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## **Managing Nigeria's Environment: The Unresolved Issues**

Onyenekenwa Cyprian Eneh

Institute for Development Studies, Enugu Campus, University of Nigeria, Nsukka, Nigeria

### **ABSTRACT**

In pursuit of economic development, Nigeria and most other post-colonial countries veered in industrialization at Independence. The focus was on maximum exploitation of natural resources for rapid economic development with scant regard for resource conservation and sustainability. Industrial activities, usually carried out in developing countries with weak legal framework and regulation infrastructure, led to pollution of water resources, destruction of fauna and flora, health hazards and deterioration of health quality, air and noise pollution, as well as destruction of traditional economic infrastructures within communities hosting some of these high powered investments. Following the 1972 Stockholm UN Conference on Human Environment, the 1992 UN Rio de Janeiro Earth Summit and the dumping of toxic waste in Koko in Delta State of Nigeria by a foreign firm in 1988, Nigeria established the some national policies on environment, including the Federal Environmental Protection Act in 1988 and attendant Environmental Impact Assessment Act of 1992, as well as the Federal Ministry of Environment in 1999. This review study examines Nigeria's environmental legal framework and the unresolved issues amidst environmental pollution and degradation in the country. Two decades of the EIA Act in Nigeria, the country's environment is still characterized by ecological problems, unplanned growth and increasing problems of domestic and industrial waste disposal and pollution. Economic development activities, especially in the oil and gas sector, accelerate the loss of topsoil and deforestation, loss of habitat, loss of species and loss of biodiversity, as well as degeneration of wetlands. Water shortages and floods lead to deterioration of urban environmental quality and play a major role in transmission of communicable diseases. Corruption in the water sector is another major player in environmental degradation worldwide, especially in developing countries, including Nigeria. Weak implementation has rendered EIA Act a paper Tiger.

**Key words:** Nigeria, environmental policy, unresolved issues

### **INTRODUCTION**

In quest for economic development, Nigeria and most other post-colonial countries veered in industrialization at independence. Mabogunje (2000) observed that the first 40 years (1960-2000) of Nigeria's post-independence economic development included the re-hashed colonial development era. Okonkwo (1998) noted that the first decade (1960-1970) of Nigeria's independence witnessed government plan to promote growth of industries in order to contribute directly to economic growth and national development.

In the 1970s, two of the most applauded goals of the National Development Plans were (1) increase in self-reliance in the supply of industrial products and factor inputs and (2) develop and support small and medium scale industries and their contribution to manufacturing value added. The policy thrust of the 1980s went a step further to emphasize utilization of local raw materials.

In the 1990s, the government targeted, among others, (1) domestication of industrial process and enhancement of economic efficiency and (2) increase in capacity utilization in the industrial sector, employment generation and poverty alleviation (Eneh, 1998).

In the new millennium, the thrust is privatization and commercialization, employment generation and poverty eradication. Over all, government pursues national economic development through growth of industries through continuous research in science and technology, development of new products, increased production, high quality standard in industrial goods and services, ability to produce goods which can produce other goods, building capacity to successfully face challenges of competition and building strength to increase taste and quality by easily manipulating the techniques of production (Eneh, 1998).

Successive Nigerian governments also established and invested on State-Owned Enterprises (SOEs), usually large enterprises anchored on imported raw-materials, technologies, machinery and spare-parts, to the tune of 5.3 billion US Dollars by the end of the 1990s. As industrial economic development model assaulted and degraded the environment in the West, so also it did to Nigeria and other developing countries that toed the model, without adopting creative development models that do not compromise the native integrity of the environment (Eneh and Owo, 2008).

The government focused on maximum exploitation of natural resources for rapid economic development with scant regard for resource conservation and sustainability. Whatever pre-investment studies/assessment undertaken were limited to analytical techniques largely confined to economic and engineering feasibility studies, narrow emphasis on efficiency criteria and safety of life and property. Environmental and social consequences of the envisaged project were ignored. Industrial activities, usually carried out in developing countries with weak legal framework and regulation infrastructure, led to pollution of water resources, destruction of fauna and flora, health hazards and deterioration of health quality, air and noise pollution, as well as destruction of traditional economic infrastructures within communities hosting some of these high powered investments (Ifeanyi, 2002; Eneh and Okezie, 2009; Eneh, 2008, 2011).

For example, the Kaduna industrial complex that houses textile mills today constitutes environmental nuisance and a core source of water pollution. Ifeanyi (2002) recalls the attempt by the host community and Non-Governmental Organizations (NGOs) to force a change in the indiscriminate discharge of industrial effluent and toxic waste into River Kaduna-the only source of portable water supply to the community-which largely failed. The industrialists rejected the suggestion of the community dwellers for retooling or change to cleaner technologies on the ground of heavy financial expenditure required to effect the change, which would jeopardize their operations and trigger off lays-off. Only recently, the Federal Ministry of Environment (FENV), in response to persistent outcry of the affected communities, inaugurated a consultative meeting between the Ministry and the Chief Executives of the industries in Kaduna on Industrial pollution. This meeting resulted in verification of the complaints of the affected communities and the following resolutions:

- Immediate establishment of public and community relations sub-committee involving all stake-holders to find solution to the problem
- Every industrial facility in Kaduna to submit environmental compliance audit within 3 months from the date of the meeting
- All industrial facilities to co-operate with the Government-appointed consultants on the ongoing study of industrial effluent management in Kaduna

- Every facility to create and/or submit to (FENV) the company designated environment officer or consultant by 31st November 2001
- Every facility was bonded to achieve 100% compliance with industrial standards and regulation by 2003 and must submit relevant Action Plan within 3 months from the date of the meeting

Increase in concentrations of soil particles washed into the stream by land disturbance is an aftermath of stream pollution associated with forestry activities. The large particles sink to the bottom and increase the bed load. Depending on stream velocity, smaller particles remain in suspension. In the River Niger, for instance, the suspended matter can obstruct the penetration of light and limit the photosynthetic zone to less than 1 m depth. Suspended sediments in watercourses lead to increased water treatment costs incurred by water supply authorities (Anukam, 1997).

Other industries responsible for water pollution in Nigeria include petroleum, mining, wood and pulp, pharmaceuticals, plastic, iron and steel, brewing, distillery and fermentation, paint and food. Accidental petroleum oil spillages endanger local sources of water supply and fresh water living resources, especially in the rural areas. The problems associated with lack of adequate water resources in Nigeria threaten to place the health of about 40 million people at risk and would cost in excess of 10 billion US Dollars a year to correct, if ground and surface water contamination goes unchecked (Anukam, 1997).

Environmental pollution and degradation attendant upon oil exploration activities in the Niger delta region in southern Nigeria have generated political, social, health, economic, insecurity and other development challenges of national and international dimensions. According to Ifeanyi (2002), this region hosts the bulk of Nigeria's hydrocarbon reserves and, therefore, suffers high levels of water, air and thermal pollution. Energy production and utilization produces waste heat which affects the fauna and flora. Nigeria produces about 2 million barrels of oil daily, most of which comes from reservoirs containing gas, which is also produced along with oil. This associated gas is separated from oil at the flow stations and 95% of it is flared. This currently translates to 2 billion Standard Cubic Feet per Day (SCF/D), which is assessed at 25% of the world's gas flares and equivalent to 25% of France's total gas requirement.

Without pollution control, the waste products from consumption, heating, agriculture, mining, manufacturing, transportation and other human activities, whether they accumulate or disperse, will degrade the environment. This realization stirred worldwide efforts to stem the tide of unacceptable level of environmental degradation. The 1972 Stockholm United Nations, UN, Conference on Human Environment established the nexus between underdevelopment and environmental integrity. Twenty years later, the 1992 UN Conference on Environment and Development, also known as the Earth Summit held in Rio de Janeiro, Brasil generated an action plan for sustainable development in the 21st century, which forms the policy instrument for programmes on environment in various countries. Consequently, environmental awareness is increasing locally and internationally, especially regarding the environmental degradation and pollution resulting from anthropogenic activities for economic development, which have led to threat to human and wild lives, fauna and flora, biodiversity, ecosystem and indeed general environmental sustainability challenges of serious consequences (Ifeanyi, 2002).

The earth summit also broadly defined sustainable development as the ability of the present generation to meet its needs without compromising the potentials of the future generations to meet theirs. Therefore, sustainable development is only intra-generational, but also inter-generational.

Hence, Principle 3 of the Rio declaration on environment and development provides that the right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations (Ifeanyi, 2002).

To protect the environment from the adverse effects of pollution, many nations worldwide have also enacted legislation to regulate various types of pollution as well as to mitigate the adverse effects of pollution. The first major modern environmental legislation was The clean air act of 1956. The need to manage and control environmental degradation and pollution also led to the emergence and evolution of Environmental Impact Assessment (EIA), first in America in 1969 and later spread to Canada, Europe, Southeast Asia and the developing countries (Nwafor, 2006).

EIA is a systematic investigation into the positive and negative effects of a proposed development project on the natural and human environments on the short-term and long-term. It is carried out to identify, predict and assess future environmental impacts associated with a particular operation or project where the impacts are potentially significant and cannot be readily identified, assessed or mitigated. EIA progresses from identification of the project to the activities, which are then related to their potential benign and adverse impact on the environment (Nwafor, 2006).

Evolution of EIA has led to various off-shoot techniques, such as Social Impact Assessment (SIA), Health Impact Assessment (HIA), Rapid Urban Environmental Assessment (RUEA), Environmental Risk Assessment (EnRA) and Environmental Technology Assessment (EnTA). These instruments were initially developed to augment the deficiencies of economic techniques in accounting for the qualitative and intangible effects of major development projects. Increasing enhancement of the project-specific, downstream and reactive EIA has resulted in the above-project or sectoral-level, upstream and pro-active Strategic Environmental Assessment (SEA) at the level of policy, plan and programme, covering Regional Environmental Assessment (REA) and Cumulative Environmental Assessment (CEA) (Sadler, 1994; Goodland and Tillman, 1995).

The objective of the EIA is to ensure that environmental aspects are addressed and potential problems are foreseen at the appropriate stage of project design. EIA should be envisaged as an integral part of the planning process and initiated at the project level from the start.

The main steps are as follows:

- Preliminary activities include the selection of a coordinator for the EIA and the collection of background information. This should be undertaken as soon as a project has been identified
- Impact identification involves a broad analysis of the impacts of project activities with a view to identifying those which are worthy of a detailed study
- Baseline study entails the collection of detailed information and data on the condition of the project area prior to the project's implementation
- Impact evaluation should be done whenever possible in quantitative terms and should include the working out of potential mitigation measures. Impact evaluation cannot proceed until project alternatives have been defined, but should be completed early enough to permit decisions to be made in a timely fashion
- Assessment involves combining environmental losses and gains with economic costs and benefits. Cost-benefit analysis should include environmental impacts where these can be evaluated in monetary terms
- Documentation is prepared to describe the work done in the EIA. A working document is prepared to provide clearly stated and argued recommendations for immediate action. The

working document should contain a list of project alternative with comments on the environmental and economic impacts of each

- Decision-making begins when the working document reaches the decision maker, who will either accept one of the project alternatives, request further study or reject the proposed action altogether
- Post audits are made to determine how close to reality the EIA predictions were

At a minimum, the EIA report should contain:

- A description of the proposed activity
- A description of the potentially affected environment, including specific information necessary for identifying and assessing the environmental effects of the proposed activity
- A description of practical alternatives as appropriate
- An assessment of the likely or potential environmental impacts of the proposed activity and alternatives, including the direct, indirect, cumulative, short-term and long-term effects
- An identification and description of measures available to mitigate adverse environmental impacts of the proposed activity and alternatives and an assessment of those measures
- An indication of gaps in knowledge and uncertainties which may be encountered in compiling the required information
- An indication of whether the environment of any other State or areas beyond national jurisdiction are likely to be affected by the proposed activity and possible alternatives
- A brief non-technical summary of the information provided under the above headings

This review study examines Nigeria's environmental legal framework and the unresolved issues amidst environmental pollution and degradation in the country. After this brief introduction, the rest of the paper is structured as follows: Nigeria's environmental legal framework, unresolved issues in Nigeria's environmental protection and conclusion.

## **NIGERIA'S ENVIRONMENTAL LEGAL FRAMEWORK**

Since Nigeria is part of the global environmental management equation, applicable environmental laws in the country traverse international and regional agreements/conventions/protocols and national laws, regulations and bye-laws. They include the following (Ifeanyi, 2002):

### **International agreements/conventions:**

- 1968 African Convention on Conservation of Nature and Natural Resources
- 1972 UN Conference on the Human Environment (Stockholm declaration) which established the nexus between development and environmental integrity
- 1976 Vancouver Conference on Human Settlements. (Habitat I)
- 1985 Vienna Convention on protection of the Ozone Layer
- 1992 UN Conference on Environment and Development (Rio Summit) which produced a suite of five documents:
  - Agenda 21-an action plan for sustainable development in the 21st century
  - The Rio declaration-principles on healthy environment and equitable development
  - The convention on biodiversity

- The convention on climate change
- A statement of forest principles
- 1993 Lugano convention on civil liability for damage resulting from activities dangerous to the environment
- 1996 Istanbul Conference on Human Settlements (Habitart II) which links quality living with construction and environment, drinking water, etc
- Kyoto accord/kyoto protocol on global warming CFCs
- African charter on human and people's rights

**Regional environment policy:** According to Ifeanyi (2002), regional environment policies and their provisions include African Charter on Human and Peoples Right (Ratification and Enforcement) Act Cap 10 Article 24: All Peoples shall have the right to a general satisfactory environment favourable to their development.

**The 1999 constitution:** Various sections and sub-sections of the 1999 Constitution of the Federal Republic of Nigeria provide for environmental protection. Section 20: The State shall protect and improve the environment and safeguard the water, air and land, forest and wildlife of Nigeria. Section 16 (2): The State shall direct its policy towards ensuring the promotion of a planned and balanced economic development. Section 17 (2) (d): In furtherance of the social order, exploitation of human or natural resources in any form whatsoever for reasons, other than the goal of the community shall be prevented.

**National policy on environment:** According to Ifeanyi (2002), Nigeria's National Policy on Environment (1989) sets out the following goals:

- Securing the quality of the environment for health and wellbeing
- Conserving and using the environment and natural resources for the benefit of present and future generations
- Restoring, maintaining and enhancing the ecosystem and ecological processes essential for the functioning of the biosphere to preserve biological diversity and the principle of optimum sustainable yield in the use of natural resources
- Promoting public awareness on the link between development and the environment
- International co-operation with countries and international organizations in the protection of the environment

**Other legislation include:**

- Harmful Wastes (Special Criminal Provisions) Act Cap 165, which was part of the country's response to the dumping of toxic waste in Koko, Delta State, Nigeria in 1988
- Federal Environmental Protection Agency (FEPA) Decree No. 58 of 1988 Cap 131, which established an environmental management agency with specific powers to:
  - Establish such procedures for industrial or agricultural activities in order to minimize damage to the environment from such activities
  - Establish such environmental criteria, guidelines, specifications or standards for the protection of the nation's air and inter-state waters as may be necessary to protect the health and welfare of the population from environmental degradation

- FEPA also has responsibility for setting standards for water quality, noise control, effluent limitation, ozone protection, control of hazardous substances, etc.
- The Environmental Impact Assessment Act of 1992, which is the core legislation that governs environmental impact assessment in respect of proposed projects in Nigeria and flows directly from the provisions of Principle 17 of Rio Declaration

Environmental Impact assessment as or national instrument shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.

Nigeria's EIA Act is basically divided into four parts:

**Part 1: General Principles of Environmental Impact Assessment with broad objectives of:**

- Determination of environmental impacts of activities likely to negatively affect the environment [S1(a)]
- Promotion of implementation mechanisms at the federal, state and local government levels [S.1(b)]
- Encouragement of exchange of data and information as well as consultations and notification of alerts across boundaries to other states, towns and villages [S1(c)]

Other provisions include:

- Mandatory Assessment (SS 2 and 3), which make it mandatory that an assessment be made of likely environmental impact or effect an activity would have. This assessment should be made prior to approval or final decision and at the very early stages of the activity
- Disclosure (SS 3, 4 and 5). SS 3 prescribes that significant environmental issues shall be identified (disclosed) and studied, while SS 4 specifies the minimum matters that the environmental assessment report must contain
- Consultation [SS 7 and 9(2), (3) and (4)], which stipulates that prior to giving a decision on any proposed activity, FEPA shall afford concerned professionals, government agencies and other stake-holders opportunity to make an input. The consequential report or decision shall be public
- Approval procedure [SS 6, 8, 9(1), 10, 11(2) and 13]. The decision of FEPA shall be impartial and given after a minimum time has elapsed. It should also be in writing and supported by reasons and details such as conditions for project execution, or any directives for mitigation or that the project should be carried out under supervision. It may order further investigations into possible hazards
- Participation [S 11(1)]. Any person or community to be affected directly or remotely shall be notified and there shall be consultations which in effect means that the person or community shall have a say in the final decision of FEPA

**Part 2: Environmental assessment of projects:** This part basically covers the environmental assessment process which includes:

- Screening and reviews and matters incidental thereto (SS 16-22)
- Mandatory study, Notices and Council's decisions (SS 23-26)



- Discretionary powers of the Agency, mediation and constitution of review panels and matters incidental thereto (SS 27-39)
- Decision of the Agency including implementation of mitigation measures, follow up programmes and certification (SS 40-42)
- Trans-border matters both domestic and international; international agreements and arrangement; access to information etc. (SS 49-59)

**Part 3: Miscellaneous:** This covers the Agency's powers to issue guidelines, codes of practice and facilitating regulations; offence and penalty; interpretation etc. The final part is the Schedule which contains the mandatory study activities. These include potential projects in Agriculture, Airport, Drainage and Irrigation, Land reclamation, Fisheries, Forestry, Housing, Industry, Infrastructure, Ports, Mining, Petroleum, Power generation and transmission, Quarries, Rail ways, Transportation, Resort and Recreational Development, Waste treatment and disposal and Water supply.

**EIA guidelines:** FEPA developed detailed procedural sectoral guidelines for ease of preparation and assessment of EIA reports. The guidelines categorize activities into:

- Projects requiring public review panels, extensive public consultation, etc. (Full EIA)
- Projects with limited potential environmental impacts, e.g. electricity transmission, small scale agro based industries, tourism, rehabilitation of roads, etc.
- Projects likely to have negligible or no potential environmental impacts, such as education, family planning, health, nutrition, etc.

These categories are denoted as 1, 2 and 3 in Nigeria, but as A, B and C by international bodies, especially World Bank (Nwafor, 2006).

As outlined in the procedural guidelines, approval procedure involves:

- **Notification to FEPA:** This basically starts with a notification in writing by the submission of the project proposal and completion of the relevant form (EIA Notification Form) and payment of N10,000.00 (\$100)
- **Initial examination by FEPA:** FEPA then conducts an Initial Environmental Examination (IEE) by considering all relevant information. The project is assigned a category and a Screening Report is issued and sent to the Project Proponent
- **Submission of terms of reference:** The project proponent in turn submits its Terms of Reference covering the environmental issues, based on site scoping. This is sent back to FEPA
- **Reviews and hearing:** If FEPA is not satisfied with any issue, it may call for public hearing or ask for further studies
- **Draft EIA report:** When FEPA is finally satisfied, the Draft EIA Report is prepared by the project proponent and submitted to FEPA with a review fee of N240,000.00 (\$2,400)
- **Approval/no project decision:** If FEPA is satisfied with the EIA Report, it may either approve or decline approval. If approval is declined, there may be a review process (with a review panel sitting and evidence called by both sides). The review panel will make recommendations on the basis of the hearing
- **Final EIA report:** If approval is given or the review process is in favour of an approval, a final EIA Report is submitted to FEPA within 6 months

- **Certification:** FEPA's Technical Committee then issues an Environmental Impact Statement (EIS) along with a certificate
- **Follow up:** Some conditions of approval may specify that the project be executed under supervision. Such supervision and the monitoring functions of FEPA will continue throughout the project phases and possible commissioning

## **UNRESOLVED ISSUES IN NIGERIA'S ENVIRONMENTAL PROTECTION**

Ifeanyi (2002) notes that the deficiency of Nigeria's constitutional provisions for environmental protection is their non-justiceability. Performance cannot be enforced by legal action, since they are categorized under foundational objectives and directive principles of state policy.

Although, Nigeria has established Federal Ministry of Environment (FMENV), which has swallowed FEPA, the basic challenge confronting FMENV is implementation of the provisions of the FEPA Act. Impeccable policies in Nigeria often suffer failure at the implementation stage. (Ebigbo, 2008) observed Nigeria is replete with impeccable policies, but lacks in their implementation. Corruption makes a mess of implementation of even faultless policies in Nigeria and puts to waste resources employed in producing them.

EIA is hardly undertaken prior to the approval of projects, especially infrastructure projects. The case of National Stadium Abuja is typical. Engineering infrastructure is a core need of Nigeria today and is the basic driver of other investments that inspire economic development. The principle enshrined in the Act, of pro-active integration of development programme and environmental issues to deliver environment-friendly projects is observed more in the breach. The key defaulters in this exercise are the various levels of Government - federal, state and local - which routinely approve projects within the mandatory study list before any kind of EIA is undertaken (Ifeanyi, 2002).

Even where the requisite impact assessments were done, the detailed procedure laid down in the Act/Guidelines is usually flouted, especially in respect of consultations. Insufficient consultations usually raise anxieties or premature expectations, which often manifest in unsubstantiated fears that projects may cause adverse impacts, or false hopes that projects will bring benefits. This is usually the "mother" of most "community unrest". A case in point is the matter currently in the Nigerian High Court, which involves the Federal Ministry of Environment and some coastal Communities along the Imo River. The Federal Government had awarded the contract for the dredging of the River in order to improve vehicular access to the nation's only aluminum smelting factory at Ikot Abasi. The affected coastal communities stiffly resisted the project on the ground that the Draft EIA Report was unfavourable to the project. Unknown to them however, the Final Report got the approval of the ministry and so the dredging project commenced. This represents a classic failure of consultations and so today the matter is subjudice (Ifeanyi, 2002).

The Federal Government proposal to dredge the River Niger to improve inland waterways is being resisted by the coastal communities who are demanding compensation for the potential impacts of the project. On its part, the Government has declined payment of compensation, claiming the project holds potential economic benefits to the affected communities (Ifeanyi, 2002).

Investment climate in Nigeria is very receptive of all kinds of investments considered necessary to drive economic growth. This has unwittingly made the country a dumping ground for all kinds of obsolete technologies. Poverty and prohibitive costs are often cited as disincentives to importing clean technologies that meet international environmental standards. And, for social reasons, Government appears willing to grant waivers, thus diluting the effect of the EIA Act (Ifeanyi, 2002).

According to the Federal Ministry of Solid Minerals Development (FMSMD, 2004), the problems facing EIA in Nigeria include lack of co-operation and co-ordination between the Federal Ministry of Environment (FMENV) and the State Ministries of Environment (SMENVs), lack of inter-ministerial co-operation and co-ordination, existence of numerous overlapping functions, weak institutional capacity and lack of funding and bad governance.

**Lack of inter-ministerial co-operation and co-ordination:** According to Nwafor (2006), there is a lack of co-operation and co-ordination between the FMENV and SMENVs. Causes of discord include:

- Poor communication among the internal departments of FMENV to the extent that a department may be unaware of what the other departments are doing
- A surprising lack of knowledge of the general legislation covering the environment
- The lack of clarity about the roles of the federal and state ministries and the state EPAs, in monitoring and enforcement of federal and state environmental laws and regulations

For example, there persists confusion over the roles and responsibilities of the various ministries particularly the Federal Ministry of Solid Minerals Development (FMSMD, 2004) on the one hand and the FMENV and Federal Ministry of Water Resources (FMWR) on the other hand. FMSMD (2004) submits that there has been little attempt to reconcile the different roles of these federal ministries in the licensing of prospectors and in the enforcement of regulations at the mines and quarries.

**Numerous overlapping functions:** There are numerous overlapping functions and responsibilities for environmental protection, monitoring and enforcement. For example (FMSMD, 2004) submits that processing of EIAs is a federal function but the role of the state ministries and state EPAs does not appear to be consistent or clear ... monitoring and enforcement standards and regulations are unclear and divided.

The discordance in the relationship among the three tiers of government, which profoundly limits their effectiveness in carrying out their environmental management function, has been aptly underscored by the FMSMD (2004), when it stated, the relationship between all the Federal and State ministries and agencies and the Local Government is also discontinuous and inconsistent. The problem appears to be mainly between the centralized federal functions and those at state level, with rivalries and jealousies, resulting in top-down legislation having limited perceived applicability or relevance at State and Local level.

Managing the EIA procedure in countries with a federal system of government is usually characterized by conflicts of roles, mandates and responsibilities between the different levels of governments, namely federal (i.e., central), state (provincial or regional) and local government authority. The causes of conflict revolve around overlaps, duplications or inconsistencies in the constitutional and legislative mandates and functions which govern federal-state-local government relationship. These discords, overlaps and duplications are in turn transferred to the management of the country's environmental impact assessment EIA process among the jurisdictions of the three tiers of government.

Despite explicit provisions in the EIA Act 86 of 1992 for decentralization of EIA responsibilities to the state level and other legal and legislative instruments in managing the EIA process in

Nigeria, in none of these is the mandate to the states clearly defined. There a wide gap between sewage and refuse disposal, which functions border on environment sanitation, as against issues of environmental management and pollution control (Onyeabor, 2000).

**Weak institutional capacity and lack of funding:** SEPAs and local governments lack institutional capacity, equipment and adequate funding. With exception of Lagos, Rivers, Niger, Abia and Imo, only very few SEPAs have staff with EIA training and laboratory facilities for environmental monitoring.

**Bad governance:** Endemic corruption, greed and graft characterize the people in government and impact on EIA process (FMSMD, 2004; Nwafor, 2006) captures 8 weaknesses in EIA procedure in Nigeria to include public participation, dearth of requisite human resources, EIA report (i.e., EIS), EIA team, defective system of accreditation of EIA consultants, culpability of the government, implementation and agency capture.

**Public participation:** There is a lack of appropriate skills and prior experience in public participation on the part of both the EIA teams and the FMENV, leading to inability to carry the host community and the affected population along. Hence, there are escalating crises and conflicts resulting from the increasing severity of environmental degradation.

**Dearth of requisite human resources:** There is dearth of specialist individuals with the capacity to design, conduct, review and evaluate EIA in Nigeria.

**EIA report (i.e., EIS):** EIA report or EI statement, as an aid to decision making, should be accurate, concise and as clear as possible. The persistent problem of documentation of EIA studies is poor standards, manifesting in voluminous and unwieldy or encyclopaedic, instead of being accurate, concise and clear predictive documents.

**EIA team:** The selection of an appropriate (in terms of technical and management capabilities and competence) EIA team is a key challenge facing effectiveness in conducting and implementing EIA in Nigeria. Selection is often skewed in favour of biophysical experts, against the social scientists.

**Defective system of accreditation of EIA consultants:** The FMENV accreditation process makes it possible for unqualified persons to be enlisted as EIA consultants because FMENV does not insist on experts knowledgeable in EIA.

**Culpability of the government:** The government displays ambivalence (e.g. continuous shifting of deadline to end gas flaring) and indifference.

**Implementation:** The implementation of EIA in Nigeria is characterized by:

- Lack of an effective monitoring and enforcement unit in the FMENV
- Absence of follow-up guidelines and lack of feedbacks through follow-ups
- Lack of co-operation between FMENV and state environmental institutions for follow-u
- Absence of clear responsibility for what happens to environmental management plan/ programme (EMP)

**Agency capture:** This is a process by which the agency-industry relationships result in:

- Concealment or selective interpretation of quantitative or qualitative information about impacts
- Collusion between agency regulators and their industry clientele to actively subvert the original intention of legislations and legislators

A basic hypothesis is that in the long run, government agencies are controlled by the industries they relate to. If captured by powerful interests, agencies enforce laws, apply policy and report data in a manner desirable to those interests. Agency behavior becomes a way for developers to substantially evade the law while securing agency legitimization of their operations. Under such circumstance, EIA reports function mainly to control public opinion about the social and environmental consequences of development rather than promoting fundamental change. Nkamnebe (2010) opines that a situation where a multinational (project proponent) is richer and more powerful than the host developing country breeds the ground for agency capture.

EIA Act, which has been amended only twice in 1992 and 1999 in two decades, is dated, compared with the National Environmental Policy Act (NEPA) enacted by the Senate and House of Representatives in Congress of the United States of America on 23 December 1969 and signed into law by President Nixon on 1 January 1970. Only five years later, NEPA Act was amended twice within the same year on 3 July and 9 August 1975. Seven years following, it was amended on 13 September 1982. This updating shows the seriousness attached to environmental protection and enhanced implementation fueled by monitoring (Nwafor, 2006).

Furthermore, amidst high level of illiteracy and underdevelopment, there was no understanding of the environment by the masses when the policies were being formulated, nor was there mass environmental education and awareness creation regarding sustainable environment. People participation in formulation and implementation of the policies is lacking (Nwafor, 2006).

Standards were set without nationally generated baseline data usually lacking in the country, but with adapted guidelines and standards of the World Health Organizations (WHO). In transposing these data between countries, socio-economic and climatic differences are compromised (World Bank, 1990).

In the era of globalization driven by Information Communications Technologies (ICTs) and all the efforts by Nigerian government towards adoption of ICTs as a means of bridging information gaps and marginalization in the global market system, electronic wastes (e-wastes) are common in Nigeria and worse still, discarded and disposed of in manners that enhance their environmental pollution. Yet, Nigeria has no recycling or management policy on e-waste, some of which contain hazardous and toxic chemicals, unlike the United States of America (USA), where The Electronic Waste Recycling Act or Senate Bill 50 was signed into law in 2004 (Nkamnebe, 2010).

Little wonder, much of the 20-50 million tonnes of e-wastes produced annually is shipped to developing countries (including Nigeria) with little or no sufficient legal, human and technological capacity to handle them. Also, Nigeria imports e-wastes in the form of second-hand and inferior ICTs products, which soon outlive their usefulness and are discarded as unserviceable and dumped or inadvertently disposed of in ways that are unhealthy and harmful to both humans and the environment. E-waste disposal in landfills cause severe human and environmental health impacts because plastics in electronics (commonly littered in collection points for days before they are actually collected) easily leach off in hot weather, especially when left outside (Toby, 1998). Again,

the uncontrolled burning, disassembly and disposal of e-wastes in Nigeria cause a variety of environmental problems, such as ground water contamination, atmospheric pollution and water pollution either by immediate discharge or due to surface run-off (especially near coastal areas) (Nkammenbe, 2010).

Similarly, the strategic environmental assessment (SEA)-the application of environmental impact assessment (EIA) principles to policies, plans and programmes-is yet to receive mandatory status in Nigeria (Nwafor, 2006).

These and other unresolved issues are responsible for slow progress in environmental protection in Nigeria. (Nwafor, 2006) observes that Nigeria's environment is characterized by ecological problems (e.g., soil erosion) and high population pressure and increasing congestion in urban centres. These are further compounded by unplanned growth and increasing problems of domestic and industrial waste disposal and pollution. Anthropogenic development activities, especially in the oil and gas sector, accelerate the loss of topsoil and deforestation, loss of habitat, loss of species and loss of biodiversity, as well as degeneration of wetlands.

Water shortages and floods characterize deterioration of urban environmental quality and play a major role in transmission of communicable diseases. Environmental degradation also manifest in drought and desertification, which threaten food security and Nigeria's ecological integrity and drive population displacement. Poverty is a major mediating factor in the increasing levels of pollution and environmental degradation in Nigeria (Nwafor, 2006). According to Transparency International, Cambridge University Press and Water Integrity Network (2008), corruption in the water sector is another major player in environmental degradation worldwide, especially in developing countries, including Nigeria.

## **CONCLUSIONS**

Two decades of the EIA Act in Nigeria, the country's environment is still characterized by ecological problems, unplanned growth and increasing problems of domestic and industrial waste disposal and pollution. Economic development activities, especially in the oil and gas sector, accelerate the loss of topsoil and deforestation, loss of habitat, loss of species and loss of biodiversity, as well as degeneration of wetlands. Water shortages and floods lead to deterioration of urban environmental quality and play a major role in transmission of communicable diseases. Corruption in the water sector is another major player in environmental degradation worldwide, especially in developing countries, including Nigeria.

The weaknesses in EIA procedure in Nigeria include lack of co-operation and co-ordination between the Federal Ministry of Environment (FMENV) and the State Ministries of Environment (SMENVs), lack of inter-ministerial co-operation and co-ordination, existence of numerous overlapping functions, weak institutional capacity and lack of funding and bad governance. Others are poor public participation, dearth of requisite human resources, poor EIA report (i.e., EIS), inappropriate EIA team, defective system of accreditation of EIA consultants, culpability of the government, poor implementation and agency capture. Overall, weak implementation has rendered EIA Act a paper Tiger.

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