuasive nature in Nigerian courts. They are binding on the conscience of the court but not binding as law. The court will usually weigh some socio-political and economic factors in exercising its discretion whether to apply such conventions or not. The court will never apply such provisions of the conventions that are inconsistent with a primary source. The relevant municipal laws and regulations are listed below:

1. The Petroleum Act, 1969

2. Petroleum (drilling and production) Regulation (1969)
3. Environmental Guidelines and Standards for Petroleum Industries in Nigeria (EGASPIN), 2002
4. National Oil Spill Detection and Response Agency Act (NOSDRA), 2006

5.2.1 Gas flaring

Gas flaring is the process of burning unutilised associated gases into the atmosphere (Fagbohun, 1999). Oil and natural gas are mixed up in every oil deposit. In the process of refining, the natural gas called “associated gas” is removed from the oil. Gas flaring is, therefore, the burning of the associated gas (Ishisone, 2004). The demand for gas in Nigeria is comparatively limited because of reduced industrial activities (Fagbohun, 1999). The low domestic oil prices have also made consumption of gas unattractive as an alternative energy source in the past. These have, undoubtedly, contributed to the increasing flaring of gas in Nigeria. At present, given the ever-increasing price of petrol, diesel and kerosene, urban-dwellers in Nigeria are more and more becoming drifted into the gas consumers’ market which is still in its embryonic stage. The relevant municipal laws and regulations are as follows:

1. Associated Gas Re-injection Act (AGRA), 1979
2. The Federal Environmental Protection Agency Act (FEPA), 1992
3. Niger Delta Development Commission (Establishment) Act, 2000

5.2.2 Environmental Impact Assessment (EIA)

The point has been made that anthropogenically-driven environmental degradation causes are the subject matter of environmental law. This law may be broadly classified into two categories as follows: *ante or preventive laws* that seek to prevent or mitigate environmental degradation from source; and *remedial or post damage laws* that provide remedies to victims of environmental damage. The laws on environmental impact assessment and environmental auditing as well as the subject under consideration belong to the first category.

Environmental impact assessment may be defined as the process of appraising the likely adverse effects of a given human activity on the environment. These effects may be on any or all of the dimensions of the environment such as the physical, the biological, the social or the aesthetic environment (Simpson & Fagbohun, 1998). It may be on any or all of the environmental media such as land, water or air. The purpose of environmental impact assessment is that after the likely effects of a given activity on the environment have been assessed, steps should be taken to eliminate or at least minimise such effects on the environment.

Environmental Impact Assessment Act, 1992

Section 13(1) establishing the mandatory impact assessment regime read alongside Section 2(1), (2), (3), (4) and Section 16 of the Act, creates some problems. While Section 2(1), (2), (3), (4) creates the impression that EIA is compulsory for all projects not necessarily those under the mandatory list, Section 16 suggests that environmental impact assessment will only be required when the Agency deems it necessary. These are very confusing and misleading provisions.

5.2.2.1 Procedure for a discretionary environmental impact assessment: Starting with an interpretation that the Act established two regimes of EIA, the first regime considered here is the discretionary regime. Under this regime, EIA usually begins with a public or private proponent notifying a designated authority: the National Environmental Standards and Regulation Agency (NESREA), of its intention to undertake a project, which is likely to have significant environmental impacts (UNDP, 1998). These impacts could be either on the land, air, water, animals or plants. The notification takes the form of a preliminary or initial declaration of environmental effects which helps the Agency to screen the project in order to determine whether a more detailed assessment of environmental impact is needed, and if so, what kind? This initial declaration will deal with issues such as: a description of the proposed project comprising information about the site, design, size or scale of the development; and a description of environment likely to be adversely affected by the project.

This consideration is very much reflected in the category of projects subject to mandatory EIA by Section 13 of the Act. These projects include agriculture, road

construction and mining releasing fugitive dust, chemical processes and petroleum refining emitting speciated fugitive hydrocarbon from valves, seals, flanges and vents. With regard to duration, there is no provision in the Act relating to duration. This is a shortcoming of the Act which limits the scope of environmental law and does not deal with environmental matters in a systematic way but in a sectoral piecemeal manner.

5.2.2.2 Prevention and mitigation of environmental harm under the EIA Act: The EIA Act is a proactive law that aims at preventing environmental harm before it occurs. It is a species of planning law that aims at assessing environmental impact before the start of the project so that measures that can prevent or at least mitigate any environmental impact, will be put in place for such purpose. The Act is replete with provisions on prevention and mitigation of environmental harm.

Section 22 provides thus:

Where the Agency is of the opinion that a project is described in the mandatory study list, the Agency shall – (a) ensure that a mandatory study is conducted, and a mandatory study report is prepared and submitted to the Agency, in accordance with the provisions of this Act; or (b) refer the project to the Council for a referral to mediation or a review panel in accordance with section 35 of this Act.

Section 26 states thus:

Where at any time the Agency is of the opinion that – (a) a project is likely to cause significant adverse environmental effects that may not be mitigable; or (b) public concerns respecting the environmental effects of the project warrant it, the Agency may refer the project to the Council for a referral to mediation or a review panel in accordance with section 35 of this Act.

Section 27 states thus:

Where at any time the Agency decides not to exercise any power or perform any duty or function referred to in section 25 of this Act in relation to a project that has not been referred to mediation or a review panel, it may terminate the environmental assessment of the project.

Section 30 provides thus:

Where a project is to be referred to mediation or a review panel under this Act, the Council shall, within a prescribed period, refer the project – (a) to mediation, if the Council is satisfied that – (i) the parties who are directly affected by or have a direct interest in the project have been identified and are willing to participate in the mediation through representatives; and

(ii) the mediation is likely to produce a result that is satisfactory to all of the parties; or (b) to a review panel, in any other case.

5.2.2.3 A neighborhood principle for environmental protection under the EIA Act:

The neighborhood test propounded by Lord Atkin in the *locus classicus* case of *Donoghue Vs. Stevenson* (1932) was intended for consumer protection and not environmental protection. The facts of the case were that the appellant brought an action against the respondent because she had suffered injury as a result of drinking a bottle of ginger beer containing decomposed remains of a snail. The beer was manufactured by the respondent and bought by the owner of a café who was a retail seller from whom the appellant bought the beer. The House of Lords in England held per Lord Atkin as follows:

...thus rule that you are to love your neighbour becomes in law you must not injure your neighbour, and the lawyer's question who is my neighbour received a restricted reply. You must take reasonable care to avoid acts or omission, which you can reasonably foresee would be likely to injure your neighbour. Who then in law is my neighbour? The answer seems to be persons who are so closely and directly affected by my acts that I ought reasonably to have them in contemplation as being so affected when I am directing my mind to the acts or omissions which are called in question.

5.2.3 Compensation of victims of environmental degradation and petroleum development

Communities and individuals in the vicinity of petroleum operations are the direct victims of whatever emission are released into the environment or pollution of the environment. Since these communities and persons are lawfully present (residence, ownership or occupation) on the land, they have stakes that must be protected.

1. Oil Pipelines Act

The Oil Pipelines Act, 1956 provides a lucid legislation on compensation as it affects the Nigerian Petroleum Industry. Section 11(1), (3) and (4) of the Act authorises the holder of an oil pipelines licence, to enter upon, take possession of or use strip of land specified in the licence, and, thereon, thereover, thereunder, to construct, maintain and operate an oil pipeline and ancillary installations. This amounts to compulsory acquisition of land (Fekumo, 2004). The major provision for compensation with regard to damage

arising from the exercise of the above rights and powers, is enshrined in Section 11(5) which should be construed along with Section 20(2) of the Act for a holistic analysis.

Section 11(5) provides as follows:

The Holder of a Licence shall pay compensation to:

- (a) *any person whose land or interest in land (whether or not it is land in respect of which the licence has been granted) is injuriously affected by the exercise of the rights conferred by the licence, for any such injurious affection not otherwise made good;*
- (b) *any person suffering damage by reason of any neglect on the part of the holder or his agents, servants or workmen to protect, maintain or repair any work, structure or thing executed under the licence, for any such damage, not otherwise made good; and*
- (c) *any person suffering damage (other than on account of the malicious act of a third person) as a consequence of any breakage of or leakage from the pipeline or an ancillary installation, for any such damage not otherwise made good. If the amount of such compensation is not agreed between any such person and the holder, it shall be fixed by a court in accordance with Part IV of this Act.*

Section 20(2) provides as follows:

If a claim is made under subsection (5) of section 11, the court shall award such compensation as it considers just having regard to - (a) any damage done to any buildings, crops or profitable trees by the holder of the licence in the exercise of the rights conferred by the licence; and (b) any disturbance caused by the holder in the exercise of such rights; and (c) any damage suffered by any person by reason of any neglect on the part of the holder or his agents, servants or workmen to protect, maintain or repair any work, structure or thing executed under the licence; and (d) any damage suffered by any person (other than as stated in such subsection (5) of this section) as a consequence of any breakage of or leakage from the pipeline or an ancillary installation; and (e) loss (if any) in value of the land or interests in land by reason of the exercise of the rights as aforesaid, and also having regard to any compensation already awarded in accordance with subsection (1) of this section.

2. The Petroleum Act, 1969

The major provision on liability is Paragraph 36 of the First Schedule to the Petroleum Act, 1969, which provides as follows:

The holder of an oil exploration licence, oil prospecting licence or oil mining lease shall, in addition to any liability for compensation to which he may be subject under any provision of this Act, be liable to pay fair and adequate compensation for the disturbance of surface or other rights to

any person who owns or is in lawful occupation of the licenced or leased lands.

The Act found elucidation in the case of *Shell Petroleum Development Company Nigeria Limited v. F.B. Farrah* where the following particular heads of compensation/issues arose for consideration:

- i) Fair and adequate compensation;
- ii) Disturbance;
- iii) Reinstatement;
- iv) Injurious affection;
- v) General inconvenience;
- vi) Time of valuation; and
- vii) Method(s) of valuation.

3. Minerals and Mining Act, 1999

Section 1(1) of the Act provides thus:

The entire property in and control of all minerals, in, under or upon any land in Nigeria, its contiguous continental shelf and of all rivers, streams and water courses throughout Nigeria, any area covered by territorial waters or constituency, the Exclusive Economic Zone is and shall be vested in the Government of the Federation for and on behalf of the people of Nigeria.

However, this provision which vests control of minerals on the Federal Government on behalf of Nigerians, does not impede the right to compensation arising from petroleum activities.

Also, in the subsequent case of *Hallelujah Bukuma Fisher Development Company (Nigeria) Limited v. Shell Petroleum Development Company (Nigeria) Limited*, the learned counsel for the defendant contended that the plaintiff cannot claim for fishing right in the creeks unless it can show that it had the exclusive right to fish therein. In rejecting this proposition, the learned trial judge opined as follows:

The case (the Sillo case) deals with the common right of fishery of Nigerians in tidal waters, it was held, inter alia, that the common right of fishing in tidal waters is recognised and is not affected by the Minerals Act of 1916...I therefore hold that the plaintiff need not establish an

exclusive right before it can claim for loss of fishing rights in the Bukuma Creeks.

Thus, general damages were awarded in favour of the plaintiff for loss of fishing rights in the creeks and swamps among other items, in the sum of **₦14,545,000.00**.

4. Land Use Act, 1978

Prior to the enactment of the Land Use Act, 1978, claims for compensation in oil pollution were principally determined by the Oil Pipelines Act, 1956 and the Petroleum Act, 1969.

Section 1 of the Land Use Act provides that:

Subject to the provisions of this Act, all land comprised in the territory of each State in the Federation are vested in the Governor of that State and such land shall be held in trust and administered for the use and common benefit of Nigerians in accordance with the provisions of this Act

The foregoing provision vests the radical title on land (including land where petroleum operations are taking place) on the Governor of the State *subject to other provisions of the Act*. By virtue of Sections 28(2)(c) and 28(3)(b) of the Act, the Governor of the State is empowered to revoke a customary or statutory right of occupancy, respectively, for “the requirement of the land for mining purposes or oil pipelines or for any purposes connected therewith.” Also, Section 28(4) empowers the Government of the Federation to effect a revocation where the right of occupancy is required for public purposes. “Public purposes” is defined to include:

For obtaining control over land for or in connection with mining purposes

With regard to compensation, Section 29(2) of the Act provides as follows:

“If a right of occupancy is revoked for the cause set out in paragraph (c) of subsection (2) of Section 28 of this Act or in paragraph (b) of subsection (3) of the same section, the holder and the occupier shall be entitled to compensation under the appropriate provisions of the Minerals Act or the Petroleum Act or any legislation replacing the same.”

The implication of the above provision is that Section 29(1), (4) – (7) of the Act on compensation does not apply to petroleum mining operations. This is reiterated in Section 20(5) of the Oil Pipelines Act.

5. The 1999 Constitution of the Federal Republic of Nigeria: provisions on compensation

Section 44(1) of the Constitution of the Federal Republic of Nigeria, 1999 regulates compulsory acquisition of land and compensation in Nigeria.

It is set out as follows:

No moveable property or any interest in an immovable property shall be taken possession of compulsorily and no right over or interest in any such property shall be acquired compulsorily in any part of Nigeria except in the manner and for the purposes prescribed by a law that, among other things -

- (a) requires the prompt payment of compensation therefore and*
- (b) gives to any person claiming such compensation a right of access for the determination of his interest in the property and the amount of compensation to a court of law or tribunal or body having jurisdiction in that part of Nigeria.*

Section 44(3) of the 1999 Constitution also provides that:

Notwithstanding the foregoing provisions of this section, the entire property in and control of all minerals, mineral oils and natural gas in, under or upon any land in Nigeria or in, under or upon the territorial waters and the Exclusive Economic Zone of Nigeria, shall vest in the Government of the Federation and shall be managed in such manner as may be prescribed by the National Assembly.

Section 44(3) of the Constitution is in consonance with Section 1(1) of the Minerals and Mining Act, 1999 which vests mines and minerals, in terms of control and ownership, in the Federal Government.

According to the above provisions, there is a curtailment to the fundamental right to own property as well as the right to compensation for the compulsory acquisition of property. In plain terms, no citizen of Nigeria can own minerals, mineral oils (petroleum) or natural gas found in, under or upon his or her land. They are owned by the Government of the Federation. But who owns the land in, under or upon which these natural resources are found? Is there any compensation payable for the

compulsory acquisition of the mineral, petroleum or natural gas? For the ownership of the land, it is now controversial, by virtue of Section 1 of the Land Use Act, 1978 which purports to vest all the land comprised in the territory of the State in the Governor of that state, though he is to hold it in trust. As for compensation, there is provision in all the statutes governing natural resources, including the Land Use Act, 1978, though not for natural resources *per se* but for any damage done to the land surface and buildings, crops or economic or productive trees, among others.

The controversies trailing compensation in oil and gas matters is further heightened by the provisions of Section 25(1), (n) of the 1999 Constitution, which confers exclusive original jurisdiction on the Federal High Court to the exclusion of the State High Court, including the High Court of the Federal Capital Territory.

5.2.4 Human rights, environmental degradation and petroleum development

The issue of environmental degradation arising from the exploration and exploitation of petroleum resources in Nigeria has, for a very long time, assumed the human right dimension and now, environmental rights, which therefore, makes it necessary to consider the human or environmental indigenous rights of host communities.

It is common knowledge that most indigenes of the Niger Delta are earning their livelihood through fishery, forestry, hunting and related agricultural activities. The gradual depletion and poisoning of fauna and flora in the estuaries, rivers, seas and forests, deprived them of their economic rights. Also, the flaring of gas and poisoning of streams have either led to the death of many or the poisoning of food in the area. These have affected their right to life, good life or dignity as provided for in the Constitution of Nigeria.

Human Rights are rights considered automatically to belong to everyone by virtue of being a human, whereas recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world. Section 20, Chapter II of the 1999 Constitution, makes it a desirable objective for government to ensure a healthy environment, not an obligation

that can be enforced should the government fail. The entire provisions of Chapter II are not justiciable or enforceable.

1. The 1999 Constitution of the Federal Republic of Nigeria: provisions on human right to life and dignity

An action on human rights arising from environmental violation can be hinged upon the constitutional safeguard of right to life as per Section 33(1) and right to dignity, Section 34(1)(a) of the Nigerian Constitution and a release on International Conventions on the Human and Peoples Right as in the case of *Lopez Ostra v. Spain*.

Section 33(1) of the 1999 Constitution provides as follows:

Every person has a right to life, and no one shall be deprived intentionally of his life, save in execution of the sentence of a court in respect of a criminal offence of which he has been found guilty in Nigeria.

Section 34(1)(a) of the 1999 Constitution provides thus:

Every individual is entitled to respect for the dignity of his person, and accordingly - no person shall be subject to torture or to inhuman or degrading treatment.

Right to a healthy environment and human rights in general

Although the scope of this study is municipal regulations, the parallel evolution of human rights protection and environmental protection discloses evident affinity between the two. They both witnessed and precipitated the gradual erosion of the so-called domestic jurisdiction. Both the treatment by a state of its nationals and conservation of the environment and control of pollution became a matter of international concern. Just as there have been serious concerns for the violation of human rights of certain groups (e.g. refugees, stateless people, women and children), so also is the concern for the violation of the environmental rights of indigenous people (especially in the Niger Delta). The awareness of this interrelatedness, in recent years, has contributed in a decisive fashion to the evolution of both human rights protection and environmental protection, and obviates the need to integrate the two. The 1968 Teheran Conference on Human Rights proclaimed the indivisibility of all human rights (civil and political as well as economic, social and cultural rights). The UN General

Assembly again in 1984 and 1986, reiterated the interrelatedness of all human rights, whereby, the protection of one category rights should not exempt states from safeguarding the other rights. Multiple human rights instruments reinforce each other, enhance the degree of the protection due, and disclose an overwhelming identity of purpose. This interrelatedness has been judicially applied to the celebrated environmental case of *SERAC v. Nigeria*.

5.2.5 Corporate social responsibility, environmental degradation and petroleum development

Corporate social responsibility refers to the various welfare packages which companies ought to provide for their host communities and to the environment. At times, the provision of these welfare packages can only serve as a palliative measure because some damages caused by companies are irreversible and irredeemable.

A determination of the actual victims of environmental pollution is imperative. The environment into which noxious or toxic substances are injected is apparently the first victim. It is, however, not important for its own sake, but for the sake of human, animal and plant life that it sustains.

Once the environment is polluted, man stands at the receiving end. In this case, host communities – that is, persons living within the environment that is polluted – become victims. The pollution can be from toxic waste as was the case in Koko in Delta State, (Omotola, ed.) or oil spillage in water bodies or from gas flaring that increases the temperature of the air and injects chemicals (natural gas is a good example), into the air that chemically combines with rain and falls as acid rain, or from oil spillage that destroys plant life in its trail leaving the land barren and agriculturally useless. The form it takes is immaterial, here, the host communities are the victims.

These are direct victims of environmental pollution. The government is also a victim. This is because environmental pollution has given birth to various militant groups in the Niger Delta, and the government (both at the state and federal levels) has had to pay dearly in terms of human resources (kidnappings), material resources (the

destroyed environment) and attempts to curb violence in the region (military personnel have been killed many times in clashes between militants and military personnel). The companies are not left out. They are the cause of environmental pollution and degradation most of the time. The spate of expatriate kidnappings and closing of flow-stations by militants is enough evidence that even the companies are also victims. The university lecturer, vexed by such pollution, and having to write about it, is also a victim. In summary, one way or the other, we are all victims, whether affected directly, indirectly or remotely by ties of conscience.

The issue of corporate responsibility as against individual responsibility is at the root of company law. From the time of *Salomon v. Salomon* to the present day, the position is much the same. Although individuals *stricto sensu*, are responsible for the acts that pollute the environment and individuals form the machinery to provide welfare services to host communities, and also safeguard the environment, the law would prefer to veil the individual(s) and demand responsibility from the companies. This is the reason for corporate social responsibility.

In Nigeria, as in most parts of the world, the issue of corporate social responsibility needs to be re-visited. While it would be untrue to say that companies generally do not show any form of social responsibility, it becomes an issue how much social responsibility have they shown to both host communities and the environment. Christine Amanpour of the Cable News Network (CNN) remarked that the Niger Delta region has given so much but has reaped only very few rewards in return.

The idea of good corporate citizenship is traceable to James Burnham's book entitled *Managerial Revolution*. Burnham's main thesis, which dominated company law and social sciences for several decades, is the model which modern large companies have used to evolve to a stage where professional managers with little or no ownership, are in charge of their affairs and can manage without reference to the interest of capitalists who, in theory, are the real owners. As a result of this "managerial revolution", Burnham contends that the essential nature of capitalism has been displaced and this transformation has "infused industry with a new sense of social responsibility" (Robin

Blackburn), which transcends the maximisation of profits for shareholders (Berle, 1954; Drucker, 1946; and Bowen, 1953).

As earlier pointed out, the true position is not that there is a total absence of corporate responsibility but the real problem is that the level of corporate social responsibility still leaves much to be desired in Nigeria, especially in the Niger Delta. Some of the most prominent examples of corporate responsibility in Nigeria include the construction of an Eye Hospital in Onitsha by Guinness Nigeria Limited, equipping the Eye Clinic (now named after it) in Ahmadu Bello University Teaching Hospital in Kaduna and more recently, funding the Guinness Eye Centre project at the Lagos Teaching Hospital to which the sum of four million Naira was appropriated. Shell, Chevron and Mobile give scholarships and bursaries to students in tertiary institutions in Nigeria. These companies have also, in some cases, constructed roads in rural areas (if only to provide good access for their own use to production sites), provided water, electricity, built classrooms such as the one situated in Oleh Campus, the Faculty of Law, Oleh, Delta State and schools, which at present, is solely responsible for power supply in Nigeria. It is sad, however, that the provision of these amenities do not even cater for the needs of these host communities. Ironically, they are the goose that lay the golden eggs but have only received little help from oil companies operating in their area. At times, these companies carve a niche for themselves and their staff within these communities, build beautiful houses with uninterrupted power supply from turbines, portable water and other social amenities and fence-off the communities. In some cases, members of the communities are left in the dark or exposed to epileptic power supply from the power holding company of Nigeria, but they have the "privilege" of looking into the camps of these companies that are well lit. Shell Edjeba Camp in Warri, Delta State enjoys uninterrupted power supply, for instance, but the Edjeba Community does not. Little wonder, that in their indignation, these host communities have also formed themselves into militant groups to protest against this unfair treatment.

Shell to finally leave Ogoni and the people are overjoyed at their departure. They literally carved a coffin and performed funeral rites for Shell as the company left their

community. They do not wish for Shell's return in the near future (CNN, 2009). Many villages in Bayelsa State have not experienced a better fate.

5.2.6 Environmental protection and corporate social responsibility: challenges and the way forward

The most serious damage to the environment or pollution is perpetrated by corporations and not by private individuals. The companies wield a lot of political and financial power, making it difficult to take formal actions against them or get them to be more socially responsible. These corporations are known to maintain close ties with government and even traditional rulers who reciprocally shield them for benefits derive from these corporations. For instance, in spite of the publicity generated by the toxic waste dumped in Koko in the Delta State, Nigeria, and the fact that government knows the identity of the company and its directors, it has never disclosed it to the public.

So far, the national policy thrust and the focus of the law are essentially for criminal sanctions, as if criminalisation *per se* will ensure a safer environment for all²¹ or compel companies to be socially responsible. Apart from the fact that it is usually very difficult to get all the facts needed to indict these big corporations, they have the money to employ the best legal services to help them manipulate the law and get off the hook. Where a transnational company is involved, it is even more difficult. For instance, legal proceedings against the Union Carbide of India have not been successful. The only compensation the company has paid (and it has made it clear), is *ex gratia*, not conceding liability.

The Companies and Allied Matter Act in Nigeria also provides that the monies of the company cannot be dissipated on charity except for the furtherance of the objects of the company. This is a handicap for companies in terms of their social responsibility. However, with the vesting of the day-to-day running of the company with directors empowered to engage in any activity, which will promote the interest of the company, it is plausible that the directors can apply such funds to social investments as long as it is not done *mala fide*.

²¹ Environmental Laws, including compensation op. cit., pg.76.

Chapter 2 of the Constitution of the Federal Republic of Nigeria (CFRN) makes environmental pollution and social responsibility a non-justiciable matter. This is certainly a gap that needs to be addressed. It is suggested that a transfer of this provision to Chapter 4 would meet the challenges.

Statutes regulating environmental pollution in Nigeria do not expressly or particularly provide for the kind of welfare services these companies should provide for host communities. This makes social responsibility largely discretionary. Such flexibility is, however, considered good if employed in a purposive manner.

5.2.7 Sustainable development in petroleum development

The right to a healthy environment is a human right. It is a natural and inalienable right. Recently, it was said that the right to a healthy environment is an extension of the right to life (U.N. Declaration, 1972). It must be added at this juncture that the right to a healthy environment is a partial guarantee of the right to life. This assertion is evidenced in human experience, past and present regarding the environment. According to the Bruntland Report of Our Common Future:

"Economic development is development which meets the needs of the present generation without compromising the abilities of the future generation to meet their own needs."

Flowing therefrom, one would be taking a myopic view if one restricts the right to life to the present generation. The right to life is not only an inalienable right of the present generation, it is the right to all humans born and unborn. It is, therefore, a "sacred" duty of the present generation to ensure that the future generation will inherit and enjoy a healthy environment as a partial guarantee of longevity. This is not to say that the people of the world today should not utilise and enjoy their environment and its resources. What is meant is that such human activities should be rational in order to strike a healthy balance between the developmental and environmental needs of the inhabitants of the earth today and the right to a healthy environment of the future people of the earth. This is the principle of sustainable development.

In other words, by sustainable development, we mean that development regarding or resulting from the environment should be such that it lasts over a long period of time. We also mean that the resources of “mother earth” should be harnessed in such a way as to develop the human environment, the humans who were naturally bequeathed with such resources and such exploitation or reorganisations in the environment should not constitute a hazard or risk to unborn generations. This principle is closely associated with and in fact, implemented through the principle of integration. To this effect, the European Union, and to a large extent, countries of the world, have made the Principles of Environmental Policy Integration (EPI) an integral aspect of governmental policies.

When one views this principle from an ecological perspective, the economy is viewed not as being swayed by the forces of expansion and reduction, but as a circle of phenomena expressing the kind of production and transformation that avoids or minimises waste by ensuring a constant return to source. Therefore, *“...any economic activity must be ecologically sound and must respect the environment. At the same time, that activity must also respect the worker and consumer”*.

In discussing the applicability of this principle of sustainable development, reference is made to some relevant international instruments or documents, domestic laws in Nigeria, and the concept of corporate social responsibility.

5.3 A REVIEW OF RELEVANT INTERNATIONAL LAWS

International environmental law is the set of legal principles developed by national, international, and transnational environmental regulatory systems to protect the environment and manage natural resources. As a body of law, it consists of a distinct set of substantive principles and procedural methods that are specifically important or unique to governance of the environment across the world. It includes the following: (1) public international environmental law, commonly used to refer to the set of treaties and customary international legal principles governing relations between nations; (2) national environmental law, which describes the principles used by national governments to regulate the behaviour of private individuals, organisations, and

subnational governmental entities within their borders; and (3) transnational law, which describes the set of legal principles used to regulate cross-border relationships between private individuals and organisations. One cannot set out in detail the substantive governing principles of global environmental law within the limited confines of this study. It is an emergent system made up of legal principles developed by national, international and transnational systems. Defining and describing it is not as easy as setting out the governing principles of national, international and transnational environmental law. More importantly, it requires a far longer exposition (Yang & Percival, 2009).

In April 1986, an explosion occurred at the Chernobyl nuclear power plant near Kiev in the Soviet Union releasing radioactive substances into the atmosphere which spread as far as Japan and the Scandinavia. The Soviet Union took two weeks to acknowledge the disaster. Was this a purely domestic issue or was it governed by international law? Could claims be brought against the Soviet Union by states affected by the radioactive fall-out? Was the Soviet Union obliged to inform the international community immediately of the disaster? (Dugard, 2005).

Questions of this kind can be answered by referring to general principles of international law, particularly those belonging to state responsibility. However, this is not a satisfactory way of dealing with the threats to the land, seas, atmosphere and life of the planet occasioned by population growth, increased urbanisation, modern means of transportation and new technology. Traditional international law, which requires an injured state to prove responsibility for damage caused may allow a coastal state to recover damages from the owner or flagstate of an oil tanker that discharges oil along its coast. But it fails to address the issue of prevention. Worse still, it fails to deal with damage to the environment caused by pollutants from unidentified sources. The depletion of the ozone layer by chemical compounds emitted from many states illustrates both the complexity and gravity of the problem. Threats to the environment, to the very survival of our planet, call for a concerted, co-operative effort which draws on existing rules of customary international law and the treaty as a legislative instrument, but at the same time, employs new methods for securing international co-

operation. This co-operative enterprise is international environmental law, a blend of 'hard law' in the form of customary rules and treaties, and 'soft law' comprising conference resolutions, guidelines and programmes of action (Dugard, 2005).

The 'softness' of environmental law is illustrated by three instruments which expound the basic principles of environmental law – the Stockholm Declaration of the United Nations Conference on the Human Environment,²² the 1992 Rio Declaration on Environment and Development²³ and the 2002 Declaration of the Johannesburg World Summit on Sustainable Development. All are broadly phrased expositions of principles which make no attempt to employ the language of obligation found in treaties. This is part of a deliberate co-operative strategy. Treaties take long to draft and even longer to ratify. Moreover, there is always the likelihood that the states, most likely to cause environmental damage, will not ratify the treaty at all. Conference declarations premised on broad consensus rather than consent, do not impose obligations on states but reflect a set of principles or standards to guide states, for the violation of which they may be held politically, albeit not legally accountable (Dugard, 2005).

Soft law instruments are not enforceable. But there is little difference in enforceability between Principle 1 of the Stockholm Declaration and Article 24 of the African Charter on Human and Peoples' Rights which declares, in a legally binding treaty, that:

"All peoples shall have the right to a general, satisfactory environment favourable to their development."

Are such declarations different in legal effect from those found in constitutional instruments, such as South Africa's Bill of Rights, which declares in Section 24 that:

"Everyone has the right – (a) to an environment that is not harmful to their health or well-being; and (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that – (i) prevent pollution and ecological degradation; (ii) Promote conservation; and (iii) Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development."

²² (1972) 11 ILM 1416.

²³ (1992) 31 ILM 874.

Much of environment law, in both international and national systems, is non-justiciable and unenforceable. However, it is better to have standards and policy guidelines in place than to wait until states have ratified multilateral treaties that translate aspirations into obligations (Dugard, 2005).

The 'hard law' of the environment is found largely in the customary-law rules of states' responsibility and in a growing body of multilateral treaties that seek to protect different features of the environment. These rules, together with 'soft law' principles derived from conference declarations, General Assembly resolutions and guidelines laid down by international organisations, provide a comprehensive, if not, a coherent body of law. Of the international institutions charged with the task of environmental protection, the most important is the United Nations Environment Programme (UNEP), based in Nairobi, which has done much to develop and promote programmes of action and guidelines (Dugard, 2005).

State responsibility and the environment

A state commits an internationally wrongful act when it uses, or allows its territory to be used, in such a way as to cause harm or injury to the territory of another state or to persons or property in that state.

The leading case on this subject is the *Trial Smelter Arbitration*²⁴ which concerned a dispute between the United States and Canada over damage caused to crops in the United States by sulphur dioxide fumes from a smelter in Canada. In holding Canada responsible for the wrongful conduct of the Trial Smelter, the Arbitration Tribunal stated as follows:

*"No state has the right to use or permit the use of territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence."*²⁵

²⁴ (1938-1941) 3 RIAA 1905. See, too, (1939) 33 AJIL 182 and (1941) 35 AJIL 684.

²⁵ (1938-1941) 3 RIAA at 1965-6.

This principle was reaffirmed by the International Court of Justice in its Advisory Opinion on the *Legality of the Threat or Use of Nuclear Weapons*,²⁶ when it declared that:

"The existence of the general obligation of states to ensure that activities within their jurisdiction and control respect the environment of other states or of areas beyond national control is now part of the corpus of international law relating to the environment."

The principle is found in both the 1972 Stockholm Declaration²⁷ and the 1992 Rio Declaration,²⁸ which recognise the responsibility of states to:

"Ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or of areas beyond the limits of national jurisdiction."

The **1982 Law of the Sea Convention** gives treaty force to the principle of *sic utere tuo, ut alienum non laedas* in Article 194, which provides that:

"States shall take all measures necessary to ensure that activities under their jurisdiction and control are so conducted as not to cause damage by pollution to other states and their environment."

The obligation imposed upon a state not to engage in activities within its territory that causes harm to other states requires the state to ensure that private persons within its territory act in accordance with this obligation (Dugard, 2005). The standard of care to be observed by states in activities that may cause environmental harm is unclear. There is some support for strict liability which would make a state liable without fault for damage caused by ultra-hazardous activities within its territory, such as the risk posed by nuclear power plants. For instance, the 1972 Convention on International Liability for Damage Caused by Space objects provides for absolute liability for damage caused by space objects.²⁹

The standard of due diligence is, however, more generally accepted than that of strict liability.

²⁶ 1996 ICJ Reports 226 at para 29.

²⁷ Above (n 2), art 21.

²⁸ Above (n 3), art 2.

²⁹ (1971) 10 ILM 965. This Convention was invoked by Canada in 1979 when a Soviet satellite broke up over Canada and crashed in Canada's North-West Territories. The Soviet Union agreed to pay compensation of three million Canadian dollars: (1979) 18 ILM 899 and (1981) 20 ILM 689.

This standard is, inevitably, flexible and will vary according to the circumstances of the environment-threatening activity in question (Dugard, 2005).

Generally, actual damage must have been caused before a state may be held responsible. In some cases, this presents no difficulties. The damage caused to crops from poisonous fumes emitted by a smelter or the damage caused to marine life by the discharge of oil from an oil tanker will usually be demonstrable, as will be the source. On the other hand, the damage or harm caused to the ozone layer or climate system by the use of chlorofluorocarbons (CFCs), is less obvious and more difficult to attribute to a particular state (Dugard, 2005).

Principles of international co-operation

The general principles of state responsibility provide an inadequate legal system for the enforcement of international standards of environmental protection. Inter-state claims premised on wrongful acts, some degree of fault and proof of actual damage are no substitute for environmental regulation. There is a need for a community response which focuses on prevention and regulation rather than reparation and adjudication, and which aims at the control and avoidance of environmental harm as well as the conservation and sustainable development of natural resources.

Some of the principles that guide and shape international environmental law are given below.

5.3.1 Sustainable development

The tension between the demand for development on the part of states (particularly developing nations), and the protection and preservation of the environment is addressed by the principle of sustainable development (Dugard, 2005).

Principle 3 of the Rio Declaration states that:

The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.

Principle 4 of the Rio Declaration states that:

In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.

It is difficult to apply this principle equally to developed and developing states. This is recognised in Principle 7 of the Rio Declaration when it declares in **Principle 7** that:

In view of the different contributions to global environment degradation, states have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command.

5.3.2 Notification

There is a duty on states to notify other states timeously of any environmental hazards that are likely to produce harmful effects on the environment of those states.³⁰ Related to this is the requirement that a state with knowledge of activities likely to have a significant adverse transboundary environmental effect should consult with states likely to be affected at an early stage.³¹

5.3.3 Precautionary principle

States are required to prevent and control threats to the environment. The Rio Declaration, after approving this approach, states that:

*Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost effective measures to prevent environmental degradation.*³²

This principle seems to have German origins, as it is known as the *Vorsorgeprinzip*.³³ It essentially entails the application of preventive measures in situations of scientific uncertainty where a course of action may cause harm to the environment.³⁴ For example, if either the safe or hazardous nature of a chemical substance has not been proved by science, it ought to be treated as hazardous until such time as it is proved to

³⁰ Rio Declaration, *supra* (n 26), Principle 18, See, too, Article 8 of the Draft Articles on Prevention of Transboundary Harm from Hazardous Activities *supra* (n 18).

³¹ Rio Declaration (*supra* n 26), Principle 19. See, further, the *Lake Lanoux* Arbitration between Spain and France: (1957) 12 RIAA 281; 24 ILR 101.

³² Rio Declaration *supra* (n 26), Principle 15. See, too, the Draft Articles on the Prevention of Transboundary Harm from Hazardous Activities *supra* (n 18), art 3.

³³ Purdue (n 38) at 535.

³⁴ See Rabie (n 19) at 97; Purdue (n 38) at 535-6; Kiss & Shelton (n 38) at 37-9.

be safe. The principle rests on the need to recognise that harm to the environment can be irreversible, and therefore, it is better to avoid any possible harm than to try to remedy it later. The latter course of action may be impossible (for example, reversing the extinction of a species) or excessively costly (Kidd, 2011).

It is clear that the principle cannot be an absolute one, since every development that takes place, runs the risk of causing some environmental damage that is unknown at the time of the development taking place. For this reason, it is necessary to balance the degree of likely risk with the cost of avoidance and the likelihood of the damage eventuating³⁵ (Kidd, 2011).

It would seem that the principle is not consistently invoked,³⁶ but it has been included in a number of pieces of legislation and policy statements. Internationally, the principle has found expression in the Maastricht Treaty of the European Union,³⁷ and the Rio Declaration on Environment and Development³⁸ (Kidd, 2011).

Some examples from national legislation are also informative. In the United States, the Clean Air Act, 1982, requires emission standards to be set at levels which provide an ample margin of safety.³⁹ This has been the subject of court interpretation, where it has been held that this does not entail risk-free standards, but that factors of cost and technical feasibility can be taken into account. The overriding consideration, however, is that of an acceptable margin of safety.⁴⁰ In legislation from the Netherlands, which deals with protection of the soil and dangerous substances, it is provided that anyone who produces a substance, puts it at the disposition of another, utilises or introduces it into the Netherlands, who knows or reasonably should know that by his action, the

³⁵ Purdue (n 38) at 535; Kiss & Shelton (n 38) at 38-9. See also Sands (n 44) at 266-79; Patricia W. Birnie & Alan E. Boyle, *International Law and the Environment* 2 ed. (2002) at 115-21.

³⁶ Rabie (n 19) at 97-8; Birnie & Boyle (n 48). Cf Sands (n 44) at 279.

³⁷ Article 130r(2) provides that European Community policy on the environment 'shall be based on the precautionary principles that preventative action should be taken, that environmental damage should, as a priority be rectified at source and that the polluter should pay'.

³⁸ Principle 15 provides that 'where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation'. For discussion on the Rio Declaration, see 55.

³⁹ 42 US Chapter 85.

⁴⁰ Purdue (n 38) at 536.

substance can present a danger for humans or for the environment, has the duty to take all measures which could be reasonably demanded of him or her in order to limit, as much as possible, the danger⁴¹ (Kidd, 2011).

5.3.4 'Polluter pays' principle

The costs of pollution are in principle, to be paid by the polluter.⁴² This principle forms the basis of ILC's (International Law Commission's) draft principles on International Liability for Injurious Consequences arising out of Acts not prohibited by International Law.⁴³

The Organisation for Economic Co-operation and Development (OECD) first set out the principle in 1974 (Pearce, 1989). At its most basic, the principle entails that a person involved in any polluting activity should be responsible for the costs of preventing or dealing with any pollution caused by that activity, instead of passing these onto somebody else. This includes both the costs of prevention and the costs of dealing with the consequences of pollution already caused. The costs are not only costs incurred by humans, but also, costs to the environment itself. Thus, it can be seen that the principle has both a proactive (preventive) aspect and a reactive (compensatory) aspect (Kidd, 2011).

A question that is often asked about the principle is whether it merely levels to the polluter passing on the costs of pollution to consumers.⁴⁴ Although this may seem at odds with the principle at first glance, it should actually occur. This is because 'the price mechanism now signals the "true" costs of production to the consumer, comprising normal costs of production and the hitherto free environment inputs'.⁴⁵ In any event, Pearce demonstrates that, in practice, producers can only pass on part of the costs of pollution to consumers: in general terms, the more competitive the market is for

⁴¹ Cited by Kiss & Shelton (n 38) at 38.

⁴² Rio Declaration *supra* (n 26), Principle 16.

⁴³ *Supra* (n 20), Principle 3, commentary at 188-91.

⁴⁴ See Purdue (n 38) at 536.

⁴⁵ Pearce (n 37) at 158.

producers, the less the burden of pollution charges the consumers will bear.⁴⁶ (Kidd, 2011).

This principle is obviously a desirable one to pursue if one is to reduce inefficient economic externalities, but to what extent does it find expression in environmental law? In South African law, the National Environmental Management Act (NEMA)⁴⁷ expresses the principle as follows:

*The costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising further pollution, environmental damage or adverse health effects must be paid for by those responsible for harming the environment.*⁴⁸

Arguably, South Africa's legislation does not adequately provide mechanisms to ensure the comprehensive realization of this principle. Individual legal provisions are consistent with the principle in respect of specific types of pollution or effects on specific parts of the environment. It might be argued that Section 28 of NEMA applied the polluter pays principle, however, this is done imperfectly as liability under this section is not confined to the polluter. This is explored further in Chapter 6 (Kidd, 2011).

In International Law, the polluter pays principle is recognised in several instruments.⁴⁹ Possibly, its best-known expression in international law, although in somewhat diluted form, is in the Rio Declaration on Environment and Development (Kidd, 2011).

5.3.5 Human rights and the environment

The conference on Human Environment, held in Stockholm from 5-6 June 1972 was in many respects, the most successful international conference held in years. Within two weeks, it adopted not only a basic Declaration and a detailed resolution on institutional and financial arrangements, but also 109 recommendations comprising an ambitious action plan.⁵⁰ The Declaration contains a set of "common principles to inspire and guide

⁴⁶ Ibid. at 158 and 159.

⁴⁷ Act 107 of 1998.

⁴⁸ Section 2(4)(p).

⁴⁹ See Philippe Sands. *Principles of International Environmental Law* 2ed. (2003) 279-85.

⁵⁰ The official text of these documents is contained in the Report of the U.N. Conference on the Human Environment, U.N. Doc.A/CONF.48/14, at 2-65, and Corr.I (1972).

the people of the world in the preservation and enhancement of the human environment". The resolution on institutional and financial arrangements proposed the establishment by the General Assembly of the United Nations of: an intergovernmental Governing Council for Environmental Programmes, to provide general policy guidance for the direction and coordination of environmental programmes; an Environment Secretariat headed by an Executive Director; an Environment Fund, to provide additional financing for environmental programmes; and an interagency Environmental Coordinating Board for the purpose of ensuring cooperation and coordination among all bodies concerned in the implementation of environmental programmes. The Action Plan focuses on environmental assessment, through the establishment of an Earthwatch, designed to identify and measure international environmental problems and warn against impending crises; environmental management acting on the basis of Earthwatch assessments; and the necessary supporting measures, including education, training and public information.

In 1968, when Sweden suggested the convening of an international conference on the problems of human environment, the main objectives were to "create a basis for comprehensive consideration within the United Nations on the problems of human environment", and to "focus the attention of Governments and public opinion in various countries on the importance of the problem".⁵¹ These objectives were endorsed by the Economic and Social Council and the General Assembly in their resolutions relating to the convening of the conference.⁵²

5.3.6 Environmental Law Guidelines and Principles on Shared Natural Resources

The draft principles of conduct (*attached below as Appendix G*), in this note, further referred to as the principles, have been drawn up for the guidance of states in the field of the environment with respect to conservation and harmonious utilisation of natural resources shared by two or more states. The principles refer to such conduct of

⁵¹ 45 U.N. ECOSOC, Annexes, Agenda Item 12 (Doc. E/4466/Add.i) at 2 (1968).

⁵² ECOSOC Res. 1346, July 30, 1968, 45 U.N. ECOSOC, Supp. 1 (Doc. E/4561) at 8 (1968); G.A. Res. 2398, Dec. 3, 1968, 23 U.N. GAOR, Supp. 18 (Doc. A/7218) at 2 (1969).

individual states as is considered conducive to the attainment of the said objective in a manner which does not adversely affect the environment.

5.3.7 The atmosphere

The atmosphere is not a distinct category in international law because it consists of a fluctuating and dynamic airmass, it cannot be equated with airspace, which above land, is simply a spatial dimension subject to the sovereignty of the subjacent states⁵³ (Birnie & Boyle 2002).

Principle 21 of the Stockholm Declaration on the Human Environment already forms the basis for the 1979 Convention on Long-Range Transboundary Air Pollution, the 1985 Convention for the Protection of the Ozone Layer, and the 1992 Framework Convention on Climate Change. Although the global atmosphere is not an area “beyond the limits of national jurisdiction”, and thus, does not quite fit the precise terms of Principle 21, it should by analogy, fall within the protection afforded by international law to common areas such as the high seas. This conclusion is implicit in the Ozone Convention and in UNGA Resolution 43/53, and in the designation of climate change as a matter of “common concern” in the Climate Change Convention⁵⁴ (Birnie & Boyle 2002).

Moreover, international claims concerning the conduct of atmospheric nuclear test provide some precedents for the inference that, like the high seas, the global atmosphere must be used with reasonable regard for the rights of other states, including the protection of their environment and human health (Birnie & Boyle 2002).

Customary international law, and the responsibility of states for the performance of their customary obligations may, therefore, provide some legal restraint on the production of greenhouse gases or on conduct of other activities likely to result in global climate change. But, as in the case of acid rain, it is not easy to extrapolate from this conclusion, precise standards for the diligent conduct of states. It does not follow

⁵³ 1944 Chicago Convention on International Civil Aviation, 15 UNTS 295.

⁵⁴ UNGA Resolution 44/207 (1989), para 4, and UNEP Principles of Co-operation in Weather Modification (1980).

that standards adopted under the 1987 Montreal Protocol to the Ozone Convention and the 1997 Kyoto Protocol to the Climate Change Convention can be generalised into customary law⁵⁵ (Birnie & Boyle, 2002). Without dismissing the relevance of customary law as a basis for negotiation, it seems clear that, as in the case of ozone depletion, legally binding standards for the abatement of the emission of greenhouse gases can only come through agreement on detailed commitments and international supervisory mechanisms (Birnie & Boyle, 2002).

1. The 1985 Vienna Convention for the protection of the ozone layer⁵⁶

UNEP initiated negotiations for a treaty to protect the ozone layer in 1981. As with the 1979 Convention on Long-Range Transboundary Air Pollution, the interests of several groups had to be reconciled (Birnie & Boyle, 2002).

2. The 1987 Montreal Protocol

The 1987 Montreal Protocol on substances that deplete the ozone layer,⁵⁷ sets firm targets for reducing and eventually eliminating consumption and production of a range of ozone-depleting substances. These were supported particularly by the USA, which referred to the need to err on the side of caution and to recall the well-being of future generations, and by the Executive Director of UNEP, whose efforts ensured that a consensus emerged among the scientific experts on predicting the rate of ozone depletion and the regulatory measures needed to protect health and the environment. Following scientific evidence that the standards adopted in 1987 would not be effective in reducing ozone depletion, however, additional substances were included by the amendments adopted in 1990 and 1992 and the timetable for complete elimination revised and brought forward to 1996.⁵⁸ These changes were made possible by the development of new technology and alternative substances, although in some cases, these substitutes may still have an ozone-depleting potential; others are greenhouse

⁵⁵ See Churchill and Freestone (eds.), *International Law and Global Climate Change* (London, 1991), Ch.9.

⁵⁶ Yoshida, *The International Legal Regime for the Protection of the Stratospheric Ozone Layer* (The Hague, 2001); Benedick, *Ozone Diplomacy* (2nd edn., London, 1998); Flinterman et al. (eds.), *Transboundary Air Pollution* (Dordrecht, 1986), 267 and 281; Brunée, *Acid Rain and Ozone Layer Depletion* (Dobbs Ferry, 1988), 225-54.

⁵⁷ Ad Hoc Working Group of Legal and Technical Experts, First Session, UNEP/WG.151/L.4 (1986); *ibid.*, Second Session, UNEP/WG.167/2 (1987); *ibid.*, Third Session, UNEP/WG.172/2 (1987). See Benedick, *Ozone Diplomacy* (2nd edn., London, 1998).

⁵⁸ For amendments and adjustments, see UNEP, *Handbook of Substances that Deplete the Ozone Layer* (5th edn., Nairobi, 2000) and subsequent updates. Decisions of the parties will also be found there.

gases. Limited allowance is made for increases in production of ozone-depleting substances to meet domestic needs and facilitate industrial rationalisation. Control of both consumption and production was necessary in order to protect the interests of producers and importers by deterring price inflation or over-production in the interim period until the eventual phase-out of these gases⁵⁹ (Birnie & Boyle, 2002).

5.4 INTERNATIONAL ENVIRONMENTAL TREATIES

A network of multilateral treaties seek to protect seas, land, rivers, atmosphere and outerspace from environmental degradation, preserve fauna and flora, and to prohibit ultra-hazardous activities that threaten the environment. Some of the treaties designed to combat marine pollution are described in the Chapter on the Law of the Sea. In this section, several of the more important environmental treaties are described in order to provide a glimpse of what has already been achieved and to indicate the enormity of the challenge to set in place an international legal regime that serves effectively to protect the environment (Dugard, 2005).

5.4.1 Fauna, flora and biological diversity

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) of 1973⁶⁰ regulates trade in endangered species. The appendices list species threatened or likely to be threatened with extinction and prescribe regulations for trade of such species. A conference of the Parties meets regularly to review implementation of the Convention (Dugard, 2005).

The Convention on Biological Diversity of 1992⁶¹ aims to halt the loss of biological diversity resulting from actions such as deforestation, the destruction of temperate forests, wetlands and coral reefs and the hunting of fauna.

The development concerns of developing nations are also taken into account.

⁵⁹ Explanatory Note by the Executive Director of UNEP, Montreal, 1987.

⁶⁰ (1973) 12 ILM 1085. M. Cowling & M. Kidd 'CITES and the Conservation of the African Elephant' (2000) 25 *SAYIL* 189.

⁶¹ (1992) 31 ILM 818.

5.4.2 Nuclear activities

Since the accident at the Chernobyl nuclear reactor in 1986, the International Atomic Energy Agency and multilateral treaties have devoted considerable attention to nuclear safety and the protection of the environment from nuclear accidents. The failure of the Soviet Union immediately to provide information to its neighbours involved in the accident at Chernobyl, prompted states to undertake to provide such information in bilateral and multilateral treaties. In 1994, the Convention on Nuclear Safety,⁶² was adopted, which emphasises that the responsibility for nuclear safety rests with the state having jurisdiction over a nuclear installation. Parties are required to account for the safety measures they have taken to periodic review meetings of all parties (Dugard, 2005).

5.4.3 Hazardous waste

The disposal of toxic and hazardous wastes at sea and on land has led to the adoption of a number of multilateral conventions to prohibit dumping of such substances. The principal convention is the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal of 1989.⁶³ It requires parties to prohibit the export of hazardous and other wastes to parties which have prohibited the import of such wastes and informed other parties of such prohibitions. Where a state has not prohibited the import of such wastes, parties shall not permit the export of hazardous wastes to that state without its consent in writing.⁶⁴ Parties are required, inter alia, to take appropriate measures to prevent pollution due to hazardous wastes and to ensure that the transboundary movement of hazardous wastes is 'reduced to the minimum, consistent with the environmentally sound and efficient management of such wastes'.⁶⁵

⁶² (1994) 33 ILM 1514.

⁶³ (1989) 28 ILM 657. See Z. Lipman 'Transboundary Movement of Hazardous Waste: Environmental Justice Issues for Developing Countries' (1999) *Acta Juridica* 266.

⁶⁴ Article 4(1) (c).

⁶⁵ Article 4(2) (d).

CHAPTER SIX

NIGERIA RENEWABLE ENERGY POTENTIALS AND THE NIGER DELTA

6.1 MEANING AND ASPECTS OF RENEWABLE ENERGY

6.1.1 Meaning

Renewable energy is an energy obtained from natural and persistent flows of energy occurring in the immediate environment. Energy passes through the environment as a current or flow, irrespective of a device to intercept and harness this power.

Renewable energy is that that is replaced naturally or controlled carefully and can therefore be used without the risk of finishing it all (Oxford Advanced Learner's Dictionary New 8th Edition). It is in constant supply without depletion (Ezugwu, 2015). Renewable energy sources comprise energy mix of solar, wind, hydro, bio-mass, ocean waves and tides, and geothermal. They are *renewables* because they are regularly replenished by natural processes and are therefore in endless supply (Uyigue, 2006). They also can operate without adversely affecting the environment (Ezugwu, 2015).

Renewable energy offers our planet a chance to reduce carbon emissions, clean the air, and put our civilization on a more sustainable footing. Renewable sources of energy are an essential part of an overall strategy of sustainable development. They help reduce dependence of energy imports, thereby ensuring a sustainable supply and climate protection. Furthermore renewable energy sources can help improve the competitiveness of industries over the long run and have a positive impact on regional development and employment. Renewable energies will provide a more diversified, balanced, and stable pool of energy sources (Behl *et al.* 2013).

6.1.2 Aspects of renewable energy

There are different aspects of renewable energy and the nature of each depend on the mode of formation and the materials involved. The following are some aspects of renewable energy: solar, wind, hydro, biomass, and geothermal energies (Okeke, 2016).

1. **Solar energy:** Solar energy is derived from the ultraviolet radiation given out by the sun from the outer space. It is the pivot of green plants sustenance as it energizes the process of photosynthesis through which green plants manufacture their food. However its importance to mankind has for so long gone beyond mere sustenance of green life. Solar energy was used extensively by early men for the purposes of agriculture and several domestic activities and it is believed that human civilization started with the exploration of possible ways of harnessing it. Its importance today has transcended beyond agriculture but now extensively applied in technological developments (Okeke, 2016).
2. **Wind energy:** This was one of the mostly used energy resources at about 3,200 BC. The first recorded use of the wind energy is the Egyptians sailing exploits. The windmills flourished so much on wind power and still do in developing countries. Immense technological advancements over the years have made wind power an indispensable energy resource as wind speed as low 3m/s is detected and converted into work by modern hypersensitive turbines. A wind turbine in Portugal for instance is able to generate as much as 2,130 MW of electrical power which serves a population of about 1,119,900 people in northern Lisbon. Nigeria recorded a significant increase in the use of wind power between years 2002 and 2011. Maximum wind speed of 8m/s has been recorded up north in Nigeria and 6m/s down south. The average wind speed across Nigeria is estimated at 3m/s after adjustments made to wind speed measurements at different heights (Adaramola & Oyewola, 2011).
3. **Hydro energy:** Hydro power is one of the oldest sources of renewable energy in Nigeria as hydroelectricity for instance mainly came from hydropower through the use of dams and before the discovery of fossil fuels. It is the second largest type of

renewable energy available in Nigeria (Nadabo, 2010). It is also a very useful asset in agricultural practices in Nigeria as dams make it possible for irrigation of farmlands to take place especially in times of drought (Okeke, 2016).

4. **Biomass:** Biomass is a term used to describe agricultural and municipal wastes that are capable of producing renewable energy when subjected to thermal or chemical decomposition. They are both plant and animal based in nature and hence are made up mainly of organic materials. They are mostly found as a mixture of carbon and other inorganic molecules of elements such as Oxygen, Nitrogen and small amounts of metallic compounds. Biomass differ from fossils because the latter are remains of biological materials that have absorbed carbon dioxide over long period of time while the former is made of bonded plant and animal remains of recent origins (Okeke, 2016).
5. **Geothermal energy:** Geothermal heat comprises of hot water, hot rock and molten rock situated some distance into the earth crust. It is sustained by shallow grounds capable of maintaining a temperature range of 500C to 600C. It is a harmless and clean source of renewable energy and do not pose any known environmental pollution. There are two known potential geothermal resource stations in Nigeria: Ikogosi warm springs in Ondo State and Wikki warm springs in Bauchi State (Babalola, 1984).

6.2 NIGERIA'S RENEWABLE ENERGY POTENTIALS

6.2.1 Wind energy potential

Like most of West Africa, Nigeria has a large untapped potential for wind energy development. At 50m, there is abundant wind at the appropriate 6ms and up speed.

The price point for wind as a standalone or coupled system is substantially lower than diesel.

There is availability of wind energy at an annual average of 2.0 m/s speed in coastal areas while the northern part of the country has up to and 4.0 m/s. The intensity of wind energy perpendicular to the wind direction ranges between 4.4 W/ m² in coastal

areas and 35.2 W/m^2 in the far north having an air density of 1.1 kg/m^3 (Sambo 2009). At the moment, the share of national wind energy is low and no commercial wind power plants is connected to the national grid.

One of the cheapest technologies of renewable energy today is wind, and it costs about 4 or 6 cents per hour per kilowatt. Its construction is time efficient, including its fuel, maintenance and operation. Also, it can use modular form capacity addition that which makes it demand ever increasing. Wind helps save fossil fuels for other forms of application and incoming fuel needs. Only the wind fuels the fuel energy, so, it is clean and environment friendly, so it has high competition potentiality with conventional electricity, and it has reduced drastically in cost for the past ten years but its initial cost is quite high. In the general sense, its consistency level is low due to the intermittent nature of wind and it cannot be stored except with the use of batteries.

6.2.2 Solar Energy Potential

The location of Nigeria in the high sunshine belt gives it a high potentiality for solar energy generation of up to $1850 \times 10^3 \text{ GWh}$ per day if only one percent of her land area is covered by solar modules and this is more than a hundred percent of what her electricity consumption per year (Uzoma *et al.* 2011). In all the country has been estimated to have $17,459,215.2$ million MJ/day (17.439 TJ/day) of solar energy falling on its $923,768 \text{ km}^2$ land area and this makes adoption of solar energy, according to Oji *et al.* (2012), a credible and sustainable alternative for the country.

In Nigeria the National Centre for Energy Research and Development (NCERD) as well as the Sokoto Energy Research Centre (SERC) have undertaken some pilot surveys supervised by the ECN. There have also been many electrification, PV- solar-thermal installations and water pumping. Solar applications have also positively affected village electrification, water pumping, use in rural medical centres schools, as well as for preservation of medical facilities. Lagos Rivers, Bayelsa, Ondo, Delta, and other coastal states have great, round the year. Potentiality for strong wind energy harvest.

6.2.3 Hydro Energy Potential

Still Nigeria has a reasonably high endowment of big river flows and natural falls with streams and rivers existing in the country's division to eleven River Basin Authorities where some of the rivers are capable of all year round discharge. A twelve state survey over four river basins conducted reveals that about 300 small hydropower (SHP) sites remain unexplored even when they have a total potentiality of 734.3MW (Aliyu & Elegba, 1990). The Federal Government of Nigeria in collaboration with the Nigerian Electricity Supply Company (NESCO) have established all over Nigeria, some eight small hydro power stations that have the capacity of 37.0 MW in the average. Okafor & Uzuegbu (2010) have established that the waterfalls, streams and rivers used can avail Nigeria ample off-grid electricity if properly maintained.

The south part of Nigeria has the longest duration of rainfall which decreases as one progresses to the north. With this situation, there is well over 240 days precipitation in a year almost all across the south while in the north, it may not be more than ninety days. In whatever analysis, the following advantages are traceable to the small hydro development.

- (i) Provision of a basic tool for rural development;
- (ii) Very low operation and maintenance costs;
- (iii) No fuel costs;
- (iv) Kick-starting and support for cottage industries;
- (v) Access to remote and often neglected communities;
- (vi) Competitive economic and supply advantage over other power systems;
- (vii) Environmentally friendly and emission free power generation;
- (viii) Poverty alleviation;
- (ix) General upliftment of the social structure of the community;
- (x) Provision of rural employment;
- (xi) Economic empowerment of the community;
- (xii) Reduction of rural-urban migration; and
- (xiii) Opportunity to tap substantial unutilised energy resources of the country.

In spite of the above clear cut benefits, there are still some shortcomings as power generation is dependable during raining seasons except where reservoirs are used and that also has its own down side in terms of cost.

The disadvantages of hydro-power projects in Nigeria are as follows:

- Dependency on loan which has been greeted by allegations of corruption.
- Drought and other natural disasters can deny electricity production
- It can harm the ecosystem and destroy wildlife

6.2.4 Biomass and Biofuel Energy Potential

Certain forage grasses, crops and shrubs, forestry and animal wastes and aquatic biomass are the biomass resources of Nigeria while maize, sweet sorghum, and sugarcane have strong potentials for befool production of biofuel (Nnaji *et al.* 2010). Like other sources, biomass from plants which also can be fermented by anaerobic bacteria for production of biogas (cheap fuel gas), have fuel utility values especially for small-scale industries (Akinbami, 2001). Nigeria has been estimated to produce about 227,500 tons of fresh animal waste on daily basis and this can be used to produce biogas (Akinbami, 2001). Other biomass sources are wood wastes and sawdust and they can be used for energy generation.

Initial efforts to produce biofuels date back to the early days of the automobile. However, they were quickly replaced as the fuel of choice by cheap petrol, which continued relatively unchallenged until the oil crisis of the 1970s, inducing governments to explore alternatives sources of fuel. However, with the end of the oil crisis between the late 1970s and early 1980s, interest in biofuels diminished. Renewed interest in biofuels has been reflected in the rapid expansion of global biofuel markets in the last five years or so. Commonly cited driving forces behind the current market development of biofuels include: current high oil prices, opportunities for greater energy security, and currency savings through a reduced oil bill. But what is new about this renewed interest and what makes biofuels a serious option for partially replacing oil as a transport fuel are their alleged reduced greenhouse gas (GHG) emissions. Renewable energy technology is a promising solution to the energy crisis in Nigeria.

Renewable energy, apart from being sustainable and inexhaustible, can be set up in small units and is, therefore, suitable for community management and ownership (Uyigüe, 2007). At a time when the focus is on global warming, carbon-dioxide emission, secure energy supply, and less consumption of fossil-based fuels, the use of renewable energy resources is essential with the exception of hydro-electricity and nuclear energy. The majority of the world's energy needs are supplied through petrochemical sources, coal and natural gases. All these sources are finite and at the current usage rate, will be consumed by the end of the next century (CONCAWE, 2000).

Renewables are often still perceived as an expensive energy option. In fact, the reality of their cost is rapidly changing, with technologies moving beyond the peak and prices coming down quickly. Solar photovoltaics (PV) is on the verge of reaching competitiveness with retail electricity prices in some markets (Breyer and Gerlach, 2010). Wind energy in New Zealand is being deployed without a dedicated support mechanism for renewables. In locations that do not have access to modern energy services, through grid-connected electricity, stand-alone renewable energy applications are often more economically viable than other technologies (such as diesel generators), while also providing an environmentally sustainable option for energy supply (International Energy Agency 2010a). Finally, relying only on the one least-cost option would create problems with securing availability, due to the absence of diversity in the energy portfolio. Despite the known fact that renewable energy represents a cleaner alternative, there are certain environmental risks as explained below.

Human dislocation and resettlement

In Ghana, significant environmental and social issues emerged with the development of the Akosombo Lake on the Volta River (for hydro-power generation and other multi-purpose uses). The creation of the Lake and the regulation of the floodwaters of the Volta River brought in its wake, numerous negative impacts on the lives of communities living upstream and downstream. The major impact was socio-economic, arising from the dislocation and resettlement of about 80,000 people from about 740 villages. Different ethnic groups with a wide linguistic diversity lived within the flood basin. This tremendously compounded the problems of resettlement. The resettlement

effort also represented a formidable and physically challenging task due to the inundated nature of the basin. The basin was not only large; it was isolated, difficult to access and had minimal infrastructure. The basin was also unhealthy with insect-borne diseases such as malaria, river blindness, sleeping sickness and water-borne diseases such as bilharzia. Incidence of some water-borne diseases such as bilharzia and hookworm increased. A positive health impact, which arose from the development of the Akosombo Reservoir, is the eradication of river blindness caused by the simulum fly, associated with fast flowing water. Other positive impacts are the creation of opportunities for the development of extensive navigation on the reservoir and the explosion of fishing activities.

- In 1999, the Kainji Dam flooded the river banks and displaced thousands of people.
- In August 2001, the Tiga Dam failed and the ensuing flood displaced over 20,000 people and washed away hundreds of hectares of farmland. The Gurara Dam displaced over 100 settlements within its reservoir. While compensations were made, affected people lost their farmlands, cultural artifacts, ancestral homes and socio-economic mainstays. Recently (in August 2006), a run-of the-river flood from the Usuma plain channel displaced many settlements within the satellite town of Kubwa in the FCT, destroying many properties.

6.3 NIGER DELTA RENEWABLE ENERGY POTENTIALS

Since the year 1990 and beyond, Nigeria has witnessed and explored many explorations of renewable energy. A bulk of this engagement has been in the area of photovoltaic (PV) panel solar power. This chapter features four applications of solar power for the very fact that they have, as distinct models, models, brought about significant exemplifications of how to adapt renewable technologies to for local utility.

Every case of the model represents years of iterative improvements put off by many organizations, both individually or, and through partnership in the view of new technology. As a result of limited space and time however, what will be captured here in terms of the technological revolution will be limited but in doing that, the roles played by socially progressive companies and NGOs will be given due recognition,

especially in terms of the efforts they have made in adapting this technology to local needs.

1. **Simplicity Model of the Solar Water Pumping:** Nigeria has for long suffered from provision of potable water as many parts of the country have relied solely on single borehole water which, in most cases are owned by private individuals, donated by communities or, and politicians seeking votes. This has suffered serious problems due to cost of operation, especially in the area of electivity.

The Niger Delta region has for long been described as being too cloudy for solar energy adaptation, so, the Niger Delta Wetlands Centre (NDWC) continued to experiment with borehole powered by solar for decades. The Centre broke the too cloudy appellation by designing simply and easy to operate boreholes. The breakthrough of the NDWC throws up a system that pumps ample water in the day time through the use of the DC, making the use of batteries and inverters unnecessary.

The following well proven strengths have been attributed to this model:

- Investment in quality components is rewarded with extraordinary durability.
- Maintenance costs are low enough to be viable in rural areas.
- There is a continuous fall in the costs of major components, primarily solar panels.
- Efficiency of both pumps and panels continues to improve.

However, there are some outstanding issues which have been highlighted as follows:

- Low maintenance is not maintenance-free – some trained support is still essential;
- Initial capital costs are still significantly higher than generator/grid systems; and
- Capacity needs matching to demand management – systems will pump only within their storage capacity for a 24-hour period and will not ‘top up’ overnight.

The present situation is that following a period of time which includes sponsorship of an array of disastrous installations, the Niger Delta Development Commission decided to adopt the foregoing simple model for general use in the rural communities. In spite of this, existing schemes that are generator based, as well as poor solar continued to be operated by many agencies of government.

- 2. Small-Scale Solar Lighting Products:** Other experimentations of solar applications and lighting in Nigeria have been met with restricted success. Most of these have targeted provision of alternatives to low income families that depend on kerosene based lanterns, and miniature generators. What existed before it utile little solar panels lighting that used battery supports and could power small devices such as radios. Cost of purchase and maintenance however confronted the system and its users.

A significant increase has however greeted lighting options lighting options in the last 36 months, focusing on Nigeria and the rest of Africa and putting affordability and commitment into main consideration. There have been affordable and robust LED lighting apparatus that are equipped with better and more durable battery options. This, no doubt has created lighting and power option to households and small enterprises.

The present position is that in a country like Nigeria, households solar energy has come to have significant potentiality with the huge population of seventy million Nigerian who have no access to grid electricity as main beneficiaries. This has created affordability for many families, especially in the area of night life lighting.

On the assumption that the there is correctness in the current assessment that over their lifespan they offer transformational changes, what remains the frustrating clause is finance, as well as the case of developing a small consumer industry. What appears to be a revolutionary simplification and affordability of light producing solar products equally implies that a new thing, that is the modular mixing of small solar products, can be developed or encouraged to come up in Nigeria.

- 3. Refrigeration for Vaccines and other Medical Items** Just as in the case of solar-powered water pumps, the solar powered refrigerating applications assisted in the area of health. They also had affordability advantage for households.

Many companies operating in Nigeria have for years installed solar-powered refrigerating machines in rural areas where cost of fuel is not very affordable, in order for them to maintain standard services. In 2008, a company called KXN Nigeria got the Ashden innovation award for installing solar-powered refrigerators across center and north of Nigeria. Since 2002 the company has installed about 800 refrigerating systems across medical centres, especially those committed to eradication of polio. The refrigerators installed are compact and energy efficient.

In a recent development, Surechill, a company based in the United Kingdom, has improved tremendously in terms of design and efficiency, by circulating a refrigerator capable of withstanding 43°C for one week with no form of power source, requiring a mere 350W solar panel to function completely off-grid. This efficiency, in combination of other innovations **simply** suggests a radical reduction in the use of inverter and battery. As a result, Surechill solar outfit has radically reduced the overall cost of power in about 25 percents of the earlier known. This indeed raises the question of whether or not this can be achieved through little fuel consuming generators. It is estimated that the cost of making power available through the aforementioned system can be much lower making a well-maintained generator its part.

At present, stable refrigeration for medical and other purposes continue to have a major alignment with solar. That bang stated, interview with practitioners in solar industry health based organizations such as hospitals and medical centres pinpoint lessons that have been learnt all along. The fridge system has a high failure rate and is very challenging in term of maintenance, and what this reminds us is that the maintenance dependency of solar systems, where maintenance and replacement remain critical issues. Basic refrigerating maintenance and replacement being an obvious issue. At the same time, solar components often fail due to issues relating to dust and leaves appearance on the panels. In the overall analysis, it is needed to consolidate gains and lessons from earlier while taking advantage of new technology.

4. Off-grid Information Technology Centres

A very good example of how there is improvement in the many options of renewable energy system. Many Nigerians especially of low income living in the rural communities have had a longstanding aspiration for access to the internet and other information technology devices. Now they have been socially included in such a way that closes in the inequality gaps in Nigeria in a more critical way.

This is however, especially in the rural, not without its own maintenance problems which are similar to those faced by some micro rural infrastructure projects other than the ICT. An NGO that ran the STAND governance project in the Niger Delta in 2006 was met with a proposed cost of about \$120,000 in order to power a small centre. Some three years after, the SDN, that succeeded that company opted for a pilot using new technology of low-energy consuming computers designed specifically for power problematic rural situations.

At present, many IT centres there are that use similar or same technology in many parts of the Niger Delta. With this, demand for energy as well as the capital to acquire it have further declined and created visibility for the installation of systems that stand alone on a single modest solar panel. In a similar vein, a lot of states of the federation and their ministries, departments and agencies continue to invest huge capital for schools and institutions in both urban and rural areas to use the solar ICT systems. The following factors are common to the pilots and early experiences of Nigeria.

- Refined design, with emphasis on simplified combinations of well-protected components that wherever possible, are robust and solid.
- Improving technology and solar efficiency continue to make solar products and systems more affordable and reliable.
- Relatively economical maintenance capacity and basic training for end users remains essential to sustainable performance.
- Education of government and agency managers of development budgets is likely to be critical to market development.
- Access to applied technologies from other countries should be a higher priority, so that adaption for use within Nigeria can be hastened.

6.4 NIGERIA'S RENEWABLE ENERGY INSTITUTIONAL FRAMEWORKS

Although Nigeria has not enacted a handy renewable energy law, however, there are institutions that are reposed with responsibilities of developing or implementing renewable energy related policies, guidelines and regulations. Below is an outline of some of the institutions.

- i. Energy Commission of Nigeria (ECN)
- ii. Ministry of Power
- iii. Rural Electrification Agency (REA)
- iv. Nigerian Electricity Regulatory Commission (NERC)
- v. Standard Organization of Nigeria (SON)

6.4.1 The prospects of a renewable energy resources development in Niger Delta

During the Focus Group Discussion (*see Appendix F*) organized by the research while carrying-out the field study, some prospects of renewable energy resources development in Niger Delta were highlighted and discussed. The following is the summary of these prospects:

The potential the development of renewable energy resources in Nigeria is very enormous. Akwa-Ibom, being a coastal state has lots of water. For instance, Oron has fresh water that can be used for hydro plants. There is also a large undeveloped land for building of windmills. Like Akwa-Ibom, Cross River State is also blessed with water that can be used to generate electricity, while in some areas like Akankpa Local Government, there is heavy sunshine for solar energy. Similarly, Ohafia in Abia state has high potentials for solar energy. The case of Delta is more heartening as the state has virtually all renewable energy resources like water and biomass. Also, Rivers state has resources for biomass, hydro-energy and solar energy. Bayelsa state is a riverine state and its unique water waves provide resources for hydro-plants. The case of Edo and Ondo states are similar to those of Delta and Rivers, because there is availability of all renewable energy resources. Lastly in Imo, the heavy sunshine and wastes provide viable resources for solar energy and biomass.

6.4.2 Highlighted effects of renewable energy in the region

1. It reduces communal crises for it reduces the clamour for resources control.
 2. It reduces pollution and the pressure on the environment and the challenge of compliance by oil companies.
 3. There is a need for diversification of energy sources for non-renewable to renewable.
 4. It is often feared that the renewable energy resources cannot be harnessed/produced at a large scale. That it can only be self-sustaining and not capable of being used as a product for international trade. But it is proven that the major boost needed for any sector to go commercial is the right response from the government in terms of interest, policy and investment. Moreso, the effect and benefit on reduction of unemployment and poverty are massive.
 5. The campaign (at this stage) for development of renewable energy resources does not call for a total abandonment of non-renewable resource but reduction in our dependence on crude oil, thereby reducing pollution and crimes associated with oil production.
 6. However, it is not to posit that renewable energy is without its negative effect on the environment and society. For instance, windmills may cause high tides in water, thereby resulting in flooding spread of fire. The most important thing is that the hazards are effectively managed.
 7. The development of renewable energy might occasion reduction in direct employment in oil companies but will help provide adequate and stable power supply, thereby encouraging entrepreneurs and help to create millions of jobs in the economy.
 8. Waste recycling is an area waiting to be explored for energy generation in Nigeria. Developed countries like Germany have effectively put their waste to good use.
 9. There is also a need for constant education of the citizenry on the benefits of renewable energy.
 10. Corruption (both official and unofficial) and indiscipline are also hindrance to the development of renewable energy. There is need to fight corruption in the sector.
- There is need for enactment of a law to regulate the power sector particularly for the promotion of the use of renewable energy. Also, the government must summon the will

to implement all laws and policies for the sector the grow, as well as strengthen the institutions.

CHAPTER SEVEN

RECOMMENDATIONS

7.1 RECOMMENDATIONS

In order to remedy the legal loopholes that have contributed to the crisis in the Niger Delta, the following fundamental and holistic constitutional reforms, oil and gas legislative framework amendments are hereby recommended.

True federalism should not only be expressed in words but indeed and manifested in ascertainable and practical fiscal constitutional provisions that are people-oriented.

1. MAJOR CONSTITUTIONAL REFORMS

To reduce dissatisfaction and agitations among Niger Deltans, major constitutional reforms are recommended in this study which should include the following:

- i. Resource control and derivation formula, as agreed and recommended and as provided in the national conference report of 2014 should be given constitutional strength.
- ii. Independence of the judiciary should be strengthened and provisions made for training and retraining of judicial officers.
- iii. Power rotation among various regions should be made constitutional.

These constitutional reforms, if effected, will no doubt, achieve the following:

- i. Address the issue of agitations for resource control.
- ii. Reduce illiteracy and poverty in the region.
- iii. Substantially address human right oriented problems in the region.
- iv. Improve Niger Delta peoples' confidence in terms of judiciary and rule of law.

These will reduce frustrations that have consistently fuelled agitations, violence and militancy in the region.

2. REPEAL OBSOLETE ENERGY AND ENVIRONMENTALLY RELATED LAWS AND REPLACE SAME WITH THE PETROLEUM INDUSTRY BILL (PIB)

It is recommended that legislation be repealed either because of obsolete nature or their attendant loopholes.

PIB should be enacted to serve as a unified 'stand-alone' Act to govern the oil sector, thus repealing all existing obsolete laws currently applicable in Nigerian energy sector.

Enactment of PIB will transform energy sector in Nigeria and make it to conform with that of developed countries as well as giving the sector a law that pays due regard to international best practices in the oil and gas sector.

The bill, when enacted, will take care of various issues in the sector, including but not limited to the following:

- i. Existence of various conflicting and obsolete laws will cease as it will unify all laws.
- ii. Better compensation for torts arising from oil and gas-related activities.
- iii. Proper and adequate provision for environmental impact and compensation payable.
- iv. Inclusive participation in favour of oil-bearing communities.

In addition to addressing the above issues, PIB will make the following positive impacts on the Niger Delta environment:

3. REMEDIATION OF THE ALREADY POLLUTED NIGER DELTA ENVIRONMENT

As strongly recommended by the UNEP 2011 Report, the Nigerian Government and MNOCs should be more sincere in their approach to the remediation of the whole Niger Delta polluted environment.

- i. There should be a Niger Delta Environmental Clean-up Trust Fund for funds to be contributed into annually by both the Nigerian Government (through NNPC) and MNOCs until the entire environment is sanitised. The Nigerian Government should either include in its national budget funds adequate to contribute its yearly quota into this fund or provide the same through OMPADEC budget head while MNOCs should contribute into this fund through short and long-term budget planning. The UNEP Report on Ogoni land clean-up revealed that it will take at least 25 years to clean up only the Ogoni area of the Niger Delta. This implies that it will take a longer period to clean up the entire region. Any further delays in

doing what is expected on the excuse of the enormity of the amount of money needed for this exercise, is rather pretentious and hypocritical on the part of a government that wastes billions of dollars annually through corruption, security votes, National Assembly wardrobe allowances, presidential jets, presidential food and other frivolous leakages.. In addition to complete clean-up of crude oil pollutants from the terrestrial and hydrological environments, there should be a properly coordinated and well-focused general sanitation of the Niger-Delta Region by the three tiers of government in collaboration with both indigenous oil companies and MNOCs operating within the region. The sanitation activity would involve the detoxification and coverage of abandoned oil wells, clearance of drilling wastes, drill cuttings and direct removal of oil sludge. Furthermore, it is recommended that sustainable and environmentally friendly oil exploitation technology and measures as practised by Shell BP and other MNOCs in countries such as the Netherlands be replicated in the Niger Delta in order to prevent further degradation.

- ii. As part of measures to reduce or prevent further degradation of the Niger Delta environment, the following environmental mitigating concepts and practices are hereby recommended:
 - a. **Source and sink concept:** Source and sink refers to where something emanates and where it ends. Plants need carbon emissions from industries in order to survive.
 - CO₂ from industries is the source while plants are the sink (plants absorb).
 - The gas does not only emanate from pollution (from industries) but also from gas flares.
 - This can be addressed by reducing the source of pollution or increasing the sink (as is the case in Europe).
 - It can also be addressed by creating a sink in developing countries (creating projects that reduce emission such as a sink).
 - This concept can be applied within the Niger Delta by MNOCs such as Shell PB. Renewable energy projects can be instituted in order to address pollution in the Niger Delta. The issue can also be addressed by planting trees to increase biomass

source of renewable energy, which will provide alternative energy sources by increasing fuel wood used by households and at the same time, serve as a sink for CO₂ emitted through industrial emissions and gas flares.

b. Clean Development Mechanism (CDM)

CDM is considered to be the most far-reaching global environmental investment, climate protection instrument and credit scheme of its kind. Its aim is to contribute to sustainable development and environmental protection (Gupta, 2012). CDM is a project-based mechanism established by the Kyoto Protocol (Article 12) to achieve cost-effective solutions for mitigation of greenhouse gases. A CDM project is undertaken in a developing country (such as Nigeria) with no emission reductions target (referred to as a non-Annex I country under the Kyoto Protocol). Emission reductions generated by the project (termed Certified Emission Reductions, CERs) can be sold to Annex I governments (developed countries with commitments to reduce emissions) and authorised companies (ICF, 2006).

CDM has proved to be a huge success for climate protection in many parts of the world, particularly in China, India, Brazil, Mexico and Malaysia as they possess the key factors that drive and influence CDM attractiveness globally. So far, this has not been effectively applied in Nigeria's environmental protection drive. CDM is an instrument of environmental sustainability to curtail excessive gas flaring and its attendant environmental consequences in the Niger Delta region of Nigeria (Philip E. A, 2015) and should be encouraged in Nigeria in order to mitigate environmental pollution.

2. ENACTMENT OF RENEWABLE ENERGY LAW AND ESTABLISHMENT OF RENEWABLE ENERGY REGULATORY AUTHORITY

Till date, Nigeria has not enacted a renewable energy law. There is a need for a renewable energy law regime which will provide for enforceable Renewable Portfolio Standards and a regulatory authority in Nigeria.

The researcher proposes the jumpstart and implementation of the following renewable energy policies and standards as recommended by Soji Adelaja (2013). These policies and standards have been adopted in some countries, including the United States of America in driving its green energy plan.

- i. Renewable Portfolio Standards (RPS)
- ii. Mandatory green power option (retail choice)
- iii. Generation disclosure rules (GDR)
- iv. Public benefit fund (PBF)

RE policy and laws need to be incorporated into this plan, one that allows the country to move forward in a sustainable manner. When these broad measures are implemented, the global energy crisis would be mitigated, a new and rejuvenated environment would evolve in the Niger-Delta Region of Nigeria, Nigeria and the world at large. The importance of these recommendations is that the more renewable energy powered electricity, the less CO₂ emitted into the environment as against gas powered electricity. Therefore, the more renewable electricity used in Nigeria, the more mitigation and less pressure on the Niger Delta environment.

Renewable Energy Regulatory Authority

This study recommends that the EPSR Act 2005 be amended to empower NERC to act as Nigeria's renewable electricity authority to regulate and enforce the renewable standards recommended above. The new renewable energy law should contain similar provisions empowering NERC to so act.

3. CREATION OF EMPLOYMENT OPPORTUNITIES

Youth restiveness and social vices have been associated with unemployment within a given economy. The higher the unemployment index, the more youth restiveness and social vices prevalent in a given society. The scenario in the Niger Delta explains the correlation between the high level of unemployment and the high level of youth restiveness and social vices such as kidnapping, militancy, oil theft, pipeline vandalism and other violent illegal activities. Frustration theorists have explained this as a direct consequence of economic frustration of the people through insensitive

and unsustainable oil mining activities by MNOCs in partnership with the Nigerian government. In recommending solutions to this malady, the researcher proposes the creation of employment opportunities through renewable energy. These unemployed youths decided to create employment for themselves such as vandalising pipelines, illegal oil refinements, kidnapping of employees of MNOCs, armed robberies and other social vices.

Considering Nigeria’s renewable energy potentials as shown above, this development of modern renewable energy technologies would surely replicate the above US factories that would gainfully employ thousands of Niger Delta youths and in the long run, mitigate violent conflicts in the Niger Delta. This way, renewable energy would help in mitigating environmental violence by reducing youth restiveness, agitations, militancy and other violent activities within the region.

4. CREATION OF FOREST HARVEST (AFFORESTATION) WITHIN THE REGION

Afforestation is the practice of creating forest or establishing native vegetation on land which was previously meant for other uses such as pasture, covered with non-native species or contained man-made structures.⁶⁶ Adopting strategies of reforestation and afforestation for the reduction of emissions caused by deforestation and degradation would go a long way in mitigating the environmental violence within the region.

Adopting a strategy of energy generation through biomass from wood lots could be an alternative form of energy supply. Measures to encourage afforestation and reforestation should be put in place to replant the trees hewn. This would have a double advantage as follows: first, energy generation through a renewable source; and second, reduction of atmospheric carbon dioxide directly and indirectly.

Afforestation and reforestation programmes should be encouraged with the aim of reversing the effects of deforestation (Usman & Adefalu 2010).

⁶⁶ www.ecy.wa.gov/climatechange/2008FAdocs/081508afforestation_draft_paper.pdf

Afforestation and reforestation programmes must be properly coordinated while the activities of all levels of government need to be closely integrated with those of the private sector. If this is done, there would be less dependence on firewood (Usman & Adefalu 2010).

6.5 CONCLUSION

As noted earlier, the Niger Delta region endowed with huge oil and gas deposits, also boasts of abundant renewable natural resources like mangroves, freshwater, timber, palm oil, fisheries, and fertile agricultural lands. However unsustainable exploitation of oil and gas resources by MNOCs which dates back to 1956, gas flares and oil spillages have degraded its ecosystem and greatly endangered its biodiversity, human health and its people's means of livelihood which are largely based on fishing, farming and trading on natural resources. Added to these are pressures on the environment arising from global energy crisis, scramble for Niger Delta oil and gas and Nigerian sole dependence on the region's oil as the main stay of her economy, Governmental blind eyes over breach of environmental standards, human and environmental rights and the existence of obnoxious laws. These have all contributed to the problem of Niger Delta two pronged Environmental violence which include violence against renewable natural resources within the environment by MNOCs and violent agitations by indigenous people in protest to the degradation of ecological biodiversity within the environment.

To curb the activities of the emerged environmental rights activists by civil society groups, the military deployed several operations to manage the conflicts in the Niger Delta since 1966 (Obasi, 2005). These include The Military Clampdown Isaac Adaka Boro Revolt (23 February - 06 March, 1966); The Rivers State Internal Security Task Force (1993-1998); Operation HAKURI II for Ijaw Kaiama Declaration (December, 1998-January, 1999); The Military Deployment to Quell the November, 1999 Odi Uprising; Operation RESTORE HOPE (2003-2009); Operation FLUSHOUT III (2004-2009); and Operation RESTORE HOPE (2009-2011).

The legal frameworks that should have empowered the indigenous people Niger Delta to demand for their rights has deprived them access to natural resources within their lands and aquatic environment.

This research therefore shows that the renewable energy policies and renewable energy could help mitigate environmental violence in the Niger Delta with some vital recommendations, which welcomes criticisms and contribution.

Chapter two of this study examined a wide range of literature available on the Niger Delta study including the impacts of environmental degradation on the ecosystem and the peoples' health.

Chapter three shows study area, population of the study, sample size and selection method, data collection method, data were generated through primary and secondary sources. This chapter also covered data analysis methods, ethical consideration of the study, data preparation and presentation, univariate analysis, choice and rationale of research design, and rationale for the study.

Chapter four of this study presented the data analysis, discussion of research findings in relation to impact of violence and unsustainable exploitation of petroleum resources in the region. It also showed Nigeria energy development efforts and consequences of Niger Delta environmental violence.

Chapter five examined the relevant municipal and international environmental laws and Niger Delta with the view to critically appraising their effective implementation and enforcement towards the preservation of the Niger Delta environment and its abundant renewable natural resources. In considering these laws, particular emphasis was placed on their roles in mitigating environmental violence. Issues relating to effective implementation and enforcement of these laws were equally considered.

This chapter also considered the international environmental laws and their roles in seeking to achieve sustainable use of human resources within the global environment in

addition to Niger Delta. Issues relating to Nigeria ratification and domestication of these international laws were also considered.

Chapter six dwelt on the meaning and aspects of Renewable Energy, Nigeria renewable energy resource potentials, Niger Delta renewable energy potentials were also considered. The roles of relevant institutions in promoting renewable energy policies and development of Nigeria renewable energy potentials were equally examined.

Chapter seven which is the final chapter proffers the following recommendations that would impact positively in mitigating the Niger Delta environmental violence: remediation of the already polluted Niger Delta environment; Enactment of Renewable Energy Law and Establishment of Renewable Energy Regulatory Authority; Creation of Employment Opportunities; Creation of forest harvest (afforestation) in the Niger Delta; Effective Implementation of existing Renewable Energy Policy; Mitigating Environmental Pollution through Source and Sink Concept, Clean Development Mechanism (CDM), and Inter-Fuel Substitution.

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APPENDIX A: RESEARCH QUESTIONNAIRE

**N6A/539, SABO ROAD, OPP. ST. LAWRENCE HOSPITAL,
MOKOLA ROUNDABOUT, IBADAN.**

Instructions: This questionnaire is in five sections. The first, on socio-demographic/background data simply requires ticking options that are applicable to respondent. The other sections are structured to reflect the objectives of this study. Please supply answers according to how they apply to you.

SECTION A

Name of Community.....
Date of Interview.....
Name of Enumerator.....
Name of Respondent.....

Socio-demographic/background data of Respondent

Q.1 What is your age?

Q.2 What is your State of Origin?

Q.3 Are you from oil bearing community?

01) Yes

02) No

Q.4 What is your sex?

01) Male

02) Female

Q.5 Level of Education (tick as appropriate)

01) No formal education []

02) Adult Literacy []

03) Primary school education []

04) Secondary school education []

05) University Degree []

Q.6 What is your Employment Status?

01) Unemployed []

02) Public service []

03) Private sector []

04) Self-employed []

Q.7 Occupational/Professional Status

01) None []

02) Politician []

- 03) Professional []
- 04) Student []
- 05) Trader/Businessman []
- 06) Artisan/Technician/Craftsman/Tradesman []
- 07) Oil Company worker []
- 08) Others []

Q.8. Do you belong to any group? Yes [] No []

Q.9 What is the major aim of your group?

.....

.....

SECTION B

Questions for community, local, environmental and human rights groups:

Q.1. How would you assess the relationship between you and local environmental groups?

.....

.....

Q.2. How would you assess the relationship between oil companies and local environmental groups?

.....

.....

Q.3a. What are your specific grievances against the Nigerian government?

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Q.4a. What are your specific grievances against oil companies?

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Q.4b. How has the activities of oil companies affected your means of livelihood?

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Q.5. How would you rank your grievances in order of their seriousness to your group?

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Q.6. What specifically have you done to show willingness to work with the government peacefully?

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Q.7. What specifically have you done to show willingness to work with the oil companies peacefully?

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Q.8. How has your group reacted to government failure to put in place appropriate or implement formal environmental policy frameworks?

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Q.9. From your perspective, what are the specific causes of violence in the Niger Delta?

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Q.10. What relevance would you ascribe to the failure by the Nigerian government to enforce key environmental policies related to oil business?

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SECTION C

Q.1. What are the principal objectives of your group in your community?

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Q.2. How have you sought to achieve those objectives?

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Q.3. What has your group done to engage oil companies and government officials peacefully in the pursuit of your objectives?

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Q.4. What specific constraints have you faced in your struggle to achieve environmental justice for your people?

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Q.5. What constrains you from approaching the quest through electoral processes?

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Q.6. If the political system becomes more democratic (free and fair), would you be willing to use the political arena in lieu of violence?

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Q.7. What constrains you from approaching the quest through judicial processes?

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Q.8. If the legal system becomes more transparent and accountable to the law (less corruptible), would you be willing to use the courts in lieu of violence?

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Q.9. Why have you not tried other less violent means such as peaceful demonstrations, boycotts, and appeals to state authorities?

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Q.10. What successes have you achieved through violence? Please specify.

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Q.11. In what ways have such successes translated to you as individuals or to communities in the Niger Delta? Please specify the benefits and identify the benefitting communities?

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Q.12. Why did you decide on your present course of action?

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Q.13. Given your present use of violence, what would constitute success for you?

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Q.14. What are your minimum conditions for abandoning violent activities against oil companies?

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Q.15. What are your minimum conditions for abandoning violent activities against the government?

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Q.16. Can you identify any local militant groups that are engaged in violent activities just for the money?

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SECTION D

Q.1. What are the government and oil companies doing to ensure that they have adequate environmental policy guidelines for dealing with the challenges of oil exploration and production in the Niger Delta?

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Q.2. To what extent do existing environmental policy instruments measure up to global yardsticks in terms of their scope and relevance?

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Q.3. What are the government and oil companies doing to ensure that oil mining activities in Nigeria impose minimum environmental impact and burdens on your communities?

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Q.4. Which offices of the state or oil companies responsible for monitoring effective compliance to environmental legislations have approached you or other local groups or communities in an attempt to address environmental concerns or issues?

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Q.5. What specific efforts can you identify or are aware of that have been carried out by government to ensure compliance with key environmental policies in the Niger Delta?

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Q.6. What specific efforts can you identify or are aware of that have been carried out by oil companies to ensure compliance with key environmental policies in the Niger Delta?

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Q.7. To the best of your knowledge, what specifically is the government doing in regard to oil spillage in your area?

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Q.9. To the best of your knowledge, what specifically is the government doing in regard to gas flares?

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Q.10. To the best of your knowledge, what specifically are oil companies doing in regard to gas flares?

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Q.11. To the best of your knowledge, what specifically is the government doing in regard to oil well blow-outs?

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Q.12. To the best of your knowledge, what specifically are oil companies doing in regard to oil well blow-outs?

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Q.13. To the best of your knowledge, what specifically is the government doing in regard to damages to marine wildlife (fauna and flora)?

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Q.14. To the best of your knowledge, what specifically are oil companies doing in regard to damages to marine wildlife (fauna and flora)?

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Q.15. To the best of your knowledge, what specifically is the government doing in regard to the ongoing imbalances in the ecosystem through species elimination and delay in biota (fauna and flora) succession?

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Q.16. To the best of your knowledge, what has the government done to engage your communities to address your financial losses and challenges resulting from the impact of environmental damage due to oil exploration and production activities on your land and water resources?

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Q.17. To the best of your knowledge, what have the oil companies done to engage your communities to address your financial losses and challenges resulting from the impact of environmental damage due to oil exploration and production activities on your land and water resources?

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Q.18. To the best of your knowledge, what has the government done to engage your communities to address your health difficulties and challenges resulting from the impact of environmental damage due to the oil exploration and production activities on your land and water resources?

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Q.19. To the best of your knowledge, what have oil companies done to engage your communities to address your health difficulties and challenges resulting from the impact of environmental damage due to their oil exploration and production activities on your land and water resources?

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Q.20. To the best of your knowledge, what has the government done to engage your communities to address the challenges and the associated distortions in your way of life resulting from the impact of environmental damage from oil exploration and production activities on your land and water resources?

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Q.21. To the best of your knowledge, what have oil companies done to engage your communities to address the challenges and the associated distortions in your way of life resulting from the impact of environmental damage from their oil exploration and production activities on your land and water resources?

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Q.22. To the best of your knowledge, what has the government done to engage your communities to address the matter of adequate compensation for the appropriation of your resources by the state?

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APPENDIX B: QUESTIONNAIRE ON RENEWABLE ENERGY

Q.8. If the legal system becomes more transparent and accountable to the law (less corruptible), would you be willing to use the courts in lieu of violence?

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Q.9. Why have you not tried other less violent means such as peaceful demonstrations, boycotts, and appeals to state authorities?

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Q.10. What successes have you achieved through violence? Please specify.

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Q.11. In what ways have such successes translated to you as individuals or to communities in the Niger Delta? Please specify the benefits and identify the benefitting communities?

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Q.12. Which of these renewable energy resources ~~exist~~ in Niger Delta?

- a. Solar
- b. Wind
- c. Biomass
- d. Hydro(water)
- e. ~~Don't know~~

Q.13. Would you think that the development of appropriate policy, legal and regulatory framework on renewable energy resources in the Niger Delta will mitigate environmental violence in the region?

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Q.14. Would you think that the investment, development and use of renewable energy resources by MNOC will mitigate violence and reduce degradation in the Niger Delta?

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Q.15. What are the problems with the development of renewable energy resources in the Niger Delta?

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APPENDIX C: INTERVIEW AND FOCUS GROUP DISCUSSION QUESTIONS

Community, Local and Environmental Groups:

- What are the principal objectives of your group?
- How have you sought to achieve those objectives?
- What has your group done to engage oil companies and government officials peacefully in the pursuit of your objectives?
- What specific constraints have you faced in your struggle to achieve environmental justice for your people?
- What constrains you from approaching the quest through electoral processes?
- If the political system becomes more democratic (free and fair), would you be willing to use the political arena in lieu of violence?
- What constrains you from approaching the quest through judicial processes?
- If the legal system becomes more transparent and accountable to the law (less corruptible), would you be willing to use the courts in lieu of violence?
- Why have you not tried other less violent means such as peaceful demonstrations, boycotts, and appeals state authorities?
- What successes have you achieved through violence? Please specify
- In what ways have such successes translated to benefits to you as individuals or to communities in the Niger Delta? Please specify the benefits and identify the benefitting communities?
- Are you able to maintain your family and manage your other responsibilities?
- Do you believe that members of some other local groups are able to meet up with their financial obligations through their violent activities? Which ones?
- Why did you decide on your present course of action?
- Given your present use of violence, what would constitute success for you?
- What are your minimum conditions for abandoning violent activities against oil companies?
- What are your minimum conditions for abandoning violent activities against the government?
- Can you identify any local militant groups that are engaged in violent activities just for the money?
- How would you assess the relationship between government and local environmental groups?
- How would you assess the relationship between oil companies and local environmental groups?
- What are your specific grievances against the Nigerian government?
- What are your specific grievances against oil companies?
- How would you rank your grievances in order of their seriousness to your group?
- What specifically have you done to show willingness to work with the government peacefully?
- What specifically have you done to show willingness to work with oil companies peacefully?

- How has your group reacted to government failure to emplace appropriate or implement formal environmental policy frameworks?
- What are the specific causes of violence in the Niger Delta?
- What relevance would you ascribe to the failure by the Nigerian government to enforce key environmental policies related to oil business?
- What are the government and oil companies doing to ensure that they have adequate environmental policy guidelines for dealing with the challenges of oil exploration and production in the Niger Delta?
- To what extent do existing environmental policy instruments measure up to global yardsticks in terms of their scope and relevance?
- What are the government and oil companies doing to ensure that oil mining activities in Nigeria impose minimum environmental impact and burdens on your communities?
- Which offices of the state or oil companies responsible for monitoring effective compliance to environmental legislations have approached you or other local groups or communities in an attempt to address environmental concerns or issues?
- What specific efforts can you identify or are aware of that have been carried out by government to ensure compliance with key environmental policies in the Niger Delta?
- What specific efforts can you identify or are aware of that haven been carried out by oil companies to ensure compliance with key environmental policies in the Niger Delta?
- To the best of your knowledge, what specifically is the government doing in regard to oil spillage?
- To the best of your knowledge, what specifically are oil companies doing in regard to oil spillage?
- To the best of your knowledge, what specifically is the government doing in regard to gas flares?
- To the best of your knowledge, what specifically are oil companies doing in regard to gas flares?
- To the best of your knowledge, what specifically is the government doing in regard to oil well blow-outs?
- To the best of your knowledge, what specifically are oil companies doing in regard to oil blow-outs?
- To the best of your knowledge, what specifically is the government doing in regard to damages to marine wildlife?
- To the best of your knowledge, what specifically are oil companies doing in regard to damages to marine wildlife?
- To the best of your knowledge, what specifically is the government doing in regard to the ongoing modification of the ecosystem through species elimination and delay in biota (fauna and flora) succession?
- To the best of your knowledge, what specifically are oil companies doing in regard to the ongoing modification of the ecosystem through species elimination and delay in biota (fauna and flora) succession?

- To the best of your knowledge, what specifically is the government doing in regard to decreases in both your fishery resources and farm yields?
- To the best of your knowledge, what specifically are oil companies doing in regard to decreases in both your fishery resources and farm yields?
- To the best of your knowledge, what is the government doing to compensate local Niger Delta communities that have borne the brunt of the environmental damages resulting from their oil exploration and production activities?
- To the best of your knowledge, what are oil companies doing to compensate local Niger Delta communities that have borne the brunt of the environmental damages resulting from their oil exploration and production activities?
- To the best of your knowledge, what has the government done to engage your communities to address your financial losses and challenges resulting from the impact of environmental damage due to oil exploration and production activities on your land and water resources?
- To the best of your knowledge, what have the oil companies done to engage your communities to address your financial losses and challenges resulting from the impact of environmental damage due to oil exploration and production activities on your land and water resources?
- To the best of your knowledge, what has the government done to engage your communities to address your health difficulties and challenges resulting from the impact of environmental damage due to oil exploration and production activities on your land and water resources?
- To the best of your knowledge, what have the oil companies done to engage your communities to address your health difficulties and challenges resulting from the impact of environmental damage due to oil exploration and production activities on your land and water resources?
- To the best of your knowledge, what has the government done to engage your communities to address the challenges and associated distortions in your way of life resulting from the impact of environmental damage due to oil exploration and production activities on your land and water resources?
- To the best of your knowledge, what have the oil companies done to engage your communities to address challenges and associated distortions in your way of life resulting from the impact of environmental damage due to oil exploration and production activities on your land and water resources?
- To the best of your knowledge, what has the government done to engage your communities to address the matter of adequate compensation for the appropriation of your resources by the state?
- To the best of your knowledge, what have the oil companies done to engage your communities to address the matter of adequate compensation for the exploitation of your resources by the companies?

Oil Company Officials:

- How would you assess the relationship between your company and government?
- How would you assess the relationship between your company and local groups in the Niger Delta?

- Do you have any specific grievances concerns about the Nigerian government? Specify
- Do you have any specific grievances or issues with local groups that are targeting oil companies and their facilities? Specify.
- What do you believe are the specific grievances of local groups against your activities in the Niger Delta?
- What specifically has your company done to address the grievances of local groups agitating against your activities?
- How would you assess government environmental policies?
- Are government environmental policies actually adequate to ensure full environmental protection for human, animal, and plant life in the Niger Delta region?
- How would you assess the compliance level of your company to government environmental policies?
- How would you assess the compliance level of other companies to government environmental policies?
- How has your company engaged the government to ensure that it puts in place appropriate policies or that it implements its own formal environmental policy frameworks?
- What, in your view, are the specific causes of violence in the Niger Delta?
- What relevance (to the violence) would you ascribe to the failure by the Nigerian government to enforce key environmental policies related to oil business?
- What are the main factors which negate or slow down the implementation of government environmental policies related to the oil business in the Niger Delta?
- What do you feel are the principal objectives of local militant groups?
- In what constructive ways has your company engaged government in an effort to look at ways to address those objectives?
- How would you assess their claims of legitimate bases for the use of violence?
- What specific opportunities do you believe they have for peaceful pursuits of their stated objectives?
- How would you assess their chances in attempting to use democratic or electoral processes as a means for trying to address their grievances?
- If the legal system was more transparent and accountable to the law (less corruptible), do you believe that the militants would be willing to work through the courts in lieu of violence?
- How would you assess government's efforts in using violence rather than persuasion techniques to address the grievances of the people of the Niger Delta?
- Has government done reasonably well, in your view, in addressing the grievances of the Niger Delta people?
- Why have such efforts not borne fruits in terms of the cessation of violence in the region?
- Who do you believe are responsible for the militarization and violence in the Niger Delta?

- Can you identify any local militant groups that are engaged in violent activities just for the money? Please specify which ones
- Can you identify any local politicians or external role players that are connected (perhaps through oil bunkering) to the violent activities in the Niger Delta?
- What is your company doing to ensure that it has adequate environmental policy guidelines for dealing with the challenges of oil exploration and production in Nigeria?
- What is your company doing to ensure that your oil mining activities in Nigeria impose minimum environmental impact and burdens on the local communities?
- Do you have a dedicated office responsible for monitoring effective compliance to environmental legislations in Nigeria?
- What is the office (your company) doing to ensure your compliance with key environmental policies in the Niger Delta?
- What specifically is your company doing in regard to oil spillage?
- What specifically is your company doing in regard to gas flares?
- What specifically is your company doing in regard to oil well blow-outs?
- What specifically is your company doing in regard to damages to marine wildlife?
- What specifically is your company doing in regard to the ongoing modification of the ecosystem through species elimination and delay in biota (fauna and flora) succession?
- What specifically is your company doing in regard to decreases in both fishery resources and farm yields?
- What is your company doing to compensate local Niger Delta communities that have borne the brunt of the environmental damages resulting from your oil exploration and production activities?
- What have you done to engage the local communities to address their financial losses and challenges resulting from the impact of environment damage from your oil exploration and production activities on their land and water resources?
- What have you done to engage the local communities to address their health difficulties and challenges resulting from the impact of environment damage from your oil exploration and production activities on their land and water resources?
- What have you done to engage the local communities to address the challenges and the associated distortions in their way of life resulting from the impact of environment damage from oil exploration and production activities on their land and water resources?
- What have you done (even in collaboration with the government) to engage the local communities to address the matter of adequate compensation for the appropriation of their resources by the state?

Government officials:

- How would you assess the relationship between government and oil companies?
- How would you assess the relationship between government and local groups in the Niger Delta?
- Given the context of pervasive violence and tense atmosphere, what do you believe has gone wrong with the relationship?
- Do you have any grievances or concerns about the activities of oil companies? Please specify
- Do you have any grievances or issues with local groups that are targeting oil companies and government? Please specify.
- How would you assess the merits of the local militant grievances against government activities and presence in the Niger Delta?
- What specifically has government done to address the grievances of local groups agitating against your activities and presence in the Niger Delta?
- How would you assess oil company compliance to government environmental policies?
- How would you assess government efforts to ensure that oil companies comply with its environment policies?
- Are government environmental policies actually adequate to ensure full environmental protection for human, animal, and plant life in the Niger Delta region?
- Why is government not doing more to identify publicly specific oil company violations of environmental legislations and the compliance level of individual companies as well as the penalties imposed on each culprit?
- What has government done to ensure global standards of environmental legislation as well as policy implementation and monitoring?
- What, in your view, are the specific causes of violence in the Niger Delta?
- What relevance (to the violence) would you ascribe to the failure by the Nigerian government to enforce key environmental policies related to oil business?
- What are the main factors which negate or slow down the implementation of government environmental policies related to the oil business in the Niger Delta?
- What is the government doing to ensure that it has adequate environmental policy instruments for dealing with the challenges of oil exploration and production in Nigeria?
- To what extent do existing instruments measure up to global yardsticks in terms of their scope and relevance?
- What is the government doing to ensure adequate monitoring of the environmental impact of industrial activities in Nigeria?
- Who is responsible for monitoring effective compliance to environmental legislations in Nigeria and what are they doing to ensure the compliance of oil companies with key environmental policies in the Niger Delta?
- What are the monitors doing in regards to oil spillage?
- What are the monitors doing in regards to gas flares?

- What are the monitors doing in regards to oil well blow-outs?
- What are the monitors doing in regard to damages to marine wildlife?
- What are the monitors doing in regard to the ongoing modification of the ecosystem through species elimination and delay in biota (fauna and flora) succession?
- What are the monitors doing in regard to decreases in both fishery resources and farm yields?
- What has the government done to compensate local Niger Delta communities that have borne the brunt of the environmental damages resulting from oil exploration and production activities?
- How has the government worked to engage the local communities to address their financial losses and challenges resulting from the impact of environment damage from oil exploration and production activities on their land and water resources?
- How has the government worked to engage the local communities to address their health difficulties and challenges resulting from the impact of environment damage from oil exploration and production activities on their land and water resources?
- How has the government worked to engage the local communities to address the challenges and the associated distortions in their way of life resulting from the impact of environment damage from oil exploration and production activities on their land and water resources?
- How has the government worked to engage the local communities to address the matter of adequate compensation for the appropriation of their resources by the state?

OGONI BILL OF RIGHTS

*PRESENTED TO THE GOVERNMENT AND PEOPLE OF NIGERIA
NOVEMBER 1990*

We, the people of Ogoni (Babbe, Gokana, Ken Khana, Nyo Khan and Tai) numbering about 500,000, being a separate and distinct ethnic nationality within the Federal Republic of Nigeria, wish to draw the attention of the Government and people of Nigeria to the undermentioned facts:

- 1. That the Ogoni people, before the advent of British colonialism, were not conquered or colonised by any other ethnic group in present day Nigeria.**
- 2. That British colonisation forced us into the administrative division of Opobo from 1908 to 1947.**
- 3. That we protested against this forced union until the Ogoni Native Authority was created in 1947 and placed under the then Rivers Province.**
- 4. That in 1951 we were forcibly included in the Eastern Region of Nigeria where we suffered utter neglect.**
- 5. That we protested against this neglect by voting against the party in power in the Region in 1957, and against the forced union by testimony before the Willink Commission of Inquiry into Minority Fears in 1958.**
- 6. That this protest led to the inclusion of our nationality in Rivers State in 1967, which State consists of several ethnic nationalities with differing cultures, languages and aspirations.**
- 7. That oil was struck and produced in commercial quantities on our land in 1958 at K. Dere (Bomu oilfield).**
- 8. That oil has been mined on our land since 1958 to this day from the following oilfields: (i) Bomu (ii) Bodo West (iii) Tai (iv) Korokoro (v) Yorla (vi) Lubara Creek and (vii) Afam by Shell Petroleum Development Company (Nigeria) Limited.**
- 9. That in over 30 years of oil mining, the Ogoni nationality have provided the Nigerian nation with a total revenue estimated at over 40 billion Naira (N40 billion) or 30 billion dollars.**

10. That in return for the above contribution, the Ogoni people have received NOTHING.

11. That today, the Ogoni people have:

(i) No representation whatsoever in ALL institutions of the Federal Government of Nigeria.

(ii) No pipe-borne water.

(iii) No electricity.

(iv) No job opportunities for the citizens in Federal, State, public sector or private sector companies.

(v) No social or economic project of the Federal Government.

12. That the Ogoni languages of Gokana and Khana are undeveloped and are about to disappear, whereas other Nigerian languages are being forced on us.

13. That the ethnic policies of successive Federal and State Governments are gradually pushing the Ogoni people to slavery and possible extinction.

14. That the Shell Petroleum Development Company of Nigeria Limited does not employ Ogoni people at a meaningful or any level at all, in defiance of the Federal government's regulations.

15. That the search for oil has caused severe land and food shortages in Ogoni - one of the most densely populated areas of Africa (average: 1,500 per square mile; national average: 300 per square mile.)

16. That neglectful environmental pollution laws and sub-standard inspection techniques of the Federal authorities have led to the complete degradation of the Ogoni environment, turning our homeland into an ecological disaster.

17. That the Ogoni people lack education, health and other social facilities.

18. That it is intolerable that one of the richest areas of Nigeria should wallow in abject poverty and destitution.

19. That successive Federal administrators have trampled on every minority right enshrined in the Nigerian constitution to the detriment of the Ogoni and have by administrative structuring and other noxious acts transferred Ogoni wealth exclusively to other parts of the Republic.

20. That the Ogoni people wish to manage their own affairs.

Now therefore, while reaffirming our wish to remain a part of the Federal Republic of Nigeria, we make demand upon the Republic as follows:

That the Ogoni people be granted **POLITICAL AUTONOMY** to participate in the affairs of the Republic as a distinct and separate unit by whatever name called, provided that this Autonomy guarantees the following:

- (a) Political control of Ogoni affairs by Ogoni people.
- (b) The right to the control and use of a fair proportion of OGONI economic resources for Ogoni development.
- (c) Adequate and direct representation as of right in all Nigerian national institutions.
- (d) The use and development of Ogoni Languages in Ogoni territory.
- (e) The full development of Ogoni Culture.
- (f) The right to religious freedom.
- (g) The right to protect the OGONI environment and ecology from further degradation.

We make the above demand in the knowledge that it does not deny any other ethnic group in the Nigerian Federation of their rights and that it can only conduce to peace, justice and fair play and hence stability and progress in the Nigerian nation.

We make the above demand in the belief that, as Obafemi Awolowo has written:

"In a true Federation, each ethnic group no matter how small, is entitled to the same treatment as any other ethnic group, no matter how large."

We demand these rights as equal members of the Nigerian Federation who contribute and have contributed to the growth of the Federation and have a right to expect full returns from that Federation.

Adopted by general acclaim of the Ogoni people on the 26th day of August, 1990, at Bori, Rivers State.

Signed on behalf of the Ogoni people by:

BABBE

1. HRH Mark Tsaro-Igbara, Gbenemene Babbe
2. HRH F.M.K. Noryaa, Menebua Ka-Babbe
3. Chief M.A.N. Tornwe III, JP
4. Prince J.S. Sangha
5. Dr. Israel K. Kue
6. Chief A.M.N. Gua

GOKANA

1. HRH James P. Bagia, Gberesako XI, Gbenemene Gokana
2. HRH C. A. Mitee, JP, Menebua Numuu
3. Chief E.N. Kobani, JP, Tonsimene Gokana
4. Dr. B.N. Birabi
5. Chief Kemte Gidaom, JP
6. Chief S.N. Orage

KEN-KHANA

1. HRH M.H.S. Eguro, Gbenemene Ken Khana
2. HRH C.B.S. Nwikina, Emah III, Menebua Bom
3. Mr. M.C. Daanwii
4. Chief T.N. Nwieke
5. Mr. Ken Saro-Wiwa
6. Mr. Simeon Idemyor

NYO-KHANA

1. HRH W.Z.P. Nzidee, Gbenemen Baa 1 of Nyo-Khana
2. Dr. G.B. Leton, JP
3. Mr. Lekue Lah-Laolo
4. Mr. L. E. Mwara
5. Chief E. A. Apenu
6. Pastor M.P. Maeba

TAI

1. HRH B.A. Mballey, Gbenemene Tai
2. HRH G.N.K. Gininwa, Menebua Tua
3. Chief J.S. Agbara
4. Chief D.J.K. Kumbe
5. Chief Fred Gwezia
6. HRH A. Demor-Kaani, Menebua Nonwa Tai

APPENDIX E: KAIAMA DECLARATION

THE KAIAMA DECLARATION

by
IJAW YOUTHS OF THE NIGER DELTA

BEING COMMUNIQUE ISSUED AT THE END OF THE ALL IJAW YOUTHS CONFERENCE WHICH
HELD IN THE TOWN OF KAIAMA THIS 11TH DAY OF DECEMBER 1998

INTRODUCTION

We, Ijaw youths drawn from over five hundred communities from over 40 clans that make up the Ijaw nation and representing 25 representative organisations met, today, in Kaiama to deliberate on the best way to ensure the continuous survival of the indigenous peoples of the Ijaw ethnic nationality of the Niger Delta within the Nigerian state.

After exhaustive deliberations, the Conference observed:

- a. That it was through British colonisation that the IJAW NATION was forcibly put under the Nigerian State
- b. That but for the economic interests of the imperialists, the Ijaw ethnic nationality would have evolved as a distinct and separate sovereign nation, enjoying undiluted political, economic, social, and cultural AUTONOMY.
- c. That the division of the Southern Protectorate into East and West in 1939 by the British marked the beginning of the balkanisation of a hitherto territorially contiguous and culturally homogeneous Ijaw people into political and administrative units, much to our disadvantage. This trend is continuing in the balkanisation of the Ijaws into six states-Ondo, Edo, Delta, Bayelsa, Rivers and Akwa Ibom States, mostly as minorities who suffer socio-political, economic, cultural and psychological deprivations.
- d. That the quality of life of Ijaw people is deteriorating as a result of utter neglect, suppression and marginalisation visited on Ijaws by the alliance of the Nigerian state and transnational oil companies.
- e. That the political crisis in Nigeria is mainly about the struggle for the control of oil mineral resources which account for over 80% of GDP, 95 %of national budget and 90% of foreign exchange earnings. From which, 65%, 75% and 70% respectively are derived from within the Ijaw nation. Despite these huge contributions, our reward from the Nigerian State remains avoidable deaths resulting from ecological devastation and military repression.
- f. That the unabating damage done to our fragile natural environment and to the health of our people is due in the main to uncontrolled exploration and exploitation of crude oil and natural gas which has led to numerous oil spillages, uncontrolled gas flaring, the opening up of our forests to loggers, indiscriminate canalisation, flooding, land subsidence, coastal erosion, earth tremors etc. Oil and gas are exhaustible resources and the complete lack of concern for ecological rehabilitation, in the light of the Oloibiri experience, is a signal of impending doom for the peoples of Ijawland.

g. That the degradation of the environment of Ijawland by transnational oil companies and the Nigerian State arise mainly because Ijaw people have been robbed of their natural rights to ownership and control of their land and resources through the instrumentality of undemocratic Nigerian State legislations such as the Land Use Decree of 1978, the Petroleum Decrees of 1969 and 1991, the Lands (Title Vesting etc.) Decree No. 52 of 1993 (Osborne Land Decree), the National Inland Waterways Authority Decree No. 13 of 1997 etc.

h. That the principle of Derivation in Revenue Allocation has been consciously and systematically obliterated by successive regimes of the Nigerian state. We note the drastic reduction of the Derivation Principle from 100% (1953), 50% (1960), 45% (1970), 20% (1975) 2% (1982), 1.5% (1984) to 3% (1992 to date), and a rumored 13% in Abacha's 1995 undemocratic and unimplemented Constitution.

i. That the violence in Ijawland and other parts of the Niger Delta area, sometimes manifesting in intra and inter-ethnic conflicts are sponsored by the State and transnational oil companies to keep the communities of the Niger Delta area divided, weak and distracted from the causes of their problems.

j. That the recent revelations of the looting of national treasury by the Abacha junta is only a reflection of an existing and continuing trend of stealing by public office holders in the Nigerian state. We remember the over 12 billion dollars Gulf war windfall, which was looted by Babangida and his cohorts. We note that over 70% of the billions of dollars being looted by military rulers and their civilian collaborators is derived from our ecologically devastated Ijawland.

Based on the foregoing, we, the youths of Ijawland, hereby make the following resolutions to be known as the Kaiama Declaration:

1. All land and natural resources (including mineral resources) within the Ijaw territory belong to Ijaw communities and are the basis of our survival.
2. We cease to recognise all undemocratic decrees that rob our peoples/communities of the right to ownership and control of our lives and resources, which were enacted without our participation and consent. These include the Land Use Decree and The Petroleum Decree etc.
3. We demand the immediate withdrawal from Ijawland of all military forces of occupation and repression by the Nigerian State. Any oil company that employs the services of the armed forces of the Nigerian State to "protect" its operations will be viewed as an enemy of the Ijaw people. Family members of military personnel stationed in Ijawland should appeal to their people to leave the Ijaw area alone.
4. Ijaw youths in all the communities in all Ijaw clans in the Niger Delta will take steps to implement these resolutions beginning from the 30th of December, 1998, as a step towards reclaiming the control of our lives. We, therefore, demand that all oil companies stop all exploration and exploitation activities in the Ijaw area. We are tired of gas flaring; oil spillages, blowouts and being labelled saboteurs and terrorists. It is a case of preparing the noose for our hanging. We reject this labelling. Hence, we advise all oil companies' staff and contractors to withdraw from Ijaw territories by the 30th December, 1998 pending the resolution of the issue of resource ownership and control in the Ijaw area of the Niger Delta.
5. Ijaw youths and Peoples will promote the principle of peaceful coexistence between all Ijaw communities and with our immediate neighbours, despite the provocative and divisive actions of the Nigerian State, transnational oil companies and their contractors. We offer a hand of friendship and comradeship to our neighbors: the Itsekiri, Ilaje, Urhobo, Isoko, Edo, Ibibio, Ogoni, Ekpeye, Ikwerre etc. We affirm our commitment to joint struggle with the other ethnic nationalities in the Niger delta area for self-determination.

6. We express our solidarity with all people's organisations and ethnic nationalities in Nigeria and elsewhere who are struggling for self-determination and justice. In particular we note the struggle of the Oodua people's Congress (OPC), the Movement for the Survival of Ogoni People (Mosop), Egi Women's Movement etc.
7. We extend our hand of solidarity to the Nigerian oil workers (NUPENG and PENGASSAN) and expect that they will see this struggle for freedom as a struggle for humanity.
8. We reject the present transition to civil rule programme of the Abubakar regime, as it is not preceded by restructuring of the Nigerian federation. The way forward is a Sovereign National Conference of equally represented ethnic nationalities to discuss the nature of a democratic federation of Nigerian ethnic nationalities. Conference noted the violence and killings that characterized the last local government elections in most parts of the Niger Delta. Conference pointed out that these electoral conflicts are a manifestation of the undemocratic and unjust nature of the military transition programme. Conference affirmed therefore, that the military are incapable of enthroning true democracy in Nigeria.
9. We call on all Ijaws to remain true to their Ijawness and to work for the total liberation of our people. You have no other true home but that which is in Ijawland.
10. We agreed to remain within Nigeria but to demand and work for Self Government and resource control for the Ijaw people. Conference approved that the best way for Nigeria is a federation of ethnic nationalities. The federation should be run on the basis equality and social justice.

Finally, Ijaw youths resolve to set up the Ijaw Youth Council (IYC) to coordinate the struggle of Ijaw peoples for self-determination and justice.

Signed for the entire participants by:

Felix Tuodolo and Timi Kaiser-Wilhelm Ogoriba

APPENDIX F: FOCUS GROUP DISCUSSION

PRESENTER: BROWN MESHACK working with **AKABUIRO DOMINIC** conducting a research on:

TOPIC: THE INTERFACE BETWEEN RENEWABLE ENERGY RESOURCES IN THE MITIGATION OF ENVIRONMENTAL VIOLENCE IN THE NIGER DELTA REGION OF NIGERIA.

This is a focused group discussion and you are carefully selected to represent the nine states of the region which includes: Abia state, Imo state, Bayelsa state, Rivers state, Akwa-Ibom state, Cross River state, Edo state, Delta state and Ondo State.

A number of questions will be asked as regards to the variables under study. You will be asked first on the renewable energy resources you have at your location after which we will go into the second aspect that has to do with law and how law can come in to settle certain environmental issues.

A representative from a multi-national company is here with us who will tell us about what the multi-national companies are capable of doing when it comes to renewable energy resources. Since everyone is familiar with the topic at hand, let us go straight to the question. There is a principle guiding a focused group discussion and the principle is that you're expected to speak, give opinion and tell us things you know that happens within that region you came from.

When we talk about renewable energy potentials, please think of the community, local government in your state, you were carefully selected because you have rich knowledge of these things that is why you are expected to explore the areas you know much about the renewable resources and you can from there answer the subsequent questions that comes therein.

We will start with your name and the state you represent:

- Edward Kingsley representing Akwa-ibom state – Oron local government
- Bright representing Cross River State – Ifang local government
- Chinedu Michael representing Abia State – ukwa Api local government
- Ugochukwu Williams representing Delta State – Broki local government
- Haweeb Abiyi representing Rivers State – okiri local government
- Israel Yepee representing Bayelsa state –Nembe local government
- Busola Otozua representing Edo State – Ovianota local government
- Okukoyo sholomu representing Ondo State – ofia North local government
- Anayo John representing Imo state –Umuahia North local government

You are all expected to answer the questions the way you can and if you do not have an idea about any particular question, you are not expected to respond but I

know you all have ideas so please say one or two things because it will help us on analysis of the data.

This is a discussion group setting, so you are expected to contribute and ask questions equally because that's one of the principles guiding focus group discussion. You are also expected to add to the contribution of one another, if there is any observation about the state that's not your location, you can equally tell us.

The first question is **WHAT RENEWABLE ENRGY RESOURCES DO YOU THINK YOU HAVE IN YOUR STATE, THAT IS TO SAY, WHAT ARE THE RENEWABLE ENERGY POTENTIALS IN YOUR STATE?**

Let's start with Mr. Akwa ibom.

Mr Akwa Ibom: we all know Akwa Ibom, Oron to be precise, Oron have fresh water, plenty of water and also kind of oceanic because we share boundaries all where rivers flow, plenty of fish, plenty of food coming from the river. We have plenty of bridges which will go for other renewable energy being in need, we also have plenty of land where wind mills can be built.

Mr Cross River: where I come from, the water that flows there can be used to generate power and on the other hand, you can also consider the solar, if you should go the place like Akankpa local government, there is heavy sunshine and the land mass which I think the government can explore the land there.

Mr. Abia: in Abia especially ohafia, ukwuapi area, what's predominant is lots of sunshine (solar power). We sometimes wonder if we are next door neighbour to the sun. I feel if government in power can harness that solar energy, it will help.

Mr. Delta: in Delta state, we virtually have all the resources; water, biomass, everything mainly water, broki, sapele has water also.

Mr. Rivers: we have virtually all, mainly because we have the Upland and the riveting areas; when you talk about Biomass, you look at Port Harcourt where the population is there and the production of waste which can give room to availability and use of Biomass. We also have solar and also the rainy season and solar energy can be utilized during the sunny season.

Mr. Bayelsa: is a riverine area. We have water wave the

Mr. Edo: really all the resources we are talking about, the biomass, sunshine, they are all available in all the states. Well in Edo we have sunshine, debris, waste which can be used as biomass.

Mr. Ondo: I am from Olumoyan Akure North in Ondo State, the renewable resources; we have is water, wind, and mainly sunshine.

Mr. Imo: my name is Anayo from Imo State Owerri North: Basically what we have in Imo State is very serious sunshine, we can also harness biomass. We from that area we understand that most of the resources especially the renewable resources are not even touched yet.

QUESTIONS AND CONTRIBUTIONS EXCERPT

Question I: To Mr. River State

Do you think development of renewable energy resources in your state will reduce environmental bareness in your state and extension of Niger Delta region? The floor is opened for anybody that wants to contribute.

Question II: To Mr. Bayelsa

Please tell us what you know about one or two environment situation that have happened as a result of the use of a non-renewable energy resources like the crude oil. Then you will now tell us how this one can be used without causing cases in certain states.

Answer I: I am Mr. Bayelsa on my own point of view, on the wind, there has been no resource control but the issue of resource control lives in the mind. It can be renewed from any angle. Thus can reduce communal crisis.

Answer II:

My name is **Mr. Abia**, that also comes in line with what I'm going to be saying. People focus so much on the crude and when it comes to crude oil or oil processing companies, everybody wants to work there and bring up issue of indigenes, non local virtue but if the government harnesses it instead of the crude as nobody can make claim to the sun.

Answer III:

Mr. River State: The two major reasons why there are crisis is because oil companies have failed to live up to their responsibility and their practices are sharply far from what is obtainable outside Nigeria as a result of this, they pollute everywhere but if renewable energy is used, the issue of pollution will not come in; the issue of not being responsible in terms, of cooperate social responsibility like developing of places infrastructurally will not also come in because the oil we defend will be replaced by the renewable energy. Renewable energy serves mostly our community commercially, but may not be that beneficial to these Niger Delta States. Why? Because the crude is use is used for the commercial benefit it provides to the people here.

In conclusion, I think there is need for diversification, if the government can move away from crude oil and go into solar energy, I think it will go a long way.

Answer IV:

Presenter: Mr. Akwa Ibom said that in commercial quantity, he doesn't think, the crude can really serve the renewable energy discussed earlier on like the biomass,

solar, hydro and the wave, he said he think it cannot help in revenue generation for the region and we are looking at something that is not just self-sustaining but something that could be used for international trade.

We expect reaction to that “he said that this renewable energy is just self-sustaining be it cannot lead to international trade.

Answer I

Mr. Imo State: when you say that this renewable cannot go commercial, I don't agree to that because I believe that if government come into it, with a sincere purpose just like Mr. Akwa Ibom said that they have massive land also in Imo State we have lots of undeveloped land. Government can come in there and build this renewable energy industry, this can create job for the people and as its creating job for the people Nigerians would be happy paying money for a functional power but since its only from Kanji Dam, they tell us its having problem, where as we make some payment, so it will be good if we source for power through renewable energy resource.

Answer II:

Mr. Bayelsa: I sincerely agree with Mr. Imo, because once an industry is built in an area, it helps to tackle the issue of unemployment thereby making room to face other changes.

Answer III

Mr. Delta: where I come from, its only oil that is predominant, are you suggesting that we should totally leave crude oil alone.

Presenter: No it's just that we need to just curtail or reduce the rate at which we solely depend on oil by focusing on the renewable energy resources. This can also help to reduce the risk of environmental pollution which leads to environmental degradation.

Mr. Delta: in contribution, solution to what you said, and government should come to Delta since we have water especially brooks, they should come and try to harness this water resources for the benefit of the country and reduce crimes of oil pipeline vandalisation.

Mr. Imo: the problem the Niger Delta is facing is that everybody wants crude oil, even people from as far as Sokoto and some neighboring states whereas they have solar energy and we don't disturb them; it is the role of government to harness that their solar energy in order to power their state while we here who have the solar energy would use our solar energy. Thus we have diversified our economy.

Presenter: It would be wise if we consider the consequences of these renewable energy (Bio mass) because it seems as though we don't look into the negative

effect of the biomass but I know of two which can cause environmental degradation, and so there are consequences, we need to find measures in order to stop or control the environmental violence which may arise due to this.

Mr. Bayelsa: Yes. Example in the wind, it can cause high tides in the water which can also cause flooding of our areas and also it can cause spread of fire. But in every problem there is a solution.

Mr. River: Windmills and solar energy will create unemployment because it doesn't require much skilled or unskilled labor just like oil where millions of people required and millions are investing on gas. But however if properly handled, it will make a change.

Mr. Ondo: I have a contrary opinion, because managers would only employ one or two persons, thus creating unemployment but if we have contrast supply of power, I think our unemployment problem will be reduced. How; a young school leaver, who just finished school can receive money from either parent or uncles to start a barbing salon, if there is constant power supply, the capital of the business will not be affected because there will be no need to buy generator and fuel.

Mr. Abia: if Germany could produce car battery and automobile engine, using human waste by recycling the waste but we here we take waste as waste, so if we can use the biomass it can go a long way on having a multiple effect on the economy.

Presenter: How about the health hazard when managing waste and recycling. Can it cause pollution and does it pose great threat on our health?

Mr. Akwa Ibom: Once there is an advantage, there is also disadvantage but it is minimal because the raw material we use is harmless like wind, solar, it has no harmful effect on our health.

Mr. Imo: Just like people who pick dust are empowered on how they do the work. They are told on what to do and when to do it. That is empowerment which in turn doesn't attack their health.

Presenter: Problem associated with the development of renewable energy resources.

The use of solar, wind, water, is the difficulty in using it. No knowledge about it or they do not have what it takes to accept it. This is to enable us draw conclusion out of it.

Mr. Cross River: Nigerians are not innovative, they lack the awareness of the fact that the sunshine can serve as a source of energy but rather we all hope and dwell on the fact that it is only crude oil that can do such.

Mr. Abia: High level of irresponsibility, high level of wickedness and Nigeria factors. The Nigerian leaders deliberately play politics with everything within their custody even the power they give us. This is due to the high generators they own or probably might be selling, this makes them feel we (Nigerians) should not rely on their power.

Mr. Rivers: Government policy is the major problem of Nigerian leaders. Nigerian leaders focus on their own and not problem solving e.g. someone who studied Accounting would be given much courses in the name of "Electives" instead of doing his/her own course.

Mr. Edo: The problem facing solar is ignorance and unawareness. The government is dodging from their responsibility. Take a look at Germany 70% of their power is from solar but in reality, we have more sunshine than they do, later they (leaders) tell us that they spent billions of dollars on hydro power.

I want to anchor my point into two basic reasons:

- (1) Technology: We may have the money but we do not have the technology and it is not all about buying the technology, but also sustaining it.
- (2) Nigerian factors: Our main source of power is hydro; we concentrate mainly on oil cabals, neglecting hydro cabal, but these hydro cabals make a lot of money in reducing our power and also importing generators into the country.

Presenter: what are the possible means by which we can stop all these importations? How will the Nigerians have appropriate knowledge on renewable energy resource, policy or legal measure and regulating favours that will impact not just the Niger delta but Nigeria at large?

Mr. Abia: in matters of legislation, group or persons must come to a point; we must first have a president who is willing to help the people just like what Uganda president is doing. Also the legislators should carry out their duties of fishing out and stopping the cabals without fear or favours because it is the cabals that put some of these legislators and when they (legislators) are in power, they don't tend to fulfil the demand of the masses rather they obey the words of those who put them in authority, and the president should make the country remove their entire minds on the old and source for other resources.

Presenter: It's assumed that there is a law concerning how to regulate it.

Mr. Edo: For the problem to be solved, a bill has to be passed, accepted and implemented. Our leaders should not use generators in their houses, also for our academic sectors to grow; all children of the leaders should attend government schools in Nigeria. Nigeria is the best country on paper, our policy is probably one of the best but the problem we are having is implementation. The leadership

is the main challenge of the people and also implementation of policies. If the people have an oriented life example by obeying traffic lights even without the presence of policemen, but it seems like some Nigerians are living a life closer to that of an animal but if we all live a normal life, it would be better for our leaders to govern us very well.

If the law is too rigid for the people, it would be hard for the people to obey it.

Mr. Delta: the law is not working because we have a weak institution that runs the affairs of the country.

Mr. Imo: am still supporting propaganda for state policy.

Presenter: Can someone from Edo, please respond to how the coming in of multi-national oil companies in Nigeria can help in the expansion of Nigerian economy?

REPRESENTATIVE: The oil and gas industry are coming up with something to ensure that energy is sustained all over and some host communities wants compensation, but we all want to harness all these renewable energy.

Presenter: At this point, thanks to the executives and the representative of the multi-national company. The outcomes of this discussion will go a long way in helping Nigeria in the provision of renewable energy resources and stopping of violence that erupts.