

**AN OVERVIEW OF THE ENVIRONMENTAL PROTECTION IN NIGERIA:
ISSUES AND CHALLENGES**

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Abstract

The article studies environmental protection in Nigeria. Brief history of environmental protection in Nigeria was discussed and also the role of environmental protection agencies was also explained. Methods of environmental protection in Nigeria were identified and explained. This includes afforestation, environmental laws, environmental education, etc. Challenges of environmental protection in Nigeria were itemized and explained. These includes ineffective execution of environmental protection laws in Nigeria, lack of mechanism for monitoring the environment, inadequate penalties for violation, weak environmental governance. Recommendation was also made on how to conserve the environment. These are effective environmental monitoring to prevent it from destroying, proper education/enlightenment, adequate funds should be given to environmental enforcement agencies, etc.

Keywords: *Environment, protection, methods*

Introduction

Scientific and technological development uncontrolled economic and socio-cultural activities, and unsustainable exploitation, and spread of pollution which poses threats to human and natural habitats. This situation called for intervention from countries, individuals and organization to search for appropriate solutions to protect and improve the environment. In the past, the three components of the environment (air, soil, and water) were pure, uncontaminated and hospitable. But the reverse is the case today because progress in science and technology is also leading to environmental degradation and serious ecological imbalance, which in the long run, may prove disastrous for mankind (Sharma, 2002).

Globally, it is now recognized that the environment needs protection. In the last hundred years, there has been an exponential increase in the types and quantity of pollutants, some of which are synthetics we have created-newcomers to the planet whose long-term consequences we do not yet know. There has been an explosive population growth, bringing increased demands for natural resources and competition for clean water and food in the many parts of the world. A different phenomenon is also occurring in some places: affluence expressed by an excessive and unprecedented rate of consumption, and a remarkable indifference to wastes from that consumption which clog our oceans and poison our groundwater. Facing such assaults, the environment cannot be its own advocate it needs human voices and human action.

Environmental Protection

Environmental protection is a practice of caring for the environment, for individual, organization or governmental levels, for the benefit of the natural environment and future generations. Following the increase in global population, the demand for natural resources increases and consequently pollution increases. When this happens, there is environmental degradation which could be temporal or permanent. The degradation of land, air or water has continued to generate conflicts among various communities in various regions all over the world. In recent times, the discovery of oil and subsequent growth in the industry and massive importation of goods have brought about increasing negative environmental impacts. These have attracted the attention of the government. The earliest solution was the creation of the River Basin Development Authority and setting up of environmental control divisions in the federation of works.

What brought the consciousness of environmental protection to the fore in Nigeria was the incident of Koko port in the Niger Delta region. In 1988 a large consignment of toxic waste of Italian origin was dumped in the Port Town of Koko. Many people in the area suffered from strange disease and death toll was mounting on daily basis. This incident constituted a major catalyst for the government of Nigeria to act in order to protect the Nigerian environment. This resulted in the creation of the Federal Government Protection Agency (FEPA) by Decree 58 of 1988 and strengthened by Decree 59 of 1992.

Development of Environmental Legislation and Agencies in Nigeria

Prior to 1988, there were no laws to regulate industrial pollution or Hazardous waste in Nigeria. The existing environmental laws only focused on the protection and conservation of economically importance natural resources. (E.g. Oil Pipeline Act, 1956, Forestry Act 1958, Mineral Oil (safety) Regulations 1963, Oil in Navigable waters Act 1968).

Concessions were granted by Federal and State to business promoters to establish industries with little or no attention paid to the pollution generated for their operational activities. The Koko toxic waste incident of 1988, in which barrels of toxic waste were imputed and dumped in Koko (Delta State), changed this trend and resulted in the establishment of (FEPA). Decree (now and Act of 1988 and the creation of Federal Environmental Protection Agency).

Federal Environmental Protection Agency

FEPA was created by Decree 58 of 1988 as the overall body charged with the responsibility of protecting the environment in Nigeria, in cooperating with federal and state ministries, Local Government, statutory bodies.

Its functions were to established and present natural guidelines, criteria and standards for:

- a) Water quality
- b) Air quality and atmospheric protection
- c) Noise level
- d) Gaseous emissions and effluent limits
- e) Ozone protection

The agency was empowered to monitor and control Hazardous substances, supervise and enforce compliance.

National Policy on The Environment Of 1988

A natural policy on the environment was promulgated in 1988.

- a) Secure a quality of environment adequate for good health and well-being.

- b) Conserve and use environmental resources for the benefit of present and future generations.
- c) Restore, maintain and enhance the ecosystem.
- d) Raise public awareness and promote understanding.
- e) Collaboration with other countries and international agencies on environmental protection.

Nigeria's Agenda 21

Nigeria's Agenda 21 Programme seek to;

- a) Integrate environment into development planning at all levels of government and the private sector.
- b) Commence a transition to sustainable development.
- c) Address spectral priorities, plans, policies and strategies for the major sectors.
- d) Foster regional and global partnerships.

National Oil Spill Detection Response Agency (NOSDRA)

NOSDRA: Is a parastatal of the Federal Ministry of environment established by Act No. 15 as the Institutional framework to Implement Natural Oil Spill Contingency Plan (NOSCP) of 2001.

The function of NOSDRA includes the following:

- a) Surveillance and ensuring compliance with all existing environmental legislation and detection of oil spills in the petroleum sector.
- b) Receiving reports of oil spillages and coordinates oil spill response activities throughout Nigeria.
- c) Coordinating the implementations of the plan for the removal of hazardous substances as may be issue by the Federal Government.
- d) Promoting technical co-operation between Nigeria and member states of the West Africa sub-regions.
- e) Strengthen the natural capacity and regional action to prevent control, combat and mitigate marine pollution.

- f) Encouraging regional cooperation among member states of West Africa sub-region and in the Guide of Guinea for combating oil spillage and pollution in our contiguous water.

National Environmental Standards and Regulations Enforcement Agency (NESREA)

In 1999 FEPA was scrapped and its functions was taken over the newly created Federal Ministry of Environment. In 2007, the National Assembly established the National Environmental Standards and Regulations Enforcement Agency (NESREA), a parastatal of the ministry of environment. NESREA Act replaced FEPA Act of 1988, NESREA now has the responsibility of enforcing environmental laws, regulations and standards and deterring people, industries and organizations from polluting and degrading the environment.

NESREA Functions

Include the following:

- a) Enforcement of environmental standards, regulations, rules, laws, policies and guideline.
- b) Protection and development of the environment, biodiversity conservation and sustainable development in Nigeria.
- c) Liaison with relevant stakeholders within and outside Nigeria.
- d) Developing guidelines, regulations and standards on the environment other than in the oil and gas sector.

NESREA Has Power To:

- ✓ Prohibit and use of equipment or technology that undermine environmental quality.
- ✓ Conduct field follow-up compliance with set standards and take procedures prescribed by law against any violator.
- ✓ Establish mobile courts to expeditiously dispense cases of violation of environmental regulation.

Other Regulatory Agencies Include:

State environmental protection agencies such as:

- ✓ KEPA (Kaduna State Environmental Protection Agency).
- ✓ KESEPPA (Kano State Environmental Plan Protection Agency).
- ✓ OGEPA (Ogun State Environmental Protection Agency).
- ✓ Adamawa State Environmental Protection Agency.
- ✓ River State Environmental Protection Agency.
- ✓ Lagos State Environmental Protection Agency etc.

To control and regulates environmental issues in the various state as established by the state.

Other Includes:

- ✓ Department of Petroleum Resources (DPR) Enforces Safety and Environmental Regulation in the Oil and Gas Industry and ensures that operations conform to national and international practice standards.
- ✓ Standards Organization of Nigeria (SON), Implements, audits and certifies 150 14000 standards in Nigeria. The 150 14000 family address. "Environmental Management". This means what the organization does to minimize harmful effects on the environment caused by its activities and to achieve continual improvement of its environmental performance.

International Environmental Regulation

Following the Stockholm conference in 1970, many countries established ministries of environment and environmental legislation began to increase. There was also growing recognition that pollution does not respect land borders and pollution from one country crosses to another. In addition, phenomena such as the greenhouse effect, global warming were identified. As such there was a need to develop international environmental legislation. This has organization such as the United Nation (UN). The most common treaties called conventions include:

- UN law of the sea (1986)
- UN convention on Biological diversity (1992)
- UN frame work convention on climate change (1994)
- UN convention to combat Desertification (1997)
- Vierina convention for the protection of the ozone layer (1988)

- Stockholm Convention On Persistence Organic pollutants (2001 , 2004)
- Basel convention on the Trans-boundary movement of hazardous waste
- Bamako convention on the ban of the import into African and the control of transboundary movement of hazardous wastes within Africa.

Environmental legislation in a fairly new and emerging field when compared to other aspect of Law, it is still evolving in Nigeria and such on the agencies charge with the responsibilities are many and are continue to evolve for better and effective performance to view result.

It is important to know the basis and reasons for enacting environmental laws and agencies involve, and stiffer penalties are currently being applied for violating environmental laws or polluting the environment. There is also a need to organize, a comprehensive international legal system once the problems associated with the various conventions and protocols are iron out so as to give a meaningful result for protecting the environment for the overall benefit of all for sustainable environment for present and the future generation.

Methods of Environmental Protection

The following methods are universally applied to protect and conserve the natural environment. These include the following:

- A. Environmental laws: Environmental laws are the basic methods most governments of the world apply to protect the environment from pollution. Law is a code of rules for the society to confirm. Environmental law is understood to the impact of human activities on the environment. Environmental laws come as part of natural and ecological law. The law is coined out because of the problems that are involved in our environment. These sets of laws determine what is known as environmental management.

The Basic Principles of Environmental Law

The following are the basic principles of environmental laws namely: Polluter pays principle, the prevention principle and the precautionary principle

- i. Polluter pays principle: The principle implies that whoever is responsible. The Federal Environmental protection Agency Act of 1988, provides that except where an owner or operator of the facility can prove that a discharge whether

gas or liquid was solely caused by natural disaster or an act of war by sabotage, such owner or operator of the vessels or the facility from which the hazardous substances are discharged shall be liable for:

- a. The cost of the removal of the pollutant
 - b. The cost of the third parties in the form of reparation, restoration, or compensation as may be determined by the Agency from time to time. This shows that there is a general consensus for the polluter to meet the cost of pollution control, prevention measure and compensation for the damage done. The aim of polluter pays principle is to ensure that this cost of damages caused by the pollution activity is borne in full by the person or agency causing the pollution (FEPA Acts of 1988)
- ii. The prevention principle
- Prevention principle is based on the maxim that prevention is better than cure. In this case industrialists, manufacturers and other potentials polluters are expected to take some necessary steps to prevent or minimize the effects of pollution before production processes begin. This principle demands that every manufacturing industry should poses environmental impacts assessment (EIA) reports highlighting possible pollutants and how to mitigate them.
- iii. The precautionary principle
- In this principle, the action taken is to protect the environment where there is no evidence as to the effect of any productive activity. The essence is to pre-empt the effect of the pollutant substance in the environment

Environmental Protection Laws in Nigeria

The role of legislation in inducing responsible attitudes towards the environment cannot be over looked. Legislation serves as an effective instrument for environmental protection planning, pollution, prevention and control. The following provides a summary of Nigeria legislation on the environment.

- o Constitution of the Federal Republic of Nigeria (1999). The constitution, as the national legal order, recognizes the important of improving and protecting the environment and makes provision for it. Relevant sections are

- i. Section 12 - establishes though impliedly that international treaties (including environmental treaties) ratified by the national assembly should be implement as law in Nigeria
 - ii. Section 20- makes it an objective of the Nigerian state to improve and protect the air, land, water, forest and wildlife of Nigeria.
- National Environmental Standards and Regulations Enforcement Agency (NESREA) act (2007) NESREA replaced the federal environmental protection agency (FEPA) act. It is the embodiment of laws and regulations focused on the protection and sustainable development of the environment and its natural resources. The following sections are worth noting:
- a. Section 7- provides authority to ensure compliance with environmental laws, local and international on environmental sanitation and pollution prevention and control through monitoring and regulation measures.
 - b. Section 8- empowers the agency to make and review regulations on air and water quality, effluent limitation, control of harmful substances and other forms of environmental pollution and sanitation
 - c. Section 27 - prohibits, without lawful authority, the discharge of hazardous substances into the environment. This offence is punishable under this section, with fine not exceeding N1, 000, 000 and an imprisonment of 5 years. In case of a company there is an additional fine of N50, 000 for every day the offence persists.
- The urban and Regional Planning act is aimed at overseeing a realistic, purposeful planning of the country to avoid overcrowding and poor environmental conditions. In this regard, the following sections become instructive (2004).
- a. Section 30 (3) requires a building plan to be drawn by a registered architecture or town planner
 - b. Section 39 (7) established an application for land development would be rejected if such development would harm the environment or constitute a nuisance to the community.
 - c. Section 59 makes it an offence to disobey a stop-work order. The punishment under this section, is a fine not exceeding N10, 000 and in case of a company, a fine not exceeding N50, 000.

- d. Section 72 provides for the preservation and planting of trees for environmental conservation

B. Bioremediation

One of the most innovative ways to tackle environmental damage by toxins and pollution is to let nature do the dirty work by cleaning up the mess. Certain microbes or microscopic organisms that live in soil and water can help with the bioremediation, the natural cleanup of contaminants in the environment by eating chemical compounds that would otherwise harm the environment. For example, some microbes eat oil and have been useful in cleaning up the oil spilled in ocean water. They transform it into harmless waste products such as water and carbon dioxide. Bioremediation is generally considered a safe and less expensive method for removing hazardous contaminants and production of non-toxic by-products (Provident et al.1993).

C. Afforestation

Afforestation scheme is applicable where the land had been polluted through erosion. Afforestation can play a substantial role in improving the environment (Powlson et al.1998). Afforestation is a planned cultivation of trees for the purpose of protecting the soil against erosion and desertification. In afforestation programs, tree species with rapid growth and high regenerative ability are used to create forests. Naturally, trees provide soil with firm layers of root network which binds the soil aggregate together against erosion. Apart from this the root network also provides the soil with water retentive capacity thus creating a condition for plant growth. This is very essential in checking desert encroachment. Desertification is an ecological problem which threatens the ecosystem of many West African states in Nigeria. This problem has been of much concern to the Federal and State Government especially in the northern parts of the country. In recent times, desert lands are spreading progressively towards Saharan West African Countries. In Nigeria, for example, expanded tree planting schemes have been implemented in some states like Sokoto, Katsina and Borno to check desert encroachment in the Sahel zones.

D. Monitoring

Monitoring can be effectively used to check environmental pollution and degradation. Monitoring implies continuous and repeated observation of an area that is liable to pollution. It involves repeated visits to the disaster site for visual observation. In advanced countries of Western Europe and the USA, orbiting satellite and remote sensor equipment's are used for wider coverage and to ascertain the scope of the damage to the environment.

The major problem confronting environmental management in Nigeria and other Third world countries is lack of sophisticated equipment for adequate monitoring of environmental disasters; such disasters require timely delivery of up-to-date information to the authority. Such timely information is useful for informed decision making to save life, reduce damage to environmental and reduce cost of clean off of the pollutant.

It is obvious that many oil drilling companies operating in Nigeria often cover up incidents of oil spill in remote area avoid payment of compensation. Sometimes this is done in collaboration with influential indigenes to conceal the incident after huge amount of money must have changed hands. Therefore, for effective monitoring of our environment, relevant governmental agencies should be in position, on its own to detect changes in the environment where there is oil spill. They should also be able to determine sources, and impacts of such changes prior to any formal report by the affected community. This is necessary to check the excesses of the oil drilling company operating in the area. In view of the above, there is need for Environmental Monitoring Information System (EMIS) in Nigeria.

E. Environmental Education

Environmental education refers to organized efforts to teach about how natural environment functions and particularly how human being can manage their behavior and ecosystem in order to live sustainable. Environmental education focus on developing community investigations and citizenship participation by building environmental knowledge,

environmental sensitivity and responsible environmental actions (Hungerford and Volk 2003). However, it is sometimes used more broadly to include all efforts to educate the public and other audiences, including print materials, media, campaign, workshop, websites etc. Environmental education is a learning process that increases people knowledge and awareness about the environment and the associated challenges and fosters attitudes, motivations and commitments to make important decisions and take responsible actions.

Challenges of Environmental Protection in Nigeria

Despite the legislation and policies on environmental protection and conservation, environmental degradation has continued to worsen in Nigeria and is attributed to the following problems.

- a. Ineffective execution of environmental protection laws in the country. The World Bank (1995) identifies the lack of enforcement of environmental laws as one of the problems of the Niger Delta environment.
- b. Enforcement agencies lack the mechanism for monitoring and evaluating the impacts of industrial pollution with a view to controlling them.
- c. Inadequate penalties for violation.
- d. The non-involvement of citizens in the formulation and execution of the law.
- e. Lack of enforcement of environmental laws which is the most fundamental cause of the inability of the legislation to promote the sustainable exploitation of natural resources.
- f. The isolation of the environmental laws from the development program and policies of the country.
- g. Weak environmental governance; weak and fragmented environmental governance remains a major bane of environmental protection in the country. Many of the institutions dealing with environmental issues have weak capacity and adopt sectoral, rather than integrated approaches. They are generally under-funded and ineffective in their core functions to have meaningful impact on environmental protection. Weak enforcement of laws and weak implementation of policies remains a major issue of concern in Nigeria's environmental sector.

CONCLUSION

Having identified and discussed the major challenges of environmental protection in Nigeria despite several efforts made by the government both at the National, state and local level to address these challenges/problems. Our environment is still faced with several problems both man-made and natural disaster such as deforestation, environmental degradation, flooding, pollution, faming, desertification, oil spillage, erosion etc. These necessitated the formulation and promulgation of level environmental related laws, agencies and Act so as to addresses these challenges, but however, from the above issues identified one would suggest that it necessary/paramount important for the government to strengthen the effectiveness of these agencies/laws for effective operation and performance of the agencies, at all level, proper delegation of function/responsibilities should be spelt out so as to enable the agencies to achieve their man-date, goals and objectives for sustainable environment for the benefit of all the present and future generation.

RECOMMENDATIONS

- There should be effective environmental monitoring, observing and recording information about the environment to prevent it from being destroyed by man's activities especially those involving sophisticated technology, to plan for future exploitation of its resources and to control them
- People should be educated on how to interact with the environment especially in schools and universities.
- Public enlightenment campaign should be organized at the grass root level time to time on how to conserve the environment.
- Government should allow its environmental protection agencies to perform their roles effectively without over lapping.
- Training should be given to enforcement agencies staff on how to protect the environment and also to ensure the effective enforcement of environmental laws in existence.
- Illegal lumbering/cutting down of trees should be discourage, this will protect the environment from soil erosion and desertification.
- Adequate funds should be given to environmental protection agencies in order toward to enhance the execution of project toward the improvement of the environment.

- Government should train and deploy Agric extension officers both at urban and rural area for enlighten/ educating the rural dwellers on the use of alternate source of energy.
- Measures should be taken by the concern authority/agencies to enforce the law concerning the protection of the environment at both levels.
- Government should designate a waste collection point in an appropriate location within the neighborhood for easy collection.
- Community effort should also be encouraged toward clearing of the drainage blockage to avoid surface ran off and flooding.

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