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A Deep Dive into the Review of National Environmental Standards and Regulations Enforcement Agency (NESREA) Act

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ABSTRACT

Nigerians are poorly aware of their environment and the damages being done to it through their numerous activities either knowingly or unknowingly. Moreover, the constitution is the basic law of the land and it proclaims its supremacy over and above all other laws in the country and any law that is inconsistent with any of its provisions shall be null and void to the extent of its inconsistency. Although the National Environmental Standards and Regulations Enforcement Agency (NESREA) has good 33 National Environmental Regulations that cut across almost all sectors of human activities that can have negative effect on the environment, but their role is not felt in term of environmental management, conservation, protection and sustainability in the country due to inadequate awareness and enforcement. A literature review was done by using a variety of search engines including Research Gate, Google Scholar, Academia, Mendeley, SSRN search strategy to retrieve research publications, "grey literature" and expert working group reports. This review paper tried to do a deep dive into the review of National Environmental Standards and Regulations Enforcement Agency (NESREA) act, focusing on national environmental laws and regulations, gazette, composition, structure, mandate and enforcement power of NESREA and intermediary determinants of empowering the citizens to have legal standing and access to justice to be able to protect and enforce the protection of a clean, healthy environment cum sustainable development and others. Therefore, mending the leakages in the roof is the work of an honest, patriotic, disciplined, hardworking, visionary, accountable, sincere and need for achievement driven followership and leadership that is abreast with current environmental knowledge with a solution focused systems therapy approach to environmental problems with a view to heal the world. This paper therefore recommends that the NESREA Act of 2007 be amended to give it oversight over the entire environment including the oil and gas sector. Furthermore, the requirement of Pre-action Notice and Limitation Clause is removed from the NESREA Act. Also, effective implementation of both the NESREA Act and its regulations requires necessary capacity building of the agency in terms of human, technical, material and financial capacity. It further requires effective cooperation and collaboration of various stakeholders in the implementation and protection of environmental laws in Nigeria.

Key words: Deep dive, sustainability, capacity building, cooperation and collaboration, NESREA act 25 of 2007, Nigeria constitution

INTRODUCTION

Environmental management does not mean “management of the environment”. It does mean “management of activities within environmentally tolerable limits (carrying capacity) or constraints imposed by the environment itself and with full consideration of ecological factors”. Interestingly, during the last twenty-five years, the world has seen the beginning of one of the quietest and most profound revolutions in the history of human society. It has its roots in the emergence of environment as a major public issue. The real environmental issue is survival and survival is of course a very real issue and is mirrored in the whole ascent of mankind. Man has had to carve his niche on Earth. Naturally, earth is the home of man and in turn nurtures man and his myriads of activities. As man utilizes earth’s resources and makes severe impacts upon the natural environment, sometimes knowingly and sometimes unknowingly. In the opinion of Raimi *et al.*¹ environment has been conceived as a complex of social or cultural conditions that affect an individual or community. Three components of the environment may be identified: First, the physical environment, which refers to all non-living parts of the earth and its atmosphere (land, water, atmosphere, temperature etc.); secondly, there is the biological environment, which comprises of all living organisms including man and, the chemical environment, which comprises of all mineral component including soil chemical properties and lastly is the social (or built) environment. This may further be divided into political, sociological and economic environments¹. It may also refer to a system where living organisms interact with the physical elements. This system is alternatively known as the ecosystem. In this view, man as part of the living organisms interacts with other organisms within the environmental set up. Example of man’s interaction with his environment can be found in agricultural practices, mining, quarrying, water resources exploitation, deforestation, afforestation, road and rail network constructions, laying of pipelines as means of water supply to an area or as means of transporting crude oil (petroleum) over a long distance among others. Thus, a number of issues have therefore arisen out of man’s interaction with his milieu. Not only does man respond to the forces of environment, but man, in turn, acts upon and modifies environmental processes and forms. Man creates many forms of environmental degradation and pollution. Environmental business is a serious business and its fragility makes it a critical factor in human existence and man is blessed with the environment and the opportunity to exploit its resources to his advantage. It is within the milieu that both natural and man-made things are found and sustained¹⁻³. In

other words, man will ever interact with the environment for his sustenance and sustainable development. However, anthropogenic activities have posed a great threat to the environment as reflected in many current environmental problems facing the world today including Nigeria i.e. climate change, global warming, ozone layer depletion, soil degradation and so on. Therefore, for the environment in which human is habited to remain suitable for man, it needs protection against the scourge of degradation often perpetrated by man^{4,5}. The resultant pains that millions of people all over the world have experienced and are still encountering as well as the dangers posed to the world’s future and human society by anthropogenic impact on the environment have compelled coordinated attempts towards maintaining a balance between human affairs and the natural environment. This has provoked the needs to establish environmental policies and enforcement agencies around the world and in Nigeria. The legal mechanisms and its instrumentality cannot be overemphasized if any conscious attempt geared towards salvaging the precarious state of milieu vis-a-vis preventing future generations from suffering from the reckless environmental damaging activities of the present generation (sustainable development)^{6,3}. It is within this view that this paper attempts to review the National Environmental Standards and Regulations Enforcement Agency Act (NESREA Act). It provides a background of the evolution of environmental governance in Nigeria that dated back to the pre-colonial era of post 1988. As part of the emerging coordinated approach to environmental issues, the Federal Environmental Protection Agency (FEPA) was established due to discovery of some imported toxic chemical wastes, brought in by an Italian ship in Koko, May 1988, in the defunct Bendel State now in present day Delta State. It explains the mandate, vision, functions, regulations, some key activities and challenges of the Agency.

BRIEF OVERVIEW OF ENVIRONMENTAL LAWS IN NIGERIA

The development of Nigerian environmental laws can be divided into two: The pre 1988 era and the post 1988 era⁷.

The pre 1988 Era (Pre-colonial): During the colonial period, Nigeria was not concerned about environmental safety. As a result, there was no policy to treat and prevent it⁸. Unfortunately, the principle of care, maintenance and bequest was operated only within the limited confines of the family. The challenges before us in modern times are to extend this principle not simply to the total national area and resources but also to the whole global environment. The tort of nuisance

was more important because jurisdiction in the area of environmental law is not recognized as a public interest warranting Government's contribution and intervention. A few valid environmental laws are regulated activities that can damage the environment⁹. One of those laws was the Criminal Code Act of 1916, which prohibited water pollution and air pollution. In 1917, the Public Health Act was enacted. Although in scopes, this Act does not provide any basis for the regulation of various environmental media such as soil, air and water pollution. At that time, environmental issues were treated in a rudimentary way from the perspective of environmental sanitation¹⁰⁻¹⁸. As a result of Nigeria's independence in the 1960s and the discovery of oil in trade weights, environmental laws became increasingly inadequate and apparent. This is because most environmental protection provisions are scattered across different jurisdictions, leading to untimely response to different needs in different situations¹⁹. In the next decade of independence, the government disrupted pollution activities, especially those related to the release of oil into navigable waters and environmental damage from oil activities^{6,18,20-24}. The 1970s saw the further development of the Nigeria's environmental regime in response to the individual growth associated with the oil boom. River basin authorities were created and environmental units were established in some government ministries¹⁹. The laws were, however typically "knee-jerk or immediate" emergency responses to situations. The 1970s saw Nigeria's local government system grow in response to individual growth associated with oil boom. River basin authorities were created and environmental units were also created in some government ministries¹⁹.

The post 1988 era: It is worth noting that toxic and dangerous dumping in Nigeria provoked the federal government to tackle environmental pollution. It happened on September 19, 1987 when Sunday Oyemire Nana, a farmer from Koko, a small village which is five miles from the coast in the former state of Bendel, Nigeria, was approached by Gian Franco Raffaelli, an Italian businessman who has been living in Nigeria for about 20 years, dumping about 3,880 tonnes of toxic and hazardous waste on behalf of an Italian company. In May 1988, the Italian ship was found and most of its components are made of polychlorinated biphenyls (PCBS). However, the media response following the discovery prompted the Federal Government to reconsider its environmental standards. This led to the creation of the Harmful Waste (Special Criminal Provision etc.) Decree 42 of 1988, which prohibited, illegal, dumping, storing or depositing of harmful wastes debris in the

various environmental media such as air, land and waters of Nigeria and the then Federal Environmental Protection Agency (FEPA) through Decree 58 of 1988 and 59 (amended) of 1992. The agency was charged with the overall responsibility to protect, restore and preserve the ecosystem of the Federal Republic of Nigeria. The decree 58 of 1988 requires FEPA to establish environmental guidelines and standards for the abatement and control of all forms of pollution^{13,20,21,23-26}. With the setting up of Federal Environmental Protection Agency (FEPA), the State's Environmental Protection Agencies (KSEPAS) (Kwara State Environmental Protection Agency Act of 1992) were set up. These were complemented by the Local Governments (LGAs) Environmental Protection Agencies. The most recent and important addition to Nigeria's environmental regime is the NESREA Act, which came into force in 2007. The Act establishes the National Environmental Standards and Regulations Enforcement Agency which is Nigeria's lead environmental protection agency.

In 1980s and 1990s observed the most extreme and systematic development of environmental laws in Nigeria partly owing to Nigeria's ratification of or accession to a number of international instruments (i.e., conventions and treaties)^{23,27}. National laws on environmental sustainability has improved during this era and had different National environmental laws and some of them are still in force today. Other Environmental laws passed in Nigeria include, but are not limited to, the following;

- Environmental Impact Assessment Act. 1992
- Harmful Waste (Special Criminal Provision) Act. 1998
- Oil Pipelines Act. 1956
- Petroleum Act. 1969
- Niger Delta Development Commissions (NDDC) Act
- Environmental Sanitation Law of Lagos State

National environmental standards and regulations enforcement agency (NESREA) act: This Act replaced the FEPA act of 1988. In 1999 the Government wisely decided to merge the FEPA and relevant Departments from other Ministries into a single Federal Ministry of Environment. However, the new Ministry of Environment lacked the necessary laws to enable enforcement. This created a vacuum in the effectiveness of environmental laws, standards and regulations in the country. To address this gap in line with section 20 of the 1999 Constitution of the Federal Republic of Nigeria, the Federal Government established the NESREA, as a parastatal of the Federal Ministry of Environment.

The composition, structure, focus, mandate and enforcement power of NESREA are:

Composition: The Council is composed of fourteen (14) members drawn from the major stakeholders in the environmental sectors covering both the public and private sectors. The head of the Council is entitled a "Chairman", appointed by the President on the recommendation of the Minister. Other members include the Permanent Secretary of the Federal Ministry of Environment or his representative, a Director Representative from the Federal Ministries of Solid Minerals Development; Agriculture and Natural Resources; Water Resources and Science and Technology. Others are representatives of the Standards Organization of Nigeria, Manufactures' Association of Nigeria, Oil Exploratory and Production Companies in Nigeria, as well as the Director General of the Agency. The Minister appoints four additional members; three appointees representing public interest and one appointee representing any stakeholder body.

Structure: The Agency consists of five Directorates, headed by a Director of the five, two are service Departments i.e., Directorate of Administration and Finance and the Directorate of Legal Services. The remaining three are technical Departments i.e., the Directorate of Planning and Policy Analysis, the Directorate of Inspection and Enforcement and the Directorate of Environmental Quality Control. The Director in charge of the legal services Directorate also serves as the legal adviser to the agency²⁸.

The focus of NESREA is:

- To protect the environment
- Enforcement of Laws and Regulations on the Environment
- Maintaining Environmental Standards
- To create environmental awareness
- To engage in partnership in the protection of the environment

Mandate and powers of NESREA: Part II of the NESREA Act contains the functions of the Agency. The Agency is authorized to enforce compliance with laws, guidelines, policies and standards of environmental matters. Such standards would include the federal water quality standards and air quality standards. In carrying out its functions, it is to coordinate and liaise with stakeholders within and outside Nigeria on matters of environmental standards, regulations

and enforcement. Relevant stakeholders would include the organized private sector, environmental groups at both national and international levels and other ministries and parastatals²⁹.

The agency has powers to:

- Forbid the processes and equipment or technology usage that undermines environmental quality
- Manage field follow-up of compliance with set standards and take procedures prescribed by law against any violator
- Subject to the provision of the Constitution of the Federal Republic of Nigeria 1999 and in collaboration with relevant judicial authorities, establish mobile courts to expeditiously dispense cases of violation of environmental regulation
- Conduct public investigation and make proposals to the Minister for the review of existing guidelines, regulations and standards on environment
- Develop environmental monitoring networks and compile environmental data from other sectors, except the oil and gas sector²⁸

It is pertinent to note that the powers of the Agency do not extend to environmental issues arising from the oil and gas sector. In other words, the Agency lacks jurisdiction over environmental matters emanating from the oil and gas sector. Also noteworthy is the fact that although the Agency has a Director General as the Chief Executive Officer, it still remains like its predecessor (FEPA), a parastatal within the Federal Ministry of Environment, Housing and Urban Development. The Minister in charge of the Ministry enjoys an overriding authority over the Agency and its functions.

Enforcement powers of the agency: The Agency roles would be meaningless if not complemented if they did not have the proper tools to enforce the law. Indeed, the capacity to impose and inject life and the sense of fundamental values is fulfilled as a function. Section 7 of the NESREA Act lists the mandate of the Agency as follow:

- Enforce compliance with environmental matters, laws, guidelines, policies and standards
- Coordinate and partners with relevant stakeholders, within and outside Nigeria, on matters of environmental standards, regulations and implementation

- Ensure compliance with the provisions of international agreements, protocols, conventions and treaties on the environment, including climate change, biodiversity, conservation, desertification, forestry, oil and gas, chemicals, hazardous waste, ozone depletion, marine and wild life, pollution, sanitation and such other environmental agreements as may from time to time come into force
- Ensure compliance with water quality, environmental health and sanitation policies, standards, legislation and guidelines, particularly in the area of pollution abatement
- Ensure compliance with guidelines and legislations on ecosystem sustainability and its management, biodiversity conservation and the development of the Nigeria's natural resource. Enforce compliance with any legislation on sound management of chemical, safe use of pesticides and disposal of their products, particularly, spent packages
- Enforce compliance with regulations for the import, export, production, distribution, storage, sale, use, handling and disposal of hazardous chemicals and waste other than in the oil and gas sector
- Enforce through environmental compliance, monitoring, regulations and standards on noise, air, land, seas, oceans and other bodies of water other than in the oil and gas environment
- Ensure that environmental projects funded by development partners such as donor organizations and external support agencies comply with regulations in environmental safety and protection
- Ensure environmental control measures through registration, licensing and permitting systems other than in the oil and gas environment
- Conduct environmental audit using environmental management systems such as ISO 14001:2004 and establish data bank on regulatory and enforcement mechanisms of environmental standards other than in the oil and gas environment
- Ensure environmental education and awareness creation on sustainable environmental management, promote private sector compliance with environmental regulations other than in the oil and gas sector and publish general scientific or other data resulting from the performance of its functions
- Engage in such activities as are necessary or expedient for the improvement and performance of its functions

Gazette national environmental regulations: NESREA Have 33 national environmental regulations that cut across almost all sectors and human activities that can have negative effect on the environment which have been gazette into NESREA act. They are as follow:

National environmental (Wetlands, river banks and lake shores) regulations, S.I. No. 26 of 2009:

The thrust of these policies includes the conservation and wise use of wetlands and their resources in Nigeria; ensure safe water conservation and management of flood and ensure the sustainable use of wetlands for ecological and tourism purpose aims to unify the entire citizenry and also to minimize pollution to the bearest minimum. This regulation provides for application of permit to use a riverbank or lake shore in Nigeria for any activities. Anyone wishing to perform any of the above mentioned tasks set out in the third schedule of the Regulations shall make an application to NESREA - (a) cultivate or promote by any means whatever plant, whether foreign or indigenous on any shore or coast; (b) introduce any animal or micro-organism, whether alien or native in any riverbank or lake shore; or (c) placing any substance on the riverbank or lake shore. Under the Regulations, a person commits a crime or if reclaims or drains a wetland, erects, construct, places, extends, removes or demolishes any structure that is fixed in, under or over a wetland. Anyone found guilty of this offence under these Regulations will be sentenced to a term of at least three (3) months or a fine not exceeding N500, 000 or both. In addition to this penalty, the offender will be required to carry out remediation work^{3,5,10,30}.

National environmental (Watershed, mountainous, hilly and catchment areas) regulations, S.I No. 27 of 2009:

The purpose of these regulations was to ensure that all landowners or residents, while using the land in a watershed, mountainous, hilly or catchment area observes and respects the carrying capacity of the land; carry out soil conservation measures and carry out preventive measures for water protection of catchment area. There were also provisions for sanctions under this regulation where there was any state violation of the provisions of the regulations. Anyone who violates any of the provisions of the regulations may have his permit withdrawn or shall be liable upon conviction to imprisonment of not more than one year or to a fine of not more than N200,000 or both. For all offenses committed by a corporate body will be liable to a fine not exceeding N1, 000,000 and an additional fine of N50, 000 for daily offence subsists³⁰.

National environmental (sanitation and wastes control) regulations, S.I. NO. 28 of 2009:

The thrust of these initiative regulations was to adopt sustainable and environmentally friendly practice in environmental sanitation and waste management to minimize pollution in Nigeria. All landlords or occupiers of premises were required to provide waste receptacles for storage before collection by licensed and certified waste manager. The regulations forbid without initial notifications issued by the agency, the transit of any toxic waste destined for another country through the territory of Nigeria. Regulations 71-93 gives rise to offences, while regulations 94-104 provides provisions for the penalties for various offences under this law^{10,11,30}.

National environmental (Permitting and licensing system) Regulations, S.I. No. 29 of 2009:

The provisions of these regulations must inter alia, permit the implementation of environmental laws, regulations and standards in all economy sectors and geopolitical regions in Nigeria. There was a request for an application for authorization and the agency was empowered to fix various permit fees after having examined the application. The agency may grant or refuse consent on the issuance of an authorization. The agency also has the power to suspend or cancel any authorization in accordance with regulations 19-29³⁰.

National environmental (Access to genetic resources and benefit sharing) regulations, S.I. No. 30 of 2009:

The purpose of these regulations was to give account for environmental impact statement to the effect that a person shall not engage in any activity that could (a) have a negative and adverse impact on any ecosystem; (b) lead to the introduction of any exotic species and (c) leads to the continued use of natural resources, without any declaration of environmental impact statement. Application for authorization to access genetic resources in Nigeria was made to the agency. Under this regulation, the agency may suspend, revoke or cancel any access permit given under these regulations where the holder thereof is in contravention of any of the condition imposed on the access permit or those implied under these regulations or of the agreement made pursuant to its financing. Anyone convicted of an offence under these regulations will be liable to a fine of not less than N1, 000,000 but not more than N10, 000,000 or to imprisonment for a term not exceeding one year or both. Where the offence is committed by a corporation, it shall on conviction be prosecuted and liable to a fine of N10,000,000 and not exceeding N100,000,000 and an additional fine of N1,000,000 for daily the offence subsists³⁰.

National environmental (Mining and processing of coal, ores and industrial minerals) regulations, S.I. No. 31 of 2009:

The main purpose of these provisions was to reduce pollution from the mining sectors and processing of coal, ores and minerals from Industries. This regulation allows provisions for a general permit. Procedures for application for permit or license for mine emissions exceeding approved levels including revocation of such permit when it has already been given are contained in the National Environmental (Permitting and Licensing System) regulation 2009. Regulation 29(1) provides for a violation of any provisions of Regulations which creates offences and any person who commit any offence is found guilty of an offense not exceeding N100,000 or imprisonment for a term not exceeding two years or both and an additional fine of N5, 000 for each day the offence is committed. Whenever a crime is legally committed under regulation (28), is punished with a fine of at least N100,000,000 and an additional fine of N5,000 daily the offense subsists³⁰.

National environmental (Ozone layer protection) regulations, S.I. No. 32 of 2009:

The basis of these regulations was to prevent ozone-depleting substances. By the requirement, no person should import, manufacture in part or all, install, offer for sale, sell or buy new or refurbished facilities intended to be used for the production of any Ozone-Depleting Substance (ODS) with the exception for the recovery and recycling of already use substance. It was illegal to handle ODS refrigerant with effect from the phase out date for the different substances as outlined in the sixth schedule to the regulations; no one shall handle or deal in a manner consistent with ODS refrigerant unless such a person has obtained an ODS refrigerant handling permit, or has undertaken and be certified in an approved technical training relevant to handling of ODS refrigerant or was verified in the approved relevant code of practice. The penalties for any persons who breaks the provision of the regulations was that, such person may be found guilty of an offence and was liable on conviction to a fine of not more than N200,000 and an additional fine of N10,000 for each day the offence subsists or imprisonment for a term not exceeding one year. Where the offence under these regulations was attributable by a corporate body, it shall be liable to a fine not exceeding N1, 000,000 and an additional fine of N50, 000 per day the offence subsists^{1,26,30}.

National environmental (Food, beverages and tobacco sector) regulations, S.I. No. 33 of 2009:

The thrust of these regulations is to prevent and reduce pollution from all

operations and ancillary activities of food, beverages and tobacco companies to the Nigerian milieu. Under these provisions, a company that release the highest quality effluent and sludge into the environment beyond permissible level commit an offence, or not to report the release of effluent and sludge into the premises in excess of permissible level as contained in the first and second schedules to the regulations. Any persons who contravenes the provisions of the regulations is guilty of an offence and shall on conviction be liable to a fine of at least N200,000 or a term of imprisonment of at least two years or both and an additional fine of N5,000 daily the crime subsists. If the company commits an offense it was liable to a minimum fine of N 1,000,000 and an additional fine of N 50,000 daily the offense subsists³⁰⁻³⁴.

National environmental (Textile, wearing apparel, leather and footwear industry) regulations, S.I. No. 34 of 2009:

The aim of these regulations was to prevent and reduce pollution from all sectors of operations and ancillary activities in Nigerian Environment. Under regulation 4, all facility was required and mandated to install anti-pollution equipment or process for the detoxification of effluent and emission emanating from facility. Polluter-pay principle is also entrenched in these regulations. Regulations 36(5), provides that the permitted shall bears the cost, monitoring tool approved by the agency to facilitate compliance and quality measurement of waste discharges as required by law. Such equipment shall always be in good working conditions, maintained and accessible. Plans and specifications for such projects should be submitted to the agency, for review and comments. Such equipment shall always be in good working conditions, maintained and accessible. Plans and specifications for such projects should be submitted to the agency, for review and comments. Regulation 51 of the present proceedings provides for penalties for violations of the law and a crime punishable by imprisonment, liable to a fine not exceeding N200,000 or imprisonment for a term not exceeding two years or both, with an additional charge of N5,000 for each day the offence subsists. Wherever a facility committed the offence, it shall be punished with a fine not exceeding N1, 000,000 and an additional fine of N50, 000 for each day the offence continues^{30,34}.

National environmental (Noise standards and control) regulations, S.I. No. 35 of 2009:

The scope of these regulations was to ensure maintenance of a better and healthy surrounding for all people in Nigeria, the tranquility of their milieu and their mental well-being by regulating the level of

noise and improving people's standard of living by: (a) defining the most acceptable noise levels for a building or activity; (b) providing for the control of noise and for mitigating measure for noise reduction. Under these regulations, the agency may seize, impound, confiscate or limit the use of any property, tool, machinery or other equipment that may, or has triggered excessive noise emission and if, in the opinion of the agency's, the restriction would restore the degree of compliance and noise level of the area^{30,35}.

National environmental (Chemical, pharmaceutical, soap and detergent manufacturing industries) regulations, S.I. No 36 of 2009:

The aim of these regulations is to prevent and reduce pollution activities from all operation and ancillary from all sectors within Nigerian environment. Regulation 47 prohibits it an offence to make a statement from a facility which is known to be false or misleading particularly, where the statement was made (a) and a written complaint that was necessary to provide a copy of the required information or under provision of the Regulations (b) for the thrust of obtaining permit for the building, for variation, transfer or surrender of a permit. Under regulations 51(1), any person who contravenes any of these provisions of the regulations, especially, regulations 46-50 was found guilty and was liable to a fine of up to N200,000 to imprisonment for a term not exceeding two years or both and an additional fine of N5,000. Where the offence was committed by any building, it shall on conviction, be liable to a fine not less than N1,000,000 and an extra fine of N50,000 for each day the offence subsists^{26,30,34}.

National environmental (Standard for telecommunications and broadcasting facilities) regulations, S.I. No. 11 of 2011:

The purpose of these regulations was to safeguard the environment and human health, guarantee safety and general welfare, eradicate or reduce community and private losses due to operations in the telecommunications, including radio and television sectors. In essence, the regulations aim at ensuring that all telecommunications and broadcast base stations and mast installations and operations are not a public nuisance and/or has an impact that are negative on the health and safety of the public etc. Regulation 11 provides penalty for wrong doing of the regulations³⁶.

National environmental (Soil erosion and flood control) regulations, S.I. No. 12 of 2011:

The scope of these regulations was protecting human lives and the environment; reduces losses due to damage from flood and erosion and their impact on endangered areas by regulating land-

disturbing activities on the ground and among other things control accelerated soil erosion, flooding and sediment deposition in water bodies and water ways in order to avoid water resources pollution. Regulation 19 provides for the sanction's in the event of an individual and corporate body wrongdoings^{36,37}.

National environmental (Desertification control and drought mitigation) regulations, S.I. No. 13 of 2011: These regulations in the initial segment (I) on desertification have the targets of providing an effective and realistic administrative structure for the sustainable utilization of all regions already impacted by desertification and the protection of endangered areas; awareness creation on the general population on the causes and threats associated with desertification and the attendant land degradation in addition to other elements. Second Part (II) of the regulations contains desertification control guidelines. The third part (III) of the guidelines concerns drought mitigation with objectives of guaranteeing that appropriate proactive measures are taken to reduce the impact of dry spell at occurrence; ensure that legitimate criteria for proclaiming drought emergencies are established, so that such declarations are followed up with different relief and response activities among others. Offences and punishments are spelt out in the regulations^{3,30,38}.

National environmental (Base metals, iron and steel manufacturing/recycling industries) regulations, S.I. No. 14 of 2011: These guidelines have the principal thrust of forestalling and limiting pollution from all operations and ancillary activities of the sectors in the Nigerian milieu. The regulations likewise accommodate polluter-pay principle, where there was pollution throughout the course of operation of any facility (iron and steel industries). Under the guideline, each facility, corporation or organization will set up a voluntary action programmes for global warming control measures. Punishment for violating any of the provisions of the guidelines is provided for under regulation 56-87^{14,30}.

National environmental (Control of bush/forest fire and open burning) regulations, S.I. No. 15 of 2011: These Regulations have the objective of forestalling and limiting the destruction of ecosystem through outbreak of fire and burning of any material that may affect the health of the ecosystem through the discharge of hazardous air pollutant. The regulations forbid the burning of bush or forest or anything that may cause fire in the bush or woodland with license. Bush burning or forest for hunting of animal is

disallowed. Notice of fire occurrence was obligatory to be given to NESREA by any landowner or occupier within seven (7) days of such occurrence in accordance with the details as required under the regulations. Regulation 21 accommodates for penalties for offences violating the provisions of the regulations^{3,36}.

National environmental (Protection of endangered species in international trade) regulations, S.I. No. 16 of 2011: The guidelines apply to specimen of untamed life species listed in Appendix I, II or III of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) that are at high risk for invasive species (Control of International Trade and Traffic) Act and furthermore incorporate wildlife species included by the context of CITES after the entry into force and conditions set forth in the regulations and also those listed in the provisions I and II of the Convention. Under these convention, importing or exporting, re-exporting or introducing from the sea was an offence or endeavor to import, export, re-export or introduce from the sea any specimen listed in Appendices I, II and III to the CITES and the schedules to the Act and these Regulations without a valid license or certificate³⁶.

National environmental (Domestic and industrial plastic, rubber and foam sector) regulations, S.I. No. 17 of 2011: Under these regulations, the main objective was to avoid and minimize Nigerian environmental pollution of all activities and ancillary operations of the domestic and industrial sectors of plastics, rubber and foams. The guidelines additionally require each facility or corporation to set up a voluntary action programmes for the control of global warming measures and such production processes will consider energy saving measures through protecting the best available technologies. Regulation 55 establishes a fine of up to N200,000 or six-month imprisonment for penalty under the statute of fines committed by an individual and N1,000,000 fine for offences committed by a corporate body³⁶.

National environmental (Coastal and marine area protection) regulations, S.I. No. 18 of 2011: The goals of the regulations are to among other things provide regulatory structure capable of saving the natural ecological conditions of estuarine system, the barrier islands system and the beaches, so as to safeguard and perpetrate their characteristic efficiency and their biological, economic and aesthetic values and guarantee the protection of the coastal and marine environment for sustainable development. NESREA was

required under the regulations in a joint effort with relevant agencies, states and local governments, communities and other development partners to compile an inventory of all coastal and marine areas for the purpose of determining their conservation status and ecological quality. Violations of the regulations attract penalties of N1,000,000 for individuals and N5,000,000 for corporate bodies³⁶.

National environmental (Construction sector) regulations, S.I. No. 19 of 2011: The Nation Environmental (Construction Sector) Regulations has the goal or purpose of preventing or limiting pollution from 'Construction, Decommissioning and Demolition Activities' to the Nigerian environment. Different offences and penalty were expressed under these regulations. Regulation 28 provides for penalty of N200,000 fine or imprisonment for 6 months for any individual offence and N5,000,000 fine for corporate offenders³⁶.

National environment (Control of vehicular emissions from petrol and diesel engines) regulations, S.I. No. 20 of 2011: The purpose of these regulations was to restore, protect and improve the nature of air. The guidelines accommodate for the protection of the air from pollution and, among other things, citizens' rights to clean air; minimize and forestall air pollution through the improvement of the nature of automobiles that operate on the road way and improve the health of Nigerians, particularly in the urban areas with high frequency of air pollution due to expanded number of automobiles that ply the roads. Under regulation 2, the regulations only apply to motor vehicles registered after 28th April 2011. Any individual offenders of any of the provisions of the regulations shall upon conviction is liable to be fined N50,000 or one (1) year detainment and corporate body is fined N500,000^{17,36}.

National environmental (Non-Metallic minerals manufacturing industries sector) regulations, S.I. No. 21 of 2011: The main objectives of these regulations were to avert and reduce pollution from all actions and auxiliary activities of the non-metallic minerals production unit in the region of the Nigerian environment. Under the guidelines, each facility shall conduct Environmental Impact Assessment (EIA) for fresh projects or remodification including upgrading existing projects prior to commencement of projects; presenting environmental research report, among others. Pursuant to Article 62, penalties were imposed for any offense in the sum of N200,000 fines or imprisonment for 6 months in total for individual and for corporate offenders is N1,000,000.

National environmental (Surface and groundwater quality control) regulations, S.I. No. 22 of 2011: The principal thrust of this regulation was to restore, enhance and protect the physico-chemical and biological characteristics of the nation's surface waters and to maintain existing water uses. The standards contained in the guidelines provide surface waters protection from pollutants, so that the waters shall be protected, used, developed, conserved, managed and controlled in ways which take into account citizens' right of access to clean water and sanitation; protection of the water environment for sustainability of the resources and protection of aquatic ecosystems among others. The regulations further aim at protecting ground water sources by regulating the underground disposal of hazardous wastes, fluids used to extract minerals, fossil fuels energy and anything that can contaminate groundwater. In accordance with the law, no person shall divulge or engage in any activity that could cause or contribute to the contamination or degradation of the water type without the express consent of the agency. Offences and punishment were given in the regulation^{5,11,15,20,21,24,36}.

National environmental (Electrical/Electronic sector) regulations, S.I. No. 23 of 2011: The main scope of these regulations was to avert and reduce pollution of all ancillary activities resulting from electrical/electronic services in a Nigerian environment. These standards apply to both new and used Electrical/Electronic equipment (EEE/UEEE). Application for license was processed as provided under regulation 46 after receiving the key information and payment of fees application. While offences were considered under regulation 61, punishment were stipulated under regulation 67(1) of the guidelines to the effect that any individual who contravenes the provisions of these regulations commits an offence and shall be liable to a fine not exceeding N500,000 or to imprisonment for a maximum of two years or both. Where the offence provided for in the provisions of the regulations was committed by a corporation, it shall be sentenced to a maximum fine not exceeding N100,000 and a further fine of N50,000 per day the offence persists³⁶.

National environmental (Control of alien and invasive species) regulations, S.I. No. 32 of 2013: The principal thrust of these regulations was to avert the decay, reduce the change and destruction of the biotic and abiotic factors, the economy and human health caused by large foreign and invasive species (which in these regulations are called species) by (a) regulating the breeding, planting, storing, transportation,

importing, or any other control of the species; (b) take measures for example mitigation, including determining the stability and improvement of national life through contributions to biodiversity conservation, human safety and sound promotion of agriculture, forestry and fishes; (c) develop a national database for the performance of proactive administration of fauna and flora of the species for the mitigation of existing invasions and future prevention events. Under the regulation, license may be granted and notwithstanding, such permit under the guidelines may likewise be cancelled where the issuing authority acquires information showing that the species or activity involving them may be detrimental to biodiversity and human wellbeing. Regulation 17 sets out provisions relating to offences, while regulation 18 provides for penalties applicable to persons convicted of an offence under the regulations, involving exotic species or invasive species on the list was liable to a fine not less than N250, 000 but not exceeding N500, 000 or to imprisonment for a period not exceeding 5 years or both and an extra fine of N25, 000 per day the offence persists. Whenever the offence was committed by a corporation, in the event of conviction be at risk to a fine not less than N20,000,000 but not more than N100,000,000 or its principal officer to an imprisonment for a term not surpassing five years or both and an extra fine of N500,000 per day the offence persists³⁹.

National environmental (Quarrying and blasting operations) regulations, S.I. No. 33 of 2013: The principal thrust of these was to control the impact of quarrying and blasting activities on the environment and human wellbeing. Specifically, the regulations plan to: (a) avert environmental degradation (b) guarantee the utilization of environmental-friendly technologies in quarrying operations. (c) Sustain the quarrying limit of the Nigerian land in particular and the environment in general. In the case of a termination notice that will be served on any person with license, regulation 39(1) shall indicate that when a notice was issued, complete the implied warranty to be disclosed or expressed in the notice. Provision for the penalties was set under the law to the effect that anyone who was convicted for an offence under the regulations will be liable to a fine of N1,000,000 or imprisonment for a minimum of two years or both and an additional N20,000 per day the offence persists³⁹.

National environmental (Pulp and paper, wood and wood products sector) regulations, S.I. No. 34 of 2013: These regulations in addition to other things seek to avert and limit

pollution from all operations and ancillary activities from this sector in the Nigerian environment. Under the regulation 31(1), a facility, corporate body or organizations with those listed in Schedule XV of the guidelines will require an atmospheric emission license from the agency before operation. Regulation 61(1) makes provision for penalties for infringement of any provision of the regulations, especially regulations 55-60, to the effect that such infringement was an offence and any individual will on conviction, be at risk to a fine not less than N200,000 or to detainment or imprisonment for a term not less than six month or both and an additional fine of N5, 000 for each day the offence subsists³⁹.

National environmental (Motor vehicle and miscellaneous assembly sector) regulations, S.I. No. 35 of 2013: The scope behind these regulations was to avoid and limit all activities associated with pollution and wastes from Motor Vehicle (MV) and Miscellaneous Assembly sector for the Nigerian environment; these regulations will cover new, used and end-of-life (UV/ELV) Motor Vehicles. Under regulation 59(1), a person who violates the provisions of the Directives, in particular regulation 53(1),(2) and (3),(a)-(j) commits an offence and was at risk of a fine not less than N500,000 naira or to imprisonment for a term not exceeding two years, or both³⁹.

National environmental (Control of charcoal production and export) regulations, S.I. No. 62 of 2014: From regulation 1, the principal thrust of these regulations were to shield the Nigerian ecosystem from further depletion emerging from charcoal production and handling including its export and specifically to (a) regulate the export of coal or charcoal products; (b) regulate felling and supply of trees for charcoal production; (c) guarantee the efficient domestic production of charcoal and (d) regulate community partnerships in inter and intra state trades in coal or charcoal products. Under regulation 7, an individual shall not transport charcoal or charcoal products for business purposes from one place to another in Nigeria unless such individual has a valid license to operate or dispense charcoal handling or transport permit issued as set forth in the Form 2 of Annex 1 standards of the regulations and is apply to the terms and conditions stated, (b) the charcoal handling transport license as specified by the approval and authorization of the charter officer to determine the vehicles of any ship carrying charcoal or charcoal products and (c) the assignee has to pay the amount of the permit specified. A person who violates any of these conditions is guilty and will be fined N1,000,000 or imprisonment not less

than five years, with an additional fine of N10,000 for any additional day the offence persists. If the offence was committed by a corporation, it was at risk of conviction to a fine of at least N1,000,000 and an additional N50,000 per day in which the offence was proceeding⁴⁰.

National environmental (Energy sector) regulations, SI No.

63 of 2014: The main aim behind these regulations was to avert or limit pollution and promote energy efficiency across all energy sectors in Nigeria while accomplishing sustainable development. Under rule 35 (1), the permitting procedures shall be those used in the National Environmental (Electrical and Electronic Sector) Regulation, 2011 and the National Environmental (approved by the licensing systems) Regulations, 2009. In the regulations 44 (1), it was an offence for producers, assemblers, merchants and distributors or operators of power facilities not to provide collection center's for take-back of their wastes or end-of-life equipment in Nigeria. Any individual who fails to comply with these instructions, has made a mistake and, if convicted, be liable to a fine not more than N200,000 or imprisoned for a period not exceeding one year or to both and an additional fine of N5,000 for each day the offence persists. Whenever an offence is committed according to the law, by a facility upon conviction, it will be at risk to a fine not exceeding N1,000,000 and an additional fine of N50,000 for additional day the offence persists^{40,41}.

National environmental (Air quality control) regulation, S.I.

No 64 of 2014: The principal thrust of these regulations was to provide for improved control of the nation's air quality to such a degree that would upgrade the protection of biotic and abiotic, human, health and other resources affected by air quality deteriorations in addition to other things. Under regulation 38, the agency will have the ability to enter and seal any facility or premises discovered contravening any of the provisions of these guidelines. Any individual who violates any of these provisions, commits a crime and is liable on conviction to a fine of not less than N100,000, or to imprisonment for not less than six (6) months, or both and an additional fine at least N10,000 for each day the crime continues to be available to offenders and where a corporation commit the crime, is liable upon conviction to a fine of at least N1,000,000 and an additional fine of N50,000 per day the offence persists^{3,40,17}.

National environmental (Hazardous chemicals and pesticides) regulations, S.I. No. 65 of 2014: These regulations have the thrust of shielding human health and the

environment from the unsafe impacts of hazardous chemicals and pesticides, as well as other agrochemicals, promote the protection of their use, control the import, export, sale and processing of hazardous chemicals, contribute to the sustainable development in agriculture and environmental conservation and implement the requirements of the Harmful Waste (Special Criminal Provision etc.). Act in addition to other things. Under regulation 8(1), an individual who engage in import or export hazardous chemicals and pesticides to each container package or label, including the following information: (a) the name, address and telephone number of the manufacturer, importer, exporter or any other person concerned; (b) the trade name, chemical name, common name and chemical composition (CAS) of the substance and the manufacturer and the expiry date of the substance; (c) warning words such as "Danger" "Warning" and Pictograms, in accordance with UN GHS. By the provision of statutory provision 33 (1) persons who violate the provision of the law commits an offence and are liable on conviction to a fine of up to N1, 000,000 or imprisonment of up to five years. When an offence was committed by a corporation, it shall on conviction, be liable to a fine of up to N1,000,000 and an additional fine of N50,000 for each day the offence continues to be committed^{3,40}.

National environmental (Dams and reservoirs) regulations,

S.I. No 66 of 2014: On the basis of the provisions of regulation 1(1), these guidelines aim to control the impact of dams and reservoirs on health of humans and the environment in Nigeria. According to these regulations, the dredging of the facility was carried out with authorization of the corresponding supervisory authority⁴⁰. A list of National Environmental Regulations under NESREA Act is shown in Table 1.

General challenges behind limitations and drawbacks of environmental regulation/Law in Nigeria:

After the Koko incident, the Nigerian state passed series of laws to protect and combat environmental ills. Despite all these legislations on environmental policies which was geared towards the conservation and protection of the environment, environmental despoliation and degradation has however continued to be on the increase and to a large extent was worse in the Niger Delta region. According to the World Bank⁴², the debt was the result of non-compliance with the laws on environmental protection. Validating this, Ibaba⁴³, Morufu and Ezekwe²¹, Raimi and Ezugwu²⁰, Olalekan *et al.*²⁴, Premoboarers and Olalekan²³ and Olalekan *et al.*¹¹ state that enforcement agencies have no means of monitoring and

Table 1: List of national environmental regulations under NESREA act

S/N	National environmental regulations	Year of establishment
1	Sanitation and wastes control	2009
2	Soil erosion and flood control	2011
3	Desertification control and drought mitigation	2011
4	Base metals, iron and steel manufacturing/recycling industries sector	2011
5	Standards for telecommunications and broadcasting facilities	2011
6	Control of bush, forest fires and open burning	2011
7	Protection of endangered species in international trade	2009
8	Domestic and industrial plastic, rubber and foam sector	2011
9	Coastal and marine area protection	2009
10	Construction sector	2011
11	Control of vehicular emissions from petrol and diesel engines	2011
12	Nonmetallic minerals manufacturing industries sector	2011
13	Surface and ground water quality control	2011
14	Electrical/electronic sector	2011
15	Mining and processing of coals, ores and industrial minerals	2009
16	Quarrying and blasting operations	2013
17	Watershed, mountainous, hilly and catchment areas	2009
18	Wetlands, riverbanks and lake shores	2009
19	Access to genetic resources and benefit sharing	2011
20	Control of alien and invasive species	2013
21	Control of charcoal production and export	2014
22	Ozone layer protection	2009
23	Noise standards and control	2009
24	Air quality control	2014
25	Energy sector	2014
26	Permitting and licensing system	2009
27	Food, beverages and tobacco sector	2009
28	Textile, wearing apparel, leather and foot wear industry	2009
29	Chemical, pharmaceutical, soaps and detergent manufacturing industries	2009
30	Pulp and paper, wood and wood products sector	2013
31	Motor vehicle and miscellaneous assembly sector	2013
32	Hazardous chemical and pesticides	2014
33	Dams and reservoirs	2014

Author compilation, 2019

evaluating the impact of industrial pollution or its control. Non-compliance with environmental legislation was considered the main reason for the non-implementation of environmental legislation to improve the quality of the environment and health in Nigeria (Adibe and Essagha⁴⁴, Premoboere and Olalekan²³, Raimi *et al.*⁵ and Olalekan *et al.*¹¹). The rationales behind these failures are:

- **Politics:** According to Nduonofit *et al.*⁴⁵, Premoboere and Olalekan²³ indicated that politics was sincerely the cause of failure of environmental law in Nigeria. Politics as a concept in Nigeria is different from the understanding one may get, say from the developed world. Here, politics is all about selfishness and personal aggrandizement⁴⁶. Indeed, politics in the Nigerian State was seen as a means of accumulating wealth⁴³. The

aftermath of this accumulation is the privatization of the states for the pursuit of private interest^{23,45}. In order words, the privatization of the environment. What this mean here was that the environment has been politicized; as such it was seen as the private property of certain individuals who own and control large industries in the country. Their game was the politics of control and control here means the control of the environmental Agency in Nigeria. Similarly, government policies in Nigeria have been known to be erratic, lacking implementation and uncoordinated and in turn, these result in apparent lack of very reliable data bank in the country

- **Lack of a national database on environmental quality:** The lack of environmental sustainability data bank implies that the environmental values and extrinsic values adopted in the NESREA model were purely unbiased^{23,47}. In addition, even if the values obtained were within acceptable limits, this does not translate into a positive impact on human health or the environment⁴⁷. It has also been reported that it was impractical in Nigeria to assess the contributions from multiple sources^{17,23,48}. The effects of poor-quality national data on environmental variables were constrained by a clear understanding of the policy options available to reduce the cost of pollution directly as indeed the costs of unforeseen and potential consequences for the government
- **Lack of staff:** Inadequate technical capacity of the workers responsible for the implementation of the principles, as well as the inadequate nature of the institution, both formal and informal, have made enforcement of the law in Nigeria difficult and inefficient⁴⁹. Moreover, the nature of the government bureaucracy causes government officials to lack incentives to be efficient or effective^{50,51}. Meaning that employees are not motivated. Other things get worse because of insufficient funds with inadequate capacity
- **Multiple agencies:** There were as many agencies as there were standards; the actions and decisions of the authorities often come into play, leading to a conflict between the authorities and the public over the reaction of the authority, which results in a failure of implementation^{11,13,52}. A further result of the overlap of receiving a petition that often some agencies may under-regulate or less tolerant measures which tend to attract more subscribers⁵³. In this vein, Mr. Famikade Famiroti a member of the Manufacturers Association of

Nigerian (MAN) said government agencies are indeed over-burdening the economy and exploiting operators and businessmen through duplicity, duplication and over-regulation including taxes and fees for their services⁵⁴.

- **Weakness in the institutional set up of environmental regulations:** This leads to corruption and special interest groups often try to use the regulatory process to advance their own economic position. For example, since 1984, the Federal Government continues to exert both regulatory and administrative pressure on oil companies operating in the Niger Delta region to stop the flaring of gas, yet gas flaring continues and polluters appear content to pay the penalty as it was found to be economically viable to do so⁵⁵. In some cases, the usefulness of a "revenue-driven" economic budget can be used in intervening the political process to develop the process so as to bring the benefits. Most state municipal environmental and public health laws were more revenue sensitive than the pollution regulations. For example, in the extreme north-west of Kano, where there is a high concentration of reservoirs, the State's Environmental Protection Agency allows tanneries to be polluted when they pay the pollution tax^{23,53}.
- **Federal constitution:** The enforcement of environmental regulation in Nigeria raises a notable challenge, namely that the 1999 Federal Constitution places environmental issues on the exclusive, concurrent and residual list, suggesting that each of the three levels of government including federal, State and the local can legislate with respect to pollution. The after effect of this arrangement was that the effect of this agreement was never to specify the level of intergovernmental relations in the field of the environment. Additionally, the tiers of government required to regulate an aspect of environmental pollution within Nigeria's established constitutional framework is unclear. Besides it isn't clear what happen where there are conflicts or how it ought to be resolved. Clearly, to accomplish effective and productive environmental management, a reasonable and cohesive inter-governmental relationship is required, which was currently obscure in Nigeria^{11,48}. In addition to the structural clash emerging from the vertical structure of the various tiers of government, conflict likewise emerges from horizontal structure of governance, which was more frequently apparent among ministries charged with obligations in the management of Nigeria's environment^{23,47}.

Major drawbacks of the defunct Federal Environmental Protection Agency (FEPA) act and regulations 1991-2006:

The FEPA was defunct and it's Act and Regulations were repealed in 2007 by the NESREA Act. The major drawbacks of FEPA were:

- **Lack of community base approach or awareness:** FEPA is an institution or agency which is quite foreign to the people of Nigeria where their concept or idea did not evolve from the people's traditional way of life. FEPA is very far from the people and the environment where they don't carry the community people along and the agency officials are like tax collectors of the olden days, the development strategy used by FEPA is "top-down" and not "bottom-up" (Community-based approach)
- **Lack of or weak enforcement of existing environmental laws and regulations:** FEPA gave industries five years moratorium in 1990 for industrial compliance with the installation of pollution abatement facilities, which expired in 1994. Nonetheless compliance rate by industries was generally low (between 20-40 per cent). Even then the efficiency of many of the pollution abatement facilities was suspect. Many had broken down, or were grossly inadequate or were just operationally cosmetic to give semblance of compliance⁵⁶
- **Disciplinary measures are not evidently stringent to compel compliance:** Section 20 of the law prescribes penalties for the discharge of hazardous substances into the environment. There was also a prescription of ₦100,000 fines or 10 years' imprisonment for individual offenders in subsection 2 of section 20. Whereas subsection 3 prescribes a fine not exceeding ₦500,000 and an additional ₦10,000 for corporate offenders. This law was unable to adequately address environmental problems. Issues such as the use of dangerous chemicals for fishing, logging and inimical agricultural practices were obviously missing in the law. The FEPA Act does not even have a definition for what is known as waste^{23,43}
- **Low coverage of the petroleum industry:** Given the impressive impact of the oil sector on the environment of the oil-bearing communities, in terms of gas flaring, oil spillage and what you have, the provision of the law on the industry was wholly inadequate. One can confidently say here that the wide gap created by the provisions of this law, makes it defective and ineffective. Hence it was exploited to avoid punishment to the detriment of the environment and this has induced environmental

degradation in the Niger delta and thus undermining the source of livelihood of the people of the region, by so doing provoking poverty. This law can be explicated on the bases of the political economy of the petroleum industry. Politicians who represent foreign capital in Nigeria politicize everything and certainly politicized the formulation of these laws. In order words, the law serves perhaps the interest of certain “wealthy elements” vis – a – vis the ordinary man who exist in the oil-bearing communities as it were. According to Nduonofit *et al.*⁴⁵ and Premoboere and Olalekan²³ FEPA is a victim of political high-jacking or rather, was serving a different purpose.

Performance of NESREA, is it better than FEPA?: Day in day out researchers’ was reported that the rate of environmental problems continues to worsen in Nigeria on daily basis and without any definite sign of improvement. The irony was that almost all areas of human national life in Nigeria in relation to his interactions with the environment are covered by the broad national environmental regulations and enforcement of NESREA Act or Policy. NESREA is with the aim of “Securing for the Nigerian people, a healthier, decent, habitable and sustainable environment in line with the vision and mission of the agency”. Now, despite all the regulations: how many of these Regulations are effectively enforced and are known to the Nigerian public who are stakeholders and beneficiaries of the environment? It is one thing to have laws; it is another thing to have them implemented or enforced. According to the study of Zephaniah⁵⁷ described creation of NESREA as “Old wine in a new bottle”, this was because most of the challenges and limitations face by FEPA still occur in NESREA without much different in the result outcome for environmental management. Also, a research conducted by Adeoluwa⁴, Ezeibe and Umenweke⁵⁸ and Premoboere and Olalekan²³ pointed out that NESREA has been passive in the discharge of its all-important duties in terms of environmental awareness creation and enforcement of laws in the sector. Given the gravity of its responsibilities under NESREA Act, people would have expected a vibrant and active agency with a solution focused system approach to environmental problems that will entrench right attitudes toward the environment among Nigerians within one decade through standard regulations and compliance enforcement with all laws and regulations relevant to its advent and purpose to heal the world.

RECOMMENDATIONS

- **Massive publicity and environmental awareness creation:** NESREA should increase their public awareness and create a synergy of knowledge or information between regulators and the regulated and maximizing advocacy. They should publish general scientific or other data resulting from their performance of its functions. Many Nigerians, especially in the rural communities were unaware of NESREA enforcement activities and policy. This also to the fact that people live without any respect for environment rules and regulations because the enforcement agency is inactive to warrant responsible attitudes from the masses especially in the rural areas where they are closer to the natural environment
- **Increase proactive management and enforcement team:** NESREA should devote its efforts toward enforcement of these national environmental regulations, without serious enforcement; violation of environmental rules will continue unabated. The laws were well stated only to enforce it. When public awareness creation and enforcement were combined in environmental management by the appropriate agency, there will be rapid improvement in environmental sanctity
- **Increase in adequate manpower:** Nigeria government should increase the number of technical staffs; this will enhance the agency efficiency in carrying out its duties and enforcement as state in regulations
- **Cooperation and collaboration with other agency:** It was necessary for NESREA to effectively cooperate and collaborate with various stakeholders and other agencies in the protection of the environment and management of natural resources in Nigeria so as to create synergy in environmental sectors. By so doing, the agency will achieve a better outcome in term of sustainable environment
- The Nigerian Environmental Standards and Regulations Enforcement Agency (NESREA), Nigeria’s topmost environmental regulatory agency, established by NESREA Act 25 of 2007 does not regulate the oil and gas sector. This paper therefore recommends that the NESREA Act of 2007 be amended to give it oversight over the entire environment including the oil and gas sector. Furthermore, the requirement of Pre-action Notice and Limitation Clause be removed from the NESREA Act
- **The oil Pipelines act (CAP 338, LFN, 1990):** This Law was first enacted in 1956. It provides for the issuance of licenses to any person or corporate body prospecting for oil or gas to survey, construct, maintain and operate pipelines for the purpose of conveying natural gas, mineral oil or any petroleum product to any destination. In Part IV the Act requires the oil operator to pay

compensation to any individual or group that may have suffered environmental or personal injury. The Act also provides for payment of compensation for land acquired in the laying of the pipelines. The entire compensation regime envisaged under this Act weighs against those whose lands and property suffer injury. This law deserves unification in the form of the American Superfund Act (Comprehensive Environmental Response, Remediation, Compensation and Liability Acts, 1980) that compels polluters to clean up impacted areas to the satisfaction of the citizenry²³

- There is need for a new law on oil and gas pipelines which should be enacted and comply with Rio Declaration 1992; American Superfund Act, already cited above; Articles 16 and 24 of the African Charter on Human and Peoples Rights (Ratification and Enforcement) Act, CAP 10, Laws of the federation of Nigeria, 1990
- The Gas Re-Injection Act of 1979 should be amended to:
 - Remove the provision that empowers the minister to authorize the flaring of gas
 - Impose stiffer sanction including fines equivalent to commercial price of natural gas and holding the heads of offending agencies personally liable
 - The proposed Petroleum Industry Bill should not contradict the provisions in the Gas Re-Injection Act. The PIB should be futuristic and cater for future exploration and exploitation in zones outside of the current oil/gas belt. It should also ensure protection of communities in the fields of operations
 - Domesticates all ratified international conventions and treaties and
 - The penalty for gas flaring should be paid to the communities that are directly affected by such flaring rather than the Federal Government

Realizing that the environmental problems have assumed serious proportions in the country as a result of rapid industrialization, urban population explosion, increase in commercial activities and exploration and exploitation of mineral and forest resources etc., the Federal Government launched FEPA which was later defunct and its Act and Regulations were repealed in 2007 by the NESREA Act. This act became climax environmental law in Nigeria. NESREA which have good 33 National environmental regulations that cut across almost all sectors and human activities that can have negative impact on developments, human and mineral resources of the nation and the environment at large, but their role is not felt in term of environmental management, conservation, protection and sustainability in the country due

to inadequate awareness, erratic policy and enforcement. The policies and institutional arrangements for the management of the environment and natural resources for social and economic development represent an aspect of the external influences that can affect the balance of both the environmental cycle and industrial development of innovations. Therefore, any action in one of these two areas could have an impact on the other. For example, environmental policies can be a positive force to encourage new technologies that are not only more environmentally friendly and efficient, but also more economical, just in the same way that similar policies and regulations, if not properly considered, could result in stifling industrial innovation by increasing production costs. The development of an environmental policy and the institutional arrangements to realize the goals and objectives of such a policy in the country are a complex exercise. In dimension, it involves virtually all the elements of the ecosystem, as well as the different aspects of physical, economic planning and environmental management. The truth was that, at its core, the essence of environment itself must not be seen as just an inert tableau, a neutral object on which humanity simply exercises its technological might of use and destruction. Rather, it must be conceived as an important component in a field of forces, reflecting prevailing consensus and conflict of values. Or how does one explain the mindless indifference to a filthy environment exhibited by many Nigerians except in terms of a sense of alienation in which they no longer see their own health and wellbeing as intimately related to the cleanliness of their environment? How does one interpret the inordinate exploitation of these non-renewable resources such as petroleum except in terms of a loss of a sense of equity concerning a reasonable bequest to the coming generation? Or better still, how they analyze the pollutive activity of a neighborhood industry except in terms of a lack of appropriate sensitivity to the welfare of others. It is clear that only when environmental management is seen to the general populace as part of a total policy package conceived with their welfare and wellbeing in mind, can one expect that they will play their part responsibly and willingly. The debt owed posterity requires that all, acting together, leave the country and its environmental resources in a far better shape than we met them.

CONCLUSIONS

"You cannot solve the problem with the same thinking that created the problem" Albert Einstein. All things are connected "humankind has not woven the web of life. We are but one thread within it. Whatever we do to the web, we do to

ourselves. All things are bound together. All things connect." - Chief Seattle, Leader of the Suquamish and Duwamish Native American Tribes. The 'environment' is where we live and development is what all do in attempting to improve lot within that Abode. The two are inseparable."- The Common Future is lay the foundation for Sustainable Development. Both the economy and society depend on the environment and ecosystems to function and survive; the economy also depends on the society to progress; the economy sits on top and can only function if its foundations remain solid over the long term.

The environment is one of the three (3) key elements of pillars for sustainable development as reflected in 2030 agenda for sustainable development and its 17 goals with 169 targets. Yet the reconstruction of the Nigerian environment is critical to sustainable development and indeed central to the value underpinning the whole environmental movement. A society which successfully cares for its environment would be one that equally cares for its citizenry. A society in which the gap between the rich and the poor is very wide and almost unbridgeable would be hardly able to motivate and mobilize its masses to care for the environment. Conversely, these legislations would only be words on paper if they are not implemented, complied with and where necessary enforced. Therefore, mending the leakages in the roof is the work of an honest, patriotic, disciplined, hardworking, visionary, accountable, sincere and need for achievement driven followership and leadership that is abreast with current environmental knowledge with a solution focused systems therapy approach to environmental problems with a view to heal the world. However, the vital need to preserve the integrity of the Nigerian environment and thus secure its sustainability for present and future generations requires clear and direct stipulations in the Nigerian Constitution.

In Nigeria today, the need for comprehensive surveillance and management of the environment is becoming a foregone conclusion. What remains, however, is the development of appropriate policies, programmes and institutional arrangements to tackle the known problems of the environment confronting the country today and to prevent or mitigate others that may be inherent in the future socio-economic development of the nation. Indeed, the fiscal allocation for solving the continuing ecological and environmental problems in the country written specifically into the national revenue allocation formula is a reflection of the national consciousness regarding environmental consideration as a way of improving and sustaining the ecosystem which forms the basis of the economic growth and

social development of the nation. To the foregoing, NESREA is required to create public awareness and provide environmental education on sustainable environmental management, promote private sector compliance with environmental regulations and publish general scientific or other data resulting from the performance of its functions. Effective implementation of both the NESREA Act and its regulations requires necessary capacity building of the agency in terms of human, technical, material and financial capacity. It further requires effective cooperation and collaboration of various stakeholders in the protection of the environment and management of natural resources in Nigeria. If all these are put in place, there will be rapid improvement in environmental sanctity. However, the relevance of the constitution to the environment lies in the fact that it should lay the foundation for the legal framework for the enforcement and protection of the environment by empowering the citizens to have legal standing and access to justice to be able to protect and enforce the protection of a clean, healthy environment cum sustainable development.

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