



Reimagining Development In Niger Delta

Beyond Oil

Re-imagining Development in the Niger Delta

Health of Mother Earth Foundation (HOMEF)

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Beyond Oil: Reimagining Development in the Niger Delta

is a report by Health of Mother Earth Foundation (HOMEF)

Researchers

Ken Henshaw Tijah Bolton Akpan Ekpere Prince Uzo Ogbonnaya Bonny Akaeze Peter Adi

Authors

Ken Henshaw (Research)
Ify Malo (Renewable Energy)
Irikefe V. Dafe (Sustainable biodiversity)
Nnimmo Bassey

Pictures

Ken Henshaw Betty Abah Nnimmo Bassey

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Health of Mother Earth Foundation (HOMEF) | Int'l Office: 214 Uselu-Lagos Road, P.O.Box 10577 | Ugbowo, Benin City, Nigeria

Office: Tel +234 906 975 6927 & +234 817 370 6095

South Sudan office: Block 01, Plot 134, Juba Na Bari, Juba. Tel: +211 955 692 021; +211 95 461

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www.homef.org | twitter: @Health_Earth | Skype: HOMEF Instigator

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List of Abbreviations

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CBD Convention on Biological Diversity

CBN Central Bank of Nigeria

DR Congo
DRE
Decentralized Renewable Energy
EBM
Ecosystem Based Management

ERA/FoEN Environmental Rights Action/Friends of the Earth Nigeria

FMENV Federal Ministry of Environment

GEF SEC Global Environment Facility Secretariat HOMEF Health of Mother Earth Foundation

ICT Information and Communication Technology

IFS Integrated Farmers Scheme
IOCs International Oil Companies
MNDA Ministry of Niger Delta Affairs

MW Megawatts

NAEE National Association of Energy Economist

NBS National Bureau of Statistics

NDDC Niger Delta Development Commission NDES Niger Delta Environmental Survey NGOs Non-Governmental Organizations

OPEC Organization of Petroleum Exporting Countries

PAs Protected Areas
PAYG Pay-as-you-go

PTDF Petroleum Technology Development Fund RSSDA Rivers State Sustainable Development Agency

SDN Stakeholder Democracy Network SMSE Small and Medium Scale Enterprises

TICPI Transparency International Corruption Perception Index

UNDP-GEF United Nation Development Programme-Global Environmental

Facility

UNEP United Nations Environment Programme
UNEP United Nations Environment Programme

UNESCO United Nations Educational, Scientific and Cultural Organization

UNICEF United Nations Children's Fund

WWF World Wildlife Fund

BEYOND OIL

Executive Summary

he Niger Delta has for long been referred to as a region that is highly neglected. The region has also gained the dubious fame of being one of the top ten most polluted places on Earth. The state of neglect is compounded by years of pollution from oil and gas exploitation. Other records held by the region include the fact of its having the third largest mangrove forests in the world and the largest wetland in Africa.

There have been efforts made to address the question of neglect of the Niger Delta since the Willink Commission Report of 1958¹ highlighted the fact and etched it in history. These efforts led to the creation of the Niger Delta Development Board (1960), the Oil Minerals Areas Producing Development Commission (1992), Niger Delta Development Commission (2000) and the Ministry of Niger Delta Affairs (2008).²

Its rich sustainable biodiversity while being globally acknowledged has been largely ignored as attention has been focused on petroleum resource exploitation. Oil has been explored and commercially extracted in the Niger Delta since 1958. The processes of exploration, extraction, transportation and refining of crude oil in the region has resulted in more than 300 spills annually. The case of extreme pollution has been highlighted at Ogoni in the environmental assessment conducted by the United Nations Environment Programme (UNEP).³ Generally, pollution from oil spills, gas flares and dumping of toxic wastes have resulted in severe health consequences- including cancers, birth defects and various breathing diseases. The region is also said to have the lowest life expectancy in the nation.

Current efforts by government, such as the clean-up of the Ogoni environment and the future coverage of the entire Niger Delta provides a possibility of massive economic upturn in terms of skills development and engagement in the remediation processes. However, seeing the clean-up as economic opportunities has its own problematic as it must be coupled with a zero-tolerance of future pollutions.

Climate change impacts are already taking a toll on the region through floods, coastal erosion and the resultant loss of infrastructure, livelihoods and sustainable biodiversity.

While the imperatives of development and economic diversification of the Niger Delta has been recognised, the dearth of infrastructure and social nets, as well as security challenges, have made attainment of the goals rather tenuous and difficult. Moreover, the solutions proffered have essentially been wrapped around political expediency and have not yielded the desired results.

This report highlights efforts that have been made by governments in the Niger Delta by way of economic empowerment and diversification efforts. The idea has been to move the states from the sole dependence on rents from petroleum resources. For close to two decades, the state

governments have embarked on a plethora of these empowerment and diversification schemes with particular focus on the youths through skills acquisition and funding for kicking off business enterprise. This report interrogates some of these schemes and the results show why they have been largely unsuccessful.

After presenting these tentative efforts, Beyond Oil dwells on two key routes to re-imagining the development paths for the region. These are found in the sections examining how renewable energy can be the anchor on which to develop the region.

The Niger Delta, with all its oil and gas resources, has very limited energy penetration. This objective situation subverts creativity, innovation and productivity. Renewables present the possibility of modern energy access without dependence on national grids that are difficult to extend to all parts of a region that is largely riverine and with widely dispersed communities and settlements.

The second and main anchor for development of the Niger is found in the interrogation of the concept of development itself. With a people who are largely dependent on environmental resources, the degradation of the environment by decades of oil and gas pollution effectively displaces them from their natural skills as farmers and fisher folks. The situation also attenuates the applicability of cultural norms and indigenous knowledge developed by interactions with their complex ecological resources by which the people had maintained the ecological balance of the region and thereby benefitted economically and met their medicinal and food needs.

With fossil fuels driving climate change and surely entering its last phases as a dominant energy source, the development of the Niger Delta requires urgent re-imagination. This will happen with a sober reflection on why throwing money at problems may have been politically expedient but have compounded rather than solve those problems. It will also happen when we accept the wisdom that development must work in sync with Nature and not against her. The route to bringing into fore truly sustainable development of the Niger Delta will come through the recognition and development of indigenous knowledge, clean-up and restoration of the region and a development of a pathway based on sustainable biodiversity management that maintains the full ecological integrity of the region.

Foreword

Living without Oil The only option

Alberto Acosta*

The Niger Delta, a habitat of great biodiversity in its mangroves and wetlands, is known as one of the most polluted places in the world. What is less known is the resistance of their communities and, the alternative proposals that emerge from that region. It may be a surprise to some, but revolutionary proposals such as the Yasuní-ITT Initiative, designed to leave oil in the ground of the Ecuadorian Amazon, actually emerged from discussions held at the beginning of the millennium in Nigeria. And since then, the idea has spread throughout the world - the protection of the Lofoten Islands in Norway, the San Andrés and Providencia Islands in Colombia, Lanzarote in the Canary Islands or the Madidi in Bolivia. It resonates in efforts to prevent the exploitation of oil, and to stop fracking in several European countries, and even in the USA. The idea-s also inspires efforts to block the expansion of mining in Mexico, India and Germany.

The voracity of capital creates runaway extractivism -a destruction that needs to be stopped urgently. If we want to avoid an even bigger environmental catastrophe than exists today, the International Energy Agency itself – the club of richest countries dependent on fossil fuel consumption - considers it essential not to extract at least 80% of all known reserves of fossil fuels including oil, gas and coal. We also know that 70-95% of CO₂ emissions should be reduced, according to the Intergovernmental Panel on Climate Change. Unfortunately, those messages seem to fall on deaf political ears.

In spite of these and other scientific warnings, appropriate measures are still not taken. International agreements on global environmental problems do not even challenge the "religion" of economic growth, the cornerstone of extractivism. In establishment circles, there is no questioning of world trade, which encourages multiple socio-environmental problems. The international system of financial speculation mercilessly accelerates economic flows - even forcing extractivism into futures markers, overcoming the resilience of the Earth. There is little commitment to technologies that favour mitigation and adaptation to climate change impacts for the benefit of impoverished countries. Meanwhile, highly polluting sectors, such as civil aviation and maritime transport, which account for a tenth of global emissions, are exempt from any commitment.

Far from reflecting a civilizing "great transformation" - as conceived in the mid-twentieth century by Karl Polanyi, the projects that see greater expansion in recent decades are those that market and financialize nature. Above all, industrialised countries promote a so-called "green economy," all too uncritically-received by countries in the periphery. The market has expanded its "invisible

^{*}Alberto Acosta is an Ecuadorian Economist. He was former Minister of Energy and Mines in Ecuador, former President of the Constituent Assembly, and former candidate to the Presidency of the Republic of Ecuador.

hand" by commodifying air and water, and even on natural processes and functions such as "environmental services". Thus, to balance and compensate anthropogenic emissions, countries use profitable market mechanisms involving forests or oceans; or geoengineering, carbon capture and storage methods, among others.

On the other hand, ecosystem processes, commoditized as "environmental services", create new patrimonial rights that are converted into titles of credit or property for which new markets must be created to facilitate their commercialization. And new technologies tend to meet these requirements. Most disturbing is the transformation of the atmosphere into a commodity designed, regulated and managed by the very same actors responsible for its pollution in the climate crisis. And moreover, government subsidies are devised to encourage this corporate scam.

Climate privatization began many years ago in the first global neoliberal wave promoted by the World Bank, the IMF, the World Trade Organization and complementary treaties, such as Free Trade Agreements. Likewise, progressive governments failed to counter these developments. Such governments, often drowning in their ambition for power, prisoners of extractivism and victims of their own corruption, ended up endorsing the capitalist modernization pathway. These dead ends condemn any option for a decent life for humanity and for Mother Earth.

In short, serious environmental damage caused in the name of 'modernity,-development and progress, the bastardization of concepts such as "sustainable development", the persistence of false solutions such as the "green economy", make it necessary to look no longer at alternative developments, but rather at "alternatives to development" and indeed alternatives to capitalist society. Such limitations should not lead to catastrophic conclusions. In various parts of the world, and in the Niger Delta itself, there are communities that re-imagine their lives over and over again. They have understood that they cannot follow the mantra of development and progress imposed by colonial and neo-colonial invasions, whether military or conceptual. And from these readings many communities give concrete answers honed from their own daily life in response to their demands of life.

Breaking with the false promises of oil, people's alternatives emerge in this region of Africa, such as training, learning and re-learning programs; breeding poultry and chickens; integrated sustainable farms; community microcredit schemes; economic diversification programs; banana plantations without chemicals or transgenics; fish farms; own telecommunication and transport systems; communal farms to produce rice; use of renewable resources ... Such projects - described in this publication - are part of the Niger Delta strategic management of biodiversity.

They are practical hands-on answers to a decent life for many communities but, in addition, they are projected into the future, because they possess a strategic horizon of action. These alternatives are based on an ethical position: an assumption that a human being must not only take care of him or herself, but of others as well. A person is understood to become a person by looking through the eyes of others; thus, human beings have to act with the consciousness of being interconnected with the rest of humanity and other living beings. Such a way of life involves caring directly for the environment and working for life in harmony with Mother Earth.

This effort demands, as these pages point out, a massive awareness-raising and a willingness to promote the necessary transitions. These transitions demand both wide participation and a capacity for eliminating potential conflicts at the same time. Such transformation projects should be deployed with a strategic vision and coherent political action before the civilisational crisis of capitalism destroys the Earth, our home.

Foreword

Breaking from Oil is Inevitable

Prof. Johnson A. Ekpere*

It is with special pleasure and great delight that I introduce this unique and excellent work of experts superintendent over by a world acclaimed advocate of "protect our planet" on "Beyond Oil: Reimaging Development in the Niger Delta". This is a study whose time has come and appropriately funded by the United Nations Development Programme (UNDP). At a time when the world price of crude oil has plummeted to a low level and the highest consumers of the product are contemplating electric cars by 2030, it is only wise for oil producing countries, (Nigeria being one) to look beyond oil. It is in this context that Nigeria's policy thrust for economic diversification through agriculture and human resource development, skills acquisition and empowerment is important.

However, the predictive conversation on Re-imaging Development in the Niger Delta Beyond Oil, should and ought to be undertaken with a hindsight assessment of the Niger Delta with oil. The Niger Delta sub-region of Nigeria was known for its lush vegetation, large biological diversity (plants and animals), including genetic diversity and other abundant natural resources. The discovery of crude oil in the 1950s and commercial production and export of the commodity in 1958 was seen as a blessing because it was expected to provide the needed financial resource for national development in general and the Niger Delta in particular. However, this was not to be, due to a combination of factors. The Niger Delta produced large quantities of crude oil and the nation earned vast revenues which was envisaged would drive the economy and growth. These earnings were barely applied directly or indirectly to the development problems of the Niger Delta. Instead "with oil" the Niger Delta experienced steady pollution of its waterways, underground water, degradation and destruction of its vegetation, threat to, and loss of, its biodiversity, devastation of its agricultural land and fishing grounds and disastrous impact on the welfare and livelihood of the population, resulting in aggravated poverty. Over the years, neither the government nor the oil and gas companies have done enough to mitigate the human and environmental problems associated with crude oil production.

It is against this background, the objective realities of the technological advancement in alternatives to fossil fuel, the volatility of crude oil price on the world market and its projected impact on the national revenue base that the concept of Niger Delta Beyond Oil has become significant. Breaking from oil is inevitable to keep hope alive in the Niger Delta.

The case studies presented in this document provide an assessment of the extent to which selected intervention projects planned and implemented have addressed the problems

*Johnson A.Ekpere is a retired professor, University of Ibadan, Ibadan, Nigeria and one of Africa's foremost biodiversity experts. He served as Executive Secretary, Organization of African Unity (now African Union), Scientific, Technical and Research Commission for several years. He is now an Independent Consultant in Agriculture and Rural Development.

created during crude oil production and how lessons learned could be applied to the process of breaking from oil and re-imagining development of the Niger Delta without oil. The case studies demonstrate the intentions of government to intervene in the sub-region.

The modality for action was through agricultural loans/production, skill acquisition and economic diversification. The essence was to restore the dignity of the environment and quality of life of the people. The projects were small scale in nature with the option of upscaling, which were mostly never undertaken. Even though the projects achieved some measure of success, they were all basically not sustainable for various reasons.

The suggestions emanating from the comprehensive case studies posit three strategic intervention action plans to possibly unlock the potential which the pilot projects present and could meaningfully develop the Niger Delta.

- Research
- · Renewable energy and
- · Sustainable biodiversity management

The study has enunciated a large number of concepts derived from international sources and conventions which though applicable to the Niger Delta situation need to be urgently domesticated locally through adaptive research. Secondly, existing information on oil and gas industry in the Niger Delta needs to be accessed and aggregated into a Niger Delta Research and Development Centre to enable evidence based planning and action for development.

The study suggests access to affordable clean energy as a major determinant for effective development. We agree. It is key to industrial transformation and will provide the needed linkage with people-oriented agribusiness and agro-processing, job and wealth creation in the Niger Delta. Some of the Niger Delta States have subscribed to the idea of "Green Economy" as a way out of the consequence of an inadequately regulated oil and gas sector and its negative impact. The idea of renewable energy is consistent with emerging climate change policies and international investment interest. Consequently, resort to clean and renewable energy will complement the Ogoni (and Niger Delta) clean — up effort and reduce the probability of subsequent re pollution from crude oil. Also, given the hostile and difficult riverine configuration of the Niger Delta in relation to existing power grid infrastructure, widely dispersed communities and settlements, renewable energy option is clearly more attractive.

Most communities and settlements in the Niger Delta depend on biodiversity and natural resources for their livelihood. The study observed the severe habitat loss and fragmentation occasioned by oil and gas exploration and production, the decline in biodiversity as well as threat to sustainable livelihoods of rural communities and postulated that "Niger Delta without Oil" should invest in biodiversity conservation, effective and sustainable utilization of biodiversity and management. This will not only ensure full benefit for the present generation but enable availability for the future.

While the suggested options for re-imagining the Niger Delta for development may seem plausible, the ensuing programme and strategy should be implemented with due consideration for human resource development, science, technology and innovation safety net to stabilize the ecosystem against future problems. It is important to recognize that the transition to a non-oil economy will present its own challenges which need to be identified, understood and appropriately addressed.

This report provides and appropriate platform for a takeoff in the right direction.



The Niger Delta: Context, Culture and Coloration

The region referred to as the Niger Delta has at least two major definitions. First is the geographical and ecological focused definition which emphasizes the physical outlay of the region and its relationship to the defining Niger River. This more historical definition places the Niger Delta region strictly on the Bight of Biafra, on the Gulf of Guinea in the Atlantic Ocean⁴, covering more than 16093.44 square kilometres with an estimated shoreline of 321 kilometres.⁵

The second and more conventional definition of the Niger Delta emphasises the resource and political commonalities among a collection of states. Within this definition is the accepted notion that the Niger Delta refers to states in the South of Nigeria with significant hydro carbon deposits that are being exploited or have been exploited. Going by this conventional definition, the region consists of 9 Southern states in Nigeria, bordered to the South by the Atlantic Ocean and to the East by Cameroon. It occupies a total surface area of about 112,110 square kilometres which represents roughly 12% share of Nigeria's total area of 923,768 square kilometres; it is occupied by over 40 million persons.



The Niger Delta is one of the most sensitive ecosystems in the world. It sits on 5 distinct ecological zones spread across the region; coastal barrier islands, mangrove swamp forests, freshwater swamps, lowland rainforests and a high altitude Montane zone lying at the eastern end of the region around Obudu in Cross River State. The Niger Delta which is home to the largest mangrove forests in Africa and the third largest in the world, is also tremendously bestowed with one of the richest and most robust sustainable biodiversity on earth. The ability of the region's ecosystem to support an assortment of flora and fauna species makes

it interesting as it is important.

Over 40 ethnic groups and nationalities, speaking hundreds of languages and dialects live in the Niger Delta region. They include the Ikwerres, Etches, Ekpeyes, Ogbas, Engennes, Obolos, Isoko, Nembes, Efiks, Ijaws, Okrikans, Kalabaris, Urhobos, Itsekiris, Igbos, Ika-Igbos, Ndoni, Oron, Ibeno, Ibibios, Ogonis, etc. Between them is a rich heritage of valuable cultural practices reflecting complex and effective political and economic governance structures. From their mode of dressing to the system of kinship and worship, the nationalities of the Niger Delta created systems that are effective in

managing their relationships and providing frameworks for coexistence and growth. The numerous ethnic nationalities who call the region home have for centuries established collaborations in trade, travels and cultural exchanges. Leveraging on the ecosystem they occupy, the people engaged in farming, fishing, crafts, processing and trading. Indeed, when the first Europeans arrived the shores of the Delta in the 15th Century, what they met were organised and productive Kingdoms that were trading with one another on the basis of mutual exchange and respect.⁶ The rising demand for locally processed palm oil as lubricant for the factory machines that heralded the European Industrial Revolution, is an example of mutually beneficial value chain economy that created wealth and opportunities across the region. Unfortunately, recent history has tended to present trade with Europe as the stimulus for the formation of city states in the Niger Delta. Nothing is farther from the truth. Long distance trade activities in agricultural products, fish, salt etc. existed between the North and South, and between the East and West long before contact with Europeans.

Trade with Europe however contributed to the emergence of powerful Niger Delta Kings who combined political rule with astute prowess in business. Notable among this breed are Nana of Itsekiri, Eyo of Old Calabar and Jaja of Opobo. 7 These Kings expanded their business empires to scales unprecedented at the time. Thousands of people were employed at different levels of the business value chain while the Kings gained exceptional wealth and power. So powerful were these kings that they sought to compete as equals on the business turf with Europeans. For instance, in order to break the monopoly of European middlemen who controlled trade around the Calabar River, King Eyo of Old Calabar in 1857 made an attempt to send a vessel of goods directly to England.⁸ This attempt was botched by

English traders who feared that such direct line of business would render the era of European middlemen redundant and ensure even greater wealth for African traders. With the support of the British authority, King Eyo was forced to sign an undertaking effectively prohibiting him from henceforth seeking direct access to European markets. Later, King Jaja of Opobo again tried to break the European monopoly of the trade. In the 1880s, he organised a shipment of Palm oil to Birmingham in response to a European conspiracy to fix the price of the product. This and other attempts by African businessmen to assert themselves and grow an indigenous capitalist class were routinely crushed. The Naval power of the British empire was deployed against the Kings of the Niger Delta to assert European dominance of trade⁹. In 1895 Akassa was burnt down by British forces in an oil palm trade war to halt direct access by local merchants to European markets. King Jaja of Opobo and King Nana of Itsekiri were dethroned and exiled.

Their era was replaced with direct British imperialist dominance of all trade. The Royal Niger Company was established and awarded a British royal charter. Prices of African produce were deliberately reduced while the cost of procuring British products were increased. The economic traction in the Niger Delta generated by the agricultural produce trade was reversed. Vast populations that had prospered in trade had to seek employment elsewhere; some joined the ranks of low level 'white collar' jobs created by the need to service the growing European administrative machinery, others returned to subsistence fishing and farming. Cities which had grown in size and population on account of business activities stagnated and declined¹⁰. In its place, the Niger Delta was amalgamated alongside the Northern and Southern protectorates and its people turned into subjects of the English crown.

The Strangulation Of Oil

In the early 1900s, exploration for crude oil had already started in the Niger Delta area. A German business firm operating under the name 'Nigeria Bitumen Company' and another called British Colonial Petroleum, were actively exploring for crude oil in present day Ondo state in western Nigeria and other parts of the Niger Delta. In 1938, a company named Shell D' Arcy was given oil exploration license by the colonial government which effectively granted them leave to probe the entire country for crude oil¹¹. By 1956, the Company had successfully drilled its first oil well in Oloibiri, in present day Bayelsa state in the Niger Delta region. That same year, Shell D'Arcy changed its name to Shell-BP Petroleum Development Company of Nigeria Limited. In a short space of two years, more oil drilling sites had been opened at Afam, Bonu, Ebubu, etc., all in the Niger Delta. In 1958 Nigeria joined the league oil exporting nations with its first shipment.

This first discovery with a daily production capacity of 5,100 barrels was the beginning of an unprecedented penetration of every nook and cranny of the Niger Delta. In a few years, many other international oil companies had arrived hundreds of communities in the region, each brandishing permits and licenses that effectively allowed them to drill for oil in ancestral lands, farmlands, fishing ports and anywhere science told them the black gold could be found. With the entry of firms like Agip, Mobil, Safrap (now Elf), Texaco and Chevron, etc. petroleum exploration also moved offshore to ocean terminals.

Currently, the Niger Delta region consists of roughly 13,329 settlements of which only 98 can be categorised as urban. The majority are structured as scattered rural villages typically cut off from amenities and basic infrastructures¹². Within this space also

exists over 800 oil—field communities with over 900 active oil wells and thousands of other oil production facilities 13.

On account of the oil produced from the Niger Delta region, Nigeria currently ranks between the 6th and 12th largest exporter of crude oil globally (depending largely on its unstable oil production outputs), with an output of up to 2.5 million barrels daily. The region also accounts for a significant ratio of global gas output with proven reserves of 192 trillion cubic feet. The government of Nigeria with about 170 million people to carter for, depends almost exclusively on earnings from the sale of crude oil. It relies on the oil and gas for up to 90% of export income and 75% of all government revenues.

While Nigeria's dependence on the oil and gas revenues increased as the years progressed, the viability of other sectors of the economy declined significantly. In the 1960s, 65% - 70% of overall export from Nigeria was from the agricultural sector. As at the 1970s, it had declined to about 40%; by the 1990s it accounted for just 2% of exports. The same is true of other sectors. By the late 1990s, Nigeria's emerging manufacturing sector had all but collapsed; vehicle assembly plants, tyre manufacturing companies, textile factories, etc. had folded up leaving many unemployed. In its place, a massive import market for almost every product which were previously manufactured locally, grew and thrives.

Today, despite increased oil and gas wealth, Nigeria fares miserably on all key global indicators. In the last Human Development Index released by the United Nations Development Programme, Nigeria ranked 152 amongst the 193 United Nations member states. The Fund for Peace's Fragile States Index (formerly called the Failed States

Index) ranks Nigeria the 13th least stable country in the world, out of 178 surveyed. It is ranked in the neighbourhood of countries like South Sudan, Somalia, Central African Republic, Sudan, DR Congo, Guinea and Zimbabwe. 15 The index takes into consideration issues like grievances in the country, uneven economic development, poverty and economic decline.

According to UNICEF, Nigeria still has 10.5 million out-of-school children, this is the highest number for any country in the world¹⁶. Nigeria also records maternal death rates of 704 -1000 deaths per 100,000 women. This is one of the highest in the world.

The World Bank's Doing Business ranking indicates that Nigeria may be one of the worst places on earth to start and pursue a business. It is ranked 169 out of 189 countries 20 points away from the bottom.¹⁷

By all indications, Nigeria is a classical reflection of the resource course. Rather than develop the country and its people,

hydrocarbon revenues have instead fuelled mismanagement, corruption and conflict. In the latest Transparency International Corruption Perception Index for 2016, Nigeria emerged one of the most corrupt countries in the world ranking 136 with just 28 points from a possible 100.18 Corruption in Nigeria's oil sector is alarming. Out of about 2.25 million barrels of crude oil produced daily in 2013, it is believed that around 400,000 barrels are stolen daily. 19 In financial terms, this amounted to a loss of \$8 billion in 2013 alone. Beyond this incredible theft, the financial accruals that finally get to the government faces equally alarming levels of theft. From budget scams, contract inflation, payments to nonexistent workers, project abandonment, etc., the full values of Nigeria's oil revenues hardly trickle down to the majority of its people. Indeed, according to Nigeria's National Bureau of Statistics, about 112 million Nigerians representing 67.1% of the population (167 million) currently live below the poverty level,20 making Nigerians some of the poorest people in the world.



The Niger Delta fares even worse



The abundance of oil and gas wealth that accrues to states of the Niger Delta region ought to mean an attendant improvement in the welfare of their citizens, better infrastructures, better educational standards, better healthcare, etc. This has not been the case. Despite the receipt of more revenues which accrues from the sale of oil, coupled with other statutory allocations, states in the region have not managed to lift their people out of poverty and destitution. A long history of

mismanagement, fiat and corruption has made states of the region among the least developed in the country. In terms of infrastructure and other development indicators, Niger Delta states do not fare significantly better than others, despite standing on far more impressive fiscal grounds. Beyond the statutory allocations which states and local government areas of Nigeria receive from the federation account, they also receive additional 13% percent share of revenues emanating from oil

extracted from their domains. This fact has made these states some of the highest earners from the federation account. Additionally, the region benefits from a specialised federal government agency dedicated to its development - the Niger Delta Development Commission, with an annual budget averaging N250 billion, and a Federal Ministry tasked exclusively with the affairs of the region- the Ministry of Niger Delta Affairs, with an average annual budget of N50 billion. The vast resources of the region have not translated into development, but has fuelled the rise of an elite cadres of 'millionaires' and 'billionaires' who are suspected to have cornered the region's wealth.

In the late 1990s, the poverty and destitution which this dearth of development engendered, festered and provided the reason (or excuse) for regional armed crises characterised by kidnapping and other forms of brigandage which saw the region driven farther below the poverty line. The region tilted on the periphery of outright anarchy. Political governance was weakened, economic activity was grounded to a halt and Nigeria's oil production reduced far below its capacity. The rise of what is now termed 'militancy' was both a reason and outcome of the dearth of development in the Niger Delta region.

In many instances, social indicators- bad as they are in Nigeria- are even worse in the Niger Delta. For instance, while life expectancy in Nigeria is 53²¹ years, in the Niger Delta it averages around 40 years.²² While 67.1% of Nigerians currently live below the poverty line, in the Niger Delta, 88% of rural dwellers live below the poverty line.²³ Other indicators follow similar trends.

The problems of the region have been exacerbated by activities associated with

crude oil extraction. One instance is the economically wasteful and environmentally hazardous practice of gas flaring. Of the 3.5billion cubic feet of associated gas estimated to be produced annually in Nigeria, 2.5billion cubic feet (or 70%) valued at about \$2.5 billion is burnt off in gas flares. 24 The real losers in this practice have been Niger Delta communities who are exposed to adverse health impacts and loss of livelihoods arising from the practice. Another major source of concern is the uniquely destructive phenomenon of oil pollution. The transport of crude oil from their points of extraction to the desired destinations means that thousands of kilometres of pipes are buried beneath the lands, swamps and rivers of the Niger Delta. Sometimes due to age or human activity, the pipes rupture releasing oil that pollute farmlands and water bodies, leaving a trail of destroyed ecosystem, wildlife, aquatic life and livelihoods. It is estimated that as many as 13 million barrels of oil has been spilled into the Niger Delta over the last decades,.25 Recently, the scale of pollution was captured by the United Nations Environment Programme, UNEP.

After many years of localised and international campaigns by thousands of climate groups and activists, the Federal Government in 2007 invited the United Nations Environment Programme (UNEP) to carry out a scientific assessment of the impact of oil pollution on parts of the Ogoni environment. UNEP completed the assignment and submitted its report to the Nigerian government on August 4th, 2011. The report indicated massive soil and water contamination in Ogoniland, which has significantly compromised sources of livelihood and was slowly poisoning the inhabitants. So alarmed was UNEP about the findings that it recommended that inhabitants of the area immediately stop

using water from all their traditional sources, while the government was to immediately commence a clean-up exercise which could take up to thirty years, and amount to the biggest soil and water remediation ever embarked on. While this assessment by UNEP was carried out on selected sites in Ogoniland, it is generally believed that the level of pollution is similar-or worse-in other oil bearing areas of the Niger Delta of which Ogoniland is merely a small fraction.

Pollution, environmental degradation and the inability of the environment to continue to support life, is the most visible and direct impact of oil exploitation. In all, the plethora of problems associated with crude oil in the Niger Delta has resulted in an alarming loss of traditional livelihood, leaving in its thread alarming levels of poverty, destitution and conflict.

Governments in the Niger Delta have increasingly expressed worry over the environmental costs of oil exploitation which is often presented as a necessary by-product of crude earnings. Unfortunately, they have not been able to take action to stop the continued destruction of their environment as they fear this may lead to a decline of their revenues from oil. Niger Delta states remain heavily reliant on oil determined revenues to meet their financial obligations. However, in recent times, states of the region have begun giving serious thought to addressing the economic and infrastructural challenges which confronts the region, utilising development models that do not rely on fossil revenues. Discourse has become common about creating an economy in the region beyond the volatility, uncertainty and destruction which oil brings, with talks about manufacturing, industrial scale agriculture and technological innovations. Several efforts have been invested in diversifying the economy of Niger Delta states through establishing income earning businesses away from the oil sector; and building human capital and opportunities for the people of the region to earn a reasonable living and thrive away from the oil sector- as it was in precolonial times.

While the Niger Delta has been defined in political, regional or oil production terms and with varied number of states, this work focuses on four Niger Delta states namely, Akwa Ibom State, Bayelsa State, Delta State and Rivers State.



States of the oil rich Niger Delta region have since come to the obvious reality that their future lies in definitively extricating their economies from dependence on hydrocarbon revenues. Although civil society groups, especially the Environmental Rights Action/Friends of the Earth Nigeria (ERA/FoEN) had been campaigning for a post petroleum Nigeria²⁶ the shift in official circles became obvious when Delta State began to host an annual conference tagged Delta Beyond Oil. The clamour for change became strident in 2014 when the last boom in crude oil prices came to an end and prices crashed to an all-time low, dropping from above \$100 to less than \$40 per barrel. Barely months into the oil revenue slump, states of the Niger Delta could no longer meet their basic financial obligations including salary payments. They resorted to borrowing from different sources including local banks, and approached the Federal Government for financial bailout.

The huge debts gradually but effectively overwhelmed the economy of many states, with many owing salaries for as much as 9 months and much longer for pension payments.²⁷ As at December 2014, Delta States had a debt of ₩211billion, Cross River had ₩107billion while Rivers, Bayelsa and Akwa Ibom State's indebtedness stood at ₩91.7billion, ₩91.6billion and ₩81.7billion respectively.²⁸²⁹

Are Economic Empowerment Schemes Empowering People of the Niger Delta?

Suddenly, the governments appeared to have reached a conclusion that there is no alternative to diversifying the economy of the states to more stable sources of revenues, at least those sources which they can control, while midwifing a regime of entrepreneurship capable of engaging millions of unemployed, and growing a vibrant private sector led economy. Like clockwork, all the states in the region have created schemes targeting these objectives. What the states have not considered was how they could leverage their ecological endowments as a fulcrum for sustainable development. It is important to examine at some depth the diverse efforts by the state governments to diversify the economy of their states. We will do that in this chapter and the two following ones. The case studies

and analyses are outcomes of field research conducted in the course of this study.

Indeed, on some counts, the statistics are worse for Niger Delta states. Despite several billions of Naira spent on these schemes, Niger Delta states simply do not have more people employed, small businesses in the region do not have access to better capital, neither is the level of entrepreneurship more robust in states of the Niger Delta.

Why is this the case?

Understanding Stages of Intervention Delivery

hrough this research, four broad and vital stages have been identified in the process of delivering empowerment and economic diversification programmes in states of the Niger Delta. How the programmes perform at these key stages, often define the level of its success or otherwise. This table describes what these stages entail.

PHASE 1: Issue Context- At this stage, a detailed study is done to understand the problem which the intervention seeks to resolve or address. Questions that are asked include ones such as 'why does the issue occur,' What are the other manifestations of the issue, 'What factors drive or affect the issue,' It is imperative that the peculiar angle of the target population is surveyed and taken into consideration. At this stage, emphasis is on achieving clarity on the character and extent of the issue of concern. If an intervention fails in this regard, it ends up crafting wrong, narrow or inadequate solutions. It is important for this stage to be carried out in an objective manner, preferably by more than one team of experts.

PHASE 2: Intervention Design- At this stage, a response is crafted to address the issue that had been identified. Typically, a project construction or programme intervention is proposed. The questions that need to be addressed at this stage include:

- · How is the intervention logically linked to the issue of concern identified in Phase 1₦
- · Who are the target beneficiaries of intervention₦
- How does the intervention integrate with the culture and preoccupation of the target beneficiaries₦
- What are the specific and measurable goals and objectives of the intervention₦
- Where else has this been tried and worked₦

At the intervention design stage, it is of utmost importance that the target beneficiaries are routinely consulted and made a part of the process. This does not only ensure the input of valuable insights, but also guarantees that the targets buy into it and claim it as theirs. In designing the intervention, it is equally important that political influences are completely jettisoned. Where possible, the intervention should be tested through a pilot or an independent objective analysis.

PHASE 3: Intervention Execution- At this stage, the designed intervention is deployed. This phase involves choosing, training and providing inputs for the beneficiaries of an empowerment programme; purchasing or building facilities to provide additional revenue for the state, etc. Critical considerations at this stage are;

- Elimination of corruption
- · Transparency and accountability
- · Elimination of political influence
- · Pre-qualification

It is essential to have strong monitoring plans at this stage to ensure that the intervention is progressing in accordance to its set objectives.

PHASE 4: Intervention Evaluation- At this stage, based on careful monitoring of the intervention, feedbacks are generated, shortcomings are addressed and corrected and adjustments are made. This stage ensures that the impact of the intervention is maximized and sustained.

Between 2014 and 2015, the Central Bank of Nigeria, embarked on the distribution of agricultural loan facilities to states that were to be transferred to identified and documented farmers in the state. These loans were structured as an intervention to provide farmers with the needed capital which would enable them increase productivity, lower the inflation rate, lower the cost of agricultural products, ensure food sufficiency, 'generate surplus for export, increase Nigeria's foreign earnings as well as diversify its revenue base'.30 The programme was designed specifically to benefit existing farmers and agro-allied entrepreneurs who would have been previously known and vetted by the responsible government agencies as qualified farmers. The loans were to be repaid within a stipulated time based on a modest single digit interest rate.

When the loan facility was extended to Rivers state, it became an intervention programme for political friends. The strict pre-qualification and selection process established by the Central Bank was jettisoned in favour of another system which recognised leadership of the political party at the local government and ward levels as well as other party loyalists as criteria. Using a pre-established template for sharing political party benefits, opportunities for the nomination of farmers was traded as 'slots' based on seniority, rank and importance in the party; some got as much as 5 slots. Persons who were allocated these 'slots' kept them for themselves or shared them to whoever they deemed appropriate. Funds were duly released to these beneficiaries in line with the loan scheme. They were never repaid.

CONTEXT

The intervention correctly identified the lack of capital and input



as the key hindrance facing small holder farmers in rural areas. It diagnosed that if farmers are provided with financial facilities to procure these inputs, their productivity and income will improve.

DESIGN



The intervention failed to design a strategy of reaching

real farmers who most needed the facility. It became exposed to political influence and corruption.

EXECUTION



The pre-qualification process was tainted

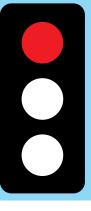
with political considerations and corruption. Access by real farmers was restricted.

EVALUATION



No feedback mechanism was structured into the

programme. No adjustments have been made to address the known challenges of the intervention.



In 2006, the government of Rivers state initiated a Skills Acquisition Programme, one of many such schemes created to address the employment challenges in the state. In the thinking of the government, the 'restiveness' of youths in the state is a related to low ratio of job engagement and the low skills set which youths possess. The theory of change of the government therefore was to fill the skills gap that mitigates against the employability of youths. The expectation was that this would significantly change the employment statistics of the state and also reduce the cases of youth 'restiveness'.

Opportunities for entry into the programmes was coordinated from the headquarters of the 23 local government areas with the various Chairpersons directly in charge of recruiting suitable candidates. According to a respondent, the key entry qualification was a 'willingness to be trained' and being an indigene of Rivers state. The scheme was however advertised strictly within the political circles of the Chairperson and other influential persons in the local government. Without consideration for any kind of process or pre-qualification, the training opportunities were shared equally among different Wards. Closeness to government officials at the local level either directly or through proxies became the access point to benefitting from the programme. For many of the beneficiaries, the logic of the government in setting up the programmes was completely lost and

replaced with the rationale of entitlement. They saw their entry into the programmes as reward for political services or for being 'loyal' to various political blocs.

One such beneficiary captures the underlying current in the programme succinctly. His understanding of the skills acquisition scheme was that the

government was 'sharing financial empowerment' to different constituencies and stakeholders. He became aware of the programme due to his political connection being a vocal community youth leader with strong links to the local government authority. No prior consultation, interview, prequalification or any other process of vetting was carried out. Recruitment into the scheme was done in such a way that it was distributed from a central pool of 'strong men' from the community who have the right influence and political leanings.

"A friend who is a community politician included my name to attend Niger Delta Development Commission supported skills acquisition programme. It was not good. The instructors were the ones discouraging participants. They would constantly remind us that this was all about the money and starter packs we will get at the end of the programmes. They even told us that no one could learn the skills we wanted to learn in such short time. Immediately after you write your names on the attendance sheet daily, you are allowed to leave. I was shortlisted to learn plumbing. I am not a plumber today".

Respondent

As expected, this process reflected in the skills

training proper, the travesty of the entire programme was obvious in the manner the training was delivered and the attention of the participants. Instructors and participants evolved an understanding that all that was required to 'get by' was for the participants to show up and sign an attendance sheet to indicate that the session held and that both parties met. A daily allowance was given to participants for this. Imparting any type of skill appeared not to have been of interest to the organisers and participants. At the end of the programme, there was an elaborate 'graduation' ceremony where participants were expected to demonstrate the skills they had acquired to the audience. Since most of them had not become proficient in any skill, professionals in the various fields were hired to complete the show, according to our respondents. They were provided needed equipment to start their chosen businesses. More than two thirds of participants quickly sold their start-up packs- sometimes back to the same suppliers who were lurking to repurchase them.

CONTEXT



While the context phase rightly identifies low skills set and unemployment as one of the major drivers of youth restiveness, it however treats it as the only driver. The result is that the ensuring intervention only partially captures the true state of affairs.

DESIGN



input of the target beneficiaries. Rather than obtain an understanding of what their preferred inclinations were, the intervention came with a ready-made list which participants had to choose from. Also, the intervention was contaminated by political influences. Rather than an empowerment scheme for those seeking opportunities, it became a scheme to strengthen politicians and their cohorts.

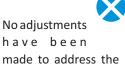
EXECUTION



The qualification

process was tainted with political considerations. Also, the politicisation of the process exposed it to corruption.

EVALUATION





known challenges of the intervention. There were no structures in place to monitor the implementation of the scheme.



In 2016, the Federal Government initiated the N-Power programme as a direct intervention to create jobs and empower young graduates. The government says the scheme targets to reach 500,000 persons in staggered phases. Participants are to be selected from a competitive online process and deployed to fill positions where gaps have been noticed principally in teaching and agriculture.

At the point of registration for N-Power, the online portal gives the impression of objectivity and impersonality. While this ensures that the recruitment process does not get hijacked, it however presents the problem of not being able to identify those who are truly qualified for the employment as opposed to those who already have jobs and are only seeking for greener pastures or added income. Indeed, a significant number of N-Power beneficiaries already have some kind of employment.

Available evidence from interviews indicate that the scheme may already be abused. Some beneficiaries posted to Schools as teachers, easily agree on a plan with the School heads to part with a share of their federal government stipend. In return the N-Power participants do not bother tending their assignment or even appearing in the schools to which they are posted. In doing this, no teacher gap is however created in some of the schools because there were no gaps that needed filling

in the first place. No system was put in place by the government to know if the schools N-Power participants were posted to really needed teachers.

N-Power addresses the challenge of youth unemployment by providing a structure for large scale and relevant work skills acquisition and development while linking its core and outcomes to fixing inadequate public services and stimulating the larger economy...The N-Power Volunteer Corp involves a massive deployment of 500,000 trained graduates who will assist to improve the inadequacies in our public services in education, health and civic education...N-Power will also be a platform for diversifying the economy. N-Power is preparing young Nigerians for a knowledge economy where, equipped with world-class skills and certification, they become innovators and movers in the domestic and global markets. Nigeria will have a pool of software developers, hardware service professionals, animators, graphic artists, building services professionals, artisans and others. N-Power also focuses on providing our non-graduates with relevant technical and business skills that enhance their work outlook and livelihood.

N-Power Website

http://www.npower.gov.ng/about-us.html

This is evident in Akwa Ibom state where N-Power beneficiaries were not deployed to places of work 7 months after being engaged

in the programmes. They were however paid for the duration.³¹

Evidence also suggests that N-Power participants posted to the agricultural sector in the states of study only make an occasional appearance per week at the farms.

As currently being implemented, the N-Power programme seems more inclined to ensure the payment of stipends to graduate youths more as a social welfare package than as a serious and well thought out plan to develop skill for employability and creating jobs.

CONTEXT

At the context phase, the government identifies unemployment as a major problem in the

country. It believes that this is mostly driven by the lack of employment opportunities. It however does not appropriately capture other factors driving unemployment in Nigeria, therefore, the N Power intervention addresses only one aspect of the problem.

DESIGN

At the design stage, the intervention does not adequately capture the input of target

beneficiaries. Interviews with N-Power beneficiaries shows that an overwhelming majority would rather be doing something else and not teaching or farming. To a large extent, the pursuit of N-Power is a response to campaign promises made by politicians of the ruling party.

EXECUTION

While the prequalification process was objective and neutral, it had no way of identifying

those who most needed the intervention. Many of the beneficiaries continue to hold other employments. Also there was no proper identification of the needs of the sectors these participants were posted to. This and other factors reduced the programme to a government welfare package rather than a job creation exercise.



Evaluation is currently being carried out on the programme. Hopefully it

will address challenges identified.



By 2016, the government of Akwa Ibom state had successfully restored and expanded its poultry and chicken hatchery, and achieved a weekly production capacity of 20,000 birds. Coming in the early days of a newly inaugurated government, this feat was expectedly a major reference point for the administration. The government immediately sought to extend this success to the empowerment of poultry farmers in the state. It developed an agricultural intervention scheme where it would provide day old chicks to poultry farmers, support them with the necessary vaccines and provide them feeds for the birds. It was expected that when the birds were sold, the government would recover its capital investment while the farmer would retain the profit . The State Ministry of Agriculture reckoned that this free intervention would stimulate and encourage poultry farming. However, this was not to be the case.

The Ministry produced a list of farmers which was seriously flawed as it included many people who did not own poultry farms and had no intention to establish any. For the overwhelming majority, the scheme was another government 'empowerment' scheme, marking aa systemic leakage point. It was 'government money' which they felt entitled to and there was no intention to repay. Some sold the chicks immediately they got them, others abandoned their established farms and lost the birds and yet others grew the birds to size, sold them but simply refused to repay the investment.

The poultry empowerment programme failed. The story of one of the beneficiaries underscores the fiasco which the scheme became. When asked to repay the poultry loan, a beneficiary who got 1000 birds reported that they had all been eaten by dogs in one night!

CONTEXT

At the context stage, the government rightly identified poultry

farming as a good response to job creation. It also rightly reasoned that supporting persons interested in establishing poultries to do so would impact positively in reducing unemployment in the state.

DESIGN

The target beneficiaries in this case were poultry farmers. The



intervention targeted them and took their inputs and concerns into establishing the outgrower programme. The programme was designed by Akwa Prime, a known expert in the field.

EXECUTION

The execution stage failed mainly because the pre-qualification process was not rigorous

enough to eliminate fakers. The list of beneficiaries produced by the state Ministry of Agriculture was thus not that of genuine farmers. For this reason, the majority of participants saw the programme as an entitlement for political services rendered.

EVALUATION

Using information gathered through a monitoring, evaluation and audit



process, the intervention

was stopped, redesigned and deployed. One such redesigned intervention is called the Naomi Scheme which is fully functional and impactful.



In 2001 the government of Akwa Ibom state launched the Integrated Farmers Scheme (IFS) as an economic empowerment and diversification strategy of the state. According to the government, the plan was to 'make farming appealing to the youth as an employment alternative'. The scheme set-out to expose Akwa Ibom youths to 'modern farming techniques while encouraging them to embrace farming as a vocation through capacity building and empowerment strategies'.

The state adopted the approach of providing loans ranging from N250,000 to N500,000 to selected farmers in the state to establish new farms and expand existing ones. These loans were to be repaid over a period of 4 years. As guarantee, each participant provided a surety that was a senior civil servant in Each local the state. government area was asked to submit about 200 names (depending on how many persons the scheme targets in that year) through its local council authority. These persons were trained in a branch of agriculture ranging from crop farming, poultry, piggery, rabbit rearing and snail keeping. Unfortunately, this selection

process was seen by the local authorities as a measure of recognition and reward to key local political 'stakeholders'.

While the government claims the scheme has been successful, the reality is that IFES has failed to achieve the objectives it was set up to achieve. Staff of the agency responsible for its execution hold the view that the low success recorded by the scheme could have been mitigated if it was devoid of political influence. Many of the people who took the loans neither had an intention of going into farming nor a plan to repay. A study conducted by the University of Uyo reveals for instance, that

While the Agency responsible for the Integrated Farmers Scheme remains with a full retinue of staff, the government had discontinued its funding since 2011. This gives the impression that the government will continue with the scheme. However the lack of capital funding for the Agency in about 6 years may indicate that governments' interest has declined.

out of 337 participants which consist of 153 and 184 beneficiaries from both the first and second batch which benefited from the loan, only one beneficiary (0.3%) made full repayment while 92 (27%) and 242 (72%) made partial and no repayment respectively. In both batches, over 90% of the beneficiaries defaulted. There was no full repayment in the first batch while about 0.6% of the total loan disbursed was fully repaid in the second batch.

CONTEXT

In the context phase, the government

accurately identified the

problem militating against the development of agriculture in the state as being poor credit and lack of incentives for farmers. It reckoned that the provision of easily accessible low interest credit facilities will go a long to stimulate farming in the state.

DESIGN

At the project design phase, the government

integrated the traditional preoccupation of the people which

is farming, and consulted a good range of smallholder farmers in the state. The design of the Akwa Ibom State Integrated Farmers Scheme had all the inputs to deliver positive impact.

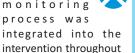
EXECUTION

In executing the intervention, the pre-qualification process was marred by political considerations.

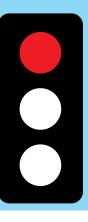
The list of beneficiaries produced by the state Ministry of Agriculture had limited number of genuine farmers but rather politicians and their cohorts. For this reason, the majority of participants saw the programme as an entitlement for political services rendered.

EVALUATION

While monitoring process was integrated into the



its 10 years and 6 batches of existence, the results were never integrated into adjusting the scheme for greater impact. Batch after batch, the scheme continued to be marred by the very same failures.



Let me use this opportunity to state the sole purpose for this scheme, which is for the empowerment of youths, is also meant to give welfare support for youths until they find their feet...From this volunteer scheme, we expect you to rise up and become entrepreneurs; set up your own business with our support. We also expect you to find other useful jobs to grow and once you get that done, others will take your place," Governor Dickson of Bayelsa State

The government of Bayelsa state set up the Bayelsa Volunteer Scheme as a youth empowerment initiative to recruit graduates and none graduates in the state into a Volunteer Corps. The volunteers and their coordinators were expected to engage in community based 'intelligence gathering' to aid other security agencies in stemming criminal acts, such as crude oil theft, pipeline vandalism and piracy on the waterways.

According to the government, the scheme was to provide monthly remuneration of N25, 000 to each graduate member, while N15,000 was to be paid monthly to each none graduate member. The scheme while structured as a security

intervention in the state, was also principally a welfare vehicle to create employment and empower citizens. The government inaugurated the Volunteer Corps with a start off number of 3000 persons drawn from the 8 local government areas of the state³³. However, their salary was reviewed to N20,000 for graduates and N10,000 for non-graduates.

However, some residents of the state have criticised the scheme as having no substance or plan to actually transform the lives of its beneficiaries in a sustainable manner. Key respondents hold the view that majority of persons were included in the scheme based on political party affiliations. In 2014, the governor had identified the job of the Volunteers as including "to mobilize support for the government and work with the security agencies",34 fuelling fears that the programme was nothing more than a vehicle for political muscling ahead of the general elections in 2015 rather than any real desire to create value or employment.

CONTEXT

The context of the intervention was faulty. There was

no clarity about what problem was being addressed

DESIGN

In designing the intervention, there was no

clarity or specifics about

the target population, the objectives of the programme or how it would translate into tangible benefits for the people of Bayelsa state. The intervention hardly seemed a response to any real social problem in the state at worst, and at best was a poorly designed one..

EXECUTION

The execution stage failed

because the overall

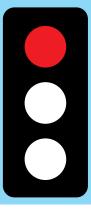
framework of the programme lacked visible merit or social purpose.

EVALUATION No monitoring

X

or evaluation of
the programme was
carried out. It did not continue beyond

2015, immediately after general elections.



In December 2007, the government of Delta State launched the Delta State Micro Credit programme as a response to the need to empower small and medium scale businesses to grow, while supporting entrepreneurial members of the society to establish businesses. In June 2011, the programme was upgraded to a full fletched state Ministry statusthe Ministry of Poverty Alleviation with responsibility for processing and disbursing micro credit facilities to the public for the support of businesses. The government expected that the initiative would result in the growth of cottage industries, employment generation, enterprise and manpower development and the revamping of the business climate in Delta state. Between 2007 and 2014, 111,312 persons benefitted from the programme with a total credit disbursal of N3.4 billion³⁵. However, despite the investment made in the programme in the period, it failed to have the maximum desired impact because a significant number of the loans beneficiaries failed to abide by the repayment terms. As at 2015, N2 billion was being owed the Micro Credit Agency since 2007³⁶.

In 2015, the new administration in Delta state made efforts to

overhaul the Micro Credit programme towards making it more responsive to the need of the state and more sustainable in the long run. A key element of the reforms is that rather than prescribe a template for beneficiaries to choose from, it seeks to support them in whatever business venture they are already engaged in. This ensures that not many new businesses are formed, but that many more are expanded and made more productive. Another element of the programme is that it integrates effectively into a known success paradigm of collaborations. Applicants for micro credit facilities are encouraged to cluster into cooperatives in their areas of business. This ensures that there are peer checks and greater management strength and expertise. The pre-qualification process has been better finetuned to eliminate political influences in the selection of beneficiaries.

Though the programme has suffered some criticisms in recent times over the 'politicisation' of

the selection process³⁷, and early failures to repay loans, it has nonetheless corrected some of the anomalies over the years and has impacted significantly on the business climate in the state. The Delta State Micro Credit Programme is still the key driver of grassroots empowerment in Delta state 10 years on.

CONTEXT

Through a process of research and consultations, the government of Delta state suitably identified

the lack of capital as the key impediment which small and medium businesses face in the state. This problem makes it difficult for businesses to start or existing ones to expand.

DESIGN

At the design stage, the government took into consideration



the weaknesses of earlier

deployments of the micro credit scheme, and created considerable safeguards. To a large extent, the scheme as currently designed, reflects critical elements of adapting to the needs of a wide segment of people, encouraging multi stakeholder approaches through the formation of cooperatives and

EXECUTION

In the initial stages of the intervention, the pre-qualification process was spoiled by the influence of politicians and

other narrow interests. This was however addressed considerably. Key in this phase is the fact that rather than box beneficiaries into prepared templates, the scheme was tailored to suit the interests of each participant. This flexibility ensured that beneficiaries only got support for what they were interested in. The converse of this is a situation where credit facilities only support a particular business area.

The result of this is that persons who do not belong in that line of business convert to suit the requirement for credit.

evidence indicates that



monitoring was

integrated into the intervention at all stages and this ensured that needed adjustments were made to the scheme as it progressed.





In 2011 The Rivers state government initiated the establishment of a large Banana plantation between Khana and Tai LGAs in the Ogoni axis of Rivers state, along the East West Road. According to the government, the planation was designed as a job creation and economic diversification scheme for the state. Rivers state signed a Memorandum of Understanding with Union De Initiative SA DE CV of Mexico, for the establishment of the N45 billion banana plantation. According to the then Commissioner for Agriculture Mr. Emmanuel Chinda, the state government was to contribute 40 per cent of the project sum while the Mexican firm would contribute the remaining 60 per cent. Mr. Chinda further said that when fully operational, the plantation would generate employment opportunities for the people of the state as part of a larger economic diversification strategy put in place by the government for the establishment of large-scale farms in the state. Specifically, the plantation was expected to produce about 6,000,000 boxes of banana annually which was to be marketed locally and internationally.

Without any prior information or consultation with the traditional owners of the land, the state government in May 2011

proceeded to notify the people via radio announcements and letters that it had taken custody of 809 hectares of their land for the establishment of a banana plantation. Weeks later, the state government sent surveyors in the company of heavily armed soldiers to demarcate the land. The farmers they found cultivating crops were treated as intruders and chased away. This sparked acts of organised community resistance which resulted in human rights abuses and deaths of community people. The indigenous community protested the establishment of the plantation on grounds that they were not consulted and that the Banana Plantation would deprive them of their farmland and source of income. They approached the courts as well as the National Human Rights Commission and filed suits to stop the government from what they saw as land grabbing. The Rivers State Commissioner for Agriculture at the time held the view that the government could not be accused of land grab as it was empowered through the Land Use Act of 1978 to acquire any land for the public good.

The government went ahead to spend \$6 million on the investment with the hope that it would live up to its goals. The plantation took off and went into operations for about a year until the government that initiated it left office. The new government while stating that the agricultural sector would be one of its priorities did not pay any attention to the plantation. The private partners of the farm abandoned the project, and weed took over the entire facility. In December 2015, fire from yet to be established sources engulfed the farm destroying what was left of it, including some farm machineries. The administrative buildings and others were scavenged and looted. After several months of disuse, community people began returning to clear the weed infested land for cassava cultivation.

CONTEXT

The intervention correctly identified

agriculture as an appropriate vehicle for

economic diversification away from its overt dependence on proceeds of oil and gas sales. It identified the volatilities associated with this level of dependence as being capable of disrupting the plans of the state.

DESIGN

In designing the intervention, the government and other backers of the



programme did not take the buy-in of the local people into consideration. Rather than seek their input and collaboration, the government imposed the intervention without considering the value local participation could have brought to it. Another failure of the intervention is that it did not appropriately link with the occupation and traditional activities of the people. For the people, the banana farm was an imposition with no identifiable benefit to them.

EXECUTION

As a joint venture partnership, the intervention was deployed in an effective



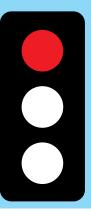
manner and according to plans. This ensured that the maximum benefit of production and sales were achieved in the initial stages of the project.

EVALUATION

It is not clear if the project was adequately monitored, but it failed



on account of lack of continuity. The new administration in Rivers state did not carry on with it, bringing the project to a failed end.



As a measure to diversify the income sources of Rivers state and create employment, the government in 2012 embarked on the construction of fish farms at Buguma Andoni, Ubima and Opobo. The government embarked on the project as a way of creating employment, generating non-oil revenue for the state, improving local community income and alleviating poverty. The project was also designed with the objective of ensuring the transfer of various levels of fish farming technology to locals interested in replicating the farm initiative. According to the government, each of the fish farms was to have the capacity to produce 4000 tons of tilapia annually. In all, the Rivers state government expected to generate substantive income from the project as well as employment for its people.

The Project was designed as a Public Private Partnership with an Isreali firm, Onida Development. The farm in Buguma took off effectively meeting its production targets, generating value chain economic impact and employment.

About one year into production, a new government came into place and support for the scheme was brought to an end. Onida Development pulled out of the project, workers at the farm left, the remaining fishes died and the facility has fallen into disrepair.

CONTEXT

The intervention correctly identified agriculture as an appropriate vehicle

for economic diversification away from its overt dependence on proceeds of oil and gas sales. It identified the volatilities associated with this level of dependence as being capable of disrupting the plans of the state.

DESIGN

The project design appropriately connected with one of the traditional



occupations of the people of the state which is fishing and fish farming. This ensured that there was immediate buy-in by members of the communities where the intervention was located. This fact brought about the needed traction and support for the project.

EXECUTION

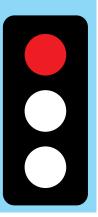
As a joint venture partnership, the intervention was deployed in an effective

manner and according to plans. This ensured that the maximum benefit was achieved in the initial stages.

EVALUATION It is not clear if the project was

adequately

monitored, but it failed on account of lack of continuity.



The major economic diversification and empowerment vehicle of the Rivers state government is the Rivers River State Sustainable Development Agency, RSSDA. The Agency was specifically established to address the problem of limited capacity and skill of youths in Rivers State. Its mission was to provide relevant knowledge and skills for youths in the state to be gainfully employed. The Technical Skills Development Programme, the Rivers State International Scholarship Programmes, the Rivers Songhai Farm Initiative and the Skills Acquisition programme were the main flagship interventions of RSSDA. To achieve the objectives of its creation, the RSSDA established strategic partnerships with local and international partners including the Rivers State Polytechnic at Bori, the United Nations Institute for Training and Research (UNITAR), City and Guild London and the Eagle Scientific, UK.

After an impressive start, and commendable efforts in delivering its mission, the government allocations meant for it gradually reduced and then finally ceased. The government began owing workers of the RSSDA salaries for several months. Students of the state who gained scholarship to study abroad had their allowances cut, their school fees were not paid resulting in their suspension from their various academic pursuits abroad³⁸. In 2015 when a new administration came into office in the state, interest in RSSDA declined noticeably. The new government discontinued the services of the Agency including salary payments for over 20 months. In January 2017, staff of the Agency were informed that their services had been suspended. The diversification and empowerment promise of the Rivers River State Sustainable Development Agency, RSSDA is now uncertain.

CONTEXT

The founding objectives of the RSSDA suggests that the government understood the problem

it was out to address including the manner it affected the development of the state through low skills set and employability.

DESIGN

establishment of RSSDA was borne



out of a detailed study of the needs of the state especially as it related to economic empowerment, job creation and diversification of the state's income base. RSSDA was not overtly encumbered by political considerations. The majority of its designers and staff were experts in their various fields. The agency was duly backed by law and funded

EXECUTION

The intervention of the RSSDA which included scholarships, skills

training, etc., were



deployed in a professional manner by experts who understood the objectives that needed to be achieved through the schemes. The needed partnerships with reputable agencies was established and nurtured.

- key factors in ensuring continuity and success.

EVALUATION

RSSDA was adequately monitored by



international agencies. Periodically, feedbacks were integrated into adjusting the scheme for greater efficiency. However, it was not sustained. Currently, there is an air of uncertainty over the future of the RSSDA.



In 2015, the government of Akwa Ibom state embarked on a project to rejuvenate an existing state owned Poultry and Hatchery. The original project was established as a limited capacity single unit hatchery that targeted production of disease resistant, rapid growing and healthy broilers. However, due to poor government interest, the farm stalled significantly. A new government in the state decided to restart the project. In doing so, it considered the following as its baseline:

- a. Akwa Ibom state has one of the highest poultry consumption rates in Nigeria
- b. Much of the chicken consumed in the state is imported from other states or smuggled into the state.
- c. Poultry farming in the state is tied to festive seasons, as a result of this, the market is volatile and irregular.
- d. Lack of expertise in handling birds younger than a certain period leads to high mortality and failure of poultry farms.

In responding, the government entered into a Public-Private-Partnership with Prime Poultry Limited, a recognized farm enterprise in Ethiopia to create the Akwa Prime Poultry Hatchery Limited. The idea was to establish models that will mitigate the noted barriers to successful poultry business in the state. The firm took over and expanded the existing farm at Mbiaya in Uruan local government area of the state to including incubators, brooders feed production facilities, etc. The immediate result is a 20,000 day old chicks a week capacity hatchery, a poultry, a feed production factory as well as other value chain products. The effect on the business climate in the state has been positive. For instance, it has created incentives for maize farming in the state to supply the production of poultry feed among others.

Akwa Prime Poultry Limited also designed a programme to support poultry farmers in the state to establish, expand and become profitable. In the programme, it grows day old chicks through the first few weeks, using their expertise to manage the most precarious period in the life of the birds. It then hands them over to farmers who

nurture them until the 8th week when they are ready for the table. Rather than rely on the seasonal and unstable market of poultry products, Akwa Prime immediately buys off the entire stock at an agreed rate measured in kilos saving the farmer further spending on feeds for birds that are by now ready for the table. By doing this, the farmer spends only what is essential in raising the birds while making the maximum profit possible. This strategy has tremendously increased poultry farming in Akwa Ibom state and empowered thousands of people. Unfortunately, as an additional direct income earner for the state, the project has not been successful because the State is no longer investing in the company and it is now being solely financed by Prime Poultry Limited. Accordingly, the state is currently not earning revenues from the farm.

CONTEXT

The intervention was very clear about the context



of the issue it was addressing and the related context of its manifestation. In the design document, this clarity is stated as a logical premise for the programme.

DESIGN

In designing the intervention, the government sought the expertise of a seasoned agricultural



firm, Akwa Prime to ensure professionalism. Similarly, the project took into consideration the traditional diet of the people of the state. While designing the intervention as an economic diversification activity, an aspect of it was equally targeted at involving the people through a programme that allows them to establish and operate their own poultries with government support.

It is important to note also that the project was a continuation and expansion of an already existing poultry and hatchery project.

EXECUTION

The project started as a joint venture partnership between the

Akwa Ibom state

government and Akwa Prime. The running of the facility is left for the experts while the government provides the 'enabling environment'. The manner of its deployment is effectively stimulating other value chain sectors and inspiring other related enterprises including maize farming, etc. The only noted weakness in the intervention is that it is currently not providing the envisaged income earnings for the state.

EVALUATION

Evidence abounds that t h e intervention is being monitored and evaluated routinely, and

information gathered and observations made are being fed into improving it.



In the early 2000s the government of Akwa Ibom state embarked on the construction of a Science Park in the state capital. The Ibom Science Park was designed to promote research and development, provide facilities for the incubating of new ideas and new industries, as well as facilitate the acquisition, assimilation and adaptation of advances in science and technology. The Science Park was also expected to serve as a Centre of research for universities, create an enabling environment for capacity building in high-tech industries and services. Above all, Ibom Science Park was to stimulate the emergence of an information technology market and the incubation of industries, while generating employment for the state.

Ibom Science Park Company Limited was incorporated on October 20, 2005 as a limited liability company wholly owned by Akwa Ibom state through its investment arm, Akwa Ibom Investment and Industrial Promotion Council. To ensure its effectiveness and smooth running, the Park was granted Export Free Trade Zone status on July, 14, 2006. An area of 122 hectares of land in the state capital was provided for it. A construction firm, SBT Juul Africa was contracted to deliver the project with an initial cost of N6 billion. Construction works

commenced in 2005 with a target of 2 years for its completion. In preparation for its commencement, the state government provided scholarship for a number of graduates to receive training in Canada in information technology systems for 18 months. These were meant to be the professional bulwark of the company.

Construction of the Science Park developed to about 60% completion of structural works. Other companies contracted by the state began to supply science equipment in sealed containers, awaiting installation. Then in 2007 after a new administration took office in the state, it all came to an abrupt end. Accusations of cost inflations and scams became rife. An investigation panel was set-up by the state to audit expenditure on the project. The panel report indicted SBT Juuls Africa and some former government officials of diverting N2.1 billion meant for the project. While SBT Juuls went to court to seek redress, the new government in the state promised that it would restart work on the project site. In fact, from 2007 to 2015, a budget line

was reserved for the Ibom Science Park project, but nothing more was done. The sealed containers with science equipment slowly disappeared from the site. The single security guard posted at the abandoned complex says the equipment are routinely carted away by persons who identify themselves as government officials. Today the Ibom Science Park is an abandoned and decaying shadow of what it was meant to be. With it, died the dream of an industrialised state, and N5.2 billion of public money³⁹.

CONTEXT

Available project documents capture the

dearth of science and technology in the state, the impact this has had on the broadening of its economic base and the potentials in bridging the science and technology gap.

DESIGN

It is not clear how well t h e government interrogated the



intervention option it adopted, however, the project design and concept seems adequate and appropriate to fill the technology gap noticed in the state.

EXECUTION

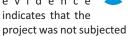
The Ibom Science Park project very quickly became a source of controversy



and litigation, mostly resulting from the lack of transparency in the manner its contracting was done. It is commonly believed that value for money was lacking in the implementation, and that the amount paid out to the contractors far exceeds the level of work on the ground.

EVALUATION

Available evidence indicates that the



to monitoring and evaluation. If this had been done, the shortfall which became the key failings of the project would have been corrected. Also the new administration in Akwa Ibom state which took office in 2007 failed to continue with the project.



Akwa Ibom State Investment in Telecom: In 2000, the Nigerian government approved licenses for establishing Global System for Mobile Communication in Nigeria. From the start it was clear that this sector would be profitable. Given the population of Nigeria, the communication gaps occasioned by the failure of the national carrier NITEL and the unreliability of the postal service, it was clear Nigerians would massively patronise mobile communication technology.

Akwa Ibom state was among the first to realise the investment possibility in this opportunity. In 2001, the government of the state purchased shares of one of the major operators called Econet Wireless Nigeria. The state invested \$67.5 million in Econet representing about 16 percent equity shares in the company. The government reckoned that holding the shares would ensure that it receives huge yearly returns as the company continued to roll out more mobile phone lines across the country. In a few years, the investment paid off. The value of the shares more than doubled as expanded significantly. However, in 2006, the state governor put the shares up for sale. It was eventually sold at an amount yet to be objectively determined. But the transaction itself has been a source of international controversy on corruption, bribery and cutting corners. Suffice to say that Akwa Ibom state no longer holds its telecommunication shares, and it is uncertain if its original \$67.5 million got returned to the state coffers.

"I sourced as much as \$67.5 millions cash and invested; by buying 15% into one of the GSM companies and this is why we were the fourth town"

Victor Attah, Former Akwa Ibom State Governor

CONTEXT

Akwa Ibom state government's rationale for investing in telecommunications

was a studied option borne out of the need to create an additional income stream for the state, and with the informed understanding that the emergent telecommunications sector would shortly rival other sectors in the country.

DESIGN

In the case of purchase of shares in Econet
Telecommunications

company, not much of design was required. The level of consultation is not also available.

EXECUTION

The government's investment in the telecommunicatio

V

ns company amounted to about 16% of the shares of the company, ensuring that a sizeable proportion of the annual proceeds accrues to Akwa Ibom state. In terms of execution, the contract was appropriately negotiated and signed.

EVALUATION

In selling off the shares held by Akwa Ibom state



in the company, the government failed to reap the full benefits of its investment. This fact is reinforced in the manner the shares were sold, which has become a source of litigation, indicating that the goals of the investment were not met.



In a bid to diversify the economy of the state, the Bayelsa state government in the late 2000s purchased 2 fishing trawlers for an undisclosed amount of money to be used for large scale commercial fishing. Through the investment, the government expected to leverage on the traditional fishing occupation of the Bayelsa people to create employment while generating huge incomes for the state. The purchase of the 2 sea going fishing trawlers was greeted with fanfare and enthusiasm. The government boasted that the state would soon become a major fish exporter in the region and beyond. The trawlers were named Patience Jonathan and Margaret Alamieyeseigha respectively, and commissioned into service. Their first venture into fishing waters unfortunately became their last. The vessels anchored at the Ogbia Waterside endlessly for years, unused and deteriorating.

Though the true state of affairs regarding the vessels cannot be determined, available information indicates that the Trawlers were already in very bad states of disuse when the state government bought them. The promise of an economy built on fish export never came to pass, and Bayelsa state never recovered the huge investment it made on the vessels. The new administration in Bayelsa state has refused to find ways to put the vessels into service. After many years, the trawlers disappeared from the Ogbia Waterside.

CONTEXT

The government rightly calculated the economic opportunities the state given its littoral status

and reckoned that large scale fishing would be profitable in generating internal income for the

DESIGN

In designing the intervention, it is evident that the government tried

evident that the government tried to itional occupation of the

leverage on the traditional occupation of the people of the state which is fishing. However, it is not clear if there was any plan to engage the people- at least fisher folks- in the business. A failure in this regard could have resulted in the fishing trawlers disrupting the activities and economies of small scale fishers.

EXECUTION

T h e implementation

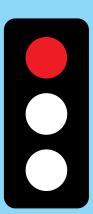
of the project was

poor. Available evidence seems to indicate that the 2 trawlers were faulty when purchased and could not adequately perform the functions they were purchased for.

EVALUATION

The failure of the project was evident from the onset. The next

government in the state abandoned it.



In 2011, the government of Bayelsa state embarked on a project to promote rice production in the state. The government rightly reckoned that given the mostly wet and marshy terrain of the state, rice production if pursued with the latest farming techniques would thrive and Bayelsa State would become a major producer of rice in the country. The government proceeded to establish the Bayelsa State Rice Training and Seed Multiplication Center in Igbogene. The project received varying sums of money in at least 3 annual budget including N150 million in the 2012 budget. The farm was equipped with state of the art tractors and other utilities. Located along the entry into the state capital, the rice farm became a talking point in the state and a bold declaration of the intention of Bayelsa to generate non-oil dependent revenues.

After the first harvest however, the government's interest waned and the project stalled. The farm was abandoned, workers left and it became overgrown by weeds. Not even the machineries were removed. The abandoned farm complete with decaying motorized machinery still lie at what was once the rice farm at Igbogene, a sad reminder of one of the many attempts by Bayelsa state to diversify into agriculture.

CONTEXT

In pursuing rice cultivation as a viable branch of the agricultural policy of the state, the

government leveraged on knowledge of the potentials in the environment of the state and the available local, national and international market for rice.

DESIGN

In designing the project, productivity was

not the key motivation,

rather all evidence indicates that it was a 'show'. This can be ascertained by the location of the farm at Igbogene, a part of the city with limited land, but maximum exposure to visitors to the capital. The land outlay meant that the project could not be expanded at the same location. Evidence also indicates that the project design did not enjoy the benefit of consultation with all range of stakeholders including those in the agricultural sector and from the Igbogene community.

EXECUTION

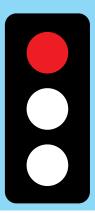
The project was executed, but the scale of the farm

meant that its impact would be limited.

EVALUATION There was no

follow-up to the project. It was abandoned and never

resumed. The succeeding government has not revisited it.



The Delta State Songhai Farm brand is an agricultural and food production initiative which integrates all aspects of the agricultural value chain- from production to processing, marketing as well as training. The initiative was borne out of the need to create a system that would provide avenues for 'restive' youths in the state to acquire necessary skills that will make them employable and productive.

The key element of the Songhai Farm model is the fact that it mobilises and trains local energies to engage in agricultural production as a strategy for economic empowerment and diversification. The Songhai-Delta, Amukpe, was initiated in 2003 and designed to train young graduates and others to develop the knowledge and expertise in managing agro enterprises in order to be self-reliant. The farm resort sits on a 137-hectare parcel of land, with administrative structures including workshops, hostels, library, clinic, staff quarters, guest house, garden, super market and other facilities suitable for learning.. The farm is fitted with many demonstration agricultural and business models which support practical trainings.

The Delta State Songhai Farm is a major economic empowerment facility of the Delta state government. For most of the empowerment scheme which the state embarks upon, it is mandatory for participants to first receive needed training in their chosen fields of engagement as well as other business and entrepreneurial topics. The farm has become a key economic diversification hub of Delta state, integrating all aspects of the government's plans and the needs of the participants into a training framework that achieves the objectives of instilling skills

CONTEXT

In establishing the Songhai Farm the government of Delta state was responding to the needs

of agricultural and business skills development of citizens of the state. The founding logic of the intervention is that if citizens are provided the skills and facilities to create employment and generate income, they will do so.

DESIGN

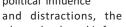
In designing the project, the government promoted the Songhai



Farm Model which emphasises best practices and standards as well as maximum productivity. The design of the project adequately anticipated the needs of the state in terms of agricultural development and entrepreneurship and provides for all round learning.

EXECUTION

To forestall political influence



farm runs its affairs independently and is free to generate its own income. This has ensured sustainability of the project.

EVALUATION

The project is routinely



evaluated to ensure that

it keeps serving the diversification agenda of the Delta State government. The project has continued through 3 governors of Delta State, a level of continuity that is rare in the Niger Delta region.



Through these case studies it is evident that the States identified agriculture, education, technology and entrepreneurship as key needs to be met. While these were in line with local needs and aspirations,

- 1. There is a clear lack of focus on the utilisation of the rich ecological endowment of the states.
- 2. There has also been a lack efforts at environmental remediation and halting of polluting activities by oil company operators and third parties.
- 3. There has been pronounced lack of inclusive and participatory consultations before the development schemes were embarked on.
- 4. Political considerations outweighed other factors in decision making, with systems of patronage ensuring the failure of some of the schemes
- 5. Lack of continuity by successive governments ensured the collapse of some of the schemes, leading to huge financial and skills/manpower loses and underscoring the lack of long term development vision for the States and region
- 6. The lack of focus on the health of the region's biodiversity can also be seen to have manifested in a lack of attention to eco-tourism development beyond some attention paid to the hospitality sector.

These gaps provide key opportunities for the States to evaluate their development paths, work on creating synergies and regional partnerships and economies and collectively and sustainably utilising nature's renewable gifts.

The next chapters focus on the basic need for renewable energy in shift from fossil fuels dependence in the development of the region as well as on the vital considerations for biodiversity based development.



Renewables as Anchor for Re-imagining Niger Delta Development



he Niger Delta area is rich in both renewable and non-renewable natural resources such as oil, gas, bitumen, non-timber forest products and timber forest products, wildlife, and others. 40 According to Organisation of Petroleum Exporting Countries (OPEC), over 90% of the total export revenue for the Nigerian Government is generated from oil and gas production and exploration. 41 With a maximum crude oil production capacity of 2.5 million barrels per day, Nigeria often ranks as Africa's largest producer of oil and the 13th largest oil producing country in the world. 42 The Niger Delta Region is the main oil and gas producing area of Nigeria responsible for producing the country's oil wealth which accounts for the bulk of country's foreign exchange earnings. 43

ENERGY SITUATION IN NIGER DELTA

Nigeria reportedly ranks in the bottom 25 countries on power consumption per capita (Nigeria Power Baseline Report, 2015).⁴⁴ ⁴⁵ About 55% - 60% of Nigerians are said to lack access to electricity, ⁴⁶ ⁴⁷ although the National Association of Energy Economist (NAEE), puts population of Nigerians with access to regular power supply at only 25%.⁴⁸ ⁴⁹ Despite Nigeria's current installed power generation capacity of almost 13,000MW, the national grid is only able to supply an average of 5,000MW;⁵⁰ which is less than 5% of Nigeria's current power need of 160,000MW. An energy needs report published by Dalberg in 2017 states that there are 27.9 million households and 10.6 million SMEs with critical access to energy needs in Nigeria.⁵¹

Other

Cother

Firewood usage
is line, in
contrast to other
regions, as
biomose from
mangrove
forest is not as
suitable for
suitable for
suitable for
Surring

Crid + generator

Orid only

Figure 1. Niger Delta primary source of household energy, 2015

Source: Dalberg, Nigeria Energy Needs Assessment (2016)⁵²

The Dalberg report further shows that the issues of poor power supply, prevalent across Nigeria is equally present in the Niger Delta and a significant number of communities depend totally on petrol and diesel generators and firewood to meet their energy needs. There is widespread self-generation of electricity by households and SMEs, with the heavier burden of energy poverty borne by rural riverine communities in this region.⁵³ Another survey conducted by Stakeholder Democracy Network (SDN) on 160 households connected to the national grid in four communities in Bayelsa and Rivers States clearly shows the prevalence of energy poverty across the Niger Delta region

Another report from SDN clearly indicates that the current energy situation in the region presents a negative economic burden and denies many indigenes a means of livelihood and productivity. The energy poverty in the Niger Delta is stark considering the large energy and mineral resources extracted daily from the region and the continuous flaring of gas worth billions of dollars that could easily provide electricity.⁵⁴ In the Niger Delta, an estimated 34% of rural dwellers have electricity access, and this is compared to 84% in the urban areas, who despite having access grapple with frequent blackouts and power cuts.⁵⁵ Energy poverty is a key issue affecting the Niger Delta region.⁵⁶

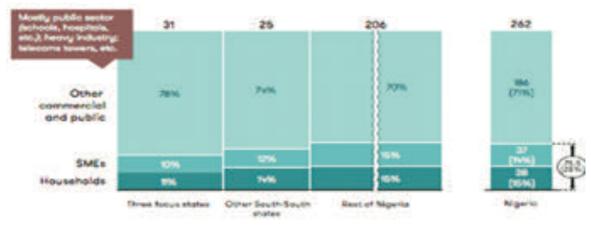


Figure 2: Niger Delta Total energy consumption 2015 by sector

Source: Dalberg, Nigeria Energy Needs Assessment (2016)⁵⁷

Insight from another survey conducted by SDN as depicted in the charts below shows very little grid connection as well as very low reliability in these communities. Several respondents also rely on self-generation for home, commercial or productive usage usually through generators. Access to gasoline and kerosene and the difficulty in accessing these products in rural communities further means that several rural communities have to depend on wood as their source of energy. As a result, poorer rural communities remain un-electrified, underserved and underdeveloped, leaving many communities with very little economic potentials and unattractive to private investors.

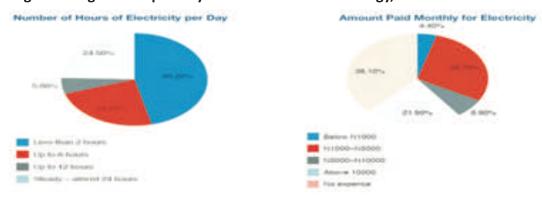


Figure 3. Niger Delta primary source of household energy, 2015

Source: Stakeholder Democracy Network

TRANSITIONING TO A RENEWABLE FUTURE

The United Nations Human Development Index, cites improved access to electricity for industry, business, micro-enterprises, and households, as necessary for increased economic growth, employment and entrepreneurial opportunities, as well as higher quality of life. ⁶³ The future economic growth of any country can be tied to affordable, accessible and environmentally friendly energy access. ⁶⁴ This is particularly true of the Niger Delta, which lags behind several other southern states and regions in development indices due to decades of neglect from the government and corruption from the oil rent states.

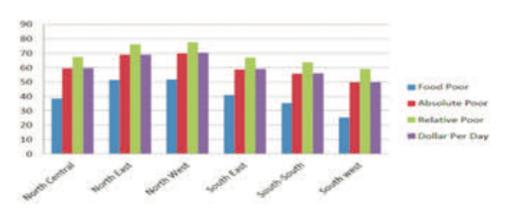


Figure 4. Incidence of poverty in the Niger Delta (South-South), 2010

Source: Nigeria Bureau of Statistics (2010)65

The conundrum in the Niger Delta is further heightened by the fact that grid extension is unlikely to be the pathway to sustainable energy access for the region. 6667

What options exist for developing the Niger Delta₦How can the region be electrified₦How can we achieve this in a cost effective and sustainable manner₦68

IMPROVING ACCESS TO ENERGY THROUGH DISTRIBUTED RENEWABLE ENERGY

With the electricity grid unlikely to reach most communities in the Niger Delta due to its difficult terrain, Decentralized Renewable Energy (DRE), stands out as the best solution in bridging the energy gap, and ensuring that the entire Niger Delta population gain access to energy as quickly and efficiently as possible. DRE is the quickest way to increase energy access and address energy poverty in the Niger-Delta. DRE has already played a significant role in improving energy access in communities similar to the Niger Delta across Africa, completely transforming rural communities and growing their economy through new cottage industries and small and

medium sized businesses. Kenya, Tanzania and Ethiopia are already leading the way in deploying decentralised renewables to increase and optimise their electrification rates particularly in rural communities. In Kenya, 15 to 20 percent of the households use solar lighting, and the country is home to a pioneering green mini-grids programme, thousands of bio-digesters and 3,000 megawatts (MW) of micro-hydro⁶⁹ systems Tanzania and Ethiopia jointly account for 67 percent of Solar Home Systems and pico-PV adoption in Sub-Saharan Africa.⁷⁰

DRE technology cuts across different

technologies beyond solar (which includes stand-alone solar systems to mini-grids and mobile solar farms) and extends to wind, mini-hydro, geo-thermal, biomass and biogas. These technologies are the future, specifically because they are available, they consist of modern sources of energy; they are affordable and are immediately deployable. DRE technologies can deliver energy access in a number of days—versus

the number of years it takes to site, permit, build and manage a traditional centralised fossil fuel grid system. DRE provides an immediate and important pathway for the Niger Delta to exploit the full range of its renewable resources; improve energy access in the region and boost the region's economy.⁷¹

BUSINESS MODELS ENSURING AFFORDABILITY FOR THE NIGER-DELTA

Various business models have been employed to make these technologies easily affordable including piece-meal purchasing plans, micro finance loans, and most recently the Pay-as-you-go (PAYG) business model. The PAYG can either be on-network (consumers pay via mobile money through a cellular network) such as the Lumos/MTN yellowbox or off-network (consumers paying cash to appointed agents for prepaid voucher/credit/scratch cards) and can be purchased on a short-term rent-to-own plan or a long-term perpetual lease.72 The increasing efficiency of PAYG system components has reduced the cost of these systems by over 50%.73 PAYG Solar has

potential to provide electricity to millions of businesses and households in the Niger Delta. The PAYG system cannot replace the grid but it is the most practical and scalable off-grid solutions that can provide immediate electrification. These systems can significantly contribute to environmental and socio-economic development of the Niger Delta, not only because they are faster to install and more likely to create employment, but also because they are accessible also to women entrepreneurs.⁷⁴ PAYG Solar for instance, is fast growing in East Africa, with companies installing many MW in Tanzania and Kenya.⁷⁵

BIOMASS

In defining a business model that works for the Niger-Delta, it is important to also consider biomass and bio-gas (which are waste products from animal, humans and agricultural waste) which can be converted to power for other productive uses. Biomass generated power is useful to power small and medium sized agricultural farms holdings and to power cooling equipment for food preservation and food processing. Beyond agriculture, these equipment can provide several business opportunities for community dwellers, from welding, to hair-dressing, to store owners, and even market traders.

FINANCE

DRE holds the promise of electrifying individual households in the Niger-Delta as well as providing enormous opportunities for several new cottage industries to emerge. These business models can be tailored to meet the unique topography, culture, businesses and socialisation of the Niger Delta communities.

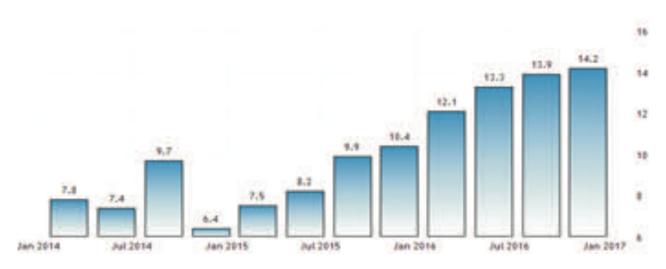
Financing to deploy DRE technologies can be provided by companies themselves - allowing customers pay on a monthly basis until they pay off and are fully-owned.⁷⁷ This mitigates the need to pay a large sum

upfront and requires no loan scheme at the consumer level. In the case of solar Mini-Grids or Micro-Grids, an entire community will be connected through a set of electricity generators and energy storage systems which are in turn interconnected to a distribution network to supply electricity to the entire community. Customers and households in turn pay monthly or weekly and pay based on their electricity consumption ensuring that quality service are provided in small households and SMSE based on their usage and affordability.⁷⁸

EDUCATION AND INNOVATION

Nigeria reportedly has the highest population of out-of-school children in the world. UNICEF estimates that Nigeria 10.5 million school-aged children in Nigeria are out-of-school.⁷⁹ In May 2016, the National Bureau of Statistics reported that Nigeria's youth unemployment was 42.24 percent, with as many as 15.2 million young people unemployed.⁸⁰

Figure 5. Unemployment rate in Nigeria 2004 to 2017



Source: Nigeria Bureau of Statistics (2016)81

The Niger-Delta has a huge number of unemployed youth and indigenes in their communities and this is directly tied to the quality of education in the region. A report on education in the Niger Delta indicates that there is low rate of access to literacy and secondary education compared to other nonoil producing regions.82 While the Niger Delta region has 87.9 percent access to youth literacy and 70.3 percent on secondary education, the South-West has 94.7 percent and 87.5 percent respectively.83 The rate of unemployment in the Niger Delta is particularly high in the rural areas where ecological damage to fishing and farming lifestyle due to oil spillages and harmful extractive practices has led to a lack of economic opportunities for communities. This has been exacerbated by outright absence of social amenities such as electricity and access to water, good roads and depletion of forest lands.84

There have been concerted efforts towards building and rehabilitating schools and several skills acquisition and entrepreneurship schemes in the Niger Delta to empower the youth. Niger Delta focused agencies including Nigerian National Development Commission (NDDC), Ministry of Niger Delta Affairs and Petroleum Technology Development Fund (PTDF) have mandate in this line. However, despite a few laudable efforts, a core issue like providing sustainable electricity for the region have lagged behind.85 There is evidenced based research that DRE can help improve education outcomes. Using DRE technologies to electrify schools in the Niger Delta will provide better quality and more efficient lighting than the more commonly used kerosene lamps, candles, or wood. It can also facilitate the use of ICT technologies in the schools.86

As further reported by UNESCO, the provision of ICT in schools can improve student achievement, improve access to schooling, increase efficiencies, reduce costs, and enhance students' ability to learn and promote lifelong learning, and prepare them for a globally competitive workforce.87 ICT can also catalyse innovation; through ICT students have access to globalised information and highquality learning tools. A few young Africans having access to electricity have been able to create and build ecosystems of innovations and inventions to solve challenges in their immediate environment. A good example is a young boy named Kelvin Doe from the rural slums of Sierra Leone who built himself a generator from scrap metals to provide electricity to his hometown and has gone on to develop solar-panel technology for installation in 400 sites around Sierra Leone. The story of Kelvin is one that should be replicated in the Niger-Delta.

Entrepreneurship and job creation

With poor education and slow human development in the Niger Delta, most youths and young adult in the region remain unemployed or under-employed. Over the years this has led to frustrations and a noticeable increase in criminality like robbery, kidnapping, vandalisation of oil installations and political thuggery. 89 Increased investment in distributed renewable energy (DRE) can increase meaningful job growth and entrepreneurship in the region. For instance, some PAYG solar panels provide between 1kva-5kva power for households

and are enough to run small businesses like local barbershops, hairdressing salons, dry cleaners and cyber café, etc for 20-24 hours per day. Operating these businesses with reliable, affordable energy will lead to increased profits through cost savings and can further lead to business growth and expansion, new SMEs and with indirect jobs created along the value chain to benefit these communities.

With solar home systems and mini-grids installations in various communities in the Niger Delta, there is a growing need for local capacity in the renewable energy sector such as site preparation, construction and installation. The growth of the DRE sector simply means that there will be a corresponding growth in skills required to run, operate and manage solar farms, and solar bore holes and these systems if localised would require permanent workers. This clearly means that there are opportunities for skills acquisitions for technicians and engineers in the Niger Delta region in the emerging DRE eco-system. These technicians can be trained and mentored by companies seeking to provide DRE technologies in the sector. The state governments can in turn, ensure transfer of skills by mandating local and state agencies to demand local content provisions for foreign DRE companies to ensure skills transfer in the agreement between them and the localities to ensure job growth. Government can also begin to incorporate skill-up programs in the DRE sector as part of any labour and entrepreneurship programs in order to build a capable workforce that ensures that indigenes of the state get priority opportunities in their communities that might open up in future.

Women as champions

There is evidence to show that energy poverty affects women the most and that the consequences around lack of access to energy are not gender neutral. For instance, the adverse environmental impact of large-scale oil and gas projects in the Niger Delta are often disproportionately borne by women and girls.90 Women have borne the negative impact of decades of harmful fossil extractions in their homes and communities. They have lost their fathers, husbands and sons to the conflict over the politics of oil and extractive governance in the Niger Delta. They have become breadwinners and caregivers and have as a result taken more active and participatory roles in the politics of resource governance and control in their communities. Women and girls are also mainly responsible for procuring and using fuels for cooking, heating and lighting, which exposes them to health hazards.91 It is therefore important to incorporate women as champions in the transition to cleaner and more sustainable energy solutions like DRE.

Not only can the women in the Niger Delta become major distributors of smaller picosolar products like solar lanterns and clean cook stoves, they also afford women the opportunity to start new trading businesses in their villages and communities. There is the need to encourage more women to partake in higher skills acquisition in the DRE profession to have more of a gender-neutral sector. Therefore effort must be made to proactively integrate women across the value chain as designers, educators, trainers, managers, and entrepreneurs in this emerging space. In this way, women are not just limited to being just

consumers of DRE products and services, but are also empowered to become small medium enterprise entrepreneurs, designers and distributors and policy makers in energy access space. There is no reason why women in the Niger-Delta who have borne decades of exploitation cannot become bold leaders in the emerging DRE energy access space in Nigeria.

Government Support to grow local Niger Deltaindustry

A number of local DRE companies continue to require "significant funding support" to take off in Nigeria. Conversely, there are a number of Niger Delta focused development programs aimed at both addressing decades of ecological, social and economic injustice in the region. These programs should be more directly aimed at ensuring sustainable development for the future.⁹²

To ensure an enabling environment for sustainable market growth of the sector in the Niger Delta, there is the need for Niger Delta states and local government to proactively put in place policies, and programmes that ensures that such development funds are used to catalyse the DRE sector to benefit the region, particularly in supporting SMSE. For instance, the Niger Delta Development Commission (NDDC) can work with micro finance banks and development banks to ensure that DRE entrepreneurs, and SMSEs utilizing DRE products in powering their businesses, are able to access financing for scale-up growth of their businesses. This would require a policy shift in the way the entire energy access policies and programs are designed in the Niger Delta and would require states and

communities in the region to collectively decide on how best to ensure that this policy is enshrined across the board.

Furthermore, the government should work closely with aligned stakeholders in the sector, along with the Standards Organization of Nigeria (SON); The Nigerian Customs Services (NCSC); and the Ministry of Works, Power and Housing; and the Ministry of Finance to Eliminate VAT and tariffs on quality solar products and the associated components. The 35% duty and tax on batteries affects the ability of developers to bring in products at reasonable costs into the country. The Kenyan experience as well as in other African countries where renewable energy has taken off shows that the complete elimination of VAT, import duties and tariffs significantly boosts the growth of the market.

The energy mix in the Niger Delta has so far been dominated by fossil fuels, which are environmentally degrading and fast depleting. As the Vice President of Nigeria Professor Yemi Osibanjo said in a recent news report, Nigeria must be preparing for a postoil era sooner than later.⁹³ There is clear evidence that Nigeria and the Niger Delta is endowed with ample renewable energy resources and that transition from our fossil based economy to DRE economy will help provide energy services to last many communities trapped in energy poverty

This is why it is also very important to get the Nigerian Electrical and Electronics Engineering curriculum reviewed to incorporate new and emerging technologies. By failing to embrace emerging new clean technologies in the renewable sector, while sticking to outdated and cumbersome central

grid models our citadels of learning are failing at preparing the workforce in Nigeria for Utility 2.0 which is becoming the future of energy sufficiency and energy access for several other countries. Without appropriately energizing the work-force of tomorrow in emerging clean technology, the economic opportunities and job opportunities will be lost to more skilled persons from outside the country or from other regions.

DRE can deliver productive use of energy in a way that empowers individuals and communities in the Niger-Delta particularly those at the bottom of the pyramid. The architecture of the future of energy is changing and it needs civil society and community based organizations as a main player in the clean and renewable energy access value chain. It is of utmost importance to have communities ably represented and included in renewable energy projects, particularly in last mile communities where the indicators of poverty and illiteracy are high. This would ensure that resilience and sustainability are built into these projects and that community ownership would act as a buffer to vandalization, theft or mis-use and neglect of these projects. In communities

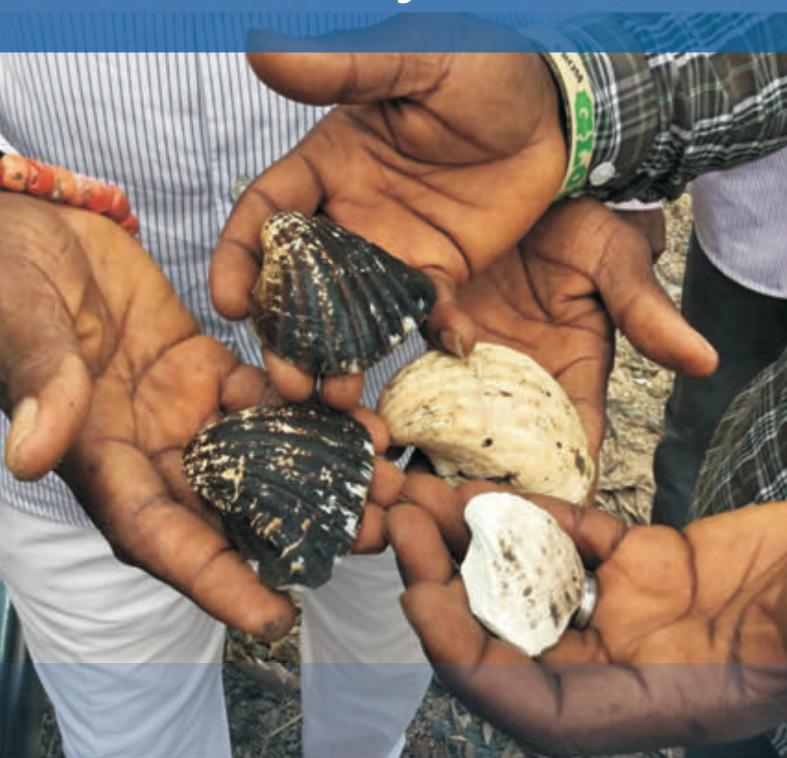
where proper engagement is done prior to renewable energy installations like Mini-Grid, the communities are involved in the ensuring the safety and sustainability of these projects including preventing theft of the systems. When communities through their representatives are properly engaged in renewable energy development, it ensures participatory and transparent policy dialogue and effective support mechanisms are built into the system to ensure durability of these projects.

The possibility and promise of deploying decentralised renewable energy. It is quicker and cheaper to deploy than grid based turbines; it is more sustainable and the cost to the end users pays off in no time. Access to electricity in the Niger Delta means increase in literacy level, innovations, increase in income and wealth creation, economic growth, female empowerment, and an increase in peace and security as well as healthy well-being and living.

The time to diversify and transition to DRE in the Niger Delta is now. The benefits of such transition to cleaner, cheaper, and more sustainable energy are numerous for the region.



Sustainable Biodiversity Based Development in the Niger Delta



Solutions for a Sustainable Future

Having reviewed the developmental efforts made thus far in the Niger Delta, and reflecting on the role renewable energy can play in uplifting the region, it is essential to underscore the fact that a biodiversity based development path is inescapable. It must be kept firmly in mind that the population here have deep knowledge of their ecosystem and the gifts that Nature has given them.

They largely depend on these resources for livelihoods and for various socio-cultural needs and these should be protected, preserved and supported.

It is clear that having an uncontaminated or degraded environment is key to attaining sustainable development. It can be said that pollution subverts efforts at development. Consider, for example, the access to potable water and sanitation. There are communities that store and process cassava in their creeks and streams. Where such water bodies become contaminated by oil spills or other toxic sludge and the people still use it to store or process their food, they would invariably be eating unwholesome food and exposing themselves to food poisoning.

Another reality that poses special challenges is global warming. This phenomenon has direct impact on the survival of species and, by extension, the health of dependent communities. Sea level rise, a result of global warming, is already accelerating coastal erosion and loss of infrastructure, farmlands and territory generally. Climate change is also putting the people's traditional knowledge of the seasons, biodiversity and support systems. This calls for investment in both formal and informal education in order to ensure the resilience and sustainability of efforts.

Strategic Biodiversity based Development

Strategic biodiversity based development in the Niger Delta must include the following:

- 1. Provision of water and sanitation
- 2. Renewable energy
- 3. Public health
- 4. Public education
- 5. Energy efficient and eco-friendly buildings (including public buildings)
- 6. Eco-sensitive infrastructure
- 7. Eco-tourism including protected sites, artefacts, products and cultural events
- 8. Fisheries including aquaculture
- 9. Integrated farming food production and processing
- 10. General biodiversity restoration including studies of biodiversity at risk, base lines studies and erosion of biodiversity already suffered through hydrocarbons pollution.
- 11. Well-being economy an economic system that focusses on the quality of life of the people and not just economic statistics

Population and development

Population increase and the resultant youth bulge cannot be ignored in the Niger Delta. The region's complex and rich ecosystems that have hitherto supported the people are overexploited, contaminated, degraded in unsustainable ways. Climate change further exacerbates these environmental problems by adversely affecting water supplies and accelerating coastal erosion.

The object of ecosystem based development is to ensure that basic human needs are met while at the same time limiting negative environmental impacts. Knowledge about ecosystems, for example, provide opportunities for sustainable agriculture production in both terrestrial and marine environments. The UN Sustainable Development Goals that were adopted by the world's countries on September 25, 2015 point toward the importance of developing sustainable solutions that are eco-friendly.

The Niger Delta is the largest delta in Africa, has the largest mangrove forests in Africa and the third largest mangrove forests in the world. 94 It is endowed with huge reserves of petroleum resources and globally recognised rich biodiversity. For the four states (Akwa Ibom, Bayelsa, Delta, and Rivers) under focus in this report, ecosystem-based solutions present the sustainable way to manage a transition from the fossil fuel dependent economy in the Niger Delta to sustainable biological resource-based economy.

Concepts in Ecosystem-based Management

The Convention on Biological Diversity (CBD) defines biodiversity as: "Biological diversity" means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems." It also defines Biological resources as including "genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity."95

Biological diversity is undoubtedly an essential resource for human beings and the preservation of natural ecosystems and therefore, both ecological and economic objectives should be incorporated in the management of biodiversity if humans are to continue to benefit from its services. There are several important linkages between biodiversity, ecosystem services and economic growth. Sustainable use of biodiversity contributes to economic growth through the impact of biodiversity and on productivity. In an economic perspective, biodiversity improves productivity of natural ecosystems and agricultural activities.

There are four broad groupings of ecosystem services⁹⁶, namely:

- · Provisioning such as medicinal resources and the production of food and water;
- · Regulating such as water purification and the control of climate and disease;
- supporting, such as nutrient cycles and crop pollination; hydrological cycles, and
- · cultural, such as spiritual, historic, recreational benefits and other place marking uses.

These ecosystem services are also seen as "nature's benefits" or gifts of nature. Although ecosystem services exist whether or not they are used by humans, the concept is often tied to the benefits that humans receive or derive from ecosystem processes. In this report, the concept is used in a holistic sense to include all biophysical relationships that exist in nature irrespective of whether they are utilised or not by humans.

Although there is no single universally accepted definition of the concept of ecosystem based management (EBM), there is a consensus on its two overarching goals. These are the

- 1) Sustainability of human usage of environmental resources and,
- 2) Conservation of species and habitats, including other ecosystem components that may not be utilised directly by humans.

Three conceptual objectives can be drawn from the second goal⁹⁷:

- 1) To conserve enough components (ecosystems, species, populations, etc.) so as to maintain the natural resilience of the ecosystem;
- 2) To conserve each component of the ecosystem so that it can play its historic role in the food web (i.e., not cause any component of the ecosystem to be altered to such an extent that it ceases to play its identified historical role in a higher order component);
- 3) To conserve the physical and chemical properties of the ecosystem.

Grumbine (1994) posits that ecosystem management "integrates scientific knowledge of ecological relationships within a complex sociopolitical and values framework toward the general goal of protecting native ecosystem integrity over the long term." It is generally agreed that the goal of ecosystem-based management approach is to restore and sustain the health, productivity, and biological diversity of ecosystems and the overall quality of life through a natural resource management approach that is fully integrated with social and economic objectives. It integrates ecological protection and restoration with human needs to strengthen the essential connection between economic prosperity and environmental wellbeing, providing the framework that draws together federal, state, local, and communities and the general public.

Eight guiding principles ⁹⁹ of ecosystem based management have been identified as follows:

- 1) Long-term sustainability as fundamental value;
- 2) Clear, operational goals;
- 3) Sound ecological models and understanding;
- 4) Understanding complexity and interconnectedness;
- 5) Recognition of the dynamic character of ecosystems;
- 6) Attention to context and scale;
- 7) Acknowledgment of humans as ecosystem components;
- 8) Commitment to adaptability and accountability.

Considering that scholarship on the complex Niger Delta ecosystem is still evolving, it is essential that developmental and economic plans should be prepared using participatory, consultative structures and inclusive manner, taking best advantage of available local

knowledge as well as technical expertise. That is the framework for obtaining up-to-date economic, social, cultural and ecological information necessary for the much-needed transformation.

Threats to Ecosystems and Biodiversity in the Niger Delta

The Niger Delta is endowed with rich biodiversity (NDES, 1997; NDDC, 2004; FMENV, 2004, etc.) and the region is regarded globally as a biodiversity "hot spot". The region is classified as among the 200 critically endangered eco-regions by the World Wildlife Fund (WWF) and the second most sensitive environment in Africa by the by World Bank (Phil-Eze and Okoro, 2009). There are 119 species of mammal, 201 birds, 30 reptiles, over 850 vulnerable tree species, and about 338 freshwater fish species in the Niger Delta region (National Biodiversity and Strategy Action Plan, 2014). However, over the last 60 years, this rich biodiversity has been under severe threat from diverse direct and indirect factors related to:

- · Oil and gas exploitation activities,
- · Economic development and rural poverty
- Pollution
- · Habitat degradation and land-use change
- · Over-harvesting of natural resources
- · Invasive alien species
- · Poverty and population growth;
- Institutional and management challenges.

The long-term solution proposed by the UNDP-GEF Project report on Niger Delta Biodiversity (UNDP-GEF PIMS no: 2047; GEFSEC Project ID: 4090) is to conserve and sustainably utilise the Niger Delta's globally significant biological diversity by mainstreaming biodiversity management priorities into oil and gas sector development policies and operations in the Niger Delta. Two key aspects were identified as relevant to this solution, namely;

- · Adopt a 'barrier-removal' approach to deal with a key driver of environmental change in the Niger Delta
- · Improve the ability of leveraging finance.

However, there are several obstacles to the achievement of the long-term solution. These are:

- Governance framework of information, law, policy and institutional capacity;
- · Weak to non-existence of adequate 'framework' for action through which key stakeholder can build trust in each other, agree on common objectives and progress towards them in a cost- effective way to develop biodiversity mainstreaming measures;
- · Financing for improved management of biodiversity in the Niger Delta is inadequate, inefficiently disbursed, and not linked sufficiently to priority biodiversity areas, oil and gas operations or communities within the Niger Delta.

The primary approach for biodiversity conservation and management in the Niger Delta is the establishment of Protected Areas (PAs) by government and several other secondary uncoordinated related projects by the international oil companies (IOCs), communities and Non-Governmental Organisations (NGOs). These are have, however, not been effective because of several policy, capacity, and governance barriers. Legal and regulatory provisions designed to protect forests and biodiversity are inadequate and the weak enforcement of

conservation regulations has resulted in uncontrolled exploitation of forest and biodiversity resources since protected areas are easily accessible for illegal activities. Policies and regulations for harnessing economic opportunities in biodiversity and tourism are only largely lacking. In addition, the human resources and knowledge bases are insufficient for sustainable effective biodiversity management and conservation. Therefore, there is an urgent need to find new and innovative approaches to conserve the ecosystem's health and biodiversity while simultaneously achieving the much-needed development.

Transition to Ecosystem Based Economy

The oil facilities in the Niger Delta have necessitated a pipeline network of over 7,000 km in length and with an average right of way of 20-30 metres. These pipelines criss-cross the mangrove ecosystem of the region and constitute sources of pollution because of their aging state, poor maintenance culture of the operators and third party interferences. A complex of other factors contributes to the devastated state of the Niger Delta environment, including fall in oil prices, conflicts and open violence, oil thefts and refining as well as the handling of stolen products through burning.

Ecosystem based development provides a way to redress the unmitigated neglect of the region, the high unemployment, under-development and the barely contained discontent. As far back as 2008, a World Bank Report stated, "Nigeria's Niger Delta is endowed with vast reserves of oil and natural gas. Despite these resources, the region is marked by deprivation and underdevelopment. Some of the principles that would contribute to ending conflict and moving towards achieving sustainable development in the Niger Delta include; political will, flexibility, long-term vision, collaboration with communities, employment generation, diversification of the economy, environmental laws, transparency and accountability." 100

The need to focus special attention on the development of the difficult terrain of the Niger Delta and its people was recognised by the colonial administration and successive Nigerian governments. This resulted in the setting up of several intervention bodies/agencies in the Niger Delta. The poor outcome of the various interventionist programmes to meet the expectations of the oil producing communities can be attributed to several factors. As have been illustrated in the case studies in this report, the key factors include;

- · Inadequate planning and absence of integrated strategic plan,
- Lack of active participation of the affected people in decision-making, project execution and management,
- Poor funding and/under funding
- Lack of transparency and prudent management of funds,
- Lack of adequate project monitoring and evaluation to determine the effectiveness of projects,
- Poor level of collaboration and synergy among the various government agencies and the private sector, etc.
- General disregard of the place of the rich biodiversity of the region as key to development

The challenges of the Niger Delta are inextricably linked and placing them in silos can be counterproductive as a supposed solution ends up creating new problems. Currently, there is no integrated holistic development vision, strategy and implementation plan for the Niger Delta with active participation of the communities and collaboration/synergy among government and private sector and interventionist agencies. Involving local communities is critical because it will not only secure the integration of local or traditional knowledge, but will also enhance community "buy-in", transparency and project sustainability. An integrated holistic development approach will involve the preparation of a comprehensive strategic plan with a holistic approach and long-term vision aimed at addressing natural resources management, employment generation, restoration of hydrocarbon contaminated land/water resources, urbanisation, climate change related issues of flooding, coastal erosion, public health, etc, predicated on cooperation, partnership and coordinated implementation of defined actions. In order to optimise short/medium term interventions and prepare for future changes (including the Niger Delta beyond oil and gas), it is imperative to develop an integrated and holistic long term vision and implementation plan.

In addition to the threats confronting the ecosystem of the Niger Delta, a transition to sustainable ecosystem-based economy requires the key basic actions including,

- Halting the dependence on fossil fuel resources that are fast declining in reserve quantity and value,
- · Ensuring food security for the increasing population,
- Ending unsustainable management and depletion of many natural bio-base resources, (land, forest, fish, etc.),
- · Providing resilient, eco-friendly social infrastructures and amenities,
- Tackling poverty and high unemployment,
- · Halting environmental degradation and pollution, and
- · Increasing levels of flood and other natural disasters readiness.

Achieving the above will require a redefinition of the existing development approaches in ways that ensure the maintenance of the life support mechanism of the region's ecosystems. A redefinition like this requires suitable knowledge and technology (including traditional knowledge), legal/policy frameworks; changes in consumption preferences and new institutional arrangements to interlink policies from a wide range of areas/sectors. Alongside these, the need for investment portfolios with societal acceptance which may be achieved through participatory processes.

It is important to note that;

- Sustainable ecosystem-based solutions with economic growth in focus can be developed based on the knowledge about possible linkages between ecosystem and economic growth (systems approach).
- The ecosystem-based solutions should use scientific and best-practice knowledge from different academic disciplines and societal sectors with early stakeholder involvement.
- · Cross-sectoral collaborations will be needed for the implementation of ecosystembased solutions, and civic engagement is often desirable. Systems thinking approach

takes a holistic, long-term perspective that focuses on the dynamic and complex relationships between interacting parts, and how those relationships generate behaviour over time.

- Systems thinking approaches offer a means to not only integrate across disciplinary and sectoral boundaries, but also to understand the complex and dynamic nature of sustainable ecosystem management. In addition, systems thinking approach is also useful in building human capacity (education) as a vehicle for the desired societal change needed for sustainable ecosystem-based solutions.
- Effective education in ecosystem/biodiversity conservation will increase the number of informed and engaged citizens, building social will or pressure to shape policy, and raise a workforce for a low-carbon economy.

Sustainable ecosystem-based economic transformation will reduce fossil resource dependency in the Niger Delta and achieve sustainable development goals. However, the success in harnessing the potentials of sustainable ecosystem-based economic transformation will depend on a complex interplay of several factors, such as, but not limited to

- · public education/awareness,
- · capacity development of relevant key stakeholders,
- · infrastructure, research and innovation,
- · product development, communication and marketing, and
- · governance, policy and regulation.

Going into Action

Building the transition to sustainable ecosystem-based economy in the Niger Delta requires integrating sustainable management and conservation of biodiversity resources into the production and marketing of agricultural, forestry and fishery business thereby creating employment, income, opportunities and community incentives for biodiversity conservation. There are three major obstacles to achieving the above integration, they are namely:

- 1) Inadequate institutional framework and competencies at the state local government levels to address the needs of an emerging biodiversity-based business sector, based on sustainable harvesting and production principles,
- 2) Inadequate sustainable production approaches, biodiversity conservation practices and knowledge due to low incomes from present product categories, and
- 3) Limited community revenues due to low prices, poor supply, processing and marketing chains and strategies.

What must be done:

- 1. Building competences at the state local government levels for support of emerging biodiversity based business
- 2. Supporting innovative and low carbon power supply and production processes
- 3. Facilitate and support development of community-based pilot demonstrations of sustainable production and biodiversity conservation that are also income generating. This includes strengthening community capacities/competences, skill and technologies to assess

and maintain the benefits of sustainable production and biodiversity conservation and establishment of appropriate pilot examples of biodiversity-based social enterprises

- 4. Integrate commercial and market chain objects in standard biodiversity conservation projects to maximise consumer prices and minimise transaction costs
- 5. Provision of energy efficient and eco-friendly housing and public buildings including by embarking on demonstration projects
- 6. Massive investment in ecosystem sensitive farming and fisheries projects including through agroecology and aquaculture
- 7. Promotion of renewable energy supply and support structures to facilitate access.

Steps and Outcomes

- · Clear and accepted policies will lead to improved cooperation and coordination among stakeholders at state, local government, communities and partners with competencies related to biodiversity business.
- Strengthened community-based sustainable production and in-situ biodiversity conservation and rehabilitation will tackle poverty at source and yield wide buy-in by all stakeholders.
- · Confidence will be built through established pilot models for community-based business oriented enterprises with combined objectives of income generation, sustainable production and biodiversity conservation.
- The creation and availability of essential human and technological capacities in Niger Delta communities will ensure sustainability of the approaches contrary to past efforts.
- Popular participation and transparent implementation will lead to the maximisation of revenue from sustainable biodiversity conservation projects and reduction of transaction costs.
- · Increased financing and enthusiasm of community based biodiversity conservation projects will promote socialised production ownership, build peace and communal cohesion.
- · Sustainably managed and healthy ecosystems support healthy populations and workforce.

What can be done

There is no doubt that agriculture that respects biodiversity will be key to any development effort in the Niger Delta. To realise the Sustainable Development goal of Zero Hunger, requires a vision of agriculture that builds on loal knowledge, learns from science, is agro-ecological and aims to provide nutritious food while fighting poverty. Key pillars of such an agricultural vision is presented in the box below.

A Vision for Sustainable Agriculture is

- One that does not always strive for maximum yields, but rather seeks yields that are sustainable in the longer term. It is multifunctional: it preserves soils and water supplies, regenerates and retains natural soil fertility, and encourages biodiversity.
- Looks after the landscape so that nature can provide its full range of ecological services. It enhances the resilience of the entire production system.
- Allows farmers to earn enough money to live on. It pays them a fair price for their produce and a reasonable recompense for their work to protect the environment, nature and the climate.
- Protects jobs in rural areas- both directly and indirectly- by providing local processing facilities, thus helping to combat poverty. It offers young people a future in rural areas and halts the exodus town.
- Providing a sink for CO₂ rather than emit greenhouse gases.
- Dispenses with agrochemicals. To maintain yields it uses natural methods to keep pest and weeds in check. It grows a diverse range of crops and combines arable and livestock farming. It seeks closed material cycles.
- Adopts production methods that make efficient use of resources such as water. It abandons fossil fuel and minimizes food losses.
- Is modern. It uses machinery where appropriate and takes advantage of knowledge-intensive systems. It is underpinned by existing traditional knowledge, which is combined with the results of cutting edge research. Agricultural science seeks to improve its understanding of nature rather than exploit it. It makes use of nature's bounties for the benefit of all, including nature itself.
- Produces food mainly where it will be consumed. Local markets offer nourishing, wholesome and affordable foods and so improve the health of local people.
- Contributes to an equitable system that supplies those living in rich countries with more plant- and less animal-based produce.

estoration of the Niger Delta environment holds another key for sustainable development. Besides hydrocarbon pollution remnediation, the waterways must be unclogged to make for ease of transportation.

The numerous rivers, creeks and creek-lets crisscrossing the Niger Delta have been invaded by Water Hyacinth (Eichhornia Crassipes) and nypa palm hindering fishing and rendering them impassable for domestic, communal and other uses. Several studies have shown that water hyacinth can be:

- · Source of cheap and available arterial for bioremediation of hydrocarbon polluted sites;
- Alternative energy source (bioenergy);
- Used as mulch and substrate for growing mushrooms.
- Used as animal and fish feed;
- Material for making rope, cane chairs, bags, tables and a range of other craft and furniture, paper and boards.
- · Material for water purification.

Rather than the current practice of gathering and disposing water hyacinth, a pilot project can be initiated in the region for its evacuation from the waterways and usage in a biomass plant for conversion biofuel and raw materials for remediation of hydrocarbon contaminated sites, animal and poultry feeds, manure, women accessories, etc.



'Swamp Devil' clearing water hyacinth in River Niger (courtesy of "Aquarius Systems")

Conclusion

Going Beyond Oil Dialogues

Attempts to diversify the economy of Niger Delta states and provide economic empowerment for its people have mostly ended in failures. An immediate result of this is that the government and people of the region see no future without dependence on the oil sector and all the problems that come with it. However, most of the states understand the need to move away from oil, and that that change must be to other areas like science and technology, manufacturing, agriculture, etc. that are not susceptible to the same revenue volatilities like crude oil and do not lead to all the manifestation of the resource curse. A study of different economic empowerment and diversification schemes however reveals peculiar patterns which consistently lead to failures or successes.

Change versus Continuity: In the Niger Delta, the tradition of political succession is still at its most nascent stage, making the end of every administration and the start of another seem like the closure of an epoch and the beginning of another. The disturbing result is that continuation of projects or programmes irrespective of how laudable become very difficult or outright impossible. As the case studies indicate, this is a key impediment to the successes of economic empowerment and diversification schemes, they simply do not last long enough to learn the needed lessons and make necessary adjustments. Indeed, in the few cases where excellent scores were recorded in the case studies in chapter 2, success was achieved partly because the projects spanned beyond the tenure of one administration.

Legacy versus Leadership: The need to leave a

legacy unstained by the 'nuisance' of having to share the success podium with someone else, is another key reason economic schemes often end in failures. Unfortunately, the political culture in the Niger Delta and indeed Nigeria is still one where successes are judged based on how many project are initiated and completed by an administration and not how good policies and programmes are continued by successors. For this reason, programmes with good objectives are jettisoned in favour of new ones started by the new administration. Often towards the end of the life of an administration, there is a frenzy to complete all the initiatives started by the administration. Unfortunately, economic empowerment and diversification schemes cannot simply be 'completed'. They need consistent policy focus and monitoring to succeed.

Politics versus Progress: In many cases, the need to satisfy political interests and blocs have derailed otherwise well thought out and designed diversification and empowerment programmes. In many of the case studies, the context and design stages of the interventions were flawless, but at the point of delivery, political considerations were introduced, opening channels for mediocrity and faulty delivery. This fact is reinforced by the disturbing social expectation that even the otherwise civil duty of voting a candidate or belonging to a political party must carry with it some extra benefit beyond good governance if the party or candidate wins. For fear of losing one's political 'constituency' and the support that comes with it, public officials tasked with deploying these schemes, sacrifice great opportunities to do good on the altar of satisfying narrow and primordial political interests.

Corruption versus Prudence: One major driver of the failure of empowerment and diversification programmes if corruption. In most of the case studies where failures were recorded, corruption seems to seems to be an enablers of other failure drivers. Somewhere within the consideration of political reward over social progress, or the need to initiate another programme rather than continue with an existing one, is the factor of corruption; the need to make fraudulently siphon public resources.

Entitlement Versus Responsibility: A factor which is not noticed or mentioned very often in the Niger Delta is the phenomenon of entitlement. There is an ever-lurking consciousness among beneficiaries of government empowerment programmes that somehow it is their entitlement to benefit from as many of these schemes as they possibly can without making appropriate use of them. The political economy of this perception derives from the fact that the Niger Delta region is endowed with crude oil resources and that these resources rightly belong to its people to be used as they please. This thinking is fortified by the language that current empowerment schemes are crafted in. For the government, these schemes are not only for the support of citizens to become economically productive, but are more to stem 'youth restiveness'. This thinking provides a currency of fiat stemming from the dubious awareness of entitlement. Restiveness or the threat of it is routinely dangled as an intimidation of the society if more and more empowerment programmes that empowers only a certain category of people are not regularly deployed.

The Niger Delta Beyond Oil

Development in the Niger Delta, as in other parts of Nigeria has largely been seen as the provision of roads, bridges, power and water plants. Due to their paucity, the provision of these basic social needs, they are highly celebrated. Their provision draws the curtain and concludes the scorecard of the governments. This has not brought about change, but rather has sustained the atmosphere of discontent.

The way forward will be built on the sustainable path with full popular participation and recognising the needs for recognition and preservation of the intrinsic values of Nature's gifts to the region. This will recognise and build on existing human capital. Rather than the current pollution tourism, the Niger Delta can be a centre for eco-tourism fully respecting the cultures and social values of the people. The sustainable biodiversity management path proposed in this report will require adequate funding and support to ensure much needed socioeconomic and environmental payoffs including in the aspects of food security and food sovereignty, clean and potable water supply, accessible renewable energy, full and productive employment, conservation of marine and terrestrial resources, quality education and healthcare systems, gender equality and adaptation to climate change.

With the transition from fossil fuels becoming a global possibility, there is urgent need to enthrone a system that promotes a productive developmental state in Nigeria in the place of the current system that stifles innovation. A system that empowers states and regions to generate revenue, retain earnings and contribute agreed ratios to the

central purse would engender competition, cooperation, integration and development. It would open attention to biodiversity protection and the enjoyment of ecosystem services in a holistic sense. It is such a platform that would promote long term planning and enthrone trans-generational justice and sustainability.

The Niger Delta beyond oil will be a hub of innovation setting the trail for other states in Nigeria and beyond. It will herald the inescapable need to leapfrog from the fossil fuel powered economies and civilisation to a low carbon, ecosystem-based sustainable society. This is a path that every state and region in Nigeria can take starting from the available endowments from Nature.

It will require strategic planning and leadership to coordinate, align and combine efforts in research and innovation according to different biodiversity and development profile. It will require institutional support for developing trans-disciplinary and specific biodiversity competences and skills both for research, academics and business.

Renewable energy resources provide the key to lighting up and powering the Niger Delta in contrast to a situation where communities live with toxic gas flares while wallowing in darkness.

A clean slate for a new development path would literally be created through the halting of polluting activities and the cleanup of existing polluted sites in the Niger Delta. The clean-up process itself will yield technical competences, create awareness for the people to be ecological monitors/defenders and provide wide opportunities for employment. The cleanup process will open the vista for new opportunities and boundless possibilities.

New development patterns and activities will require massive levels of public awareness and acceptance to ensure smooth transitions for maximum benefit. When this is coupled with participatory and inclusive approaches potential conflicts are reduced or eliminated. Transparency leads to improved synergies and better coordination ensuring efficient funding and investments by the various levels of government and their agencies. These are further strengthened through support for traditional sectors (e.g. agriculture, trade, urban services, food, fisheries etc.) and, in particular, small and medium-sized enterprises (SMEs) in conversion processes (technology, business) towards the biodiversity based development.

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