INVESTIGATING THE ROLE OF MULTI-NATIONAL CORPORATIONS IN SUSTAINABLE ENVIRONMENTAL MANAGEMENT IN NIGER- DELTA REGION OF NIGERIA- AN OVERVIEW

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"ENGAGING THE CHALLENGES,ENHANCING THE RELEVANCE"

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PRESENTATION OUTLINE

- INTRODUCTION & CONCEPT DEFINITION
- AIM & OBJECTIVE OF THE WORK
- AREA OF STUDY
- METHODS ADOPTED
- FINDINGS
- CONCLUSION & RECOMMENDATIONS

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INTRODUCTION

- MULTINATIONAL CORPORATIONS AS AGENTS OF CHANGE HENCE DRIVE THE GLOBALIZATION PROCESS TO A VERY LARGE DEGREE.

- BASED ON THIS THE IMPORTANCE OF MULTINATIONAL ENTERPRISES IN ENVIRONMENTAL SUSTAINABILITY IS EXAMINED.

INTRODUCTION CONTD

- Environment is defined as the circumstances or conditions that surround an organism or group or group of organisms as well as the complex of social or cultural conditions that affect an individual or community (Cumminghan and Saigo, 1997).

- Advancement in human activities such as exploration, exploitation, factory mining, soil erosion, urbanization etc. has destroy and eaten up many land, with little or without concern on environmental consequences and overall impact on human beings.

ENVIRONMENTAL DISTURBANCES 1

- Many major improvements to our standard of living can be attributed to the application of science and technology. Few examples include:
- The production of more and better quality food
- The creation of housing as protection from extremes of climates and as living space
- The building of fast and reliable means of transportation
- The invention of various systems of communication
- The protection from the worst effects of natural disasters such as floods, droughts, earthquakes, and volcanic eruption.

ENVIRONMENTAL DISTURBANCES 2

- With these improvements, however, have come disturbing side effects, such as lost arable land, disappearing forests, environmental pollution, and new organisms resistant to controls.

- Many effects originally considered to be just nuisances are now recognized as potential threats to nature and to human.

THE CHANGING ROLE OF TECHNOLOGY 1

- There is evidence that the role of technology in environment matters is changing in two important areas: sustainable development, dealing primarily with global problems and preventive technology, designed to reduce the environmental effects of processes, and products.
- SUSTAINABLE DEVELOPMENT:T he concept of sustainable development has challenged society to change from its destructive, exploitative philosophy to one that fosters long-term protection of the environment and its habitats.

THE CHANGING ROLE OF TECHNOLOGY 2

- PREVENTIVE TECHNOLOGY: This has special appeal to industry because of potential economic benefit. For example," production Prevention Pays Program" which involved product reformation, process modification, equipment redesign and recovery of waste products for reuse (Campbell and Glenn, 1982).

AIM AND OBJECTIVES

- **The aim of this work is** carryout a review the role of the multi-national oil firms in environmental sustainability of the Niger Delta region of Nigeria. This aim will be achieved through the following objectives:
- Identifying all the major oil firms in the operating the Niger-Delta Region.
- Carryout an assessment of their operation for a period of five years (2010-2015)
- Raise necessary instrument to collect Field data and other ancillary data that will be useful for this work.
- Acquire satellite imagery (High resolution Satellite imagery) of the Niger Delta region as a source of spatial data for analysis.
- Carry out field visits for completion, etc.
- Raise questionnaires and other means of data gathering instrument
- Seek for Funding and Collaboration in order to complete this research.
- Raise reports and publish finding in a learned journal and conference

METHODOLOGY

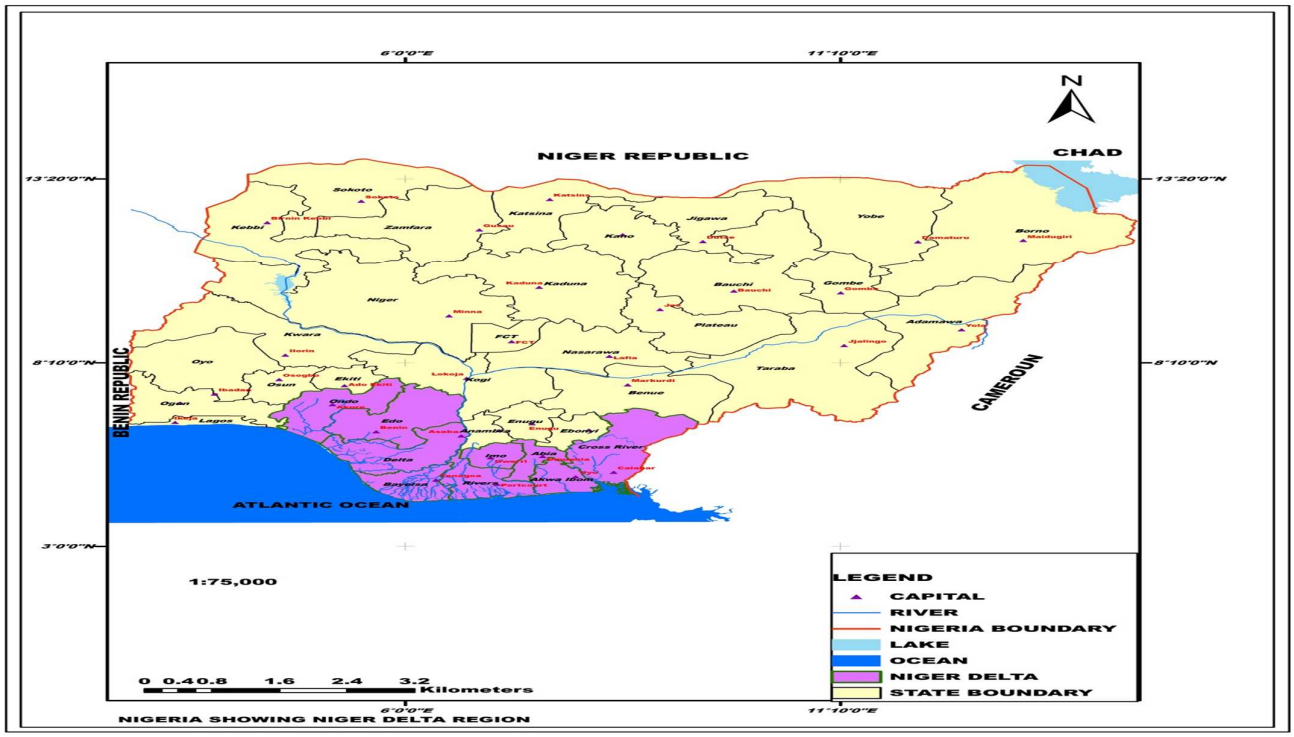
- **NIGERIA**
- Nigeria lies between 4°N and 14°N, and 3°E and 15°E.it is one of the Western Africa countries.
- It is bordered to the North by the Republics of Niger and Chad, to the West by the Republic of Benin, to the East by the Republic of Cameroon and to the South by the Atlantic Ocean.
- Nigeria occupies a total area of 923,768 km² (comprising mainly of 910,768 km2 land and 13,000km2water) with a total population of 140 million people according to the 2006 Census figure (NPC, 2006).

- THE NIGER DELTA
- Niger Delta lies between 4°49¹60″N and 8°N, and 5°E and 9°E with an elevation of about 96m above the mean sea level. It has a land mass of about 70,000km² and also among the world's major wetlands; with one of the largest mangrove ecosystems.
- Ecologically tropical rainforest dominant the northern while the south is a coastal area of mangrove vegetation traversed by many rivers, tributaries and creeks made up of Salt-water riverine area immediately adjoining the coast where the Niger and its tributaries flow into the sea; also a freshwater riverine area, which is further inland.

THE NIGER DELTA 2

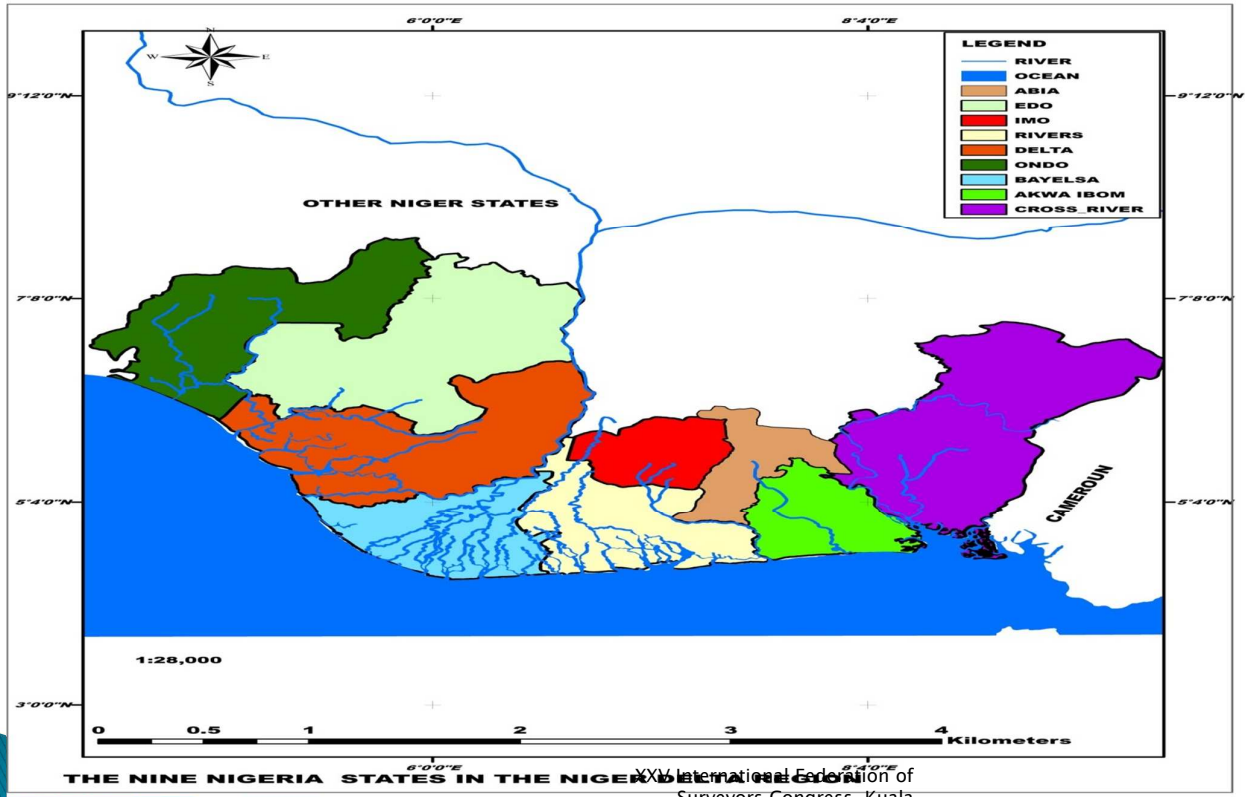
- The area was the British Oil Rivers
- Protectorate from 1885 until 1893, when it was expanded and became the Niger Coast Protectorate.
- The Niger Delta officially defined by the Nigerian government, extends to about 70,000 km² and makes up 7.5% of Nigeria's land mass.
- It consists of Abia, Akwa-Ibom, Bayelsa, Delta, and Rivers States. Cross River State, Edo, Imo and Ondo States

NIGERIA SHOWING N/DELTA



NIGERIA SHOWING NIGER DELTA REGION

NIGER –DELTA REGION OF NIGERIA



THE NINE NIGERIA STATES IN THE NIGER DELTA REGION

OIL EXPLORATION AND EXPLOITATION IN NIGER DELTA REGION

- Shell British Petroleum (now Royal Dutch Shell) first discovered crude oil in 1956 at Oloibiri, a village in the Niger Delta, while production began in 1958.
- Today, there are 606 oil fields in the Niger Delta region, out of which 360 are on-shore and 246 are offshore (Nigeria Country Analysis Brief, 2005) Collins (2008).
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- The oil industry in Nigeria is operated by six-joint venture operations between Nigeria and the Trans-National Corporations: Shell (Netherlands/UK), Exxon Mobil (US) Chevron-Texaco (US), AGIP (Italy), and Elf- Aquitaine (France).

MULTI-NATIONAL OIL FIRMS IN N/DELTA

Company	Year Established
Shell Petroleum Development Company Ltd	1937
Mobil Producing Nigeria Unlimited	1955
Chevron Nigeria Ltd	1961
Texaco Overseas Nig. Petroleum Co Unltd	1961
Elf Petroleum Nigeria Limited	1962
Philip (1964); Pan Ocean Oil Corporation	1972
Ashland Oil Nigeria Limited	1973
Agip Energy & Natural Resources	1979
Statoil/BP Alliance	1992
Esso Exploration & Production Nig. Ltd.	1992
Texaco Outer Shelf Nigeria Limited	1992

MULTI NATIONAL OIL FIRMS

Shell Nig. Exploration & Production Co.	1992
Total (Nig.) Exploration & Prod. Co. Ltd.	1992
Amoco Corporation	1992
Chevron Exploration & Production Co	1992
Conoco	1992
Abacan	1992
(Source: Nigerian National Petroleum Corporation	

Multinational Oil Companies AND Their Oil Leases

S/N	Partners Equity	Interest (%)	Operator	No. of OMLs
1	Shell Agip Elf NNPC	30 5 10 55	Shell	58
2	Mobil NNPC	40 60	Mobil	4
3	Chevron NNPC	40 60	Chevron	16
4	Agip Philips NNPC	20 20 60	Agip	N/A
5	Elf NNPC	40 60	Elf	14
6	Texaco Chevron NNPC	20 20 60	Texaco	6
7	Pan Ocean	40 60	Pan Ocean	1

(Source: NNPC) cited in (Ugochukwu, 2008).

MENANCE OF OIL EXPLORATION AND EXPLOITATION IN THE NIGER DELTA

- In the short-term, environmental degradation leads to declining standards of living, the extinctions of large numbers of species, health problems in the human population, conflicts, sometimes violent, between groups fighting for a dwindling resource, water scarcity and many other major problems.
- They include:
- UNSUSTAINABLE GAS FLARING BY OIL FIRMS IN NIGER DELTA

Major Oil Companies and Percentage Production

Operator (% interest)	Other partners(% interest)	NNPC (% interest)	Major Producing Fields	Production BPD(EST 2003)
Shell (30%	TotalFinaElf (10%) Agip (5%)	55%	Bonny or Eastern Division-Nembe, Cawthorn Channel Ekulama,ImoRiver,Kolo creek.Adibawa & Eteleibou	950,000
ExxonMobil(4o%)	None	60%	Edop, Ubit,Oso.Unam & Asasa	500,000
ChevronTexaco (40%)	None	60%	Meren,Okan,Benin River, Delta/South Delta,Inda,Meji & Robertkiri	485,000
Agip (20%)	Philips (20%)	60%	Obama,Obiafu,M'Bede, Abgara & Oshi	150,000
TotalFinaElf (40%)	None	60%	Obagi,Aghigo,Okpoko, Upomami, Afia & Obodo-Jatumi	150,000

(Source: US Government in April 2003.)

Regional Table for Gas Flaring

REGION	FLARRED GAS(BCM)	SHARE OF WORLD TOTAL (%)
AFRICA	37	34
ASIA-OCEANIA	11	10
EUROPE	3	3
FSU	19	18
CENTRAL & SOUTH AMERICA	10	9
MIDDLE EAST	16	15
NORTH AMERICA	12	11
WORLD	108	100

Source: Cedigaz OPEC World Bank (Undated)

MENANCE OF OIL EXPLORATION AND EXPLOITATION IN THE NIGER DELTA

- The burning of fossil fuel, mainly coal, oil and gas – greenhouse gases – has led to warming up the world and is projected to get much, much worse during the course of the 21st century, according to The Intergovernmental Panel on Climate Change (IPCC). This scientific body was set up in 1988 by the UN and the World Meteorological Organization to consider climate change.

GAS FLARING

Gas Flaring in Nigeria (Source: Wikipedia,2013)

Gas Flaring 1

- The burning of gas by flaring leads to the following challenges:
- Emission of carbon dioxide, the main greenhouse gas.
- Venting of the gas without burning,
- Releases methane, the second main greenhouse gas. These gases make up about 80% of global warming to date.
- Flaring produces the primary GHGs, CO2 and methane (CH4).
- Flaring of gas rich in liquids can produce smoke, with aerosol effects that also contribute to global warming.

Gas flaring 2

- Cases of premature death, respiratory illnesses among children, asthma attacks and cancer will occur from exposure to lower but still significant levels of particulate matter and benzene that occur beyond distances of 1,325 meters and 5,000 meters from gas flares, respectively.
- Gas flaring releases additional pollutants, such as sulfur dioxide, dioxins, nitrogen oxides, toluene, xylene and hydrogen sulfide, which cause other serious health effects that, are not quantified in the above analysis.
- **Benzene emissions** from gas flaring at the 17 on-shore flow stations in Bayelsa State would likely cause 8 additional cases of cancer.

OIL SPILLAGE IN THE NIGER DELTA REGION

- Crude oil extraction also leads to massive environmental devastation, which clearly affects the living conditions of local communities.
- The Department of Petroleum Resources(DPR) estimated 1.89 million barrels of petroleum were spilled into the Niger Delta between 1976 and 1996 out of a total of 2.4 million barrels spilled in 4,835 incidents.

CONSEQUENCIES

- LOSS OF MANGROVE FORESTS
- DEPLETION OF FISH BIOMAS
- WATER HYACINTH INVASION
- HEALTH CHALLENGES
- YOUTH RESTIVENESS AND CONTINUED AGITATION

RECOMMENDATION

- There is need for multi-national firms working in the Niger-Delta region of Nigeria to constructively engage and impart positively on the host communities. This engage may be in the form of environmental remediation and recovery.
- They can also give back to the host communities in terms of giving a certain percentage of their proceeds to the overall development of the impoverished community by way of health scheme, provision of basic necessities such as electricity, good water supply, tree re-planting campaign and scholarships

- CONCLUSION
- I conclude by advocating the adoption of environmental impact matrices in the oil producing region from time to time. The environmental impact matrix provides a convenient inventory and display of the impacts of energy production (Leopold, 1971) cited in Glynn (2005).The matrix is compiled with the horizontal axis listing the components of the development, such as exploration, mining, transportation, or utilization. On the vertical axis are components of the environment: the atmosphere, the hydrosphere, the lithosphere, and human impacts.
- The matrix indicates potential interactions between activities and the environment and provides answers to such questions as: Does oil exploration affect water supply quality? Or does the use of hydroelectricity affect air quality? With the methodical matrix method, potential impacts are not likely to be overlooked.

- THANK
- YOU
- FOR LISTENING

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