

Poverty Eradication through Proper Natural Resources Management: The People of the Niger Delta Region of Nigeria in Focus

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1.0 SUMMARY

Most African countries are embedded in water and are blessed with its wonderful gift of nature. Unfortunately, they had not been able to exploit their potentials, as African countries without exception and exaggeration constitutes greater majority of the under developed nations of the world today whose per capital income is below the one-dollar mark. Yet they have vast potentials and continued to wallow in abject poverty with no means of sustenance save for mere subsistence farming despite the rich resources' nature had surrounded them with.

Nigeria as a nation is blessed with so much human and natural resources, and has diverse use of its resources. It has a total area of 923,768 sq. km. of which land is 910,768 sq. km. and water 13,000 sq. km. While the Niger Delta Region is located in the Atlantic Coast of Southern Nigeria and is the World's second largest region with a coastline of about 450km which ends at Imo River entrance (Awosika, 1995).

Natural resources in a country or community do not equal automatic wealth for the people, an example is the oil rich Niger Delta Region which has so many oil wells where most of the nation's wealth is drawn from and yet lack basic social amenities like light, portable drinking water, hospitals and good schools. These have resulted to crises and clashes with the government and multinationals. Some of the people regard the natural resources as a curse rather than a blessing because it has brought untold hardship and extreme poverty to them.

With regards to the proclamation made by 193 Member States of the United Nations 2030 Agenda for Sustainable Development on 25 September 2015, which includes 17 Sustainable Development Goals (SDGs) with 169 targets and 230 indicators, the 2030 Agenda aims to tackle the complex challenges facing the planet today – ending poverty, hunger and malnutrition, and responding to climate change while achieving inclusive growth and sustainably managing natural resources. With its importance to food security, climate regulation, whole communities and the very future of individual states, achieving SDG 14, Conserve and sustainably use the oceans, seas and marine resources for sustainable development, is a major priority of the 2030 Agenda.

This paper wishes to discuss how proper management of water in the Niger Delta Region can lead to job creation and thereby eradicate poverty.

1.1 THE PEOPLE OF THE NIGER DELTA

The Delta Region is located in the Atlantic Coast of Southern Nigeria and is the World's second largest region with a coastline of about 450km which ends at Imo River

entrance (Awosika, 1995). It is made of nine states (figure 1), with 185 Local Government Areas (LGA) and has a population of over 32 million (23% of total Nigerian population), of which 2/3 are under 30 years of age. It comprises of 40 main ethnic groups; around 120 languages and dialects. Its ecological zone consist of Coastal barrier sandy ridge; mangrove swamp; freshwater swamp; lowland rainforest, and rich in Petroleum, natural gas, tin, lead, coal, zinc, arable land. It has over 7,000 km of pipelines; 606 oil fields. The oil sector accounts for approximately 95 percent of Nigeria’s export earnings and over 80 percent of Federal Government revenue.

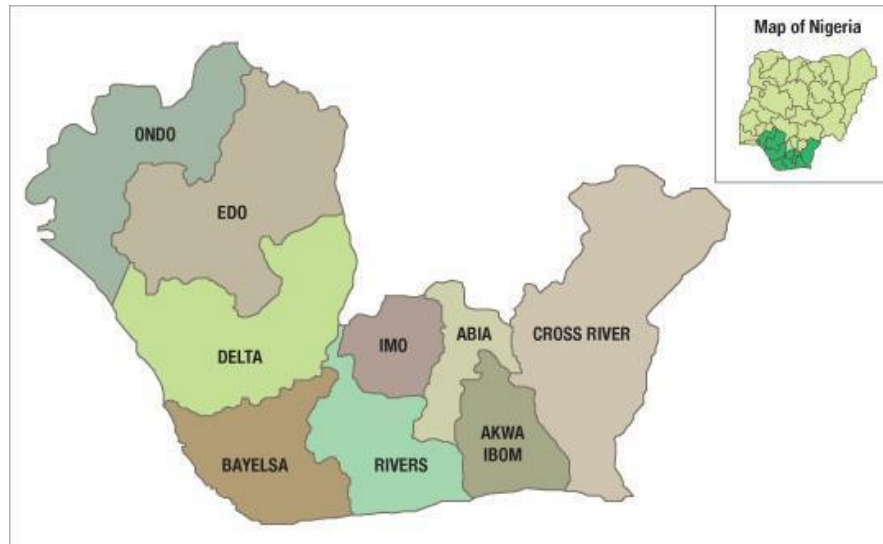


Figure 1: Map of Niger Delta Region (Source: Research gate)

Rates of unemployment in the region is estimated about 40% with a poverty rate of 43%(2004), meanwhile, 75% perceive themselves as ‘poor’.70 to 80% in the rural areas do not have access to safe drinking water yet surrounded by water (Figure 2).

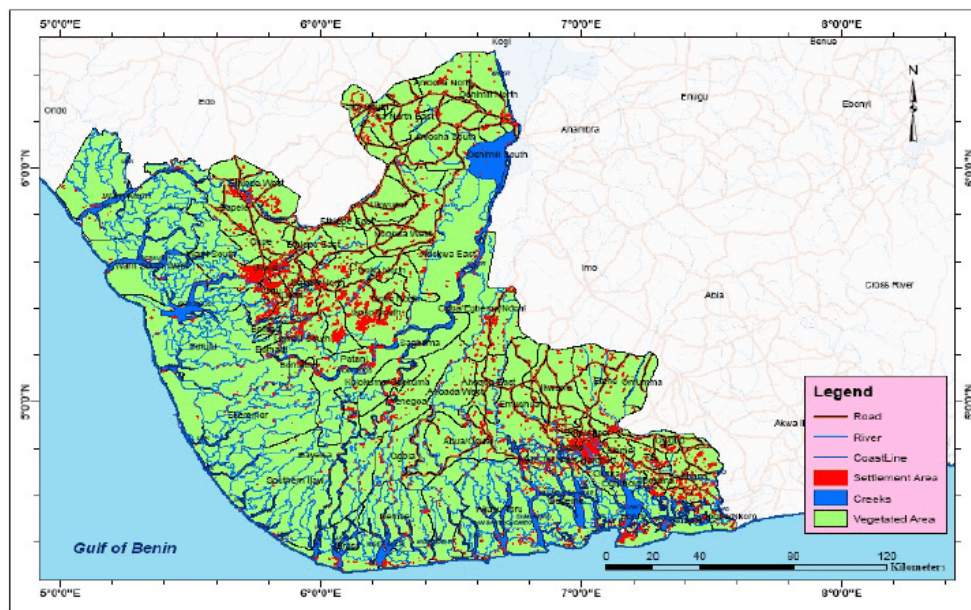


Figure 2: Map of Niger Delta Showing Network of Water Bodies (Rivulets, Streams, Rivers, Creeks and the Atlantic Coast) (Credit: Research Gate - Gordon Amangabara).

The Environment of the Niger Delta Region as a result of several decades of oil production, and industrial and infrastructural developments had witnessed tremendous environmental degradation. Profound changes have often had adverse effects on local livelihoods and social well-being. For years, local people hoped for protection that never came from successive Federal and State Governments. Attempts to fight back have at times compounded their environmental challenges—the sabotage of oil pipelines, for example, has only exacerbated oil pollution. The level of infrastructure and industrial development demanded can hardly be sustained by the fragile ecosystems in the core Niger Delta Region, particularly in the unique mangrove swamp zone.

1.2 SOURCES OF DATA (METHODOLOGY)

Data was collected from mainly secondary sources. The secondary data was obtained from various Libraries, Websites, and oral interviews.



Figure 3: Author during an interview with a community in the Region

2.0 NATURAL RESOURCES IN THE NIGER DELTA

2.1 Natural Resources What Is It?

A natural resource is anything that people can use which comes from the natural environment, they are the basis of life on earth. This can be classified into four groups name; Biotic, Abiotic, Renewable, Non-Renewable

Biotic resources are obtained from the biosphere (living and organic material), such as forests and animals, and the materials that can be obtained from them. Fossils fuels such as coal and petroleum are also included in this category because they are formed from decayed organic matter.

Abiotic resources are those that come from non-living, non-organic material. It includes land, fresh water, solar radiation, air, rare earth metals and heavy metals including ores, such as, gold, iron, copper, silver, etc.

Renewable resources can be replenished naturally. Some of these resources, like sunlight, air, wind, water, etc. are continuously available and their quantities are not noticeably affected by human consumption. Though many renewable resources do not have such a rapid recovery rate, these resources are susceptible to depletion by over-use. Resources from a human use perspective are classified as renewable so long as the rate of replenishment/recovery exceeds that of the rate of consumption. They replenish easily compared to Non-renewable resources.

Non-Renewable resources either form slowly or do not naturally form in the environment. Minerals are the most common resource included in this category. By the human perspective, resources are non-renewable when their rate of consumption exceeds the rate of replenishment/recovery; a good example of this are fossil fuels, which are in this category because their rate of formation is extremely slow (potentially millions of years), meaning they are considered non-renewable.

2.2 Natural Resources in the Region

The Region is rich with all types of natural resources, notably amongst these are Oil, Natural Gas, Sand, Soil and Clay, Periwinkle Shells, Salt and above all Water that houses these minerals.

Oil: A number of mineral resources are mined in the Niger Delta but oil is the most important due to its international demand, and its value to the Nigerian economy. No one can live in the Niger Delta without becoming aware that oil is the political, economic and environmental issue that eclipses all others.

Natural Gas: Gas, is the next important, and likely to become more so in years to come.

Sand: Sand is the next most important mineral extracted from the Region. Most of the States in the region are involve in Sand mining. This is used for reclamation, making of concrete, cement blocks, house plastering, raw material for glass production, etc. it is a viable business in the Region.

Soil and Clay: Soil, particularly if it has high clay contents, is dug for building up the foundations of roads, so that Borrow-pits are common sight. Deposits of Kaolinite clay, found throughout the Niger Delta, are used by women for making clay pots. The Ogoni potters are particularly famous.

Periwinkle Shells: Apart from its health benefit when eaten, Periwinkle shells are a renewable mineral resource used as a good calcium aggregate for binding cement to make for concrete.

Salt: Salt is extracted from boiled seawater on metal trays, this is called sea salt, the region is known for the mass production of potash called 'native salt' made from the charcoal of *Rhizophora racemosa* propagules.

Water: With two thirds of the earth's surface covered by water and the human body consisting of 75 percent of it, it is evidently clear that water is one of the prime elements responsible for life on earth. It circulates through the land just as it does through the human body, transporting, dissolving, replenishing nutrients and organic

matter, while carrying away waste material. Further in the body, it regulates the activities of fluids, tissues, cells, lymph, blood and glandular secretions. Many uses of water include agricultural, industrial, household, recreational and environmental activities. Virtually all of these human uses require fresh water.

2.2.1 Our Water Today

Contrary to the past, our recent developed technological society has become indifferent to this miracle of life. Our natural heritage (rivers, seas and oceans) has been exploited, mistreated and contaminated. Scarcity and misuse of fresh water pose a serious and growing threat to sustainable development and protection of the environment. Human health and welfare, food security, industrial development and the ecosystems on which they depend, are all at risk, unless water and land resources are managed more effectively in the present decade and beyond than they have been in the past. The population decline of the marine and riparian life, the appearance of green algae in the rivers and the stench and slime that comes as a result of putrefaction in the water, are clear signs of the depth and extent of disruption that has been caused to this intricate ecosystem.

In the assembly of world leaders at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in June 1992, it was observed that concerted action is needed to reverse the present trends of overconsumption, pollution, and rising threats from drought and floods. The Conference Report sets out recommendations for action at local, national and international levels, based on four guiding principles.

1. Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment
2. Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels
3. Women play a central part in the provision, management and safeguarding of water
4. Water has an economic value in all its competing uses and should be recognized as an economic good

Based on these four guiding principles, the Conference participants developed recommendations which enable countries to tackle their water resources problems on a wide range of fronts. These are summarized in some set of goals that would be achieved through some targets. (Table 1)

S/NO.	GOALS	TARGETS
1	Healthy People	Universal access to safe drinking water, sanitation and hygiene, improving water quality and raising service standards
2	Increased Prosperity	The sustainable use and development of water resources, increasing and sharing the available benefits.
3	Equitable	Robust and effective water governance with

	Societies	some effective institutions and administrative limits
4	Protected Ecosystems	Improved water quality and wastewater management taking account of environmental limits
5	Resilient Communities	Reduced risk of water-related disasters to protect vulnerable groups and minimise economic losses

Table 1: Suggested water goals would promote healthy people (source FOA)

For Target 1: The proposed full target for Safe drinking water, sanitation and hygiene (WASH) is: “By 2030: to eliminate open defecation; to achieve universal access to basic drinking water, sanitation and hygiene for households, schools and health facilities;

Target 2, aims to promote decisions and actions that take into account both human and environmental water requirements, as well as the need to increase the long-term viability of natural supply systems.

Target 3, aims to promote an enabling environment such that institutional structures relevant to water are effective and that its administrative systems function for the benefit of society as a whole. It underpins all the water targets and supports linkages to other development themes.

Target 4, the proposed target reflects the growing urgency for effective wastewater management and prevention of water-related pollution. Managing the human and environmental impacts of poor wastewater management and increasing use of wastewater for productive purposes has significant public health, environmental and economic benefits.

Target 5, this target both supports and is supported by the other components of the water goal. For example, it aims to ensure water quality by collecting and treating the pollution arising from sanitation and hygiene, but can only do this if the appropriate governance systems are in place.

3.0 NATURAL RESOURCE MANAGEMENT

Management is the basic, integrating process of organizing activities. The need for management arises because of the scarcity of resources used to satisfy human wants. There it could be said that Natural resource management deals with managing the way in which people and natural landscapes interact. It brings together land use planning, water management, biodiversity conservation, and the future sustainability of industries like agriculture, mining, tourism, fisheries and forestry (Wikipedia).

3.1 WATER MANAGEMENT

Water is the key to food security. Globally, there is enough water available for our future needs. Water management often involves trade-offs – and often the transfer of risks – between ecosystem services. Water demand by ecosystems is determined by

the water requirements to sustain or restore the benefits for people (services) that we want ecosystems to supply. Better-integrated water management and more sustainable development require the focusing of greater attention on ways to resolve the increasing competition for water between ecosystems and socioeconomic sectors.



Figure 4: Forcados River showing some fishing line.

3.1.1 WAYS OF ALLEVIATING POVERTY

Some of the key issues in order to make environment and natural resources as a core asset in wealth creation, poverty reduction, and sustainable development are as follows;

Good governance:

Given the role of government, as economic development manager, policies and institutions that best suit these responsibilities need to be followed. Once those policy choices are made, however, good governance is required to make sure that implementation is effective and consistent. The leadership of government should fight against corruption and work to ensure that oil revenues fuel development in the region and the nation at large. The government should concentrate on the water ports present here in the Niger Delta and make sure it's working effectively with this jobs will be created for the parties involved.

Transparency

When one cannot see how much is natural resources are extracted (since there are no data covering the extent of extraction) it is very easy to steal the resources derived that are meant for the generality of the people. But when this is monitored by opposition parties, journalists and volunteer groups, it is much harder to steal or to mismanage natural resources. Transparency will help the people to know how much is extracted, how much it is sold for and where the money goes. Being transparent with water management related issues will enable good work flow and a peaceful environment

Public Private Partnership (PPP).

There is need to encourage Public Private Partnership to boost the business and the lives of the locals. A productive and symbiotic relationship should be developed between the public and the private sector. Governments should take lead in creating basic infrastructure and an enabling environment for private sector participation in natural resources development. Deliberate actions are needed to create vehicles that will facilitate local participation in the development process. This involves community participation, especially women, in the planning and implementation of projects and programmes. It is only through consultation with the communities that their needs and aspirations can be realized.

Mainstreaming Gender Issues

Most often women are the ones who often face the social, cultural constraints that their decision making capacity in farming and natural resource management such as water. Empowering rural women is a multi-faceted task and must include several components such as access land, credit, extension, training in agriculture and natural resources management, low cost technologies and practices that ease their work burden and income generating activities outside agriculture



Figure 5: A Sole Basket Industry

Cooperatives

Women should form cooperatives for easy access to loans which could be used for modern fishing equipment, acquisition of speed boats for easy transportation of goods to urban areas and other benefits that will accrue to them as a group than as individuals.

The Environment

All activities take place in the environment. There is need to pay more attention to addressing the problem of environmental degradation caused in the process of all development activities. Firstly, practices leading to environmental degradation should be discontinued. Secondly, use of environment-friendly techniques and technologies should be promoted. Thirdly, new corporate behaviour based on improved performance, better and more inclusive relationships and engagement with stakeholders should be instituted through proper application environmental impact assessment.



Figure 6: Author with some staff on a trip to a Riverine Community.

4.0 RECOMMENDATIONS/CONCLUSION

4.1 Recommendations

- There is need for more research to be conducted on the importance of water and natural resources in the Nigerian economy.
- Environmental pollution, the decrease in biodiversity, deforestation of large areas of jungles and forests, excessive exploitation of marine and fish resources, show that the current capitalist system represents a threat to the existence of many non-renewable natural resources. It is imperative that governments take measures and that laws be enacted to address the current situation, and that people become aware of the importance of this topic in order to change certain attitudes or lifestyles that have negative environmental consequences.
- The people of the region should look 'Beyond oil', the Refineries must be made to work by the state, because of the numerous investment opportunities in the downstream sector of petroleum Refining. The operation of the Refineries and the advantages thereof would ensure that many industries that would use the feedstock from the Refineries as raw materials would come on stream. This would go a long way to meet the needs of the present generation without compromising that of the generation yet unborn.

- A proper management of the natural resources of the region would have made oil irrelevant in the scheme of things in the region, given effective leadership in governance. For instance many of the leadership in the region do not know that the Silica-Sand which abound in the coast contain 90 per cent silica, about 8 per cent silt and 2 per cent mud. This is the raw material for glass and high temperature tubes (Tebekaemi, 1982:63).
- All actions identified in the Dublin Conference Report require well-trained and qualified personnel. Countries should identify, as part of national development plans, training needs for water-resources assessment and management, and take steps internally and, if necessary with technical co-operation agencies, to provide the required training, and working conditions which help to retain the trained personnel.
- Governments must also assess their capacity to equip their water and other specialists to implement the full range of activities for integrated water-resources management. This requires provision of an enabling environment in terms of institutional and legal arrangements, including those for effective water-demand management.
- Raising awareness is a vital part of a participatory approach to natural resources management. Information, education and communication support programmes must be an integral part of the development process.

4.2 Conclusion

Before the promulgation of the Land Use Act of 1978, Land was held in trust by the traditional rulers, With the advent of the Land Use Act of 1978, all forms of ownership of land were extinguished and the Act vested all the land in every State of Nigeria in the Governor of that State who shall hold such land in trust and administer it for the use and common benefit of all Nigerians. Laws are instituted to better man's status and by extension make his environment worth living. Legislations could be further introduced to check certain excesses that are deemed inimical or counter-productive to human coexistence. Such legislation must be devoid of sentiments and should be for the collective good of the society.

Many resource-rich countries have not lived up to their development potential due to the "resource curse" of the negative effect of natural resources on the economy, society and politics in these nations , Nigeria is not an exception. The management of crude oil as a natural resource could be done in a manner, which does not constitute a problem in the Niger-Delta region. A credible leadership in Nigeria would ensure that the Refineries are in operation to refine crude for domestic consumption. The by-product of the processes would become raw materials for other subsidiary industries that would not only create employment in the region and the entire Nigeria, but would diversify the economy to reduce over dependence on crude oil and achieve sustainable Development in the Niger Delta and in Nigeria at large.

In the developing world, the lack of proper water and sanitation infrastructure constricts economic growth where growth is needed most. Water resources are

essential assets, and effectively managing and leveraging them is a shared economic responsibility of business and industry, farms and factories, individuals and communities. Water resource management is an urgent and growing need. When water resources are unhealthy or unreliable, businesses cannot grow and cannot hire or sustain a workforce. Local commerce suffers, incomes decline, tax revenues fall. The effects are very real and they are felt immediately and acutely.

Sustainable management of natural resources is necessary to sustain the resources for future generation and current basic needs of the population. Reuse is a better practice because it can be done at household level with no expense of energy. It does not cause pollution and is an ecofriendly practice.

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