

Promoting Sustainable Development in the Niger Delta Region: Current Challenges and the way forward

By

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Abstract

The study examines the need for promoting sustainable development in the Niger Delta region in the Nigerian state: current challenges and the way forward. The study adopted a qualitative case study approach and data utilized in this study were obtained from primary and secondary sources. While primary data were derived from focus group discussions, the secondary data were obtained from relevant textbooks, journals and other documents. The findings show that resource management policy gaps, poor commitment to the implementation of resource management policies, violent military activities as well as weak development agenda are constrain factors to sustainable development in the Niger Delta. The paper recommends inclusive development agenda and diversification away from oil. These are in tandem with sustainable development.

Key words: Sustainable development, Niger Delta, Nigeria, Challenges Natural Resource.

1.1 Introduction

Resource management has been seen and taken all over the globe as essential to sustainable development. This common position is on the premise that resources are at the heart of development and managing it is only but a tool and process that intends to realize a fair balance between resource management and development on the basis of sustainability. The concept of sustainable

development was first used by the world conservation strategy presented by the international union for the conservation of Nature and natural resources in the 1980's. It was commonly used and defined for the first time by the Brundtland report, entitled "Our common future", of the world commission on environment and development in 1987. The report emphatically noted the inevitability of a new development path if sustainable human advancement is to be realized. This new thinking gave rise to topical issues like human settlement, quality of life, energy, population, productive use and effective resource management.

In spite of the glaring relationship between resource management and sustainable development, many socio-economic and political effects that pose serious challenges to man and development have remained topical and of interest to all levels of government, non-governmental agencies as well as analysts and individuals, especially academics. In Nigeria, resource management and sustainable development have generated serious concern largely due to policy gaps, lack of political will to enforce resource management policies, and poor development agenda.

1.2 Statement of problem

The development of oil production in the Niger Delta has led to serious economic, social and environmental problems for the

region and its inhabitants. The oil producing areas of Niger Delta have faced so many problems caused by pollution from oil and gas related issues. These issues have affected negatively every sphere of life of the region. In the face of the many sided effects of oil prospecting and production activities in the Nigeria's Niger Delta region, there is poor management of environment and resources exemplified by policy gaps, lack of political will and poor commitment to the enforcement of existing development policies and weak 'resource justice'. Taking a central stage to the aforementioned dysfunctional resource management regime in Nigeria's Niger Delta is the interplay of politics in policy formulation and implementation that affect financing development. This study examines promoting sustainable development in the Niger Delta region of Nigeria.

1.3 Objectives of the study.

The objectives of the study are to:

- i. examine the relationship between commitment by federal government to resource management policies and sustainable development in the Niger Delta Region of Nigeria.
- ii. assess the relationship between genuine development agenda and sustainable development in the Niger Delta Region of Nigeria.

- iii. make useful recommendations that will engender sustainable development through appropriate resource management policies and practices in the Niger Delta region of Nigeria.

1.4. Development: A Conceptual Understanding.

Development is a very bogus and vague concept and it is difficult to give a precise definition. It is a step towards achieving some goal and in nature it is changing. Development is relative since it is impossible to measure development. Development is much related with aspirations and expectations of the people. It has to do with the interaction of a people with the available natural resources. Grammatically, development is technological because it is usually associated with growth into higher, fuller and mature condition. However, most times development is viewed administratively as dynamic change from one stage to another without seeing it as a final stage in a society. Development is seen by some people as a state of mind or a directional change. Development is also viewed as a part of desirable & planned change being influenced by action (s) of government. Therefore development is broad and based on value.

According to Todaro (1985), development is a multi-dimensional process that involves reorganization and reorientation of the entire spectrum of social and economic system. It goes beyond increase in income and output to radical

institutional, social and structural changes. Even though development is mostly looked at from national point of view, its full realization may warrant basic modification of the international social and economic system. Therefore, development is a many-sided process.

At the individual level, it means increased skill and capacity, greater freedom, creativity, self-discipline, responsibility and material well-being (Rodney, 1972). Most often, the concept of development is used in a restricted parlance primarily because the type of economy in any society is an index of the other social features. Development is basically a continuum in the area of generating and more efficient resource allocation in order to achieve socially satisfying ends (Aboyade, 1973).

Two basic and fundamentally interrelated parts constitutes development. These are: increasing the availability of resources and improving the utilization of available resources. The second part is a complex function of social organization, level of technology, efficient management and the content of public policy while the first part includes the natural, human and financial interaction (Aboyade, 1973). Therefore, the resource which is primarily critical to the development process is the natural resource. This is because the natural endowment constitutes man's primary economic activities.

Development connotes change and this is one sense in which the term “development” is often used to describe the process of social, economic and institutional transformation within a country (Thirtwall, 1990). This process often follows a well-ordered sequence and exhibits common characteristics across countries. The concept of development embraces the major economic and social objective and value that societies strive for and the three basic and distinguishing constituents or core values in the wider meaning of development are life sustenance, self- esteem and freedom.

Goulet, (1971)’s life sustenance is concerned with the provision of basic needs, while self-esteem and freedom have to do with the feeling of self-respect and independence from the three evils of want, ignorance and squalor. These three core components are interrelated, for lack of self – esteem and economic imprisonment become links in the circular, self-perpetuating chain of poverty by producing a sense of fatalism and acceptance of the established order-the accommodation of poverty (Galbraith, 1980).

Besides, development is universal since the conditions that lead to expansion economically are universal. Therefore, the traditional way of seeing development as the national economy’s capacity to generate and sustain an annual increase in its GNP at rates of between 5.7 percent or more from the one whose initial

economic conditions has been more or less static for a long time. Clearly looking at development from the orthodox point of view assumes that growth in income will automatically translate to improvements in the welfare of the citizens of any given country (Iyoha, M. A., Oyefusi, S.A and Oriakhi, D.E. 2003).

Due to the experience of many less developed countries in the 1950's and 1960's, which shows a simultaneous existence of rapid growth and the determination in the condition of human life; attempts have been made to humanize the concept of development. In Seers view quoted in (Todaro, 1985) for instance, evaluation of developmental levels must be concerned with what has been happening to poverty, unemployment and inequality.

Development is also an innovative process which leads to structural transformation of social system through the productive exploitation of resources of a given area. It therefore stands for the emergence from a primitive state through progressive changes in sustained socio-political and economic growth and stability to improved standards of living for the citizen.

Development is the greatest challenge facing the human race; for irrespective of the numerous chances created by improvement in technology, more than one –fifth of the world's population, live on less than US\$1 a day. In the past, development actions was of importance majorly to citizens of

poverty ridden countries, but presently, demographic, political and technological trends make development an urgent priority for rich countries as well (Summers & Thomas, 1993).

1.5. Sustainable Development: A conceptual understanding.

There are several definitions of the concept of sustainable development. However, the most popular is the one by Brundtland Report. It defined sustainable development as meeting the needs of the present generations without compromising the needs of the future generation.

Sustainable development means that development should “Keep going”. It emphasizes the creation of sustainable improvements in the quality of life of all people through increases in real income per capita, improvements in education, health and general quality of life and improvements in quality of natural environmental resources.

Sustainable development is development that is everlasting and contributes to the quality of life through improvements in natural environments. Natural environments, in turn, supply utility to individuals, inputs to the economic process and services that support life.

According to Pearce and Warford as quoted in Stiglitz (2008) “Sustainable development describes a process in which natural resource base is not allowed to deteriorate. The major problem with sustainable development is poverty eradication

which is not only multi-dimensional; it is also a menace to peace and stability across the globe. This results from the fact that, poverty like war is asymmetric to development and destructive to all economic, social and environment goals inherently and is germane to and makes up the cornerstone of sustainable development.

This brings into focus the issue of environmental and security threats and opportunities that accompanies the problem of sustainable resource management and development in the Niger Delta region. The constancy of natural stock of capital many in country is the necessary condition for sustainable development. The meaning is that, the decisions taken in the present should not jeopardise the prospects of maintaining or improving the future stock of capital. According to Tietenbery (2009) sustainable development is the willingness and the ability of the present, generation to devise a means of using depletable resources such that future generations at a minimum would be left no worse off than current generations.

Sustainability concerns itself with equity in terms of treating the present and future generations and argues that for ethical purpose exploitation of resource should not leave future generations worse off than the current situation. Sustainability also infers that the current generation, though capable of acting otherwise, should manage the resource base such that the average

quality of life it ensures can potentially be shared by all future generations (Ashein, 2008)

1.5.1 Components of Sustainable Development

Sustainable development is characterized by three components, namely: economic, social and environment. The economic component of sustainability expects that societies pursue growth paths that generate optimal flow of income without altering their basic stock of man-made capital, human capital and natural capital. Economic sustainability has three components, viz: to increase production of goods and services, satisfy the basic needs or reduce poverty and enhance equality. The social component of sustainable development is rested on the twin principle of justice and equality. For a developmental path to be sustainable over a long period of time, wealth, resources and opportunities should be shared and distributed equitably. The environmental component equally demands sustainable resource use.

1.5.2 Rules of sustainable Development

The basic implication of sustainable development concept that one can draw from the definitions that has to do with inter-generational equity is that, the present generation should pass to the next generation a stock of equality of life assets, no less than those that was inherited. Pearce (2009) suggested a constant

capital stock rule as a condition for sustainability. A precondition for sustainable development is that a nation's stock of capital should not decline through time.

1.6 Natural resource management and sustainable development

The attainment of sustainable development all round globally is derivable from effective management of natural resources. Agencies globally and nationally have long been at the centre of promoting natural resources management and environmental protection. The focus of the management of natural resources is to support environmental services, promote the sustainable management and use of land, water and genetic resources and to strengthen research and development efforts. Today's need that requires urgent attention is the utilization of our natural resources in a manner that is sustainable with a focus on minimizing their depletion and pollution. The welfare of human societies and the quality of life is directly linked to sustainable use of the natural resources.

More so, the sustainable development of a country or state is closely related to the level of industrial progress of that state, which has as its major driving force, the energy sector. Therefore, the achievement of sustainable development without altering the environmental balance of nature is the problem

confronting humanity today (Narayanam 2009). Agreeably, varying degree of environmental impact will be created by any form of industrial activity which may lead to environmental problems. In recognition of this, all sustainability related studies should take into account the technological, political, environmental, economic and ethical dimensions in their policy direction and responses. Since the central focus of sustainable development is the maximization and optimality in the distribution of the net benefits of economic development, appropriate strategies for natural resource management is required which will encompass conservative rules to maintain the regenerative capacity of resources and guide technological change so as to switch from non-renewable resource (Brookkfield, 2016).

The continuous increase in the demand for natural resources is seriously connected with the global sustainability question. The supply side presents a clear picture where economic growth and development caused by population growth has drastically reduced available supply of natural resources. Therefore, the quest for improved human existence involves the opportunity cost of giving up some amount of other desirable consumption of goods and services.

2.0 Theoretical Framework

For the purpose of this study, Daly's sustainable development path theory was adopted. This theory is premised on the fact that economic development is a primary goal of society, and as a consequence, it transcends beyond the satisfaction of basic material needs to the provision of the resources needed to improve the quality of life including meeting the demands for healthcare, education and a good environment (Daly, 1994) though it did not show the inevitability of conflict between economic development and the management of natural resources, reasons are abound that, the exploitation of natural resources might not be protected by market forces. Therefore, such approaches as that of the polluter pays principle and that of the precautionary principle be adopted and applied through appropriate regulatory mechanisms. The theory looks at how the principles of sustainable development can be applied over a full range of economic activities agriculture, forestry, fisheries, minerals extracting, energy supply, manufacturing and services, biotechnology, chemicals, waste, development and town and country, construction, transport and leisure. According to the theory, sustainability embodies a pragmatic orientation and action programmes at the international, national and local government and non-governmental organizational levels.

The adoption of the above theory was informed primarily by its utilitarian value and the adequacy in explaining the relationship between natural resource management and sustainable development in diverse settings. This theory which some-what explains holistically the understanding of the inevitability of managing the interface between natural resource exploration and economic policies for the purpose of achieving intra-generational and intergenerational sustainability is suitable for this study.

3.0 Research methods

The study adopted a qualitative case study method. This research technique, according to Yin (2003), has three aspects viz: investigation of a contemporary phenomenon which is real life context, the existence of boundaries between the phenomenon and the real life context and the use of multiple sources of evidence. The qualitative case study technique also lends itself to exploratory, descriptive and explanatory technique. Yin emphasized that exploratory research attempts to find out about a situation, while the descriptive and explanatory research techniques respectively seek to know “what happened” and how and “why it happened”. This study utilized both primary and secondary sources of data.

3.1. Primary Data

The primary data utilized in this study were derived from focus group discussion sessions conducted by the researcher. Whether to test ideas for new projects, to cover attitudes to volunteering or understanding the needs of the community, focus groups are a straight forward way for research into topical issues that can benefit from the vast ideas and experiences of experts and significant others from different or related fields of study. Focus groups have proved to be a highly insightful research technique for engaging a group of people with a question, product or idea. Bringing together a group of people to discuss a particular topic provides a more natural setting than one –to-one interview, as it allows participants to share their ideas and experiences and through discussion new strands of thought can emerge (stone, 2013). This qualitative research technique can generate rich data in a less resource intensive manner than interviewing. Using focus group discussion technique to engage with questions of local, national or global significance can form part of the design process of a wider survey, or it can uncover the opinions of key stakeholders.

The design, size and facilitation of a focus group clear be flexible, although a key to its success is having useful for the participants so as to ensure the information gathered is the most useful. Focus groups in the study were structured in a manner that the researcher interacted with the participants so as to allow

conversations to flow and develop, rather than to encourage expected answers, to enable these conversation to occur, it is important to clearly plan the focus group sessions, create a topic guide and think carefully about the facilitation of the session or sessions (Charleson, 2012). In order to ensure the fruitful use of the focus group discussion (FGD) technique, a topic guide was planned in advance and the areas for discussion were outlined with key idea and questions to be discussed. The topic guide was constructed with some degree of flexibility because the topics may be covered in a different order. To guarantee robust and insightful discussion sessions, the kind of individuals that participated were carefully determined by the researcher who facilitated during the discussion sessions.

The importance of this approach is evident in the fact that more interesting idea can emerge from a diverse range of individuals, as their experiences and attitudes may be broader as Bott (2001) rightly noted.

Six sessions were conducted with different groups made up of six 96) participants each. There is no optimal number of participants advocated in the literature, but in order to fully involve every participants and avoid incontrollable discussion sessions, Frich-Iyon,(1981) recommend 8-12 participants, Oke and Oluwadare (2002) recommended 5-8 participant and Andrew (2010) recommended 6-8 participants; in this study, the

researcher used six (6) persons. The six groups were made up of academics and post graduate students. While academics had five groups and five sessions, post graduate students had one group and one session. The thirty academic with six participants in five groups) were from five universities in five oil bearing states of the Niger Delta region of Nigeria. The universities are: Niger Delta University in Bayelsa, Akwa-Ibom State University in Onna, University of Calabar, Cross River State, Western Delta University, Ogarra, Delta State and Ignatius Ajuru University of Education, Port Harcourt, Rivers State. On the other hand, the six post graduate students in one of the six groups were from Niger Delta University, Bayelsa.

The discussion sessions were conducted in three days in the month November, 2016. The discussion was guided by the selected topic “Promoting Sustainable Development in the Niger Delta Region: current challenges and the way forward and it were introduced by the researcher is the facilitator. Different questions relevant to the subject matter were raised and discussions took place in a friendly and productive manner with an observer in each of the focus group discussion sessions. The essence of including an observer to the facilitator is for the purpose of note taking or Spark’s. The discussion sessions were also recorded in order to ensure that the data captured can be analysed later.

3.2 Secondary Data

The secondary data in this study were derived through content analysis instrument. This was utilized in collecting relevant data from texts, journals, newspapers and magazines in an analytical manner that is fruitful for the study. Content or textual analysis helps a researcher to carry out an in-depth analysis of existing data and to provide explanation for them in a manner that is useful and fruitful as Richard (2012) aptly noted.

3.3 Data Analysis

Analysing focus group discussions entails firstly and foremost the revisiting of your aims and objectives and looking through the detailed notes or a full transcript if you have time to produce one. The analysis is aimed at considering disagreements as well as noting useful quotations which reflect the purpose of your research (Woods, 2012). In this study, all notes taken at the focus group discussion sessions were read and transcribed. The transcribed versions of the group discussions were compared with the notes taken during FDG sessions to fill the identified gaps. This process was supported with the qualitative data generated in the study through in-depth content on the thematic discourse “promoting sustainable development in the Niger Delta Region: Current challenges and the way forward.

4. 0. Niger Delta and the Nigerian State

Poverty, low agricultural productivity, low and inadequate infrastructural facilities, lack of qualitative education, absence of a principled and purposeful leadership and natural resource degradation are severe interrelated problems in the Niger Delta region. The Niger Delta region include lands that have low agricultural potential because of excessive rainfall, excessive exploitation and exploration of natural resources, poor soils, steep slopes, or other biophysical constraints, as well as areas that have high agricultural potential but have limited access to infrastructure and markets, low population density, or other socioeconomic constraints. This means the Niger Delta region is less favoured either by nature or by man.

Historical records tell of the fact that the plundering of African natural resources fuelled the industrial revolution of Europe. Energy demands in the 20th century brought on the search for crude oil wells worldwide and Nigeria was not left out. From 1956, when oil well was successfully drilled in Nigeria, scrambling for Nigeria's resources by the Europeans took on a new dimension.

The oil boom era of the 1970's saw the downward plunge of the agricultural sector. There was a complete paradigm shift from the nation's then agrarian culture to oil driven culture, moving ultimately from renewable natural resources to un-

renewable resource trade. From the 70's through to the early 80's we witnessed a drastic drop in local food production. Importation rates of foods and finished products increased dramatically and our foreign debt escalated rapidly, bringing the economy to a crises.

A plethora of environmental problems exist as a result of the oil trade. Communities where certain resources are harvested - in particular, oil and gas - bear the impact of exploration and exploitation, while gains are shared to other areas that contribute next to nothing to national oil revenue. In addition oil-bearing communities are impoverished and lack basic social infrastructures and amenities. One region in Nigeria which has borne the brunt of natural resource exploitation is the Niger Delta. This region plays a key role in the country's economy in pre-colonial times and still maintains a primary position in present crude oil trade.

4.1. The Niger Delta: The Battlefield for Resource Control

The Niger Delta has featured in global discourse as a region plagued by non-violent demonstrations, violent protests and intra communal wars over resource control. The source and underlying causes of agitation in this region must be clearly understood by the global community in evolving effectual management strategies.

Agitations within the region take root from early colonial trade relations with the British incursion to the area. They made treaties with vulnerable communities, plundered resource capital and introduced a subservient cultural pattern. Communities only benefited by giving-up their farmlands in exchange for ridiculous gifts. In those days, resistance came through such visionary leaders like king Jaja of Opobo and Nana Olomu. Those leaders as recorded by Nigerian historians led their people in the struggle to rescue their natural economy from the greedy control of the British who had devised a “divide and rule” machinery of control over the people.

Control over the natural resource capital of the Niger Delta people is mirrored presently by the operations of the oil multinational companies, who defraud whole communities of their livelihood sources, paying ridiculous monetary compensation in exchange for a devastated coastal ecosystem. The oil companies make up the largest industry in the Niger Delta region. Despite this, unemployment levels are still very high, especially in the rural areas where oil and gas reserves exist. In this region exist oil well reserves (17.9 billion barrels) and gas wells (3.4 TcF), contributing about 80% of federal government revenue.

Despite this vast coastal wealth, GNP per capita is below the national average of US\$280. Pollution of coastal corridors

and wetlands is a recurrent disaster. Gas flaring has become a notorious pollutant of the local communities of the Delta. Oil spills and gas flaring have destroyed whole fishing communities, reducing needed fishery resources, terrestrial vegetation and compromising the health of local people in and around oil installations. Nigeria's resource base includes a vast network of rivers, floodplains and a rich rainforest network, with vast deposits of minerals. However about 95% of natural forest cover has been lost to deforestation, leaving 5% contained in the southeast region. While dams upstream are a constant headache and threat to the rich coastal biodiversity, deforestation ravages the teeming rainforest ecosystem.

4.2. The Nigerian Government and the Challenge of Sustainability.

In a country where agriculture accounts for about 40% of GDP and oil production and exports (exporting over 2 million barrels/day) ranks 6th worldwide, government's management structure and environmental action plan is essential to maintain balance and reduce abuse. The question here is what has been the role of the Nigerian government in the management of its natural resources. To attempt an answer, one can say that even though the legal framework and institutional structure for natural

resource management is firmly established, it still lacks the strength and drive which natural resource management deserves.

Government response to environmental problems and the nagging problem of unsustainable resource exploitation has been rather slow. Compromises in dealing with multinational companies have crippled the implementation of “goodwill” national policies and laws. The management structure at best is fragmentary, and there exists similar governmental agencies carrying out the same functions, often times leading to conflict between government agencies and stake holders.

A satisfactory environmental condition would mean developmental projects and resource utilization meet with clearly stated developmental benchmarks, whose implementation is sustainable. For projects to be considered sustainable as contained in Agenda 21 of the Rio declaration, three key aspects of development must be integrated into project planning and implementation: *economic growth, social equity and ecological integrity*.

Historical trends in the Niger Delta have shown that industrial activities in the region have negated this all-embracing principle, in the scramble for resources. Indigenous people, their laws and customs have often been side-tracked. Sustainability must therefore be redefined in this region and companies’ licenses to operate must be revoked when found guilty. The

country does not lack policies and laws, but the gap is in implementation and policing of resource utilization.

Resource depletion has far reaching multiplier effects and its importance is understood by communal agitations and high national poverty statistics. It is instructive to evolve stringent measures to “checkmate” the eclipse of our collapsing life support systems. We can’t afford to put new wine into old wine skin. The issue of local content has to do with the active participation of the local people in decision-making processes. Local people are the best managers, they have over the years evolved methods and approaches in natural resource management that have preserved certain classes of biodiversity and we need to learn from them.

5.0 Analysis of the Focus Group Discussion in the Study

The central aim of the focus group discussions was to identify the key areas of consensus or disagreement among discussants. The outcome of the six focus group discussions on different aspects of the subject matter shows that the resources cum environmental management practices are to a large extent a departure from acceptable practices. All discussants agreed that there is a very low level of commitment by the Nigerian state and its institutions towards enhancing sustainable development in the Niger Delta. There was also a common position among the

discussants on the inadequacy of resource management laws and policies as it affects the Niger Delta.

There was also a convergence of position by the discussants on the poor sustainable development mentality and action plan by the Nigerian state and the oil companies. The major reason advanced by them for their assertion is the largely lack of intra-generational and inter-generational sustainable development approach by the Nigerian state. The consensus in their opinion corroborated and modestly re-enforced the qualitative data generated in the study through in-depth content analysis of relevant textbooks and journals centred on the subject matter.

6.0 Summary of Findings

The study came up with some valuable findings. The social environment in the Niger Delta continues to be characterized by the following with their varied impacts on the business performance, the environment and the social development of the communities:

- The absence of Law and Order which makes for a high unstable operational environment, which is marked by incessant community agitation, and criminal attacks against all sectors of the community.
- High level of community related oil production deferment (600,000+bpd with lost revenue approaching \$60 million per

day-\$21 billion per year) results in less revenue to most of the oil producing States especially Bayelsa State.

- Lack of a strong national or community identity, thus fostering community division where greed and civil unrest dominate.
- Lack of a sense of ownership or responsibility for projects by the community, or maintenance capability.
- Poor coordination and the absence of a single-point responsibility across projects resulted in in-effective project deployment, widespread duplication, low levels of project completion and little chance of delivering sustainable improvements in the quality of life.

The above findings emanate from ethnic differences, poverty and high unemployment, collapse of the educational system, corruption, revenue distribution, Community development allocation, police action, boundary disputes, and elections which usually manifests in riots, protests, military engagement, militia assaults, kidnappings, killings, property destruction.

7.0. Conclusion

The importance of proper resource management in the sustainable development of both developed and developing societies cannot be over emphasized. This is because resource management has the utilitarian value of creating the conditions

that are important and critical to intra-generational and inter-generational principles that underlie sustainable development globally. The fact that resource management in Nigeria is arguably poor is a possible explanation for the serious sustainable development problem and challenge that exist in the nation.

8.0 Recommendations

The following recommendations will be useful for the sustainable development of the Niger Delta Region:

Niger Delta Regional Sustainability Development Strategy (NDRSDS) be initiated and constructed. NDRSDS will amongst many other things:

-) Propose new principles, approaches and actions to help the region achieve an economically, socially and financially sustainable future.
-) Shape a development strategy specifically for the Niger Delta region which will ensure that the most appropriate interventions are made, and that these interventions optimize the existing resources and involvement of interest groups.
-) Ensure that key development issues in the Region are addressed, whilst remaining within the context of national development framework.

-) Provide a viable platform for co-coordinating the delivery of all projects across the region.

The above is premised on the following:

$$SDNDR = f(G^g, T^{drm}, D^{eg}, S^a, D^{cis}, J^c, R^m, E^{iln}, I^d)$$

$$SDNDR = a_0 + a_1 G^g + a_2 T^{drm} + a_3 D^{eg} + a_4 S^a + a_5 D^{cis} + a_6 J^c + a_7 R^m + a_8 E^{iln} + a_9 I^d + U$$

The apriori expectation includes:

$$a_0 > 0, a_1 > 0, a_2 > 0, a_3 > 0, a_4 > 0, a_5 > 0, a_6 > 0, a_7 > 0, a_8 > 0, a_9 > 0$$

SDNDR = Sustainable Development in the Niger Delta Region.

G^g = Good governance.

T^{drm} = Transparency in decision making and revenue management.

D^{eg} = Diversified economic growth (decrease reliance on oil and gas).

S^a = Sustainable agriculture (link production to expanding markets).

D^{cis} = Decreased conflict and increased security (sustained peace).

J^c = Job creation (business development)-Youth employment.

R^m = Reduced mortality among most vulnerable groups.

E^{iln} = Education (increase literacy & numeracy).

I^d = Infrastructural development

SDNDR is a simultaneous model which requires the simultaneous presence of the above variables. The Granger Causality test is often used in situations like this, i.e. when the independent variable also depends on the dependent variable.

Consistency and Co-ordination. The government should develop a policy on each sector that is fundamental to the sustainable development of the region. The sector policy will define a series of plans targeted at regional priorities. All projects implemented within the region must fit within or be consistent with the regional sector plan which has devolved from the sector policy. Priority consideration for partnerships needs to be given by the government to those projects that are consistent with regional plans.

Policies. Government has to develop policy statements that will provide guidance for each key area of development in the region. The following are core sectors for regional development: Environment, Health, Transport and Infrastructure, Agriculture, Education, Business Development and Employment

Partnerships for Success.“Partnership” has often been used in the Nigerian State as a euphemism for contracting. Partnership must be based on shared vision, common goals and trust. Partners share the risk. Strategic partnerships must multiply the positive effect of the proposed Niger Delta Regional Sustainability Development Strategy. In such partnerships each partner will:

- Bring global expertise;
- Access substantial local experience;
- Attract additional funding or at least spread the funding burden;
- Multiply the effort;

- Bring reputable high profile partners;
- Increase the opportunity to sustain the programmes and embed the initiatives into the regional community life.

References

- Aboyade, O. (1973) *Issues in Development of Tropical Africa*. University Press, Ibadan.
- Andrew, A.A. (2005) *Research Methods: Descriptive and Analytical Approaches*. New York: Sterling Publishers.
- Ashein, G.B. (2008) *Defining Sustainability when resource management does not have deterministic consequences*. Mimeo.Department of Economics, University of Oslo.
- Bolt, B.E. (2011) *Research and Statistical Methods*. London: Sterling Publishers
- Brookfield, H. (2006) *Environmental Sustainability with Development*.
- Charlson, V.A (2012) *A Practical Guide for Assessing the Difference that Volunteering Makes*.London: Volunteers Publishers.
- Daly, E.H. (2007) *Economics, Ecology and Ethics: Essays towards a steady state of economy*. New York: Freeman and compay.
- Frich-Lyon, E. (1981) “Conducting Focus Group Session Studies in Family Planning”, Focus Group Discussion Workshop, Paris, France.
- Galbraith, J.K. (1980) *The Nature of Mass Poverty*. Itermondsworth: Pengiun.
- Goulet, D. (1971) *The Cruel Choice: A new concept on the theory of development*, New York: Athenaeum.
- Karpagam, M. (2008) *Environmental Economics*. New Delhi: Sterling Publications.
- Iyoha, M.A., Oyefusi, S.A and Oriakhi, D.E. (2008) *An Introduction to Modern Economics*.

Benin City, Mindex Publishing

Oke, E. A. and Oluwadare C. (2002) Attitudes towards Nigeria's national policy in population: Ethnographic findings in selected Yoruba communities, Nigeria Sociological Review 125-128

Pearson, C. S. (2008) Economics and Global Environment. Cambridge: University Press.

Richard, C.N. (2012) Research Method: Quantitative and Qualitative Approaches. New York: Free Press.

Rodney, W. (1972) How Europe Underdeveloped African. Panaf Publishing.

Stiglitz, J.E. (2008) Towards a new Paradigm for Development: Strategies, Policies and Processes. Paper presented at the Prebisch lecture at the United Nations conference on Trade and Development. Geneva: World Bank.

Thirtwall, A.P. (1990) Growth and Development. London: Macmillan Education.

Tietenberg, T. (2009) environmental and Resource Economics. London Pearson Education.

Todaro, M.P. (1985) Economic Development in the third world. London: Longman Group

Viassof, C. (1990) Private Communication at a workshop on health systems. Research in Leprosy in Kano, Kano state. Wesley Press.

Woods, W.O. (2012) Data Generation and Analysis. Toronto: Charlson Publishers.

Yin, R. (2003) Case Study Research Design Methods. London: Sage Publications.