

**UNIVERSITY OF PORT HARCOURT**

**ENVIRONMENTAL POLICY FAILURE  
IN NIGERIA AND THE TRAGEDY OF  
UNDERDEVELOPMENT OF  
NIGER DELTA REGION**

**An Inaugural Lecture**

**by**

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## **DEDICATION**

This work is dedicated to my late parents:  
Chief Moses Osunsina Adeyemo  
and  
Mrs. Felicia Ajoke Adeyemo

## ACKNOWLEDGEMENTS

This inaugural lecture has been written not through my personal efforts alone, but through the countless and appreciable major and minor assistances received from here and there. First and foremost, therefore, I should like to thank God for His infinite love, protection and guidance all through the preparation of this work. I wish also to express my special gratitude to the Vice Chancellor, Professor Don M. Baridam, Members of the University Administration and the University community at large for making it possible for me to present my inaugural lecture today, exactly a year left for me to reach statutory age of retirement.

I would want to thank my colleagues in the Department of Geography and Environmental Management for their help and support and for taking special interest in my academic success. Indeed I thank most fervently the pains Dr. Adesola Obafemi, my current H.O.D., and Mr. Olakekan Popoola went through in proof reading the drafts meticulously. Equally too I thank my colleagues in the Faculty of Social Sciences for their invaluable help and assistance.

Back home, Ipetumodu, the story of my academic journey would be incomplete without a mention of Dr. (Pastor) Samuel O. Adeyemo, Pastor Reuben Akin Adeyemo and Deacon David Popoola Adeyemo for their various forms of support, of no small measure, to me. My cousins too, Chief Ezekiel Kola Oyewo and Prince Johnson Siyan Olaoye should be singled out for praise for their immense love and support to pull me back from the brink. I also thank the leadership and the members of Ipetumodu Progressive Union, Port Harcourt Branch, for their prayers and love for me. I sincerely thank Pastor and Mrs Gbade Oyewole for their fervent prayers and support.

May I express my profound gratitude to my ‘computer wizard’, Pastor (Mrs) Genkume Salvation Gift-Ihunwo for her patience and enduring spirit inspite of my atrocious handwriting. She has always come to my aid whenever I have to typeset any manuscript. And for typing virtually all my publications, I say God bless you.

I am sincerely grateful to my beloved wife Mrs Omolayo Adeyemo for standing by me at all times and for her prayers and encouragement; my children: Oluremi Folasade, Temiotan and Olusanya; Mrs Funmi Afiesimama, Tope, Tunrayo, Bidemi, Bayo and Iboro for providing peace and understanding in my home to enable me work without distractions. I thank my brothers and sisters in the Lord at Shiloh and Glory Assemblies of Redemption Ministries who supported me with prayers on a regular basis.

Lastly thanks are due to my parents Late Chief Moses Osunsina and Late Mrs Felicia Ajoke Adeyemo who toiled to ensure that I had sound education. They inculcated in me good discipline, spirit of tolerance, love, hardwork and fear of God.

For all you good people, my students, graduates and undergraduates, that have travelled from far and near to attend this lecture. I say thank you.

To the political class in this country you deserve no gratitude from me but a word of advice. Let there be a very strong political will, let there be a strong commitment; let there be the fear of God which is the beginning of wisdom and let there be accountability. In the book of **2 Chronicles 7:14** it is written: ***“if my people who are called by My name shall humble themselves and pray and seek My face and turn away from their wicked ways, then will I hear from heaven and will forgive their sin and will heal their land”***. And the conclusion of the whole matter is to fear God and keep his commandments for this is the whole duty of man, **Ecl. 12:13**.

Mr. Vice Chancellor Sir, Deans, invited Guests, Ladies and Gentlemen, I thank you for your patience and attention.

**Elijah Ademola Adeyemo**

(RES A222)

*Professor of Regional Development  
and Environmental Management*

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# **ENVIRONMENTAL POLICY FAILURE IN NIGERIA AND THE TRAGEDY OF UNDERDEVELOPMENT OF NIGER DELTA REGION**

The Vice-Chancellor, Sir,  
The Deputy Vice-Chancellors,  
Principal Officers of the University,  
Provost, College of Health Sciences,  
Dean, School of Graduate Studies,  
Deans of Faculties,  
Directors and Heads of Departments,  
Distinguished Professors and Scholars,  
Staff and Students of University of Port Harcourt,  
My Dear Wife and Children,  
Distinguished Guests,  
Ladies and Gentlemen.

## **1. INTRODUCTION**

The present is a time of great challenge and opportunity for the geographical profession. The challenge lies in the fact that topics with which geographers have been concerned throughout the existence of geography as a university discipline have now become matters of great public importance – the environment and man's interactions with it. The world is already besieged with multiple complex problems of, for example, imbalance between environmental resources and population or demand, poverty, inequality in economic



development in space, social crisis, environmental degradation, inaccessibility of humans to welfare facilities, among others. This challenge provides an opportunity to demonstrate both to the academic community and to government on the one hand and the public on the other hand that we professional geographers have the necessary skills and concepts to contribute effectively to the solutions of some of the major social and environmental problems facing society. The time could hardly have been more opportune for a discussion of geography and public policy.

Some of my senior colleagues have put forward the *raison d'être* of an inaugural lecture viz:

- as an academic ceremony aimed at introducing a new professor to his professorial chair which enables him to publicly declare what he professes; (Nwodo, 2002; Okoli, 2003).
- In the course of the lecture the presenter usually highlights the major contributions to learning that he has made as well as charts the outline of further research he plans to pursue (Ejizu, 2008).
- But Ogunye (1981) of the University of Lagos pointed out three forms an inaugural lecture can take thus:
  - (i) To concentrate on the development of the department, if the lecturer is also the occupant of the chair to which the leadership is attached;
  - (ii) To focus on the professor's own work within the general framework of his discipline, and;
  - (iii) To be on any general topic where the professor considers that he has something fresh and stimulating to tell his audience (see also Nwaogazie, 2005).

The traditional role of geographers embraces teaching, research and offering professional advice to government (Coppock and Sewell, eds., 1976). Teaching has probably been the geographer's most important role, especially in the educational institutions, where geography has been the principal source of awareness about both the local and the world environment. Although traditional roles of geographers are teaching and research but the outstanding contemporary role is to evaluate government policies as they relate to efficient and balanced relationship of humans and the environment. It is our desire to place emphasis on environmental problems and the contribution of public policies in the use of resources.

This lecture focuses on my own work within the general framework of my own academic field of specialization i.e. Regional Development and Environmental Planning. The choice of my topic was influenced by many factors. First, as a Regional Development geographer I have deep concern for the spatial development and welfare condition of the peoples of Niger Delta Region in which Uniport is located. Since joining the rank and file of the staff of the Department of Geography and Environmental Management in 1993, I have chosen the Niger Delta Region as my research laboratory to test formulated hypotheses and where I can probe deeply into the mysteries of poverty with a view to improving development planning and welfare conditions of the region. To this extent the orientation and academic focus of the post graduate students that I had opportunity to guide were tilted towards burning geographic issues in the NDR. Second, six of my Doctorate degree students have carried out indepth research works in different states of Niger Delta Region just to unfold the tragedy of spatial and human underdevelopment of the region inspite of the abundant valuable resources of the region. Their research findings agreed that multiplicity of socio-

economic, ecological and political, cultural and historical factors account for undeserved underdevelopment of the region. Poverty in the region is multi-dimensional and that multidisciplinary approach at unfolding the mysteries of underdevelopment should be taken. One of them even found out that urban noise and air pollution in the city of Port Harcourt was consequent not only on rapid population concentration and industrial activities but mainly as a result of poverty. The massive purchase of unserviceable vehicles with emission of thick carbon monoxide, the use of fuel-wood for cooking, the failure of government to provide regular supply of electricity leading to excessive use of generators and other crude methods of cooking amongst others heightened noise and air pollution in the metropolis. Two, that researches into underdevelopment in Bayelsa and Rivers States contend that ecological problems constrained human accessibility to welfare facilities and services but concluded that the state of underdevelopment in their study areas could be explained by government policy failure, social and cultural behavioural factors of large family size, low achievement motive and retrogressive inheritance principle of “primogeniture”. Currently, activities have been programmed for four of my Doctorate degree students to work on various issues in the NDR all in the attempt to produce a sustainable database for development and planning of the region.

By and large, this lecture focuses on my academic area of specialisation hence I have chosen to discuss with you today: **“Environmental Policy Failure And The Tragedy of Underdevelopment of the Niger Delta Region”**. In line with the tradition of development geographers this lecture evaluates environmental policy of Nigerian government in the Niger Delta Region.

Environmental policy consists of government’s action designed to modify and improve environmental conditions

under which people live; it is also an instrument for achieving greater equity and social justice. In which case the environmental policy is designed to achieve for every citizen “equal access to all the facilities and the opportunities which could help him realise his potential and develop his full personality”.

## **1.1 PAST RESEARCH ENDEAVOURS IN THE DEPARTMENT**

The 13<sup>th</sup> Inaugural Lecture of this unique Uniport was presented by Professor Ademola Salau on 11<sup>th</sup> February 1993 entitled: **“Environmental Crisis and Development in Nigeria”** in which he examined the nature and the factors responsible for the threat to our environment in Nigeria and suggested the way out of the dilemma. The second Inaugural Lecture in the Department of Geography and Environmental Management was presented on 28<sup>th</sup> March, 2002 by Professor Winston Bell-Gam captioned **“Discerning the Management of Environmental Resources in Time and Space”** using Niger Delta Region as his focus. In this lecture he related the human economic activities and settlement evolution in the Niger Delta Region with its ecological circumstances; and concluded that environmental resource protection and management was a desideratum before any sustainable economic growth and development could take place.

Professor Charles Oyegun delivered the 3<sup>rd</sup> Inaugural Lecture that emanated from the department on 25<sup>th</sup> October, 2007 Entitled: *“Climate Change and Nigeria’s Coastal Resources”*. He identified causes and consequences of global warming on Nigeria’s coastal shores. He identified the causes of global warming to include human economic/industrial activities leading to the emissions of offensive carbon monoxide and other radiative gases into the atmosphere; ozone depletion; while he identified the social and economic

consequences of global warming to include coastal and riverbank erosion, floods, sedimentation and siltation of waterways and destruction of economic resources and settlement dislocation amongst others.

These three scholars before me have presented their inaugural lectures on environment, and here I stand before you this afternoon to present mine, still on environment, with a different approach. This lecture evaluates government environmental policy failure particularly in the NDR and the consequences of this failure on humans and environment.

## **1.2 WHY EMPHASIS ON THE ENVIRONMENT?**

Mr. Vice Chancellor Sir, ladies and gentlemen do not be embarrassed for our unending research works on the environment. This is because environment is the home of man and he depends on it for sustenance and livelihood, and we shall be failing in our duties if we fail to generate awareness about both the local and the world environment, about environmental problems and challenges that foreshadow doom on our planet earth. Besides ours is Department of Geography and Environmental Management which is expected to be reservoir of environmental knowledge, planning and development database for the use of governments, planners, researchers and the public upon which sound planning should be anchored.

Two, as said by Salau (1993) that:

Protection of the environment is also seen as essential part of development. Without adequate environmental protection development is undermined and without development to make available resources needed for investment, environmental protection will fail. Thus economic growth depends to a great extent on the maintenance

of environmental quality and environmental quality in turn depends to some extent on the maintenance of the well-being of the people.

Finally, conservation and preservation of environmental resources is a commandment of God. We are interested in our local, national and global environment for the sake of human existence and sustenance, economic growth and development, resource conservation and preservation and in obedience to the commandment of God – “Be fruitful, and multiply, and **replenish the earth** ...” Gen. 1:28. This shows that maintenance of environmental integrity, quality and health is a commandment from God.

### **1.3 SOME CONCEPTUAL CLARIFICATIONS**

There is need to properly grasp the meanings of certain concepts that reoccur throughout this lecture. They are environment, environmental policy, policy failure, tragedy, etc.

- (i) **Environment** is usually understood to mean the surrounding conditions that affect people and other organisms. Interactions between people and their environment are as old as human civilization. The problem of managing those interactions has been transformed today by unprecedented increases in the rate, scale and complexity of the interactions. The environment provides numerous opportunities for wealth creation and employment generation which reduce poverty.
- (ii) **Environmental Policy** at government, institutional or corporate levels is concerned with protecting human health, natural resources and restoration and preservation of the environment. The policy trust in environmental management in Nigeria focuses on

ensuring a safe and healthy environment that secures the economic and social well-being of Nigerians on a sustainable basis. The primary objectives of environmental management is “to take full inventory of Nigeria’s natural resources, assess the level of environmental damage as well as design and implement restoration and rejuvenation measures aimed at halting further degradation of our environment’ (NEEDS, 2004).

- (iii) **Policy** is contained in a document that embodies the principles and action plan of the government or corporate bodies. In short, environmental policies are geared towards restoration and preservation of the environment, reducing waste and pollutants, conserving resources and recycling waste material and improving human health and economic well-being of man. The documents spell out environmental policy goals (See Nigeria, 1970).
- (iv) **Environmental Policy Failure** refers to failure of the government to meet the targeted goals. Put other way yet, environmental policy failure is government failure that refers to “systematic tendencies and incentives within legislatures and regulating agencies that work against the attainment of efficient and equitable public policy” (Field, 1997).
- (v) **Tragedy** could be an unexpected colossal loss. Tragedy occurs in a society (as in NDR) where resources to make money and live a comfortable life are turned to make man live a life of penury, want and squalour. Economic tragedy is most likely to occur if

economic growth is pursued at the expense of environmental resources.

- (vi) **Resources** are anything that contributes to making desired goods and services available for consumption. Resources are limited relative to the desires of humans to consume. There is linear relationship between economic growth and the environment such that economic and environmental well-being are mutually reinforcing goals that must be pursued simultaneously if either one is to be reached. The solution to this problem lies in efficient and effective management of economic growth in such a way as to do no irreparable damage to its environment – sustainable development. UNDP (1990) defines sustainable development thus:

*sustainable human development is development that, not only generates economic growth, but also distributes its benefits equitably; that regenerates the environment rather than destroying it; that empowers people rather than marginalizing them. It gives priority to the poor, enlarging their choices and opportunities, and provides for their participation in decisions affecting them. It is development that is pro-poor, pro-nature, pro-jobs, pro-women, and pro-children.*

There should be a balance between economic growth and development on one hand and environmental resources exploitations on the other. It is now an accepted orthodoxy that meaningful development should be people-centred because the development of human capital leads to optimum and efficient utilization of environmental resources.



## **2. RESOURCES OF NIGER DELTA REGION**

The NDR covers a total land area of about 112,110km<sup>2</sup> which represents about 12% of Nigeria's total surface area and by 2005 the region controls over 31 million inhabitants or 22.30% of Nigeria's population. Niger Delta of Nigeria is a gas region associated with oil because between 2005 and 2006 crude oil reserves have increased from 25 to 35 billion barrels while the natural gas reserves increased to 187.5Tcf. Chukwueke (2006) further observed that out of 35 billion crude oil barrels in Nigeria, 28 billion barrels is found in the Niger Delta and 7 billions in the Deepwater. Daily production of crude oil in Nigeria is highly above 2 million barrels from just over 254 producing fields, while 1,183 oil fields have been discovered with 145 oil concessions operational, and 143 are open. According to Niger Delta Regional Development Master Plan (2006) there is a lot of hydrocarbon infrastructure in Nigeria with over 3000kms. of pipelines in the Niger Delta. These pipelines link over 280 flow stations across Niger Delta Region. The number of crude oil producing companies in the Niger Delta Region (NDR) has increased from one (SPDC) in 1964 to eleven (2004) producing from a total of 159 oil fields and 1481 oil wells.

Undoubtedly the NDR is very rich in human and natural resources, culture and heritage, but in reality the region is a paradox of poverty amidst plenty. The region controls over 22% of Nigeria's population (with an average population density of 265 inhabitants per km<sup>2</sup>); the region is the 7<sup>th</sup> largest producer of crude oil in the world and the largest in Africa, and has 4.5 trillion cu. metres of proven natural gas reserves. Other economically significant resources are timber, vast amount of fallow cultivable land, solid minerals such as granite, barites, marble, clay, limestone sand and gravel; tourism, and so on. Other minerals yet to be exploited fully

include: Kaolin, limestone, marble, phosphaste, silica, coal and tarsands (Bitumen).

**Table 1: Population Distribution in the Niger Delta Region, 2006**

S/ N	State	Populat ion	% Regi on	% Nigeri a	Land Area km <sup>2</sup>	% Regio n	% Nigeri a	Capital City
1	Abia	2,833,999	9.1	2.02	4,877	4.35	0.53	Capital City
2	Akwa Ibom	3,920,208	12.6	2.80	6,806	6.07	0.74	Umuahia
3	Bayelsa	1,703,358	5.5	1.22	11,007	9.82	1.19	Uyo
4	Cross River	2,888,966	9.3	2.06	21,930	19.56	2.37	Yenagoa
5	Delta	4,098,391	13.1	2.93	17,163	15.31	1.86	Calabar
6	Edo	3,218,332	10.3	2.30	19,698	17.57	2.13	Asaba
7	Imo	3,934,899	12.6	2.81	5,165	4.61	0.56	Benin
8	Ondo	3,441,014	11.0	2.46	15,086	13.46	1.63	Owerri
9	Rivers	5,185,420	16.6	3.70	10,378	9.26	1.12	Akure
	Region	31,224,582		100.00	112,110		100	Port Harcourt
	Nigeria	140,020,952	22.30		923,773	12.14		Abuja

Sources:

1. Nigeria, National Population Commission Abuja, 2006
2. Nigeria, Niger Delta Regional Development Master Plan 2004.

We are interested in the policy failure in the NDR for many reasons. First the region produces over 85% of Nigeria's revenue but records the highest rate of poverty with over 70% of the population living below poverty line; poor social and economic infrastructures; severe environmental degradation and high incidence of social unrest and insecurity. Second, the British attempted to solve the problems of Niger Delta Region by setting up Willink Commission. The Willink Commission recommended the establishment of the Niger Delta Development Board (NDDDB) to address the problem of underdevelopment of the area. NDDDB did not meet the aspirations of the people and thus some people attempted to take the extra-legal route to achieve their goal (Adeyemo, 2001; Salawu, 1993). This shows that policy failure in the region has historical antecedent. Thirdly, since 1999 the people of NDR have embarked on civil militancy against the federal government injustice in order to accelerate socio-economic and political development of the region. All to no avail. What goes wrong and where lies the solutions to the plethora of problems confronting the region?

The observed poverty and environmental denudation in the NDR are both the products of natural phenomena and human economic activities. Some of the identified environmental problems are associated with natural terrain and hydrology of the NDR. The natural problems include flooding, siltation, occlusion, erosion and the shortage of land for development. Other problems related to oil and gas exploitation in the region are oil spills, atmospheric pollution, gas leaks and flares, land subsidence, depletion of forest resources, erosion, effluent and wastes generation from oil operations (see UNDP, 2006).

Table 2 shows oil and gas production related activities.

**Table 2: Oil and Gas Production Related Activities**

% contribution of crude oil export to national forex earnings	Over 80%
Average daily crude oil production	2 million BPD
Number of oil wells drilled in the Niger Delta Region	5,284
Number of flow-stations for crude oil processing	257
Length of oil and gas pipelines in the region	Over 7000km
Number of export terminals	10
Land area within which the network of pipelines are located	31,000sq km
Number of communities hosting oil / gas facilities	Over 1,500
Gas flares-out target date	Dec. 2007
Number of petroleum training Institutes in the region	1
Number of free export/industrial zones in the region	2
Number of gas plants in the region	10
Number of marginal oil fields farmed out to local companies	30

Source: ND Regional Development Master Plan, 2006

Each of these oil and gas related activities has deprived the people of their means of livelihood and has directly or indirectly endangered the health of the people through air and water pollution. For example, the 5,284 oil wells, 257 flow stations, over 7,000kms pipelines coverage area, and 30 marginal oil fields have negatively impacted the people of the NDR. Such activities have reduced farmland and productivity in addition to water pollution which has reduced annual fish catch. The incessant oil spillages in the NDR should be viewed with grave concern especially when related with land productivity, available farmland and poverty scenario (see Table 2). Tables 16 and 17 show the phenomenon of pollution in the NDR.

In short, NDR is particularly blessed with abundant human and material resources. The region is endowed with a large number of working age population, potentially cultivable land and fishery resources. The potentials of the NDR in the

area of primary agricultural production (variety of cash and food crops), such as palm oil and palm kernels, rubber and cocoa are large. Others are cassava, yam, plantain and cocoyam, as food crops, with its enormous scope for rice production. None the less, the abundance of these valuable resources has not transformed the socio-economic landscape of the region.

### **3. OIL AND GAS EXPLOITATION IN THE NIGER DELTA REGION: HISTORICAL PERSPECTIVE**

Niger Delta Region is currently made up of 9 states of Delta, Bayelsa, Rivers, Edo, Akwa Ibom, Cross River, Abia, Imo and Ondo, otherwise known as oil mineral producing area. The core Niger Delta Region is made up of three states of Delta, Bayelsa and Rivers. Oil exploration in Nigeria began in 1908 but the exploration efforts were interrupted by the two world wars. Nevertheless the efforts yielded fruits by the discovery of crude oil in Oloibiri (now in Ogbia Local Government Area of Bayelsa State) in 1956 by Shell BP. Production increased from a mere 5,000 b/d in 1957 to 17,000 b/d in 1960, 450,000 b/d in 1966 and by the year 2005 daily production of crude oil has reached 2.2 million barrels. The first exportation of oil from Nigeria occurred in 1958 (Table 4).

The position of oil and gas sector in the overall economic growth and development of Nigeria is overwhelming. Between 1980 and 2002 the contribution of oil and gas to foreign exchange earnings grew steadily to the extent that Nigeria now earns over 90% of its GDP from oil sector (see Table 6). But since colonial era, the unique geographical features of NDR induced much attention and thus by 1956 Henry Willink's Commission was set up specifically to recommend the best strategies for the development of ecologically hostile environment such as the NDR. In 1956

the Report of the Commission observed the region as one “which is unlikely highly to be developed” and therefore recommended that **“the NDR deserves special developmental attention, and should, therefore, be made a special area to be developed directly by the Federal Government”**. Following Willink’s Report in 1958 the Federal Government set up Niger Delta Development Board (NDDDB) to spearhead the development of the region. The NDDDB failed to achieve its stated goals of providing developmental infrastructures and human capital. Perhaps, because of the political crises at that time (1965 – 1970) which later led to Nigerian Civil War or corruption in the leadership of the board: it failed to achieve its goals. After the Nigerian Civil War (1970) the ecological conditions and human welfare of the peoples of the region began to deteriorate in an accelerated tempo. The peoples of the region clamoured for improvement in the socio-economic spheres of the region. The response of the government was to set up another commission known as Oil Minerals Producing Areas Development Commission (OMPADEC) and allocated 1.5% consolidated Federal Revenue Account to the commission in 1992. Recall that in 1960, Niger Delta Development Board (NDDDB) was set up to cater for the region; and in 1974 River Basin Development Authority was equally established not only to develop the NDR but the whole country; Presidential Task Force, 1990, was designed to pay much attention to the development of the region.

Belgore Commission (1991) recommended the establishment of a developmental agency for the region to ameliorate the problems that arise from oil production. This eventually led to the establishment of OMPADEC in 1993: this is to say that between 1958 and 1993, seven developmental commissions have been established, directly or indirectly, to cater for the human and environmental development needs of

the NDR (See Table 3). Shall we then join Okowa (2007) to clamour for “developmental infrastructures and human capital in the NDR rather than developmental commissions”!!! In his remark while inaugurating the Nigerian Energy Council that will handle the reform of Energy Sector, President Yar’Adua stated:

*Our country has had for too long, a very narrow focus in the management and utilization of its hydrocarbon resources. The enormous potentials of our oil and gas industry for generating economic growth, the provision of mass employment and for providing a strong foundation for the transformation of our industrial and agricultural sectors have never really been prioritized.”*

This is an admission of government policy failure.

#### **4. NIGER DELTA DEVELOPMENT COMMISSION 2000**

The performances of the past six commissions designed to engineer total development-human, material, space and social aspects – of an environment especially the Niger Delta Region were dismal failure because neither the material nor human aspects of the NDR was developed. Between 1958 and 1999 no meaningful development took place in the NDR, the poverty of the people of the region mounted up inspite of the huge resources of the region on which the economy of Nigeria depends. The inauguration of the Niger Delta Development Commission has raised the hope of the people for better environment, economic growth and development of people and space.

**Table 3: Commissions/Boards Charged with Human and Economic Development of NDR 1960 – 2000.**

	<b>Commission/ Boards</b>	<b>life span</b>	<b>Specific Function(s)</b>	<b>Specific Problem(s)</b>	<b>Remark</b>
1	Niger Delta Development Board (Offshoot of Henry Willink's Report 1958)	1961 - 1967	To manage developmental needs and challenges of the region and improve the welfare conditions of the people.	Lack of focus and rigorous planning and its activities were interrupted by military coup, 1966 and civil war 1967 – 1971.	No achievement was made Regional problems could not be resolved, poor leadership.
2	Niger Delta Basin Development Authority (NDBDA) forms part of II RBDAs	1976 – 1979	To produce hydro-electric power, flood control regulation of the flow of rivers for navigation and the provision of recreational facilities. To develop socio-economic facilities in the core Niger Delta region made up of the provinces Yenagoa, Degema and western Ijaw Division as well as Ogoni Division of Port Harcourt.	Organizational problems, no grassroots participation of indigenes of Niger Delta Region. Poor funding. Only ₦76.7m was released NDBDA as against ₦650.7m for Sokoto-Rima BDA.	No meaningful impact on the economy and welfare of the people of the region.
3	Presidential Task Force Received 1 – 3% of Federation Account	1980 – 1992	To tackle developmental problems of NDR and revitalize the economy of the region.	Lack of focus, poor planning, and fund mismanagement.	It experienced abysmal failure, no meaningful achievement.



4	Oil Mineral Producing Area Development Authority (OMPADEC)	1992 – 1999	To rehabilitate and develop OMPADEC communities, tackle ecological problems, etc.	Lack of data for planning purposes, poor focus, and inadequate funding, excessive political interference, corruption and lack of transparency and accountability	Recorded huge failure. Socio-economic impact of the commission on the people is minimal
5	Niger Delta Environmental Survey sponsored by World Bank, SPDC (Elf, Agip, NNPC) and OPTS	1995 to date	To provide the required database for planning and development of the region. To reconcile industry, environment and community interest.	Hostile socio-political environment	The survey is still on course. Four volumes of the Report have been published.
6	Niger Delta Development Commission (NDDC)	2000 to date	To offer a lasting solution to the socio-economic difficulties of the NDR. To facilitate the rapid, even and sustainable development of the NDR into a region that is economically prosperous, socially stable, ecologically regenerated and politically peaceable.	Enormous scope, inadequate local personnel, recurrent socio-political crisis (Militia insurgency), too much political pressure and interference, irregular and inadequate funding.	The commission is on course and is too early to measure the achievements. The chairmanship is under the able willing and experienced indigene, Mr. Timi Alaibe.

The commission was created in December 21, 2000 and according to NDDC Act of 2000 the commission has the mandate, to, inter alia:

- Formulate policies and guidelines for the development of the Niger Delta area;
- Conceive, plan and implement in accordance with set rules and regulations, projects and programmes for the sustainable development of the Niger Delta area in the field of transportation, including roads, jetties and waterways, health, education, employment, industrialization, agriculture and fisheries, housing and urban development, water supply, electricity and telecommunications.
- Cause the Niger Delta area to be surveyed in order to ascertain measures which are necessary to promote physical and socio-economic development;
- Prepare master-plans and schemes designed to promote the physical development of the Niger Delta area and the estimates of implementing such master-plans and schemes;
- Implement all the measures approved for the development of the area by the Federal Government and the member states of the Commission;
- Identify factors inhibiting the development of the area in the formulation and implementation of policies to ensure sound and efficient management of the resources of the area;
- Assess and report on any project being funded or carried out in the area by oil and gas producing companies and any other company, including non-governmental organizations and ensure that funds released for such projects are properly utilized; and
- Execute such other works and perform such other functions, which in the opinion of the Commission are

required for the sustainable development of the Niger Delta area and its people.

The amended sources of funds indicated that ten (10) per cent would be deducted from the statutory allocation of the nine oil-producing states, ten (10) per cent from the Federal Government, three (3) per cent from oil companies and fifty (50) per cent of the 15 percent from the Ecological Fund. It is hoped that the transparent implementation of these programmes would minimize the hostilities of the oil-producing communities towards oil companies, the vandalization of oil companies, and youth restiveness in the area. (See Nnanna, Alade and Odoko (eds.) 2003)

The NDDC Act of 2000 has put much money into the coffers of the institution because the sources of its income have been enlarged but the fear is will the Federal and State Governments release to NDDC the funds expected from them regularly and punctually? Given the NDDC the opportunity to receive these funds regularly and punctually the chance to experience accelerated development could be very high.

## **5. CONTRIBUTIONS OF OIL AND GAS INDUSTRY TO THE DEVELOPMENT PROCESS OF NIGERIA**

The contributions of oil and gas to the development process of Nigeria is tremendous and it dates back to the colonial days when oil was exported to foreign countries bringing huge revenue to the federal government of Nigeria. Table 5 shows that since 1958 the contribution of crude oil to total export in Nigeria started to rise geometrically from 0.7 percent in 1958 through 30.6 percent in 1967, 95.2 percent (1975) to as high as 93.8 percent in 1979 and 98.6 percent in 2002.

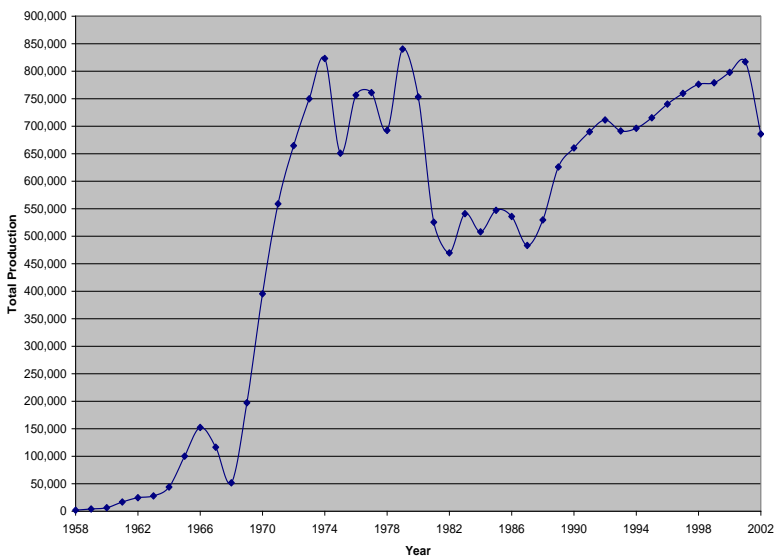
Crude oil production started to increase at astronomical rate from 1970 with 1.08mb/d to as high as 2.3mb/d in 1979 (Table 4).

**Table 4: Nigeria: Crude Oil Production – 1958–2002  
(Thousand Barrels)**

<b>Year</b>	<b>Daily Average</b>	<b>Total Production</b>
1958	5.1	1,876
1959	11.2	4,096
1960	17.4	6,367
1961	46.0	16,802
1962	67.5	24,624
1963	76.5	27,913
1964	120.2	43,997
1965	274.2	100,065
1966	417.6	152,428
1967	319.1	116,462
1968	141.3	51,732
1969	540.3	197,204
1970	1,083.1	395,331
1971	1,531.2	558,888
1972	1,815.7	664,546
1973	2,054.3	749,820
1974	2,255.0	823,064
1975	1,783.2	650,885
1976	2,066.8	756,449
1977	2,085.1	761,062
1978	1,897.0	692,405
1979	2,302.0	840,230
1980	2,058.0	753,228
1981	1,439.6	525,457
1982	1,287.0	469,755

1983	1,235.5	540,975
1984	1,388.0	507,990
1985	1498.9	547,088
1986	1324.0	535,929
1987	1324.0	483,269
1988	1451	529,602
1989	1714.8	625,908
1990	1809.8	660,559
1991	1890	689,850
1992	1948.9	711,340
1993	1894.2	691,400
1994	1907.4	696,190
1995	1906	715,400
1996	2027.9	740,190
1997	2081.4	759,710
1998	2126.5	776,190
1999	2134	778,900
2000	2185.8	797,800
2001	2238.8	817,150
2002	1878.8	685,773

Source: Economic Research & Intelligence Department NNPC, Lagos. Adapted from Marinho, F.R.A: “Nigeria: A Regenerative Economy or Vegetative existence” 1985 Ibadan Alumni Lecture.



**Fig. 1: Nigeria: Crude Oil Production – 1958–2002**

Along with huge crude oil export and production was the corresponding oil revenue to the coffers of Federal Government. Oil products which was just more than one million barrels per day in 1970 had increased to over 2mb/d by 1973. Between 1970 and 1973 oil revenue tripled (Table 6).

A corresponding increase in foreign exchange earnings occurred. These developments significantly influenced the preparation of the Third National Development Plan (1975 – 80) which proposed an expenditure of ₦30bn. This was ten times the size of the Second National Development Plan budget while the Third National Development budget was revised upward to ₦43.3bn (See Marinho, 1985). A total sum of ₦82bn was budgeted for Fourth National Development Plan 1980 – 85 and at present ₦1.9trn has been approved by National Assembly as appropriation budget for 2008 financial

year. There was tremendous national development with oil resources by way of extensive transport and communications, port expansion and development in Lagos, Calabar, Warri, Sapele and Onne; development of hydro power plants at Jebba and Shiroro and Thermal plants in Lagos and Delta areas. Unfortunately industrial and manufacturing sector contributed less than 10 percent of GDP in 1973 and the agricultural sector ceased to be the major provider of foreign exchange and producer of food. In the area of social services, education, health and housing these sectors received big, boosts in the “oil booms era”. The oil sector has emerged as the leading sector of the Nigerian economy. Since 1973 it began to ease the capital constraint.

Nigeria’s crude oil is associated with gas, and the quality of Nigeria’s gas is very high making it to be in high demand globally. In 2005, the natural gas reserves increased to 187.5Tcf. And Chukwueke (2006) states that: “There is also the indication that gas could overtake oil in economic potential to the nation due to world economic growth, changing energy markets, significant environmental advantages of gas over oil and coal and advances in technology”. Table 6, however shows the steady contribution of oil and gas to national development. Table 9 shows the completed gas projects in Nigeria and Chukwueke further contends that Nigeria would realize twice from gas what is presently realized from crude oil industry. In addition to the physical revenue, the gas plant would need manpower for operation. The industries that use gas for operation will thrive; there will be constant supply of electricity which will engender greater economic activity.

**Table 5: Nigeria: Oil Revenue 1958 – 1983 (₦ Million)**

<b>Year</b>	<b>Oil Revenue (₦ Million)</b>
1958	1.8
1959	5.2
1960	8.4
1961	22.6
1962	34.4
1963	40.4
1964	64.0
1965	136.2
1966	184.0
1967	142.4
1968	77.6
1969	301.6
1970	509.6
1971	1,053.0
1972	1,176.2
1973	1,893.5
1974	5,365.7
1975	4,555.1
1976	6,321.7
1977	7,072.8
1978	5,461.6
1979	10,166.8
1980	13,523.0
1981	10,453.2
1982	9,207.9
1983	7,507.2

Source: Nigerian National Petroleum Corporation



**Table 6: Contribution of Oil and Gas to Export Earnings  
1958 – 2002.**

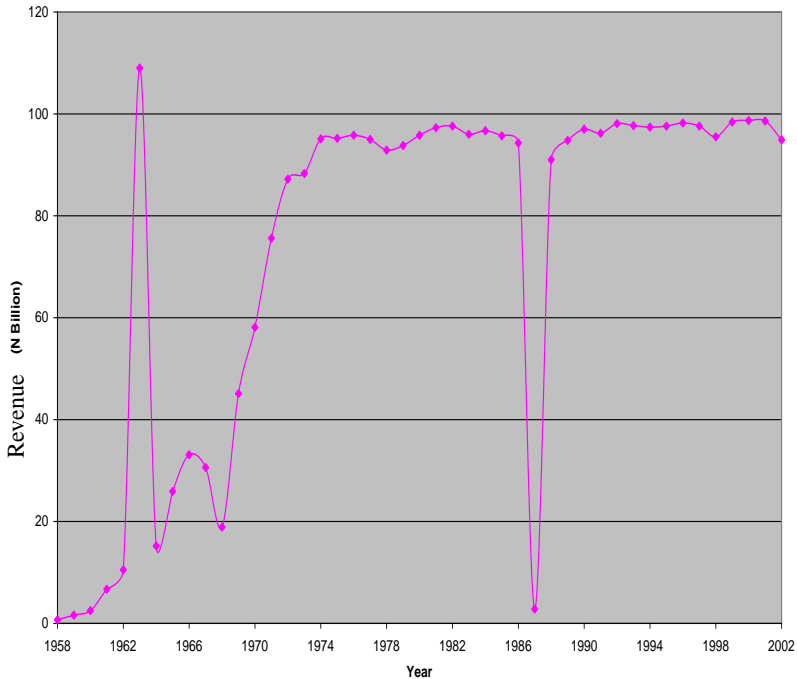
Year	A	B	C
	Total Export Earnings (₦ Billion)	Oil Export Earnings (₦ Billion)	( <sup>B</sup> /A x 100)%
1958	265.4	1.8	0.7
1959	321.0	5.2	1.6
1960	330.1	8.4	2.5
1961	339.8	22.6	6.7
1962	329.0	34.4	10.5
1963	369.6	40.4	10.9
1964	420.6	64.0	15.2
1965	526.6	136.2	25.9
1966	556.4	184.0	33.1
1967	466.2	142.4	30.6
1968	410.4	77.7	18.9
1969	668.8	301.6	45.1
1970	877.4	509.6	58.1
1971	1,393.4	1,058.0	75.6
1972	1,348.2	1,176.2	87.2
1973	2,143.6	1,893.5	88.3
1974	5,641.7	5,365.1	95.1
1975	4,793.7	6,321.7	95.2
1976	6,595.8	7,072.8	95.8
1977	7,448.5	5,401.6	95.0
1978	5,814.4	10,166.8	92.9
1979	10,836.8	13,632.3	93.8
1980	14.2	13.0	95.8
1981	11.0	10.7	97.3
1982	8.2	8.0	97.6
1983	7.5	7.2	96.0
1984	9.1	8.8	96.7
1985	11.7	11.2	95.7
1986	8.9	8.4	94.3
1987	30.4	28.2	2.8
1988	31.2	28.4	91.0
1989	58.0	55.0	94.8
1990	109.9	106.0	97.0
1991	121.5	116.9	96.2
1992	207.3	203.3	98.1
1993	218.8	213.8	97.7
1994	206.1	200.7	97.4
1995	950.7	927.6	97.6
1996	1,309.5	1,286.5	98.2
1997	1,241.7	1,212.5	97.6
1998	751.9	717.8	95.5
1999	1,189.0	1,169.5	98.4
2000	1,945.7	1,920.9	98.7
2001	2,001.2	1,973.2	98.6
2002	1,874.9	1,780.2	94.9

Source: 1. CBN Statistical Bulletin, Vol. 13, Dec. 2002, Table D.1.1. p 336.

2. Okowa (2007).

\* 1958 – 1979 in millions

1980 – 2002 in billions



**Fig. 2: Graph Showing the Contribution of Oil and Gas to Total Revenue**

Mr. Vice Chancellor Sir, ladies and gentlemen we can see that since 1970s to date the economy of Nigeria precariously depends on oil and gas sector and more sadly too the economy has not witnessed any industrial diversification. The oil and gas industry has not transformed the welfare of Niger Delta people rather it has deprived them of their means of livelihood (land, water) and degraded their natural environment. In spite of the tremendous contributions of oil and gas industry to economic growth of Nigerians it has not translated sustainable development of Nigeria, indeed it has

deepened the economic miseries of the people of Niger Delta Region in particular and enriched disproportionately the very few political class. Peoples of Nigeria have been swallowed in poverty because of mismanagement of oil and gas revenues. As shown in table 7 incidence of poverty in Nigeria increased from 28.1 percent (1980), through 42.7 percent (1992) to as high as 70 percent in 1997.

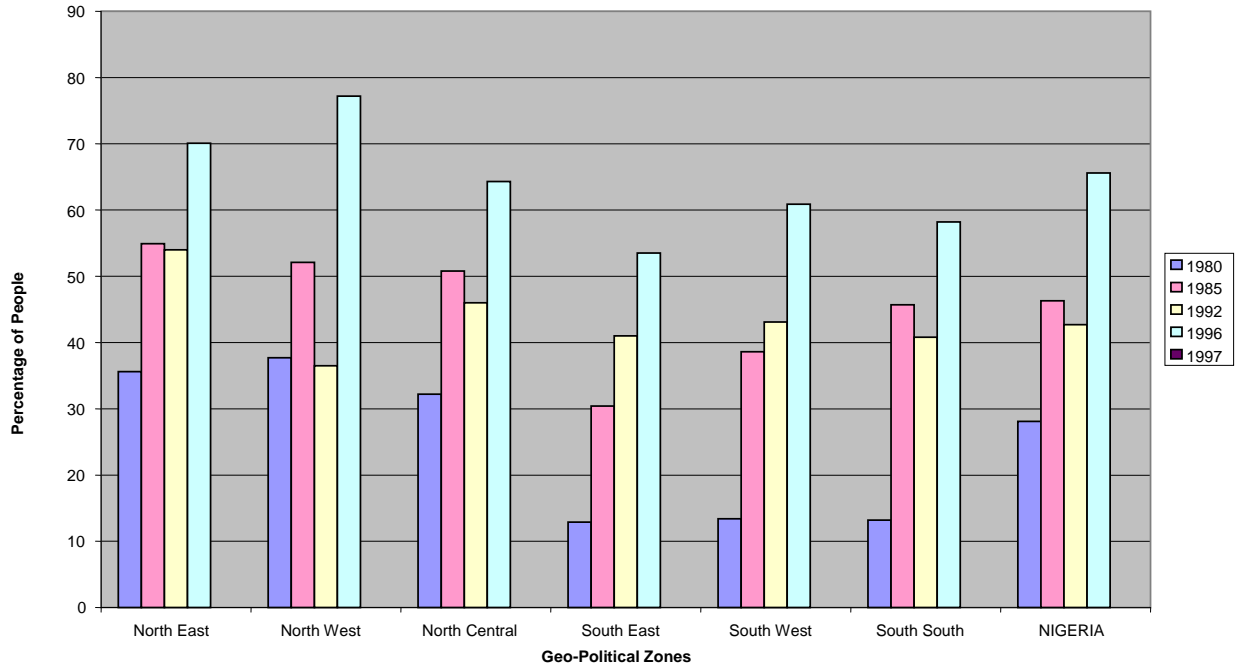
**Table 7: The Incidence of Poverty in Nigeria (1980 – 1997) (%)**

<b>GEO-POLITICAL ZONES</b>	<b>1980</b>	<b>1985</b>	<b>1992</b>	<b>1996</b>	<b>1997</b>
North East	35.6	54.9	54.0	70.1	
North West	37.7	52.1	36.5	77.2	
North Central	32.2	50.8	46.0	64.3	
South East	12.9	30.4	41.0	53.5	
South West	13.4	38.6	43.1	60.9	
South South	13.2	45.7	40.8	58.2	
<b>NATIONAL</b>	28.1	46.3	42.7	65.6	70 <sup>a</sup>

Source: Federal Office of Statistics.

<sup>a</sup> This figure is derived from U.N. (2003).

- No data.



**Fig. 3: Graph showing Poverty Trend in the Six Geo Political Zones in Nigeria (1980 – 1997)**

The welfare conditions of even the people of South-South geopolitical region (the seat of oil and gas) became even worse between 1980 and 1997. In this case the poverty incidence jumped from 13.3 percent in 1980 to 58.2 percent in 1996 (Table 7). But when compared with other developing countries that are not as rich in material resources as Nigeria, the incidence of poverty becomes more disturbing. As shown in table 8 Botswana, Ghana, Indonesia and Senegal with no oil and gas, and cultural and ethnic diversities have lower incidence of poverty 24, 45, 7, and 26 percent respectively. There is no basis for the existence of high poverty incidence in Nigeria because of the existence of diverse valuable natural resources of oil and gas, other solid minerals, vast cultivable farm land and huge population (140 million, 2006).

**Table 8: The Incidence of Poverty in some Developing World**

COUNTRY	SURVEY YEAR	INCIDENCE OF POVERTY (%)
Algeria	1995	<2
Bangladesh	2000	36
Botswana	1993	24
Brazil	1998	10
Cameroon	1996	33
Cote d Ivoire	1995	12
China	2000	16
Egypt	2000	3
Ghana	1999	45
India	1999 – 2000	35
Indonesia	2000	7
Jamaica	2000	<2
Niger	1995	61
Nigeria	1997	70
Senegal	1995	26
United Republic of Tanzania	1993	20

Source: U. N. (2003) Report on the World's Social Situation.

And Ajiienka (2005) lamented sadly that “it is obvious that despite the contribution of petroleum wealth to the national economy, Nigeria performs below most OPEC countries in several indicators of quality of life. Nigeria is a classic example of the paradox of a wealthy but poor nation. A rich poor nation or a poor rich nation ... In many developing nations, sudden mineral wealth did not translate to development”. But the causes of this failure of governments to engineer sustainable growth and development is identified by Okowa (2005) to include:

- (i) Collapse of the moral base;
- (ii) Normalization of crime/legalisation of corruption;
- (iii) Collapse of the culture of respect for the rule of law, and
- (iv) Systemic corruption.

In reality underdevelopment of Nigerian economy is perceived in poor leadership, arrogance and poor education that has not developed the subjective phase of the minds of Nigerian political class.

The **subjective phase of the mind** is the only educable part of the human mind. It performs all the voluntary functions of man including the functions of:

- interpretation
- recollection,
- conception
- imagination
- inductive and deductive
- reasoning
- volition,
- cognition
- conation,
- affection, and
- aspiration

A man's educational or intellectual standing depends on the level of the development of his subjective mind (Awolowo, 1977; Ogunmodede, 1985). The disrespect for the Rule of Law among the Nigerian political class is that they (politicians and their aides) do not "respect truth", which is an advanced stage of human development and are not committed to truth which is a higher level to human civilization (see Nwodo, 2002). Since truth is not in them (political class) they cannot recognise the will of God in creation. This is the reason why those who were born-again before they entered into political arena compromised their "bornagainism" or christenhood when they experienced sudden wealth.

The resources in Nigeria are enough to establish enduring economic development but for the "prodigal sons and daughters" in the political ruling class that forsake truth and are not committed to truth. Of course when the foundations be destroyed what can the righteous do (**Ps 11:3**).

**Table 9: List of Gas Projects in Nigeria (In operation)**

<b>NO.</b>	<b>PROJECT</b>	<b>OPERATING COMPANY</b>
1	Obiafu/Obrikom Gas Plant	NAOC
2	Nigeria Liquefied Natural Gas Plant (NLNG)	NLNG
3	Obite Gas Plant	EPNL
4	Oso NGL Plant	ExxonMobil
5	Bonny River Terminal	ExxonMobil
6	Eleme Petrochemical Plant Limited (EPCL)	EPCL
7	Warri Petrochemical Plant Ltd. (WRPCL)	WRPCL
8	Kaduna Petrochemical Plant Ltd. (KPCL)	KPCL
9	Soku Gas Plant	SPDC
10	Obigbo North Gas Plant	SPDC
11	Imo River Gas Node	SPDC
12	Agbada Gas Node	SPDC
13	Cawthorne Channel AGG Plant	SPDC
14	Cawthorne Channel Cryogenic Gas Plant (CCCGP)	GRL
15	Eastern Gas Gathering Systems (EGGS 1) Phase 1	SPDC
16	Soku Gas De-bottlenecking	SPDC
17	Akogep (Phase II)	EPNL
18	Agip IPP (Kwale/Okpali)	NAOC
19	Odidi AGG	SPDC
20	Bonny NAG Plant Expansion (BNAG)	SPDC
21	NLNG Train 4 & 5	NNPC/NAOC/Elf
22	Offshore Gas Gathering Systems	SPDC
23	Escravos Gas Project (EGP) 3A Onshore	CNL
24	Olero Creek / Dibi Development	CNL
25	Escravos Gas To Liquid (EGTL) Project	CNL

Source: Adapted from Chukwueke, A. O. (2006): “The Prospect of Gas Industry to the Growth and Development of the Nigeria Economy” IPS/PTDF Annual Report Petroleum Lecture, University of Port Harcourt, Thursday 25<sup>th</sup> May, 2006.

This has led us to witness the scenarios of poverty dimensions in Nigeria as shown in table 10 between 1995 and 2001.



**Table 10: Dimensions of Poverty in Nigeria in 1995, 1999 and 2001 (NEEDS Document, 2004)**

<b>POVERTY DIMENSIONS AND INDICATORS</b>	<b>1995</b>	<b>1999</b>	<b>2001</b>
<b>INCOME</b>			
Population below US\$1 per day (%)	70.2		
Population below minimum level of dietary energy consumption (%)	13		7
<b>SERVICES</b>			
<b>Schooling</b>			
Primary School enrolment (female %)	27.8	45.9	
Primary School enrolment (male %)	52.2	54.1	
Youth literacy (% ages 15 – 24)	81.1		87.8
<b>Health</b>			
Access to essential drugs (% of total population)		10	
Access to physicians (per 100,000 people)		<30*	
Nigerians living with HIV/AIDS (million)		>5	
Prevalence of HIV, female (% of ages 15-24)			5.8
Incidence of tuberculosis (per 100,000 people)			305
Under 5 mortality rate (per 1,000)	187		183
Infant mortality rate (per 1,000 live births)	112		110
Immunization, measles (% of children under 12 months)	44		40
Immunization, full (% of total children)		17	
Maternal mortality (modeled estimate, per 100,000 live births)	1100	704*	
<b>Clean Water</b>			
Access to safe drinking water (% of population)		50	
Access to safe drinking water (% of urban population)		80	
Access to safe drinking water (% of rural population)			40
Access to improved water source (% of population)			62
Access to improved sanitation (% of population)			54
<b>GENERAL</b>			
Population (millions)	111.3		125
Average annual growth in GDP		2.9	2.9

Source: World Bank: \*Baseline data upon which reform projections were based.  
Adapted from Ajenka, 2005.

## 6. TRAJECTORY OF ENVIRONMENTAL REGULATIONS IN NIGERIA

No significant body of environmental law developed in the world until the later part of the 19<sup>th</sup> century i.e. after Industrial Revolution (see Table 11). The unpleasant social conditions created by pollution, overcrowding and disease provided the stimulus for legal regulations. In the case of Nigeria, the Koko Port disaster of 1988 was the event that inspired a change in legislation approach in the area of environmental protection. The dumping of 4,000 tons of toxic wastes from Italy in Koko Port (now in Delta State) was what prompted the Federal Government of Nigeria to promulgate the harmful waste (special criminal provision etc.) Act in Nov. 1988. This was closely followed by the Federal Environmental Protection Agency Act in December 1988, and the Environmental Impact Assessment Act in Dec. 1992 (see Decrees No. 42, 1988; No. 58, 1988; and No. 86, 1992; and Federal Environmental Protection Agency (1999). (See Table 12)

### 6.1 WHAT IS ENVIRONMENTAL POLICY

Nigeria, as a country has objectives as stated in the second National Development Plan, 1970 – 74 and it is from these objectives that policies emanate. The five principal national objectives are **“to establish Nigeria as a united, strong and self-reliant nation, a great and dynamic economy, a just and egalitarian society, a land of bright and full opportunities for all citizens, and a free and democratic society”**. The document further states by way of elaboration of second and third objectives that:

*“A just and egalitarian society puts a premium on reducing inequalities in interpersonal incomes and promoting balanced development among the various*

*communities in the different geographical areas in the country. It organises its economic institutions in such a way that there is no oppression based on class, social status, ethnic group or state. A distributive equity is, therefore, an important cornerstone in the set of national objectives for the Government's programme of reconstruction and reform".*

*"The ultimate goal of economic development is the welfare of the individual. The focus of our policy objective should, therefore, be on how the ordinary citizen is to be affected by the resulting set of action programmes and projects. The prospect of the citizen in the process of economic development and social change should not be determined by the mere accident of the circumstances of his birth. He should be able to have equal access to all the facilities and the opportunities which could help him realise his potential and develop his full personality. A sense of self-reliance and a sense of national pride are worthy objectives which the Government believes the average Nigerian wishes to cultivate. But he can only do so in an atmosphere of expanding opportunities for full employment, for education and for self-fulfillment. The nation will, therefore, remain fully committed to the achievement of these objectives at all time".*

**Table 11: Major Federal Environmental Laws (1970 – 1999) USA**

1970	National Environmental Policy Act (Public Law 90-190); Clean Air Amendments (PL 91-224); Resources Recovery Act (PL 91-512); Occupational Safety and Health Act (PL 91-596).
1972	Federal Environmental Pesticide Control Act (PL 91-224) Federal Water Pollution Control Act Amendments (Clean Water Act) (PL 92-500); Marine Protection, Research and Sanctuaries Act (PL 92-532) Ocean Dumping Act (PL 92-532); Noise Control Act (PL 92-574)
1973	Endangered Species Act (PL 93-205); Flood Disaster Protection Act (PL 93-234) Safe Drinking Water Act (SDWA) (PL 93-523)
1976	Toxic Substances Control Act (PL 94-469); Resource Conservation and Recovery Act (PL 94-580)
1997	Surface Mining Control and Reclamation Act (PL 95-87)
1980	Comprehensive Environmental Response Compensation and Liability Act (“The Superfund Law”) (PL 96-510)
1984	Hazardous and Solid Waste Amendments (PL 98-616)
1985	Food Security Act (PL 99-198)
1986	Superfund Amendments and Reauthorization Act (PL 99-499)
1990	Oil Pollution Act (PL 101-380); Pollution Prevention Act (PL 101-508); Clean Air Act Amendments (PL 101-549).
1994	National Flood Insurance Reform Act (PL 103-325)
1996	Food Quality Protection Act (PL 104-170); SDWA Amendments (PL 104-182)
1999	Chemical Safety; Site Security and Fuels Regulatory Relief Act (PL 106-40)

Source: Adapted from Daniels, T. and Daniels, K. (2003): The Environmental Planning Handbook for Stable Communities and Regions (Planners Press, Chicago, P.4).

**Table 12: Environmental Act/Laws, Nigeria**

1988, Nov.	Decree No. 42 of 1988: Harmful Waste (Special Criminal Provision, etc.) Act
1988, Dec. FEPA	Decree No. 56 of 1988: Federal Environmental Protection Agency.
1989	National Policy on Environment
	The FEPA Decree has been amended by the Federal Environmental Protection (Amendment) Decree No. 59 of 1992.
1992 (EIA)	Environmental Impact Assessment Decree (Act)
1990	The Petroleum Act (CAP 350 LEN, 1990)
1990	Mineral Act (CAP 226 LEN, 1990. All are provision for fair and adequate compensation to be paid to the victims of environmental pollution.
1999	Establishment of Federal Ministry of Environment.

The policy objectives are geared towards the development of man, space and making natural resources or 'the good things of life' available to all. Environmental policy is derived from the five national objectives as stated above.

The principal objectives of environmental regulations are to reduce the externalities of resources exploration and exploitation, improve the human welfare conditions and mitigate bio-diversity loss, and achieve sustainable development in the area of interest. The essential issue in environmental planning is to create and maintain conditions under which man and nature can exist in productive harmony. According to Nigerian Federal Environmental Protection Agency (1999) now Ministry of Environment, the goals of national policy on environment amongst others, include:

- "to secure a quality environment adequate for good health and wellbeing;

- to conserve and use the environment and natural resources for the benefit of present and future generations;
- restore, maintain and enhance the ecosystems and ecological processes essential for the functioning of the biosphere, to preserve biological diversity and the principle of optimum sustainable yield in the use of living natural resources and ecosystems”.

The **public trust doctrine** holds that government has an obligation to make certain resources available for the enjoyment of all citizens. This is because the market system is limited in its ability to allocate common property resources, and to account for situations of uncertainty and irreversibility” (Daniels and Daniels, 2003).

In order to maximize the exploitation of oil and gas certain Acts and Regulations were enacted in Nigeria. The following regulations were made at different times:

- Land use Act 1978 Cap 2020 of 1990;
- Oil Pipeline Act 1956 Cap 338 of 1990;
- Petroleum Act 1969 Cap 350 of 1990; and
- Mineral Act Cap 226 of 1990.

Under these four Acts a victim of oil and gas pollution in Nigeria can seek redress. These Regulations provide for fair and adequate compensation to be paid to the victims of environmental pollution and degradation. For example, paragraph 36, schedule of the Petroleum Act provides that:

*“The holder of an oil exploration license, oil prospecting license or oil mining lease shall in addition to any liability for compensation to which he may be subject under any of the 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 licensed or leased land”.*

And again in Section 20(i) of the Oil Pipeline Act it was specifically stated that:

*“If a claim is made under subsection 3 of section 6 of this Act, the court shall award such compensation as it considers just in respect of any damages done to any building, crops or profitable trees by the holder of the permit in exercise of his right there under and in addition may award such sum in respect of disturbance (if any) as it may consider just”.*

However, subsection 20(5) of the Oil Pipeline Act is very clear in relation to compensation and states thus:

*“In determining compensation in accordance with the provisions of this section, the court shall apply the provisions of the Land Use Act, so far as they are applicable and not in conflict with any or interest concerned, where land or interest is acquired by the president for public purpose”.*

The Land Use Decree No. 6 of 1978 in section 1 of the Act states:

*“Subject to the provision of this Decree, all land comprised in the territory of each state of the federation are hereby*

*vested in the Governance of that state and such land shall be held in trust and administered for the use and common benefit of all Nigerians in accordance with the provision of this Decree”.*

By implication the common Law rights of land ownerships have been revoked and no freehold interests in Nigeria any more but rather mere Usufructuary function. The peoples have been deprived of a vital source of their sustenance. The expropriation of land by the Land Use Act raises issues of compensation.

These regulations have never been faithfully implemented rather they have worsened the living conditions of the people.

## **6.2 OTHER PROCESSES OF REVENUE DEPRIVATION**

The environmental regulatory activities of the federal government which started in 1960s went hand-in-hand with the formulation of revenue allocation approaches between 1946 and 1980 (see Table 13). In Nigeria the search for a fair and rational system of revenue allocation remains unresolved. Since 1946 a number of revenue allocation principles and the criteria for using them have been recommended by each respective Revenue Allocation Commission, but no level of satisfaction has been attained due to perceived or actual inequalities inherent in the system. **Before oil became the main source of government revenue the principles of derivation and population were mostly used to share Federation Account up to 1958. Between 1964 and 1977 to date the position of derivation as one of the basic factors for revenue allocation was totally relegated or abandoned.** Inequality is brought to sharp focus in the revenue allocation in Nigeria.



*“But in a just society the liberties of equal citizenship are taken as settled; the rights secured by justice are not subject to political bargaining or to the calculus of social interest. ... Truth and justice are uncompromising (Zartman, 1983).*

These principles of revenue allocation practiced in Nigeria between 1958 and 1977 have put the NDR in a total financial disadvantage, thus eroding its financial capacity and capability and accelerating their progressive pauperization.

In Aboyade’s 1977 commission and Okigbo’s 1980’s Revenue Allocation Commission, the principle of derivation which would have benefited the region now, was thrown out of consideration in the sharing of Federation Account. **The principle of derivation as a basis for fiscal federalism states that revenue should be shared, among other things, in proportion to the contribution each region made to the common purse.** Table 13 shows that the criterion of derivation was thrown aboard since 1977 and thus revenue base of the region was eroded. The implications of the application of these principles are revealed in Table 14 in financial term. Between 1979 and 1981, virtually nothing was given to oil producing states and between 1992 to 1999 the proportion ranged between 1.5 to 3% and by 1999 it was raised to 13%. **The problem of financial deprivation of NDR started during the military era, established by obnoxious decrees and endorsed by backward-looking, greedy and selfish political class.**

The fault of socio-political and economic underdevelopment of NDR is not in our stars but in ourselves.

**Table 13: Revenue Allocation Principles for Interstate Sharing of Federation Account**

<b>Commission (named after the Chairman)</b>	<b>Principle</b>
1. Phillipson, 1946	<ul style="list-style-type: none"> <li>i. Derivation</li> <li>ii. Even Progress               <ul style="list-style-type: none"> <li>(a) population-proxy</li> </ul> </li> </ul>
2. Hicks-Phillipson, 1951	<ul style="list-style-type: none"> <li>i. Derivation</li> <li>ii. Need</li> <li>iii. National Interest</li> </ul>
3. Chick, 1953	<ul style="list-style-type: none"> <li>i. Derivation</li> </ul>
4. Raisman, 1958	<ul style="list-style-type: none"> <li>i. Derivation</li> <li>ii. Need               <ul style="list-style-type: none"> <li>(a) population</li> <li>(b) continuity in government services</li> <li>(c) minimum responsibilities</li> <li>(d) balanced development</li> </ul> </li> </ul>
5. Binns, 1964	<ul style="list-style-type: none"> <li>i. Financial Comparability               <ul style="list-style-type: none"> <li>(a) need</li> <li>(b) even development</li> </ul> </li> </ul>
6. Dina, 1968	<ul style="list-style-type: none"> <li>i. Need</li> <li>ii. Minimum National Standards</li> <li>iii. Balanced Development</li> <li>iv. Derivation</li> </ul>
7. Various Revenue Allocation Decrees, 1967-77	<ul style="list-style-type: none"> <li>i. Equality of States</li> <li>ii. Population</li> <li>iii. Derivation (only 20 percent of onshore mining royalties)</li> </ul>

8.	Aboyade, 1977	<ul style="list-style-type: none"> <li>i. Equality of Access to Development Opportunity</li> <li>ii. National Minimum Standards</li> <li>iii. Absorptive Capacity</li> <li>iv. Independent Revenue and Tax Effort</li> <li>v. Fiscal Efficiency</li> </ul>
9.	Okigbo, 1980	<ul style="list-style-type: none"> <li>i. Minimum Responsibility</li> <li>ii. Population</li> <li>iii. Internal Revenue Effort</li> <li>iv. Social Development Factor <ul style="list-style-type: none"> <li>(a) primary school enrollment</li> </ul> </li> </ul> <p>(Derivation was later added to the Okigbo recommendations)</p>

Source: *Report of the Presidential Commission on Revenue Allocation*, Vol. 1 (Lagos, Nigeria: Federal Government Press, 1980), chapters 2 and 9. Briggs, C. (1988), 191-2. (Adapted from Ikein, A. A. (1999).

**Table 14: Federal and State Shares of Petroleum Proceeds, 1960 - 1999**

Years	Producing state (per cent)	Distributable Pool Amount or Federation Account (per cent)
1960 – 67	50	50
1967 – 69	50	50
1969 – 71	45	55
1971 – 75	45 minus offshore proceeds	55 plus offshore proceeds
1975 – 79	20 minus offshore proceeds	80 plus offshore proceeds
1979 – 81	-	100
1982 – 92	1.5	98.5
1992 – 99	3	97
1999 -	13	87

Source: Modification of Sagay 2001.

The human problem is an intractable one in the process of development of the NDR. Throughout the history of the NDR from colonial days through the military era, 1966 – 1979, 1983 – 1999 and the civilian era of 1951 – 1965, 1999 – to date the Niger Delta Region has not enjoyed or experienced any good governance at both local and state levels. The institutional failure is manifested in the leadership and activities of over five development committees ever instituted directly or indirectly to develop NDR. These development boards faced many human, social, political, leadership and financial problems. As noted in the Niger Delta Regional Development Master Plan (2006) that these commissions at one time or the other “suffered from lack of focus, irregular and inadequate funding, official financial profligacy, corruption, excessive political interference, lack of transparency and accountability, and high overhead expenditure. Most of its project had little to do with poverty reduction.”

None the less the NDDC (2000) has the potential to offer a lasting solution to the socio-economic difficulties of the NDR (if it receives grassroot cooperation) which successive governments and development commissions have grappled with even before independence. Faulty National development planning strategies, maladministration and deficiencies at the state and local government levels have worsened development efforts in the region. The failure of governments therefore is manifested in human development deprivations, environmental degradation, poverty, unemployment, inadequate or lack of socio-economic and welfare imponderables and very low income per capita among others.

## **7. SOME THEORETICAL UNDERPINNINGS**

### **7.1 THEORY OF MARKET FAILURE**

The “invisible hand” of Adam Smith argues that many individuals interacting through markets will provide the best allocation of society’s resources. Experience has shown that where property rights are not well-defined and enforced, (as in the NDR) private decision-making may not lead to the best allocation of society’s resources. The type of property right that is assigned to the environment – whether private, common or centrally held- will be the crucial determinant of how much pollution is generated and controlled. Backed up by oil and gas exploitation Acts of 1960s through 1990s, the oil prospecting companies in Nigeria have regarded oil and gas resources of the NDR as common property resources – allowing access to any and all users essentially without charge or with ridiculous charge at best. But our experience of property rights framework demonstrates that with such common property rights there are no markets serving to price and allocate valuable environmental assets: of oil and gas in the NDR for example. **The absence of a market in oil and gas sets an implicit zero price on the use of these assets. Hence multinationals exploring and exploiting oil and gas in Nigeria are then led to use these resources as if the cost to society were actually zero.** Presently in Nigeria no effective mechanism exists to make SPDC and its ‘cousins’ pay for environmental degradation occasioned by their activities.

Existing property rights, exercised either publicly or privately since 1960s to date in Nigeria are no longer appropriate. They fail to provide signals of overuse or misuse and provide no incentive to economize on the use of oil and gas. The Niger Delta Region or environment can no longer be used at zero cost and would not be if property rights were defined and enforced.

**Privately** held rights have the advantages of greater diversity and freedom of choice than is generally possible via government control, although publicly held property rights have a strong cost advantage due to the lower enforcement costs associated with the police powers of the state. Because of this reason environmental resources are publicly held property rights through three options; taxation, regulation or selling licenses in order to achieve a desired degree of pollution reduction. However, a variety of regulations, restrictions, subsidies, and lifestyle changes have been adopted as a solution to environmental resources abuse.

**The Regulatory Approach** to pollution has some obvious attractions. And as Chant, Fetridge and Smith (1990) have observed that: it singles out those segments of society deemed to be responsible for our problems and provides direct limits on their offending behaviour. In a property rights framework, regulation can be viewed as a situation in which the regulatory agency assumes exclusive property rights over environmental assets. This situation has failed to produce the maximum pollution reduction for a given expenditure in Nigeria.

Other option to reduce pollution in the process of resource exploitation is “**effluent tax**”. **At higher prices per unit of pollution there is less pollution.** Nonetheless many conserver solutions would extend government control not only over firms, but over the individual lifestyle and consumption decisions. It is generally agreed that environmental problems are caused not by a market form of organization but by the absence of market forces in allocating environmental assets.

## **7.2 DISCONTENT AND INEQUALITY THEORY**

Many students of domestic political conflict consider inequality in the distribution of land ownership (landlessness) to be among the more fundamental economic preconditions of

insurgency and revolution. Huntington (1968) puts it succinctly “where the condition of the land-ownership are equitable and provide a viable living for the peasant, revolution is unlikely. Where they are inequitable and where the peasants live in poverty and suffering, revolution is likely, if not inevitable, unless the government takes prompt measures to remedy these conditions”. Put other way yet the greater the maldistribution of land, the greater the vulnerability of a region to revolution from below.

However, Muller and Seligson (1987) were not satisfied with “discontent hypotheses” and state that **“inequality in the distribution of income” rather than maldistribution of land directly causes insurgency and revolution.** They thus state that, “if income inequality is relatively low, the rate of political violence will tend to be relatively low, even if agrarian inequality is relatively high; whereas if income inequality is relatively high, the rate of political violence will tend to be relatively high, even if agrarian inequality is relatively low.”

**The agrarian inequality in the NDR** is compounded by shortage of farmland vis-à-vis huge population, extremely poor ecological condition that restrict farmland, environmental degradation occasioned by the activities of oil and gas multinationals leading to abject poverty, low income and extreme income inequality distribution between the NDR and the rest five geo-political zones of Nigeria. Since “the mind of man cannot be permanently habituated to tyranny (Laski, 1938) therefore a stage is reached when the ass kicks against its master (Numbers 22:22 – 30), expectedly the oppressed masses (as it happened at Odi in Dec. 1999) cultivated intense hatred for their oppressors, and nursed secret hopes of one day turning the tables against them. This is the stage in which we are in the NDR.

The increasing human population vis-à-vis the decreasing natural resources to sustain the human existence is a source of worry to the researchers and planners. The environmental goods on which humans depend on are wasting assets and thus becoming increasingly scarce even though the demand for these natural resources is rising as per capita income increases. And since many of these resources could not naturally be increased in supply from the efforts of the private sector (for many reasons) there is a role for public sector regulation for the purpose of sustainable economic growth and development. The principle of welfare economics is concerned with questions of economic justice, of how resources should be allocated in society so that individual and social welfare is maximized and externalities are eliminated or highly reduced. The external costs of some human economic activities are felt by people other than the individuals whose behaviour actually produces them.

### **7.3 THEORY OF PROPERTY OF THE COMMONS**

To the development planners market forces result in the underproduction of public goods, inequality in spatial distribution of income, welfare facilities and other good things of life. The market is limited in its ability to allocate common property resources, and to account for situations of uncertainty and irreversibility. The private market has little incentive to provide public goods that society wants and since they are after undue profit they tend to locate their enterprises in urban areas alone. Consumers and producers have different levels of buying power and thus vary in their ability to influence the demand for goods and services that have certain environmental consequences. And as Daniels and Daniels (2003) have concluded that: “Because of these flaws in markets and the price system, government intervention may be necessary to establish environmental quality standards and financial



incentives to encourage a more efficient and equitable use of natural resources. However, there is no guarantee that a government regulation or spending programme will produce a more efficient or equitable allocation of environmental resources than a market-based decision. Put other way **market flaws are only a necessary condition for government intervention, they are not a sufficient condition.**

In the light of these flaws in price system and market forces laws and decrees were enacted in Nigeria, as elsewhere in the world to rationalise resource exploitation based on the concept of “common property resources”. **No one owns a common property resource such as air, the fish in the ocean, etc. Because there are no clearly defined property rights, every one has an incentive to use as much of the common property resource as they want. Unfortunately, this self-interest can easily lead to the degradation or depletion of the common resources.** This scenario of uncontrolled or unregulated use of common resources was described by a renowned biologist Garrett Hardin in his famous essay entitled “Tragedy of the commons” (1968).

Hardin describes the commons of New England towns of the 17<sup>th</sup> and 18<sup>th</sup> centuries where any family could freely graze cattle. **Because there was no limit on grazing, each family had an incentive to graze as many cattle as possible on the freeland. This resulted in overgrazing of the commons and eventual reduction of cattle production for everyone.** In Nigeria the recent overwhelming environmental degradation by way of air, water and land pollution; ecological destruction and massive loss of biodiversity is a startling example of the tragedy of the commons consequent on oil and gas exploitation in the Niger Delta Region.

**The Land Use Decree of 1978 has placed ownership of land in the control of Federal Government;** equally too, Oil Pipeline Act 1956 Cap 338 of 1990; Petroleum Act of

1960, Cap 350 of 1990; and Mineral Act Cap 226 of 1990 **have made the federal government the owner of mineral resources, in particular, oil and gas; and by implication the oil and gas multinational companies have been given unfettered power to explore and exploit the resources at will.**

**To the oil and gas multinationals, the natural resources in the NDR have been classified as common property resources.** No one owns a common property and because, there are no clearly defined property rights in Nigeria, every oil and gas company has an incentive to use as much of the common property resources as it wants. **Each company is locked into a system that compels it to increase its oil and gas output without limit.** In a world that is limited ruin is the destination towards which all oil and gas companies rush – each pursuing its own best interest in a society that believes in the freedom of the common – “freedom in a common brings ruin to all”.

The concept of private property rights is associated with huge responsibilities. It indicates complete ownership of property with right to sell or given out the property under his/her control. And as Daniels and Daniels (2003) have concluded that: “A landowner cannot use or develop the property in ways that would harm others. A landowner has the right to defend his/her property through legal means against trespass across the property and against nuisance occurring on neighbouring properties. A property owner also has the right to challenge government landuse regulations”. “The tragedy of the commons” (as described by Hardin 1968) is appropriately applicable to the oil and gas multinationals operating in the NDR of Nigeria. **The oil and gas companies have not taken the interests of the communities into consideration, they relied on the land use decree of 1978**

**and the various mineral Acts as shown above and to even claim the ownership of oil and gas.**

When viewed from critical perspective, one can conclude that government intervention in environmental regulation has not achieved much. One, it is characteristic of government to “throw money at a problem” for political reasons rather than pursue a clear, cost-effective, problem-solving strategy. Also governments may subsidize environmentally harmful activities that waste huge amounts of other resources. Yet, sometimes a combination of market-based decisions and government standards can result in the conservation of natural resources and producers streamline production and cut waste (Hawkens, et al, 1999).

#### **7.4 THE PRINCIPLE OF COMPENSATION**

The meaning of compensation has been related to the compulsory acquisition of land. It is to place in the hands of the owner expropriated the full money equivalent of the thing of which he has been deprived. Where an environment has been polluted and degraded as often occurs in Nigeria there are two available remedies according to environmental regulations: It is either by way of compensation for the physical losses imposed or suffered by individuals and communities or by cleaning up action in order to restore the environment to its original state. The latter is usually difficult and more expensive to accomplish but it has the cardinal attribute of giving the polluted environment a face-lift and the potential of rejuvenating the ecosystems over time (Ikhariaje, 1998).

There are many valuation techniques being used in Nigeria and elsewhere in the world. As noted by Daniels and Daniels (2003) that “the private market understates the environmental value of wetlands, private landowners have little incentive to protect them, and government regulations

and subsidy programs may be necessary”. Since 1920s Pigou proposed a system of pollution charges or taxes to correct for environmental externalities. **The Pigouvian tax is a way to compel companies to internalize their externalities.** Economic instruments may be acceptable on the grounds of cost efficiency and technological dynamism but with much resistance from industry and general public. Hence direct regulations along with economic instruments are sometimes used.

However, policy makers have an array of instruments at their disposal to control environmental externalities as shown in table 15.

**Table 15: Policy Instruments for Environmental Regulations**

<b>Economic Instruments</b>	<b>Objects Addressed</b>
Redefining property rights	Tradable Emission Permits: liability insurance legislation.
Tax/charge systems	Effluent charges, user charges, product charges and administrative charges.
Subsidies	Financial aid in installing new technology; subsidies to environmental R&D expenditure.
Deposit-refund systems	Combines charges and subsidies so as to provide incentives to return pollutants for recycling.
Regulation Standards	Effluent, ambient and technology standards
Resource use quotas	Emission quotas, harvesting quotas, by allowing quotas to be traded among market agents, the quota system would be transformed to a system of tradeable permits.

Source: OECD (1989).

These instruments aim at restricting the use of common resources without any preference for the welfare of the traditional resource owners. But valuation is important both

for investment decisions involving environmental impacts and for the regulation of the environment. **Since economic valuation is ‘anthropogenic’ (i.e. based on personal preferences) there is always a tendency to underpay compensation due for the communities where oil and gas are exploited in the NDR.**

The resources which are presumed to be damaged consequent on oil and gas exploitation in Nigeria include economic crops/trees, natural and man-made fishery and fishing contrivances, wildlife sanctuaries, breeding and sprawning grounds and structures which may include buildings of any description. Other interests are roads and access ways, shrines and sacred grooves/places, cemeteries, play-grounds and places of historical significance. **The valuation techniques being used in Nigeria to measure the amount of compensation to be paid by defaulting oil and gas companies only addresses the private property interest owners’ viewpoint.** “A survey of the Niger Delta in 2002, conducted by NDES revealed that most compensation claims are concluded by negotiation (35.3%), litigation (17.7%), arbitration etc. Put other way, compensation by valuation in the Niger Delta has evoked so much controversy that valuers now question the relevance of the methods adopted for determining such payments. While most compensation payments are determined by negotiations, such negotiations are hardly done professionally. And Akujuru (2005) concludes that both the acquiring authorities and land owners need to know the actual value of such land before agreeing to any compensation. By virtue of sections 3(1) of Minerals Act: Cap 226 LEN 1990 and section 1(1) of the Petroleum Act: Cap 350 LEN 1990 and section 44(3) of the 1999 Constitution **landowners are not entitled to compensation for the mineral itself but have a right to compensation with respect of the “surface rights and interests” such as economic**

crops/trees, etc. It is this principle that guides the valuer who intends to value an oil or gas bearing land.

**Compensation** aims at placing in the hands of the owner expropriated the full money equivalent of the thing of which he has been deprived. The objective of compensation is to find the pecuniary value to the owner contained in the asset, it cannot be less than the money value into which he might have converted his property had the law not deprived him of it. **Since the property has been compulsorily acquired by the governmental authority or oil and gas exploitation it is a common thing to find in Nigeria that the affected oil and gas company does not give landowners any enhanced value that many attach to their properties acquired or degraded. It is curious to note that most acquisition of oil and gas bearing land are done without any legal framework for reference.**

Environmental damages are not limited to the above identified resources alone but include air and water pollution, flora and fauna, loss of cultural values, traditional social institutions and patterns of land management and tenure are undermined also, consequent on oil and gas exploitation activities. As Sudder and Colson (1982) have remarked that: ‘societies that are removed from their lands not only lose the economic basis for their survival, but also experience a major reduction in their cultural inventory due to temporary or permanent loss of behavioral patterns, economic practices, institutions and symbols’. And they conclude that most oustees are substantially worse off following removal from their original areas.

In Nigeria valuation technique being used only addresses the private property interest owner’s viewpoint and many items that touch welfare and livelihood of land owners are often not valued.

For example, compensation rates for cassava increased from ₦8,840 per ha in 1994, through ₦17,680 in 1997 to as high as ₦38,000 per ha in 2001. For maize it increased from ₦3,250.00 per ha. in 1994 to ₦20,000 per ha. in 2001. **In an inflation-prone country like Nigeria, detailed analysis would reveal that these rates are not equitable and justifiable.** As noted by UNDP (2006) that “the rates were determined in Lagos without involving the host communities. There are problems with transparency and objectivity; ... victims of pollution have been poorly compensated for environmental pollution”. And as Worika (2002), Fajemirokun (1999) and Adewale (1988) have noted that “the absence of standards of liability for oil pollution and rules for determining compensation to victims could have contributed to the way cases are delayed and/or decided in favour of the oil companies”. To make claims difficult for the rural oil producing communities existing laws prescribe that the aggrieved persons can only seek redress against the oil and other big multinationals engaged in the oil and gas industry in the Federal High Courts located only in the state capitals which are out of reach of the rural poor claimants. In addition the litigation process is fraught with many technicalities requiring the services of legal practitioners that most people cannot afford. Cases abound that the awards made by the courts are generally lower than the claims made by the victims of oil and gas pollution.

Market based instruments provide continuing incentives for polluters to search for cost minimising ways of abating pollution and in this sense are technologically dynamic. None the less, “given the theoretical attractiveness of market based instruments and opportunities for practical implementation via the pricing and standards procedure, governments have been remarkably slow to integrate them into

their environmental control package” (Markandya and Richardson, 1992).

## **8. THE FAILURE OF ENVIRONMENTAL REGULATIONS IN NIGERIA**

Exploitation of natural resources especially oil and gas in the Niger Delta region started over fifty four years ago and since then there had been accelerated oil and gas exploitation with its negative and destructive impact on the local ecosystems. The alarming rate of environmental degradation in the NDR, consequent on oil and gas activities, has triggered many reactions ranging from oil pipeline vandalization, social and political crisis to resource loss, poverty and hostage taking of oil company workers (particularly foreigners) in the recent time. Finding solutions to the problems of Niger Delta Region dates back to the colonial era.

The other big factor is human factor that underscore the failure of compensation policy. **In many cases, compensation for polluted resources rarely reaches all those affected because of the ‘benefit captor’ syndrome. Benefit captors are those who purportedly represent and received compensation and other resources on behalf of the communities, who then rarely receive or enjoy the benefits.** The ‘benefit captor’ syndrome is partly responsible for the youth revolt, restiveness and against traditional authority in the region. Many youths in the rural areas are more interested in ‘**rent-seeking**’, from oil operations in the form of standby money, unmerited salaries or oil bunkering, hostage-taking and sabotage of oil pipelines (UNDP, 2006). It should be noted that compensation claims are concluded by negotiation and litigation mostly; and the valuation methods of damaged or polluted resources are inadequate and mostly carried out by unprofessional, inexperienced valuers. Where oil companies engage consultants they (oil companies) dictate limit to the



values that may be recommended by such consultants. In all cases representatives of the affected host communities would not participate in the process. **The oil companies, who should adopt holistic view by determining the total economic value of oil bearing land, rather adopt the private property interest value approach and under-assess the compensation payable. The key elements in the natural resources and environmental makeup should be given due weight in the process of compensation.**

**The concept of environmental restoration should be incorporated into the national environmental agenda. Defaulting oil and gas companies should not only pay highly as compensation but they should bear the total cost of environmental restoration.**

In addition to all the aforementioned strategies of environmental management there is need to embark on environmental education through information and formal sectors. Understanding the working environment by humans is pre-requisite to successful mobilization of natural and human resources.

In other words, we can use a ‘mixture of the contingent valuation and shadow pricing techniques’ to derive a value for the destruction of the ecological balance. **The beginning of social and economic tragedies of the people of the NDR originated from non-payment of compensation and companies disregard to the rule of law hence massive environmental degradation (Tables 16 and 17).**

**Fairness or equity is another** factor that can be used to explain government environmental policy failure in Nigeria. The people of Niger Delta perceived that revenue allocation formula adopted to share revenue from federated account was unfair and inequitable. Generally environmental policies may not be supported as enthusiastically in the political arena if they are thought to be inequitable. The existing environmental

regulations in Nigeria do not provide a strong incentive for oil prospecting companies in the region to find new innovative ways of reducing their externalities on the environment, for example, oil spillage. With oil spillage now costly, oil companies would have the incentive to search for ways of reducing oil spillage disaster and environmental degradation resulting from oil exploration and exploitation activities. More often than not environmental policy makers in Nigeria have too often tried to legislate results directly, rather than establish the types of regulations they cause oil companies to alter their production processes in desirable ways. A good example is the 1991 Environmental Guidelines and Standards for the Petroleum Industry in Nigeria which did not emphasize enforceability aspect of the regulations. The wrong assumption among policy makers is to think that enacting a law automatically leads to the rectification of environmental problem to which it is addressed.

The Petroleum Amendment Decree 16 of 1973 was full of loopholes which was abused by multinationals and thus continued to flare gas. To overcome this shortcoming, the Associated Gas Re-Injection Decree 99 of 1979 was promulgated. This decree mandates producing companies to submit proposal for gas utilization and stop flaring by 1<sup>st</sup> January 1984. The consequence for violation is forfeiture of the acreage. The decree also empowers the Minister of Petroleum Resources to grant permission to flare - a loophole that was thoroughly abused. This flare out date could not be enforced because of what they termed unrealistic timeframe and lack of capital to develop the gas infrastructure. Also, it was claimed that we do not have suitable depleted reservoir for re-injection which is untrue. Twenty-four years after, we are still talking about unrealistic timeframe and no one has forfeited his acreage! The will is not just there to stop the menace of gas flaring.

Another effort made in stopping gas flaring is the introduction of a penalty of 2 kobo per 1000 SCF of gas flared. This is contained in the Associated Gas Re-Injection Amendment Decree 7 of 1985. The penalty was increased to 50 kobo in 1990 and finally 10 naira in 1998. Penalties did not help because even at 10 naira, the penalty was less than 2% of the actual cost of gas flared and most companies did not report the exact volume of gas flared. There was therefore an underpayment of the penalty (Onyekonwu, 2008). Nonetheless a new gas flaring rate of ₦42 per 1000SCF of gas flared was announced on May 12, 2008 but what of enforceability problem?

In Nigeria, there are **relatively weak legal traditions and institutions** (just 1988 FEPA was created and 1991 EIA was also created as institutions) that can enforce compliance to environmental regulations. Enforceability requires energy and resources which the federal government is not ready to provide. **Besides an average Nigerian officer employed to enforce rules and regulation is neck deep in corruption.** The Nigerian multinationals are prone to “buying their way out” of any legal entanglement. This is a complex situation. Furthermore there are always people whose interests lie in not having environmental policies enforced. Are you surprised at unfaithfulness of an average Nigerian official in the field when God has even said of him in Job 15<sup>11-16</sup> **“What is man that he should be clean? and he which is born of a woman, that he should be righteous? Behold He puts no trust in his saints; (Nigerian Political Class) yea, the heavens are not clean in his sight. How much more abominable and filthy is man (Nigerian political leaders), which drinketh iniquity like water?”**

Thus, the vicious cycle in environmental policy failure or government failure in Nigeria. The costs of enforcement are critical to the success of environmental quality programs in

Nigeria. Environmental pollution agencies lack or are poorly equipped, technically and financially, to enforce pollution laws and guidelines. Polluters, e.g. oil and gas companies, are staffed with intelligent human beings and who may stand to lose money if environmental laws are vigorously enforced usually find many ways of frustrating environmental monitoring and sanctioning processes.

### **8.1 IS NIGER DELTA REGION REALLY ENVIRONMENTALLY DEGRADED AND POOR?**

In section 2 of this lecture I elaborated on myriads of resources of the Niger Delta region particularly its human and material resources of immense value. Niger Delta Region controls over 22 percent and 12 percent of Nigeria's population and land area respectively. Niger Delta Region of Nigeria produces the largest crude oil in Africa with a total reserves (2005) of 35 billion barrels; it is the 6<sup>th</sup> largest in the Organization of Petroleum Exporting Countries (OPEC) and the 7<sup>th</sup> largest in the world. The natural gas reserves increased to 187.5 Tcf in 2005 and this placed Nigeria in the 10<sup>th</sup> position in the world. The quality of Nigeria's crude oil and gas is adjudged to be one of the best in the world. Based on the above, it is naïve to say that the NDR is poor. In terms of economic resources the region is abundantly blessed but in terms of economic well-being the region is very poor. The economic poverty of the region is exogenously imposed and endogenously magnified.

It has been stressed that the Niger Delta Region of Nigeria produces oil and gas which has formed the mainstay of Nigeria's economy. The oil producing companies have exploited these valuable wasting assets without regard to spillages and gas flaring and negatively impacted the livelihoods and standards of living of the peoples. The economic activities, especially oil and gas exploitation, have

heightened shortage of land for development. In the region are 1,481 oil wells with about 159 oilfields, 7000kms of pipelines and flow lines, and 257 flow stations. It has been confirmed that over five percent of the total land of 112,110km<sup>2</sup> of the NDR is occupied by the oil industry, but the problems associated with its operation are immense and region-wide. The frequent crude oil spillage, gas flaring etc. in the NDR and the oil producing areas, have rendered most of these areas so barren and unproductive that they are abandoned. Villages around the oil installations at Warri, Forcados; Escravos, Nembe, Akwa-Ibom, Ogoni land, Bonny, Brass and other oil centres have experienced pollution occasioned by the spoils and spillages from drilling, dredging, production, refining and transportation. Consequently the livelihoods of the peoples have been marginalized, unemployment increased, income reduced and hope lost. Table 16 shows that between 1991 and 2000 there were a total spills of 5,781 with over 641,000 barrels of spilled crude oil and more than 70 percent were not recovered. The amounts spilled on land, swamps and offshore environments varied.

**Table 16: Frequency and Magnitude of Oil Spills in Nigeria 1991 – 2000**

Year	Number of Spills	Quantity of Spilled Oil	Total (%)
1991	201	106,827.98	16.7
1992	367	51,131.91	7.97
1993	428	9,757.22	1.52
1994	515	30,282.87	4.7
1995	417	63,677.114	9.93
1996	621	65,005.122	10.14
1997	688	60,288.99	9.4
1998	728	96,449.699	15.0
1999	818	79,608.154	12.4
2000	998	17,608.154	2.7
<b>Total</b>	<b>5781</b>	<b>640,987.209</b>	<b>100</b>

Source: NNPC Petroleum Resources 2001

## **OBSERVED EXTERNALITIES**

The effects of oil spills and gas flaring are many and varied. They include loss of arable land, degradation of forests and depletion of aquatic fauna and loss of biodiversity; atmosphere pollution causes acid rain, greenhouse emission, reduction in agricultural yields, fish catch; roof corrosion etc. (see Uchegbu 1998; Mmon, 2002 etc). It is clear that oil spillages cause serious damages to life and property as well as to soil and vegetation, and in the seas and rivers a lot of damage is done to marine lives and organisms. Where rivers are sources of drinking water, such rivers become unfit for drinking and consequently put the lives of the inhabitants mainly farmers and fishermen in danger.

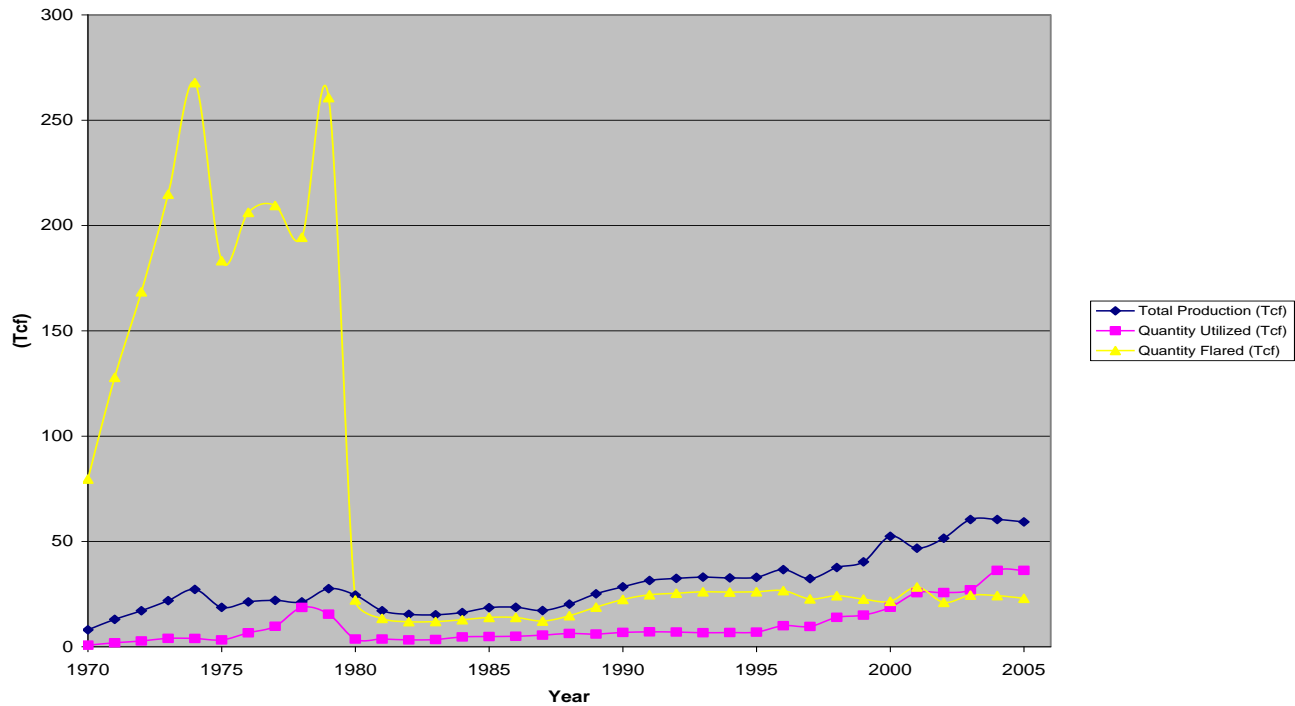
Environmental pollution induces variety of adverse health effects such as respiratory problems, chronic coughs etc. and in aquatic environment it has led to loss of aesthetic values of beaches and tourist attractions and loss of marine lives and flora and fauna. (See Table 17)

From the above analysis, it is clear that oil exploration and exploitation activities have negatively impacted Niger Delta ecosystems, reduced the amount of arable land while the social relationships of oil multinational companies with the host communities (especially as related to payment of compensation) have created mistrust and suspicion between community leaders and the youths. Nonetheless, the data at hand could not give us the quantitative dimensions of environmental damage occasioned by oil and gas activities in the NDR. But it is a strong belief of the peoples of NDR that the environmental predicament contributes to social and economic deprivation in the region.

**Table 17: Nigerian Natural Gas Production and Disposal  
1970 – 2005 (million cubic metres)**

Year	Total Production (Tcf)	Quantity Utilized (Tcf)	% Total	Quantity Flared (Tcf)	% Flared
1970	8.04	0.72	8.96	79.62	91.04
1971	13.0	1.85	14.23	127.9	85.77
1972	17.1	2.74	16.02	168.5	83.98
1973	21.9	3.95	18.04	214.9	81.96
1974	27.2	3.94	14.49	267.8	85.51
1975	18.7	3.23	17.27	183.3	82.73
1976	21.3	6.59	30.94	206.2	69.06
1977	22.0	9.72	44.18	209.5	55.82
1978	21.3	18.66	87.61	194.4	12.39
1979	27.6	15.46	56.01	260.7	43.99
1980	24.55	3.64	9.53	22.21	90.47
1981	17.11	3.64	21.27	13.47	78.73
1982	15.38	3.24	22.37	11.90	77.37
1983	15.19	3.44	21.33	11.95	78.67
1984	16.25	4.65	21.17	12.81	70.83
1985	18.57	4.82	25.04	13.92	74.96
1986	18.74	4.98	25.72	13.92	74.28
1987	17.17	5.51	29.00	12.19	71.00
1988	20.25	6.30	27.21	14.74	72.79
1989	25.13	6.02	25.07	18.78	74.73
1990	28.43	6.80	21.17	22.41	78.83
1991	31.46	7.06	21.62	24.66	78.39
1992	32.47	6.97	21.7	25.41	78.3
1993	33.07	6.67	21.1	26.10	78.9
1994	32.70	6.75	20.6	25.96	79.5
1995	32.98	6.91	20.9	26.07	79.0
1996	36.61	9.97	27.23	26.64	72.8
1997	32.34	9.64	29.81	22.70	70.1
1998	37.61	13.96	37.73	24.23	62.27
1999	40.32	15.00	39.88	22.61	60.1
2000	52.45	18.76	46.53	21.56	53.47
2001	46.79	25.67	49.00	28.35	51.00
2002	51.52	25.71	54.95	21.08	45.05
2003	60.39	27.04	52.48	24.48	41.10
2004	60.39	36.23	60.00	24.26	40.00
2005	59.25	36.26	61.20	22.99	38.80

Source: NNPC 2005 Annual Statistics Bulletin



**Fig. 4: Graph showing Trend in Gas Production, Utilisation and Flare in Nigeria, 1970 - 2005**



The issues of grave concern in the region which impact living standards in the region are rapid and uncontrolled urbanization, occupational changes, the loss of fishing grounds, the disappearance of livelihoods and land shortages for settlement, transportation development and for arable farming. It is uncontroversial to conclude that the NDR is environmentally degraded by oil and gas exploration and exploitation activities but our conclusions could not be supported quantitatively because of shortage of relevant data. The question is to find out whether the NDR is poor economically; and if poor, can we then associate the poverty of the NDR with oil and gas activities or the hostile ecological circumstances? The scope of this lecture does not extend to such areas of research.

## **9. THE STATE OF DEVELOPMENT IN THE NIGER DELTA REGION**

Research works throughout the world have shown that “poverty does not necessarily lead to environmental degradation. The linkages between poverty and environment are complex and requires specific analysis to be understood – there is no simple causal link (Amblar, 1999). Poverty is a complex phenomenon and it involves so many areas of life – resource management, good governance, political stability/peace, demographic behaviour and good attitude. But by using macro-economic analysis/variables it is possible to characterize a community, region and country according to their economic and development performances. The findings below are based on my works and those of my graduate students.

## 9.1 ACCESS TO SOCIO-ECONOMIC IMPONDERABLES

Access to education (Primary and Secondary) is equally poor in the region. About 54.4% and 44.4% of Akwa-Ibom population ever attained primary and secondary school education, while Rivers State performed worst on primary school; only 39% of Edo secondary school-age population ever attain secondary school education. Generally, enrollments in both primary and secondary schools are poor in the region. This scenario has great implications on human capita development in the region. But man is the answer and measure of development!!

Access to electricity in the region is constrained by many factors – ecological and lack of political will, among others. About 34% of the population of the region have access to electricity; 45%, 53.3% and 71% of the peoples of Abia, Delta, and Edo enjoy electricity respectively. By implication small to medium scale industry that depends on regular supply of electricity could not be developed. **Firewood is therefore the mode of cooking in the region.** With firewood as the only source of cooking, ecological balance in the region is threatened. The proportion of the people using firewood as the main source of cooking ranges between 55.4% in Edo to as high as 90.2% in Imo State (table 18). The peoples are prone or exposed to much indoor pollution leading to high respiratory problems.

## 9.2 POVERTY

In the region also, the incidence of poverty is very high. Over 43% of the peoples of NDR live below poverty line. The proportion of peoples of the NDR living below poverty level ranges from about 25% in each of Bayelsa and Imo States through 53% in Cross Rivers State to as high as 89% in Ondo State (Table 18); Low income affects calorie

intake. Food insecurity, (occasioned by poor income) is the main source of many killer diseases in Africa. Calorie intake is very low in the NDR. WHO recommends 2,900 calories intake per person per day but the peoples of Niger Delta Region consume far less amount of 2,900. Poverty level in the NDR varies among the nine states. Food poverty level varies from about 13%, 21%, and 22% in Imo, each of Ondo and Bayelsa States, respectively to as high as 38% (Rivers State), 36% in Delta and 42% in Cross River State. The Regional and the National averages being about 29% and 36% respectively. There is glaring food insecurity and/or food poverty in the NDR.

These problems of poor access to education, potable water, electricity and low level income automatically lead to poverty occurrence of HIV/AIDS and high mortality rates (see Table 18). The probability of a person not surviving to age 40 is about 26% in the region, but this varies among the states in the region. This score is very low in Delta and Edo but very high in Bayelsa and Ondo (30% each).

**Table 18: Social Conditions in the NDR, 2003 – 2006**

S/N	State	Population		Access to Pipe-borne water (%)	Access to Electricity %	Firewood as the main source of cooking fuel (%)	Poverty level % (Income) 2004	food poverty level with less than 2,900 cal. Intake (%)	HIV & AIDS Prevalence Rate 2003 (%)	Probability of birth of not surviving to as 40	attainment of Primary School (%)	Attainment of Secondary School (%)
		Male	Female									
1	Abia	1,434,193	1,399,806	3.38	45.4	68.8	29.95	22.03	3.7	26	39.6	43.6
2	Akwa-Ibom	2,044,510	1,875,698	7.37	22.1	85.0	39.86	31.60	7.2	27	54.4	44.4
3	Bayelsa	902,648	800,710	7.49	3.5	65.3	25.64	20.77	4.0	30	38.8	43.3
4	Cross-River	1,492,465	1,396,501	2.43	18.9	86.9	52.60	42.30	12.0	26	44.6	42.8
5	Delta	2,074,306	2,024,085	2.89	53.3	70.2	41.88	35.57	5.0	20	37.9	43.6
6	Edo	1,640,461	1,577,871	9.70	70.7	55.4	41.40	32.24	4.3	22	49.3	38.8
7	Imo	2,032,286	1,902,613	6.15	38.1	90.2	24.80	12.75	3.1	25	46.1	42.7
8	Ondo	1,761,263	1,679,751	5.97	38.3	67.2	88.84	21.21	2.3	30	45.0	44.2
9	Rivers	2,710,685	2,474,735	12.42	18.3	67.6	40.65	37.56	6.6	24	33.4	49.5
	Total:											
	Region	16,092,817	15,131,720	6.40	34.3	73.0	42.85	28.78	5.4	25.556	43.3	43.3
	Nigeria	71,707,079	68,313,873	13.56	31.6	77.9	56.90	36.04	4.8			

Source: Compiled from

- (1) Niger Delta Human Development Report, UNDP, 2006
- (2) Niger Delta Regional Development Master Plan (2004)
- (3) Niger Delta Environmental Survey, 2003
- (4) Adeyemo, A. M. (2002)
- (5) Afolabi, Bola (2001)
- (6) Igwe, C. F. (2002)

HIV/AIDS incidence varies among states but the regional average of 5.4% is higher than the national average of 4.8%. Unfortunately the incidence of the scourge is very high in Rivers (6.6%), Akwa-Ibom (7.2%) and Cross River (12.0%). The worry of planners and researchers of these diseases lies in its implications on productivity, and human development. And as UNDP (2006) has noted that: “The epidemic impedes sustainable human development by destroying the family as the basic unit of society; weakening the educational system, which nurtures the next generation of leaders; threatening agricultural productivity and food security; impeding industrial capacity; and overwhelming the health care system. The combination of many factors of low education, poor access to social welfare facilities e.g. potable water, electricity, health, creates problems of food insecurity and/or low calorie intake, high mortality rate, vicious circle of poverty; in short poor human development index (HDI) which demonstrates government environmental policy failure.

### **9.3 HUMAN DEVELOPMENT INDEX**

Human development index captures the real socio-economic and material growth of a country. The index ranges from 0 – 1. The range of values commonly used includes High Range (0.463 – 0.579), Medium range (0.462 – 0.347) and Low Range (0.346 – 0.229). Based on the data at hand the NDR has glaringly performed well, none of the states scored less than 0.499 (Table 19). But when compared with the rest

states of Nigeria, the human development situation in the NDR shows a decline and steeper form than for the rest of the country. Niger Delta Region appears relatively high on the HDI indicators of life expectancy, education, and GDP per capita, but the social and economic items which the region seriously needs (potable water, motorable roads, health, sewage management, etc.) are not included in the HDI. **The limitations of using HDI as an index of human development in the region should be noted before conclusion is made. First, the data on income used to compute the per capita GDP component include oil revenue, much of which is not retained within the region.** Second, the HDI does not adequately capture severe environmental degradation and poor infrastructural provision because of the nature of its measurement parameters. And UNDP (2006) states that “there is a sharp contrast between the quantitative indicators and the real quality of life of the people in the region. It is necessary to look beyond HDI for an effective assessment of the problems of the Niger Delta”. Since HDI is not adequate enough to give a true picture of poverty characterization in the NDR there is need to look elsewhere for an effective assessment of Niger Delta’s problems.

There are other countries of the world producing oil and gas and revenues generated from these resources have greatly impacted the peoples’ welfare. Saudi Arabia is the world’s leading oil producing country as well as Indonesia, Libya and Venezuela. According to the 2003 global Human Development Report, the HDI for Saudi Arabia was 0.800, Indonesia was 0.658 while Libya and Venezuela have also performed better than both Nigeria as a whole and the Niger Delta region in particular. It is clear and easy to see that the oil wealth of these three countries has served them well in terms of enhanced human development. These dimensions of

development have shown the inadequacy of human and material development in the NDR and the scenarios underscore social and political crises and the unending agitation for resource control in the region.

**Table 19: Basic Indicators of Development in the Niger Delta Region**

S/No	State	Population (2006)	No. of Urban Centres	Life Expectancy (2005)	Education Index	Adult Literacy (2005)	HDI (2005)	GDP Index	HPI	Unemployment % (2000)	No. of LGAs
1	Abia	2,833,999	1	0.492	0.578	26	0.543	0.560	29.17	2.9	17
2	Akwa-Ibom	3,920,208	7	0.506	0.683	28	0.576	0.540	30.65	18.2	31
3	Bayelsa	1,703,358	4	0.455	0.523	31	0.499	0.520	33.83	6.5	8
4	Cross-River	2,888,966	8	0.556	0.630	28	0.584	0.565	29.3	NA	18
5	Delta	4,098,391	22	0.584	0.636	18	0.615	0.621	22.36	10.3	25
6	Edo	3,218,332	11	0.579	0.602	18	0.594	0.600	23.40	1.5	18
7	Imo	2,934,899	2	0.503	0.546	29	0.547	0.519	28.95	6.8	27
8	Ondo	3,441,014	16	0.501	0.575	31	0.529	0.512	35.44	4.1	20
9	Rivers	5,185,420	17	0.563	0.590	24	0.591	0.620	26.53	19.1	23
	Total:		98	0.527	0.596	25.89	0.564	0.570	28.85		187774
	(i) Region		8								
	(ii) Nigeria										

Source: Compiled from various sources.

#### 9.4 SETTLEMENTS PATTERNS

Perhaps, another indirect indicator of development is settlement patterns. “As countries develop, cities account for an ever-increasing share of national income. Urban areas generate 55 percent of gross national product (GNP) in low-income countries, 73 percent in middle-income countries, and 85 percent in high income countries. The growth sectors of the economy, manufacturing and services, – are usually concentrated in cities, where they benefit from agglomeration economies and ample markets for inputs, outputs and labour, and where ideas and knowledge are rapidly diffused” (World Development Report, 1999, 2000). In the NDR, small and isolated settlements dominate its landscape. By 2006, the NDDC Regional Master Plan identified 7,686 settlements of less than 1000 population mark, 4,781 of between 1000 – 5000 population and 64 settlements with population range of 5000 – 20,000 and **only 98 settlements with a population of over 20,000 people**. This is to say that 12467 or 93.5% of Niger Delta Regions population are quite unattractive to industrial and commercial activities and 5.73% or 764 settlements are intermediate urban centres and 98 or 0.73% can be tagged as urban centres based on demographic urban classification. Thus the Niger Delta Region is dominated by small and isolated rural settlements. The reasons for the prevalence of small urban centres are not far-fetched. They include: limited solid land for human habitation as constrained by the poor ecological environment (the fragmentation of land into islands and occurrence of dry land in isolated pockets); most fishermen characteristically dwell in small fishing hamlets or villages close to their fishing grounds and finally, the Niger Delta Region is made up of a small and numerous ethnic groups/clans each of which cherishes its own private space. As noted by World Bank Development Report and other researchers, **urban centres are universally regarded as**



**engines of human, economic and manufacturing development. The absence of numerous large urban centres in the NDR could pose a great danger to economic development, enhanced standards of living and eradication of poverty.** This fact is identified by Niger Delta Human Development Report (2006) thus: “Given this preponderance of small settlements, the task of promoting sustainable human development in the NDR is that much harder. **Size plays an important role in the promotion of development, whether human or economic. In many parts of the world, the human development agenda has revolved mainly around large settlements.** Developmental artifacts usually involve large capital outlays, and great elements of risks, and are therefore more likely to be located in areas where the risks are low and profit or potential use can be maximized”. The phenomenon of small and scattered settlements has fostered poverty and inequality between urban and rural areas in the NDR. But any agenda that includes forced relocation and agglomeration of settlements and/or village regrouping will only exacerbate the volatile political atmosphere, rather than promoting the needed transformation of the region because of sharp differences in cultures, language and multiplicity of clans.

## **9.5 ECOLOGICAL HOSTILITY IS NOT AN EXCUSE FOR UNDERDEVELOPMENT OF NDR**

The failure of government in regulating environmental destruction manifests in many ways. Although the resources of the NDR sustain the economy of this country yet the NDR is the poorest Geo-political zone in Nigeria.

Scandinavian countries of Finland, Sweden, Norway, Netherlands and Denmark are more ecologically hostile than the NDR of Nigeria and yet these countries are among industrialized countries of the world; Saudi Arabia, Libya,

Indonesia and Venezuela produce oil and gas and the revenues derived from these resources have been maximally used to generate and spread wealth among peoples and settlements in these countries. **The inhospitable ecosystems of the NDR, as an impediment of economic growth, development and spread in the region, is a fallacy.** The explanation of poverty and underdevelopment of the NDR lies in human wickedness and corruption or failure of governance. In a situation where a governor of a state in the NDR received as security votes about ₦7bn. (2004), ₦9bn. (2005), and ₦10bn. (2006) we should by now not talk of underdevelopment. The failure of environmental regulation laws and non-payment of adequate and required compensation to the host communities is at the root of youth restiveness, social and political chaos, and absence of industrial base. Environmental pollution – air, land, water, loss of biodiversity etc. – is uncontrolled; infrastructural facilities are poor, inadequate and unsustainable; life expectancy is low, average income is very low, sewage facilities are absent in a low-lying region, and peoples of the region are vulnerable to natural hazards. In addition, inequality in personal income and economic development is very wide: institutional failure is evident. Federal, state, local governments are not functional and performing while official corruption is very high along with arrogant display of ill-gotten wealth. **Poor governance, corruption, incompetence and indifference deprive the poor of their rights.** The rural poor are not able to protect their rights, while industrial pollution of rural resources by both large and small multinationals are the major causes of environmental degradation and rural poverty in the NDR.

- 10. “MEN AND BRETHREN WHAT SHALL WE DO”**  
sections 6 and 7 of this lecture point out that the NDR experiences environmental degradation of higher order

consequent on oil and gas exploration and exploitation, deprivation of the region of its revenue base (using decrees and edicts), almost complete absence of “good things of life”, systemic corruption, poor and ill-equipped political class, bad governance and insensitive leadership, inter alia. All is not lost.

In the book of Acts chapter 2, the eleven apostles of Jesus Christ gathered in Jerusalem after His death when the day of Pentecost was fully come. The apostles were filled with the Holy Ghost and started to speak in diverse tongues/languages. The on-lookers were amazed and marveled at the divine empowerment and asked the apostles the question: “Men and brethren what shall we do?” And Peter answered:

*“Repent and be baptized every one of you ... for the remission of sins, and you shall receive the gift... For the promise is unto you, and to your children and to all that are afar of ...”*

Mr. Vice Chancellor Sir, Ladies and Gentlemen “Repentance” in the context of this lecture goes beyond evangelism and winning souls for Christ. It is a clarion call for political actors in the NDR and Nigeria.

- (1) **Niger Delta political class**, repent of your stealing and use the money given you to provide needed facilities and services for the people.
- (2) **Senators**, elected legislative members, local government chairmen and councilors repent of your sins, make restitution and use constituency allowance to develop your area;

- (3) **Governors** and other elected representative allow “those who voted you to power” to receive of the “gifts” (welfare facilities and services) they are not for your immediate family alone, the promise (comfortable lifestyle) is for everybody.
- (4) **Traditional rulers** and political godfathers stop too much demand from political class and allow them to concentrate on their mission and vision.
- (5) **Contractors** execute your contracts to specification and reduce over-invoicing.
- (6) Niger Delta militants, give peace a chance, stop hostage taking, allow foreign partners to help us develop our infrastructure.

This is the type of repentance we are advocating in the NDR.

To make the region an haven where people run to be delivered from the shackles of want, squalour and poverty, certain steps must be taken.

(i) **Planned Provision of Socio-economic Facilities and Services.**

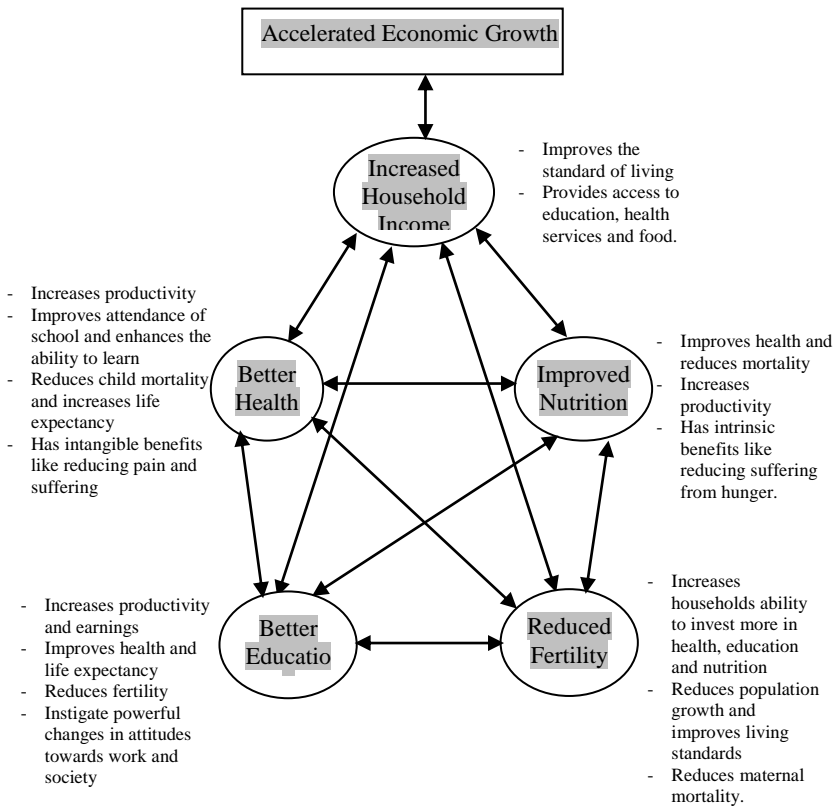
Poverty eradication hinges on the provision of five facilities and the five impact the total development of man. They are:

- (a) regular supply of drinkable water;
- (b) electricity supply on a regular basis
- (c) provision of education facilities for science and technological transformation of Nigeria
- (d) health facilities that are accessible and affordable
- (e) transport facilities and services.

We shall not deceive ourselves, no Millennium Development Goal (MDG) and National Economic Empowerment and Development Strategies (NEEDS) that transcend the efficient, effective, equitable provision of these 5 components anywhere in the world. There are close interrelations hips between aspects of human capital, resource utilization and mobilization and economic growth of any country. A nation that is not able to develop her human resources will not be able to develop any other thing, but she will only be capable of sustaining chaos and economic underdevelopment. The investments in human capital through increased provision of social services including education, health, potable water and other economic services like transport and electricity have direct benefits to individuals and their families as well as indirect benefits to socio-economic conditions in the aggregate. Education and health are specific components of human capital. There are strong linkages among health, education, nutrition and fertility. As shown in figure 5 education, health, nutrition and fertility are interlinked.

Because of the implications of education on nutrition, income, fertility and overall growth of the economy, expenditures on education should be of high priority to the governments. African Development Report (1998) states that: “Human capital is long-lived and increasingly irreversible. If people are not given adequate nutrition, health care and education in childhood, this will have consequences that cannot be remedied in adulthood. For these reasons investments in human capital cannot be postponed until economic conditions are better”. This was summed up by L. K. Jakande, former Governor of Lagos State that: “It may be late to educate a child but it is never late to build houses”. The political class in Nigeria should note that investment in knowledge might have a

constant or even an increasing rate of return since a higher knowledge base is likely to generate more innovations in the future. This is the reason we continue to advocate for more investment in the socio-economic facilities in Nigeria and in the NDR in particular.



**Fig. 5: Interrelationships among Aspects of Human Capital**

With the provision of these five basics a man will be able to afford an average comfortable living. Public health facilities shall enhance the health of the people while education reduces ignorance and superstition. Further more regular supply of electricity inspires small-to-medium scale industries such as fish preservation, canning and oil fish extraction etc. Linkage of riverine communities through roads, canals, jetties and fast boats/canoes widens market, enhances social and economic interactions while standards of living increases.

The monthly revenue each of the nine states obtains from Federation Account based on 13% derivation is sufficient to develop rural communities given ideal political will. The way out of rural poverty in the riverine areas of the Niger Delta Region includes:

- (i) The development of “the total man” in which certain values and motives will be inculcated in the students. The desired values such as aspiration or n-Achievement, hardwork, patriotism, affection, deductive and inductive reasoning and conception inter alia will be packaged in the educational systems.
- (ii) Infrastructural development that serves rural communities. The motive is to develop rural entrepreneurship that will mobilize rural resources and build industrial base that attracts development.

We have mentioned earlier that the NDR is one of rural settlements and few urban centres exist. To develop these rural villages and settlement **rural service centres in all the nine states should be identified that will serve as growth points to the surrounding hinterland.** This is not the type of conventional “Growth Poles” which turn out to be parasitic rather than generative centres. **The generative settlements are those who pass on some benefits to the hinterland**

**whereas the parasitic centres grow fat on the accumulated proceeds without passing any on.** A better policy to develop the NDR is that which encourages going directly to the poor riverine areas themselves. It is assumed generally that one of the major locational constraints in the developing countries is the non-availability of amenities and basic infrastructure in many areas necessary for industries. Investments naturally go to areas with adequate industrial base. This is to say that a way of achieving poverty reduction and regional inequality is for governments (federal, state, local and institutions to invest massively in infrastructure in the less attractive areas of the NDR. This infrastructure programme would have to include motorable roads, canals, jetties, supply of electricity, potable water, health and education facilities and services. Once this is put in place several private investments may be attracted to these hitherto deprived areas.

Governments should encourage indigenous private investors to locate in the deprived areas. Indigenous respond far more easily than multinational firms to government inducement to locate in certain areas.

**(c) Planned and Coordinated Development**

Sustainable development begins at the community level through local government then to the state level. Let the needs (economic and social) be identified by the community. Based on the local resources of population and ecological endowments, such can be articulated and valued. There are facilities and services that can be provided to serve two to five communities and even across Local Government Areas (LGA). Integration of the needs can be done at LGA level. This forms basic data input for each state.

Based on the scaled importance of these needs provision can be projected over a number of weeks, months or years. Capital provision: under the aegis of NDDC, these



needs can be itemised for all the stakeholders – Federal, State and Local governments, oil and gas multinationals, NGOs etc. shall pool their resources together and finance these projects phase by phase.

**Institutions should be forced to provide amenities and services to the areas they serve and without enforcing them, for example LG Chairmen, the elected officials will not do anything.**

From road construction engineering calculus it has been officially and quantitatively assessed that:

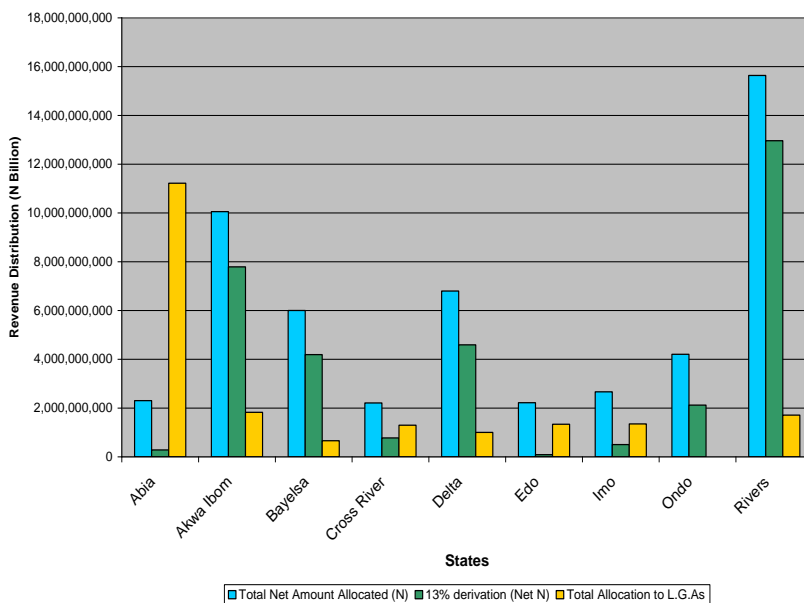
In the South-South Geo-political zone or Niger Delta Region, ten million naira (₦10m) will be spent to construct one km. of road even in the swampy area. This is to say that ten billion naira (₦10bn) will construct 4000kms of roads. In other Geo-political zones i.e. upland areas of the country two and half million naira (₦2.5m) will construct one km. of road and therefore ₦10bn will construct 40,000 kms of road (Table 20).

With a total settlements of 24,352 and a need of connectivity index of 0.5 for the 9 states, the NDR will need 9,000 kms of networks. This length of network can thus be provided within a period of two to three years employing coordinated efforts of all stakeholders.

**Table 20: Revenue Distribution to NDDC States from Federation Account  
September 2007**

S/N	STATE	Total Net Amount Allocated (₦)	% / Nigeria	% / Region	13% derivation (Net ₦)	% / Region	Total Allocation to L.G.As	No. of L.G.As	Average Amount to L.G.As
1	Abia	2,305,597,385	2.0	4.78	283,560,588	0.85	1,1218,299,407	17	71,664,671
2	Akwa Ibom	10,054,100,809	8.75	20.48	7,789,257,434	23.39	1,823,990,118	31	588,383,909
3	Bayelsa	5,999,663,958	5.22	12.22	4,189,907,820	12.58	659,865,756	8	824,832,195
4	Cross River	2,208,123,383	1.92	4.50	774,496,005	2.33	1,297,468,308	16	81,091,769
5	Delta	6,798,984,082	5.91	13.85	4,592,755,000	13.79	1,001,656,954	25	40,066,278
6	Edo	2,217,744,797	1.93	4.52	90,005,700	0.27	1,336,291,705	18	74,238,428
7	Imo	2,665,272,900	2.32	5.43	501,764,910	1.51	1,347,895,104	27	64,736,855
8	Ondo	4,203,182,895	3.66	8.56	2,119,435,521	6.36	1,319,40,515	18	73,305,028
9	Rivers	15,636,112,539	13.60	31.85	12,961,945,221	38.92	1,710,156,151	23	74,354,615
	Total (Region)	49,090,833,668		100	33,307,128,239	100	12,110,114,018	183	
	Total (Nigeria)	114,957,727,840	45.22						

Source: Computed from Nigerian Tribune, 5 October 2007, PP 2-8.



**Fig. 6: Federal Allocation to Niger Delta States September 2007**

Table 20 shows Revenue allocation to each of the 9 states of the region in the month of September, 2007. The table shows that the region receives 45 percent of the revenue shared among 36 states of Nigeria. However the share to each of the 9 states varies widely. The share varies from 13.60, 8.75, 5.91 percent in Rivers, Akwa-Ibom, and Delta States respectively, to as low as 1.92, 1.93 and 2.0 percent in Cross River, Edo and Abia States respectively. The 13 percent derivation also brought huge amount of money into the coffers of each of the 9 states. In that month alone over 33.3bn was shared among the 9 states; and out of these Rivers, Akwa-Ibom and Delta obtained 38.92, 23.39 and 13.29 percent respectively. The 183 LGAs of the region were not left behind. The 183 LGAs shared ₦12.11bn. with average amount ranging between ₦588.4m and ₦40.1m. going into the

accounts of each LGA. In the month of April, 2008 alone Rivers State government received ₦37bn. from Federation Account.

Indeed, with such amount of money at the control of each of the states and LGAs, provision of infrastructures in the urban and rural communities of the region should not be problematic. With such an amount of money the 24,352 settlements could be linked together either by roads, canals, jetties and the provision of affordable fast speed boats. Culverts, bridges and piled long bridges can be provided and by so doing interaction will be facilitated, market shall be widened and income will improve.

“Truly the harvest is plenteous but the labourers are few” (Matt. 9<sup>37-38</sup>) and thus “we should pray the Lord of the harvest, that he may send forth “labourers” into the harvest”. The region needs honest, dedicated, patriotic political and financial managers/labourers to channel and mobilize the resources of the region to the benefit of all.

## **(ii) Development of Right Cultural Values**

An incentive is something that attracts or propels people and leads them to modify their behaviour in some way. In the NDR both economic and non-material incentives that lead people to modify their economic behaviour e.g. self-esteem, the desire to maintain or preserve a beautiful visual environment or the desire to set a good example for others should be given to the youths and the adults using many approaches. It is generally accepted that both leaders and the followers in Nigeria lack the good knowledge of what leadership and followership entails. **Developmental projects ever developed, “have not been people-centred and participatory” and therefore they have not transformed peoples attitudes to wealth, position, moral behaviour and attitudes to life.** This unprogressive behaviour of the leaders

and the followers have been castigated in the UNDP Report (2006) on the NDR thus:

*“corruption, mismanagement, rampant human rights abuses, inadequate access to justice and human security, and the vulnerabilities of most of the population heightened frustration and alienation from all levels of government and other authority structures”.*

The behavioural or attitudinal change we call upon goes beyond proliferation of educational institutions but education that transforms the heart, that instills fear of God, that instills political will” in the leaders. There is a linear relationship between rates of economic growth of a country and national levels of achievement. **Since achievement is not hereditary but it is instilled in people, it is therefore possible to teach people how to increase their need to achieve and by so doing stimulate economic growth** (See McClelland, 1963).

It is true that both “external” and “internal” factors influence economic growth but **the internal factors such as desire to do well, values and motives men have lead them to exploit opportunities and shape their own destiny.** People “high” in n-Achievement tend to work harder at certain tasks, to learn faster and to do their best work, and not when special incentives like money, prizes are introduced. **If the people behind the Master plan and the people been planned for have not developed the “n-Achievement” principle and right culture the so called Master Plan would not impact positively on the well being of the people.** In the same vein Granato, Ingleheart and Leblang (1996) contend that n-Achievement can be reinforced by cultural values. The conventional factors of savings and investments cannot

determine economic growth of a society alone, achievement motivation and postmaterialist values should be used to explain economic development of any Third World countries. Cultural and economic factors play complementary roles.

**By culture we refer to a system of basic common values that help shape the behaviour of the people in a given society. The focus of cultural development in our institutions of learning should be on cultural transformation and attitudinal change to money acquisition, material wellbeing and interpersonal relationships.** No matter the number of years our leaders spend in Institute of Strategic Studies, Kuru, no matter be the number of university degrees a political or community leader achieves no progress can be made unless the fundamental culture of the people is changed. **It is the change in the heart of men that produces economic growth and development. The motives and values political class possesses will determine their performance on the field. The values and desire we have in mind are designed to create and foster loyalty, dedication, responsibility, and commitment and patriotism.** This is to say that our education systems should develop the voluntary functions of the “subjective mind” of the people particularly imaginations, inductive and deductive reasoning, affection and aspiration.

In this lecture we shall not deceive ourselves. Human capital of the NDR should be fully developed. We should all realise that man is the sole creative and purposive dynamic in nature and without his development all things else (resources) are by comparison in a state of inertia. The history of developed economies shows that education comes first in the process of development only to be followed by agriculture, manufacturing and technology in that order. The government of Nigeria and in particular the governments of the NDR should stress the development of human capital and “all other

things” will follow. The underdevelopment of an economy or any region/community is the underdevelopment of man or people of the area. The people of NDR possess tremendous innate talents or latent abilities which can only be developed or unfolded through education. To this extent allow me to quote *in extensor* Awolowo’s position on education of man or his subjective mind:

*“Now, his body as well as his faculties of perception must be kept as fit as possible: his subjective mind, which distinguishes him from the lower animals and which is the seat of interpretation of perceived objects, the seat of deductive and inductive reasoning, the seat of prejudices, predilections and partial affections, and so forth, this mind must be thoroughly polished, enlightened, and educated. Otherwise, man will remain only slightly higher than the lower animals, and far below the status of the Image of God which is his birthright at Creation.*

*Consequently, when we speak of the underdevelopment of a man’s mind, we are in effect speaking of:*

- *the underdevelopment of his subjective mind, brought about by ignorance, illiteracy, and deficiency in technology as well as technical and managerial know-how;*
- *the underdevelopment of his body, brought about by disease, calorie deficiency, bad water, bad housing, and filthy environment;*
- *the underdevelopment of his farming technique, brought about by ignorance,*

*illiteracy, lack of savings and of capital formation.*

(Awolowo, 1981).

But this can only be realized in an atmosphere of expanding opportunities for education, equal access to all the facilities and for self-fulfillment which are not readily available in the region. No region can develop above its people.

### **(iii) Re-Evaluation of Property Rights**

The evolution of property rights and their effects on investment are central issues in the political economy of development while the state regards protection of property rights as a precondition for economic growth. The land use decree of 1978 transferred ownership and control of land to the public or government; while the Oil pipelines Act of 1956, Petroleum Act of 1969 and Mineral Act of 1990 have taken away the property rights of Niger Deltans from them. Indeed Section 239(2) of Mineral Act or Petroleum Act 1990 excludes compensation for acquisition. **These Acts have become anachronistic and therefore due for overhauling to make them relevant to the needs of the indigenes of the region.** Alchian (1977) states that: “this substitution of public for private property rights considerably attenuates the incentive to count costs fully of those charged with managing the resources. As well, special interests are disproportionately rewarded when political assets dominate market consideration”. Privately held rights have the advantages of greater diversity and freedom of choice than is generally possible via government control.

**There is urgent need for constitutional Reform or Review especially those affecting oil and gas prospecting activities: Oil Pipelines Act (1956), Petroleum Act (1969), Mineral Act (1990) should be reviewed to reflect the**



**realities of the situation on ground.** Developed countries have reviewed their constitutions several times since the time of usage to reflect the actual situation on ground whereas ours of 1999, which is not the product of the peoples of Nigeria, has not been overhauled. USA has reviewed her constitution more than 27 times since the time of usage. The oil and gas exploiting companies believe that the natives have no claim on the lands on which they operate and the federal might is at hand to silence any counter claims or the federal government owns effective property rights to oil and gas resources. Thus NDR land resource has been turned into “property of the commons”. When a resources has no owner, nobody has a very strong incentive to see to it that it is not over exploited or degraded in quality. This is the very stance of oil and gas companies that Deltans have no property right to both the land and the underlying minerals. If somebody owns a piece of land, he has an incentive to see to it that the land is managed in ways that maximize its value.

As to the compensation Law it is totally unaccepted to Nigerians and therefore should be restated because oil and gas multinationals do not give the affected party any enhanced value that may attach to their property and because they have the backing of Federal Government. Besides, the pre-determined compensation rates result in gross undervaluation of the total economic values of the land and resources. **The mode of the payment of compensation has destabilized peaceful co-existence of community, led to destruction of lives and property and even wiped out many villages out of existence.**

Based on the inadequacy of compensation and its attendant evils we therefore suggest:

**(iv) Environmental Impact Assessment and Monitoring**

It is true that by 1992 EIA Act was enacted but the ways and manner the team carried out its functions were in doubt. This section is now a unit of Ministry of Environment. **EIA is a process aimed at evaluating the potential impacts of development projects on the environment.** The primary purpose is to: evaluate the needs for the project, the magnitude of the potential positive or negative effects of the project, and alternatives to the proposed project including the complete avoidance of taking any action. Such reports should be made concise, brief and with local input components. EIA may also be defined as “an activity that aims at establishing quantitative values for selected parameters which indicate the quality of environment before, during, and after the proposed activities” or as "a study of probable changes in the various socio-economic and biophysical characteristics and the environment, which may result from a proposed or impending action” (See Khitoliya, 2004). Associated with EIA is “**Environmental Audit**” or, “**Environmental Monitoring**”, **Environmental audit is an independent, systemic method of verifying that environmental regulations, internal policies and good operating practices are being followed.** Environmental monitoring is an essential component of environmental management. For efficiency and effectiveness there is need, anyway, to integrate the interest of local people who are well versed in the knowledge of the environment in order to assess the location, magnitude and coverage of any reported or observed hazards. For effective environmental monitoring, environmental monitoring should incorporate surveillance, trained citizen, volunteers that can successfully monitor the parameters of their local terrestrial aquatic and atmospheric environments and they can capture a good time-series database.

**(v) Environmental Restoration, Rehabilitation, Remediation, Reclamation and Recreation.**

There has been an increasing awareness and world wide concern for environmental issues since the Stockholm conference of 1972; however, the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro in June 1992 marked a turning point in the global perception of the place of environment in the development process. The outcome of the Earth Summit spells out strategies for addressing global and local environmental problems in the context of sustainable development. The list of environmental problems in Nigeria include deforestation, desertification, soil and beach erosion, water, land and air pollution, pollution from the oil industry, destruction of coastal ecosystems, industrial effluents, chemicals in the environment, pollution from municipal and hazardous wastes, dumping of toxic wastes, inter alia. The issue of environmental protection and natural resource conservation gained prominence in Nigeria with the dumping of toxic wastes at Koko in 1988.

The colossal environmental damage in the NDR consequent on oil and gas exploitation in the region has brought the NDR into global scene. The incessant clamour of the people of the region has forced the multinational companies to adopt strategies of environmental sanity. In 1992 Environmental Impact Assessment (EIA) law was enacted in order to restore environmental integrity of the region. Along with it was compensation and liability aspects of the law. The Land Decree of 1978 allows federal, state and local governments to act as trustees for publicly owned natural resources and to sue people who are responsible for the release of harmful materials that damage these resources. Damage assessment agency was constituted. The objective of damage assessment agency is to estimate the value of the damages to an injured resources so that these amounts can be recovered

from those held liable by the courts. The problem of measuring damages was resolved in either two ways:

- (i) that the damages should be equal to the lesser of the lost value of the resource;
- (ii) the value of restoring the resource to its former state.

In recent years and because of ineffectiveness of court actions and non-payment of due compensation and challenges in court, the emphasis has shifted towards restoration costs as the preferred measure of damages. Restoration costs are defined to include Restoration, rehabilitation, replacement and/or the acquisition of equivalent resources.

**Environmental Restoration** is the deliberate and active human manipulation of nature in **an attempt to recreate ecosystem structure and processes as close as possible to the state that existed prior to anthropogenic perturbation. Restoration is primarily aimed at speeding the recovery of degraded areas.** It is needed virtually everywhere man has directly or indirectly afflicted ecologically significant damages to the ecosystem. The concept is closely related to other human-mediated ecological process such as rehabilitation, reclamation etc.

### **Problems of Measuring Restoration Costs**

On the surface it might seem easier to measure restoration costs than lost resource value for damaged environmental resources. And as Field (1997) notes that: “Restoration appears to involve primarily engineering action based on knowledge from physical and biological sciences, but “restoration is in fact a rather complicated idea. In some cases restoration may be technically impossible e.g. when there is some element of uniqueness in the damage resource.” Again restoration of the physical values of a resource (e.g. soil pH, water temperature etc.) may not restore all of its ecological characteristics. It is impossible to discuss restoration in

physical terms without considering its monetary costs. The thorny problems in **evaluation** the restoration costs of damaged natural resources include:

- (i) The determination of what the original or base-line resource quality actually was;
- (ii) The choice among alternative ways of restoring a resource in a cost-effective way;
- (iii) The determination of what is meant by a natural or environmental resource of equivalent value to a resource that was lost (see Field,1997).

**Environmental Rehabilitation** is the process of rebuilding elements of an ecosystem structure and function without necessarily achieving complete restoration to its pristine condition. Rehabilitations aims at bringing a degraded environment back to a valuable state for human purposes rather than to a truly pristine state. It reverses degradation to a certain extent. In the NDR this exercise should be intensified such that degraded environment may still be used for agricultural practices or for any other useful purposes.

**Environmental Remediation** is the process of cleaning chemical and other contaminants from a polluted area by biological and/or physical methods. It is often adopted as a first step towards the protection of human and ecosystem health. In addition to all these methods polluted soil can also be dug-up, decontaminated or taken away and stored in a secure landfill in perpetuity.

**Environmental Reclamation** describes the biological, chemical or physical manipulation carried out in order to clean up and reconstruct severely contaminated or degraded sites in an attempt to return them to their pristine statuses. In the NDR need arises to reclaim beach eroded areas, abandoned flow stations and oil-polluted wetlands using standard reclamation techniques to restore their structural and functional integrity.

**Environmental Recreations** is the construction of a new biotic community on a site that is so severely perturbed that there was virtually nothing left for restoration process. The success of this exercise, however, depends on sufficient information from the baseline studies.

In the NDR these issues of Environmental restoration, rehabilitation, remediation and reclamation should be given priority by the oil and gas multinationals. Indeed Environmental Restoration should be given priority in the NDR in addition to very high compensation. However, the costs of restoration process should be borne by defaulting oil and gas companies. Restoration process should involve not only oil and gas companies but also community, stakeholders and government regulatory bodies.

Whenever, there is a major oil spills or pollution or any form of environmental destruction, defaulting multinationals soon focus on payment of monetary compensations for immediate associated socio-economic losses while the intangible environmental values are hardly considered. This should no longer be tolerated. Defaulting companies accept to pay compensation because it is cheaper compared with the costs of environmental restoration, rehabilitation reclamation etc.

**(vi) Separate Regulatory Tribunal on Pollution**

Nowadays in Nigeria the judiciary is trying to be independent of the executive going by corrections of mass irregularities that marred the 1999, 2003 and 2007 elections. Monitoring and sanctioning are two instruments for enforceability of pollution laws. The objective of enforcement is to get people to comply with an applicable law. Polluters who are intelligent human beings and who may stand to lose money if environmental laws are vigorously enforced can usually find many ways of frustrating the monitoring and

sanctioning processes. Our experience in the payment of compensation process in Nigeria does not favour the rural and poor complainants/aggrieved local people. Court cases take time, energy and resources. With many laws and many more violators the burden on the legal system of trying to bring all violators to justice may be overwhelming. The defaulting oil and gas multinationals through subtle means in a corrupt political system may turn the compensation payment procedure into long, drawn out costly court battles.

**Based on the above there is need to have a regulatory tribunal that will be better equipped than the courts to decide the values and extent of environmental damage and the amount of compensation to be paid by defaulting companies.** For many reasons it may be impracticable to place a value on the ecosystem but the tribunal can use a mixture of the contingent valuation and shadow pricing techniques to derive a value for the destruction of the ecological balance. Perhaps there may be a need to review compensation costs upward, or levy stiff financial penalties, or long term jail for violators so that they may improve on their operations and technical side of their activities.

#### **(vii) Environmental Pollution Standards**

There was no compensation standard that could serve as deterrence to polluters. The main market based instruments to control environmental externalities are Pigovian tax – an optimal pollution tax – “which obliges the polluter to pay the full cost of the environmental services they consume and will be set equal to marginal damage costs at the optimal externality load” (Markandya and Richardson, 1992). **The fines of 2k, 5k and ₦10.00 per 1000 standard cubic feet of gas flared are cheaper to pay for oil companies than to embark on zero gas flaring.** The failure of compensation rate

regulation lies in the existence of alternative route of escape for the oil prospecting firms hence firms embark on environmental abuse. **When environmental pollution charges are made very costly for the oil exploiting firms, they would have the incentive to change the production processes, enhance environmental integrity and reduce pollution incidence.** The government should set up standard for environmental pollution especially gas flaring, in line with the “Global Flaring and venting standard” which could discourage environmental pollution. **The principle of polluters pay all should be incorporated into environmental pollution standards.** Fairness or equity is another important criterion for evaluating environmental policy. Equity is a matter of morality in which relatively well-off people or even firms have for those less fortunate. Nigerian policy makers lack knowledge or are blindfolded by too much corruption and gratification from oil and gas prospecting companies to know how the burdens of national pollution-control programs should be distributed among the affected parties – host communities, government and oil firms.

**Enforcement of environmental pollution laws in a country with weak legal traditions and institutions is not automatic.** There is a natural tendency among policy makers, environmental economists etc. to think that enacting a law automatically leads to the rectification of the problem of which it is addressed. A strong assumption **among the environmental community is that polluters will more or less automatically comply with whatever laws are enacted.** Enforcement requires energy and resources, just like any other activity. Thus, the resources devoted to environmental quality improvement ought to be spent in ways that will have the greatest impact in Nigeria. **It is common phenomenon to see that Ecological Disaster Fund allocated to each state is often diverted to political party coffers or personal**



**account.** All these show that enforcement costs are important segment of environmental quality programs. For instance, **the former Governors of Jigawa and Plateau States (Turaki and Joshua Dariye) confessed before the Court of Law trying them for financial profligacy and official corruption that the ecological funds allocated to their states between 2003 and 2007 were donated to their political party.** These actions have made pollution policy and institutional arrangement such as FEPA, Environmental Impact Assessment Unit (EIA) and other environment monitoring units to be ineffective. A policy is cost-effective if it produces the maximum environmental improvement possible for the resources being used. **Thus the resources devoted to environmental quality improvement ought to be spent in ways that will have the greatest impact.** This is especially important in Nigeria where people have fewer resources to put in environmental programs and can ill-afford policies that are not cost-effective and efficient.

Another dimension to the environmental policy failure is the **inability of the governments to reshape the thinking and attitudes of the host communities who always clamour for compensation without demanding tangible and enduring benefits derivable from the presence of oil and gas in their various communities.** It is true of the Holy Bible that “money answereth all things” but not in the case of non-renewable valuable resources. Compensation requires that those causing the damage compensate those damaged in amount appropriate to the costs/value of damaged resource\es Degraded communities should be equipped with:

- Primary and secondary schools that will give adequate and sustainable relevant education to the citizens of the communities,

- Healthcare delivery systems (dispensaries, hospitals and health centres);
- Transport and communications systems that would link the communities with outside world and enlarge markets;
- Electricity, rural banking facilities and services, etc.
- The staff emoluments, maintenance costs and even descent accommodation are to be the sole responsibilities of violating companies. Salaries of such company staff should be made so attractive as to keep them in the rural areas.

## **11. CONCLUSION AND RECOMMENDATION**

Nigeria has all what it takes to develop and compete with industrialized economies of the world. The resources of the NDR should be efficiently managed to launch the country into the orbit of highly industrialized developed economy even without jeopardizing or degrading our environment. It is true that the NDR is environmentally degraded and the oil and gas industry has not impacted positively on the people and the environment of the region. Poverty, want, deprivation, denudation are common features in all the nine states of the region despite the fact that Nigeria as a nation, precariously depends on the resources of the region. This is a tragedy of higher order and the high level of irresponsibility, poverty, environmental degradation and economic underdevelopment in the NDR and in Nigeria in general should not be allowed to continue.

Nigeria has no record of executing any successful projects, almost all the past government economic and development projects were greeted with failure. Planners have offered many reasons for this unfortunate incident. It is true that progress would be slow without failure but much concern would be raised when failure repeats itself in almost all

subsequent projects. Thus, projects would also be slowed if too many resources were devoted to failing projects. The Nigerian political class has devoted much money and energy in corruption as an enterprise since the military era when corruption and mismanagement was legalised and institutionalised. Because of much investment in corruption underdevelopment has become common feature of our fatherland. As a regional development planner and environmental management consultant it is my sacred duty to warn the political practitioners of the ugly consequences of massive investment in corruption and to give incentive (development strategies) to kill failing projects (i.e. corruption, and mismanagement) if resources are to be allocated and utilized efficiently and effectively. Unless political classes are constrained by governmental edicts (FBI, EFCC, ICPC and Fiscal Law, etc.) backed by coercion, the elected representatives will continue to invest in too much of the wrong things at the wrong time in the wrong places. Let us hear the conclusion of the problem.

There is urgent need for the enthronement of “fiscal federalism”. Fiscal Federalism ensures flexibility in the provision of goods and services. Decentralization and financial autonomy, aggressive exploration and exploitation of resources in their various domains as well as accountability are the essential features of fiscal federalism. In as much as easy and abundant revenue comes from other region of the country political leaders, planners and opinion leaders would not look inward to search for alternative sources of revenue to develop their states or local government areas. Political office holders would never behave responsibly in as much as allocations from Federation Accounts would surely come in at the end of the month.

In a true free enterprise system, the rights of the individual and his property are sacrosanct: they are not

rendered inoperable by philosophically meaningless concepts such as the public good or public interest or the common good ...When people are allowed full title (ownership/control) of their resources inside and on their land, they treat it as if they own it i.e. they tend to protect and utilize revenue derived from the resources in the most effective and efficient manner. When property rights are unprotected (oil and gas in this case) allowing others (oil and gas multinationals and federal governments) to violate them with impunity, they tend to do so. Spoiling the environment and mismanagement of the resources is the result.

Since the federal, state and local governments; multinational oil and gas companies, have failed the peoples of Nigeria and the people of the NDR in particular; because socio-economic facilities and services have not been developed environmental pollution continues unabated, poverty is not reduced therefore the people of NDR should be allowed (unconditionally) to control the resources on their land.

Corruption cannot be stamped out of Nigeria unless there are: (i) Fiscal Responsibility Law, (ii) FIB law and (iii) Procurement bill (due process in the award of contracts). The three should be allowed to operate *pari pasu*.

I would want to suggest some ideas for accelerated development of the region in addition to the mentioned ones.

1. **Instill fiscal and financial responsibility into public office holders. In most federal systems revenue transfers from the central government to the lower levels of government are usually tied to projects or programmes or certain performance targets.** This practice enables the central governments to closely monitor the fiscal operations of the lower levels of government and makes the governments more fiscally and financially responsible. Revenue Allocations from the Federation Account to the state and local

governments are completely devoid of conditionalities. **Consequently the public office holders see the allocations as “free money from the common purse which they can use on whatever they choose.** And again since the public office holders (councilors, local government chairmen, elected representatives, senators and governors, and president) have not been elected at the polls they feel they are not accountable to the electorate but only to their “political godfathers”. Therefore constituency or grassroots socio-economic development is not their responsibility. For the sake of fiscal coordination and harmonization there is need of fiscal and financial responsibility law as practiced in Brazil and other sane countries. There is need for enthronement of Fiscal Federalism which has the advantage of ensuring flexibility in the provision of goods and services.

2. Create enabling environment for sustainable grassroots development in the NDR. This entails stability and enforcement of policies, right investment climate and security. Without security of life and property foreign investors will not come and development will not take place.
3. Need for good governance and the rule of law. Good governance relates to transparency in the handling of government/accounts, effectiveness of public resource management, justice, fairplay; and it forms the cornerstone of development.
4. Strengthen environmental regulation and policy enforcement.

5. Abrogation or amendment of obnoxious outrageous and repugnant revenue allocation formula, land use decree, mineral Acts, Compensation Acts and environmental policies to reflect realities of the situation on ground.
6. Cultural and attitudinal changes. The principle of “primogeniture” which is well entrenched in the inheritance law of the people of the NDR should be thrown out of consideration. It states that it is the first male child who inherits the land and other properties and may or may not take responsibility for the survival of his siblings. No room for such tradition in Nigeria again.

Mr. Vice Chancellor Sir, Ladies and Gentlemen let me conclude this lecture with the advice from Professor Don. M. Baridam, Vice Chancellor University of Port Harcourt (2008) that:

*“There is no single example in history to support the idea that violence brings development. Violence begets violence and reduces the quality of life for those affected. While Government, at all levels, must expedite action aimed at redressing the crying developmental needs of the Niger Delta region with the seriousness it deserves, the various armed gangs, agitators and their sponsors must know that the pervading state of insecurity in the area cannot contribute to the accelerated development that we all need.*

*Government should either massively fund and monitor the various intervention agencies-especially the Niger Delta*

*Development Commission-or muster the political will to directly take on the onerous challenge of bringing accelerated development to the Niger Delta region. In the final analysis, it is only the strong political will of the Federal Government that can lead to purposeful and sustainable development, to transform the lives of the people of the Niger Delta Region”.*

Finally Mr. Vice Chancellor Sir, Ladies and Gentlemen it is expected of me as an Elder in the Redemption Ministries Omega Beach, Port Harcourt to stand in the gap for Nigeria and the NDR. When problems confronted King David, from within and without, from belligerent Philistines and when Ahithophel, his special political and war adviser betrayed him (David) King David cried out in his prayer thus:

- = Let God arise, let his enemies be scattered;
- = Let them also that hate him flee before him,
- = As smoke is driven away, so drive them away;
- = As wax melts before the fire, so let the wicked perish at the presence of God”.

Therefore:

Let God arise and let the enemies of development of Niger Delta Region in Europe, America, Far East Asia, Australia, Africa, Nigeria and even in the NDR be scattered, as smoke is driven away, so drive away the enemies of development of the NDR.

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**Note A:**

The Niger Delta Region is made up of 9 states as shown in figure 7. These states are at the receiving end of all dimensions of poverty in Nigeria.

Variations in food poverty level are shown on the map. To solve this problem there is need to encourage farming enterprises among small-scale farmers and to encourage ecologically consistent/relevant farming enterprises. For example the efforts of Rivers State Government to popularise aquaculture in both upland and riverine communities of the state should be supported. Therefore Rivers State Sustainable Development Agency (RSSDA) should be supported by all in its efforts to encourage aquaculture and accelerated food production in the State. The efforts of Rivers State Government in rejuvenating the State's Agricultural Production capacity and reclaiming the place of agriculture as the foremost tool of sustainable wealth creation and industrialisation should be fully supported by all.

**Note B****Reducing Corruption in the Polity**

The underdevelopment of Nigeria and the Niger Delta Region is traced to many factors such as:

- indiscipline,
- corruption at all levels of governance,
- disregard of rule of law
- absence of goodwill and commitment to development.

Attempts were made during the last political dispensation to reduce the level of underdevelopment through the enactment of

- (i) Fiscal Responsibility Law otherwise known as Due Process;
- (ii) Freedom of Information Bill.

The first has been passed into law but the second was not endorsed by President Olusegun Obasanjo (1999 – 2007). According to Ngozi Okonjo-Iweala, Minister of Finance, Fiscal Responsibility law is a set of rules embodied in legislation committing all tiers of government to:

- Fiscal prudence and sound financial management;
- Greater transparency and accountability in public finance;
- Improved intergovernmental fiscal coordination to secure greater macroeconomic stability.

The imperatives of this enactment are anchored on the need to

- (i) secure greater macroeconomic stability;
- (ii) need to instill and institutionalize transparency and accountability in economic management; and
- (iii) to provide conducive climate for generating growth and reducing poverty.

Under this law each tier of government shall subject its medium term economic plans and budgets to debate in public hearings, prepare and appraise budgets in accordance with international standards and publish budget implementation reports and provide audited statements of accounts to its legislative arm.

To ensure compliance or enforcement, Fiscal Management Council is to ensure monitoring and implementation. Violators are to be prosecuted and punished under law.

### **Freedom of Information Law**

This act is yet to be passed into law as at this time of concluding this write-up but there is evidence that it will be a law in our land. The law stipulates that public office holders should make known to the public the account of their stewardship. They should publish the balance-sheet of their management. No public office holder should hold back any information on demand.

To curb corruption and reduce poverty at all geographical scales these laws should be allowed to operate along with the rule of law at all levels of governance.



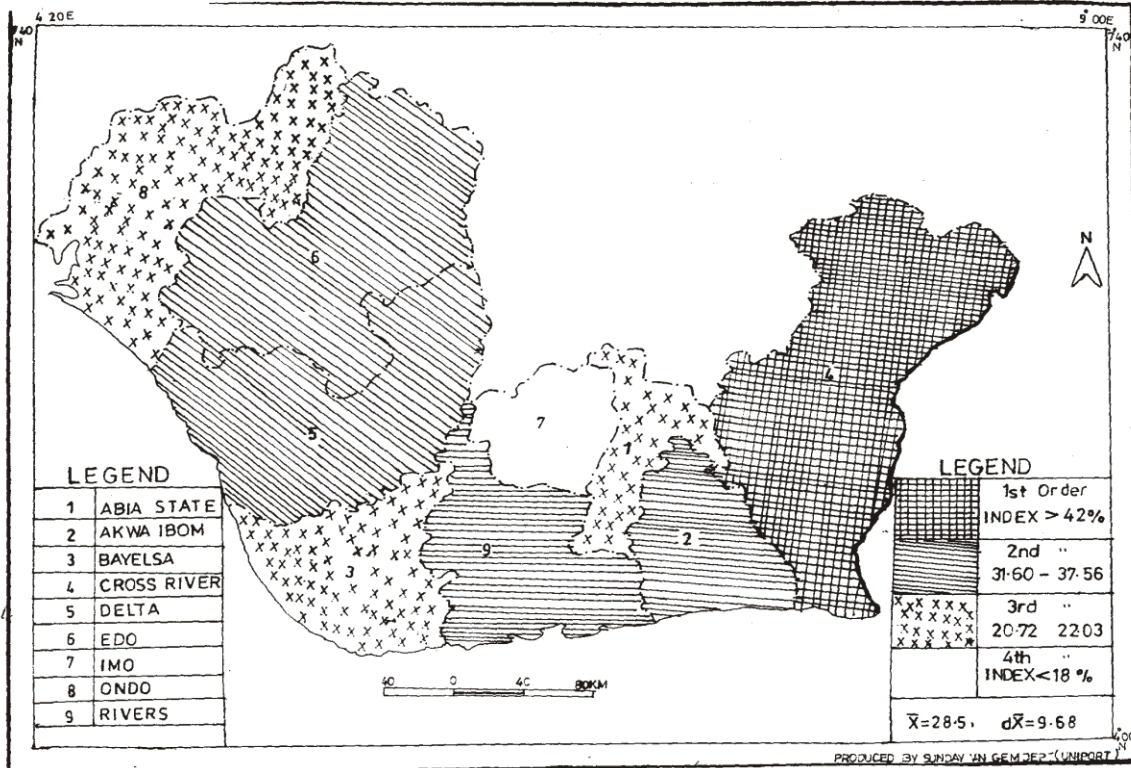


Fig 7 Food Insecurity Index Distribution(% Pop) in Niger Delta Region