Enhancing environmental governance in Nigeria: A comprehensive policy review for sustainable development

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Abstract

Despite governance being widely acknowledged as a crucial element for effective environmental management, sustainable environmental management in Nigeria remained elusive. This study aimed to provide policy recommendations by conducting a comprehensive review of the existing literature on Nigeria's institutional, legal, and policy frameworks of environmental governance. The findings indicated that Nigeria's environmental system suffered from ineffectiveness, a lack of public participation, unenforceable and impractical laws and policies, and a weak and fragmented institutional framework. Consequently, the study concluded that Nigeria's current environmental governance structures were wholly inadequate to address the country's significant environmental challenges. It emphasized that sustainable environmental management required governance systems where the legal, policy, and institutional aspects of environmental management were considered the shared responsibilities of both shareholders and various stakeholders. Based on the extensive review of environmental governance issues, the paper asserted that promoting good governance would lead to effective and sustainable environmental management in Nigeria. It recommended the establishment of comprehensive, clear, and enforceable environmental regulations and the strengthening of the institutional framework for environmental governance in Nigeria.

Keywords: Environmental governance, Policy review, Environmental management, Sustainable development

Introduction

The emerging environmental sustainability questions have produced different perspectives on the preservation of the environment and about how to make it sustainable (Adeboyejo and Ogunkan, 2013). However, the dominant perspective suggests that environmental sustainability is contingent upon effective management of environmental and natural resources. There is, therefore, the broad consensus within both scholarly and political debates that 'governance' rather than "government" is a pivotal domain for the realisation of societal transformation processes guided towards a sustainable environment (Oyefara, 2013; Erhun, 2015; Adedibu, 2015) The argument stems, in part, from the fact that since most generally acknowledged environmental problems are anthropogenically induced, there should be the need to call for social action on environmental sustainability (Oyefara, 2013).

Technological solutions alone are proving insufficient to achieve sustainable development. Instead, there is a growing recognition of the importance of governance in addressing a wide range of environmental impacts and challenges. Some argue that integrating economic, social, environmental management, and urban governance—the four pillars of development—is essential for sustainable development. Sustainability scholars acknowledge governance's crucial role in maintaining a proper balance among these pillars. They also emphasize the necessity of governance to make and implement decisions that are both legitimate and effective while ensuring the sustainability of the other three systems (Aribigbola, 2008; Fiorino, 2012; Olokesusi, 2015; Adedibu, 2015). Regardless of differing perspectives, it is evident that governance significantly influences environmental actions and outcomes. Therefore, governance appears to be the most suitable approach to address the complex, long-term, multi-scale, and multi-sectoral aspects of environmental management.

Building on this understanding, this study analyzes the literature to evaluate the challenges and prospects of governance in achieving environmental sustainability in Nigeria. It begins with a conceptual clarification of environmental governance, reflecting on the fundamental ideas of governance to provide a robust analysis of the concept. Subsequently, the relationship between environmental sustainability and governance is established. It is posited that good environmental governance considers the roles of stakeholders, enabling the identification of various actors in Nigeria's environmental governance. The discussion then explores Nigeria's environmental governance structure, based on legal, policy, and institutional frameworks. This leads to a review of these frameworks, highlighting the achievements and challenges of existing environmental governance in Nigeria. Based on this analysis, the study offers policy recommendations aimed at improving governance to effectively and sustainably manage Nigeria's environment.

Conceptualizing environmental governance

In traditional parlance, "governance" and "government" are synonymously used to denote power dynamics in resource management for overall country development (Adedibu, 2015). However, the concept of governance became the buzzword in management science, public administration, political sciences, and international relation and related fields in the late 1990s and early 2000s (Pierre, 2000; H´eritier, 2001, 2002; Van Kersbergen and Van Waarden, 2001; Hooghe and Marks, 2001). Although the concept of governance is highly debated for a variety of reasons (see Arts, 2015), it was specifically defined as "processes, regulations or the results of interactions between the legislative and executive governments, the civil society, the judiciary, and the people" (UNDP, 1997). It has even been defined as "the manner in which power is exercised in the management of the country's economic and social resources for development (Ogunkan, 2021). It is the joint responsibility of the state, market and citizens to mobilise public resources and promote decision making towards common public good" (PRIA, 2013).

According to Mayntz, (2001) "governance means a more cooperative way of government, where state and non-state institutions, public and private actors, take part and often cooperate in public policy formulation and implementation". From the array of definitions of governance, it can be inferred that the notion of governance is wider in scope than government because it includes far more key players than just governmental entities and structures such as informal structure and the citizen's social power. It is misgiven, therefore, to regard the governance process as solely the commitment of governments. While governments bear an important responsibility in governance, it is also essential to note that other stakeholders, such as NGOs, businesses, and citizens, also have an important responsibility in governance. When we add the prefixes corporate, welfare, economic, and environmental to the term "governance," it becomes more specific. When applied to the environment, the concept of governance is usually defined as comprising the relationships and cooperation between government and non-governmental agencies, mechanisms, and normative frameworks, in which powers and responsibilities directly or indirectly impact the use, management, and control of the environment (Graham et al, 2003). Environmental governance, as a subset of broader governance, refers to the institutions and processes by which the societies make decisions relating to the environment, which frequently include a normative aspects of sustainable development (deLo"e et al. 2009).

Environmental governance is concerned with the political and legal rights, regulations and responsibilities of every member of the society- civil society, private sector and the government. Simply put, Environmental governance describes the formal and informal institutional arrangements employed by a given nation or society to tackle environmental issues and concerns.

Interventions aimed at changing environmental-related activities, institution, decision making, knowledge, and behaviors are also included in the definition (Ayade, 2003). Environmental governance can take many forms, including international treaties, national legislation and regulations, local decision-making frameworks, transnational institutions, and environmental non-governmental organizations (NGOs). Environmental governance takes many forms, is critical, and is almost everywhere (Ayade, 2003). With the first global conference on the environment, held in Stockholm in 1972, the concept gained international recognition, kicking off the discussion, negotiation, and ratification of a slew of international environmental treaties. As a result, different international environmental institutions have evolved in different ways, but they all have one thing in common: they are unusually open to both the business community and civil society actors. The emergence of global environmental governance is closely linked to the evolution of global environmental politics and policy. Consequently, global environmental governance encompasses a collection of organizations, policy measures, funding models, guidelines, processes, and norms that steer global environmental protection efforts (Najam et al., 2006).

Understanding Environmental sustainability and governance

It is a truism that the Brundtland Report (1987), which coined and popularized the term, is inextricably linked to the concept of sustainable development (Sneddon, Howarth, & Norgaard, 2006). Sustainable development was defined in the report as "development that meets the needs of the present without jeopardizing future generations' ability to meet their own needs." The traditional conception of concept of sustainable development was built on an environmentalism framework that prioritizes ecological degradation issues (Nurse 2006). As a result, it is reasonable to argue that a string of environmental disasters has strengthened the concept. As the concept of sustainability evolved, there was a shift away from a strictly environmentalist perspective to greater consideration of the social and economic dimensions of development. (Kadekodi 1992; Nurse 2006). Today's mainstream concept of sustainable development underlines the interplay of social, economic and environmental sustainability (Bell 2003; OECD, 2001; Nurse, 2006). However, whether we consider sustainable development to be a three-dimensional concept or a strictly environmentalist one, the fact remains that a sustainable environment is a necessary requirement for other sustainability indices.

When discussing the connection between environmental sustainability and the broader concept of sustainable development, Morelli (2011) defines environmental sustainability "as a state of balance, resilience, and interconnectedness that enables human society to meet its needs while not exceeding the capacity of its supporting ecosystems to regenerate the services required to meet those needs, nor by our actions reducing biological diversity". The fourth pillar was added to the sustainability pillar at the 2002 World Urban Forum in Nairobi. It was asserted by the Forum that the four pillars, i.e., economic, social, environmental, and governance, are critical to sustainability and failure to address issues surrounding the four pillars would prevent sustainable development from being achieved (UN-HABITAT, 2002). Since then, the indispensability of governance in sustainability goals has been increasingly recognised (Oyefara, 2013; Adedibu, 2015; Ogunkan, 2021) Recognizing the environmental framework as an important sustainability index, the International Institute for Sustainable Development strives for sustainable development through policy statements on sustainable natural resource management, measurement and assessment, climate change and energy, economic policy, and international trade and investment. Simultaneously, governance is increasingly being recognized as significant influences on environmental decisions and actions. (Agrawal & Lemos, 2007; Roussel, 2007; Erhun, 2015).

Environmental governance acknowledges the significance of both governance and the environment in achieving sustainability. To this end, environmental governance is a recognized concept in environmental policy or political ecology concerned with identifying the elements required for sustainability. Therefore, within the frame of reference of the global environmental politics and policy evolution, the ultimate goal of global environmental governance is to keep improving the environmental conditions, ultimately leading to the broader objective of sustainable development (Najam et al., 2006)

Primary actors and their roles in Nigeria's environmental governance

As indicated by UNEP (2009), Good environmental governance focuses on the significance of all actors who have an influence on the environment. There is every indication, therefore, that there are many actors in environmental governance. International institutions, the government, businesses, non-governmental organizations (NGOs), and the general public have been identified as key actors in environmental governance in Nigeria. These actors are reclassified broadly in this study as international, state, corporate, and non-state actors.

International actors

At the global level, a variety of institutions make a significant contribution to and shape global environmental governance practice. The idea is to use a network of international organizations to regulate the environment on a global scale. The United Nations Environment Program (UNEP) as the gold standard in global environmental governance, is a United Nations agency in charge of the organization's environmental programs and assist developing nations in the implementation of environmentally sustainable policies and practices. Since 1972, UNEP has served as the world's leading environmental authority, assisting nations in tackling the demands of environmental governance. UNEP's mandates include: influencing the international environmental programs by appraising global environmental developments and trends and helping to bring scientific findings to policy platform; assisting states in achieving agreed-upon environmental priorities; assisting states in developing, implementing, and enforcing new international environmental protection laws and benchmarks; facilitating the incorporation of environmental sustainability into national or regional development policies; and assisting states in understanding the benefits of this approach UNEP has also collaborated with states and other relevant parties to help bolster their legal institutions, thereby assisting them in meeting environmental objectives, goals, and targets (UNEP, 2009). Other international organizations that include environmental governance in their strategic planning are:

- The World Bank, which shapes environmental governance through some other stakeholders, especially the GEF. Even though environmental governance is included in their mission, World Bank's mandate in environmental matters is not well defined. It does, however, devote 5 -10% of its yearly budget for environmental projects;
- The World Meteorological Organization (WMO), focusing on atmosphere and climate;
- The United Nations Development Programme (UNDP), which promotes sustainable development;
- Food and Agriculture Organization (FAO), which deals with agriculture, forests, and fishing protection.

State actors

Nigeria's state actors in environmental governance are categorized into three: national, state, and local. The Executive, Legislative, and Judicial bodies are the primary actors who can be found in all three tiers of government. At this stage, environmental governance is aimed to intervene in environmental issues through environmental policy, law, the formation of regulatory agencies, and the imposition of sanctions. The executive branch of government is usually tasked with developing and enforcing environmental policies. This arm is also responsible for ensuring inter-unit coordination and cooperation among government regulatory authorities at all levels of government to prevent jurisdictional duplication that could result in inadequate implementation of environmental legislation and policy, as well as providing adequate budgetary allocation for regulatory body activities. The legislature is the government's decision-making arm, with the authority to enact, amend, and repeal legislation. As a result, it serves as a relevant legal foundation for all environmental policy instruments. The legislative branch of government is expected to be capable of conducting effective investigations and analyses to provide guidance in the process of amending existing legislation and in the enactment of new ones. This branch is typically has the sole power to amend and approve (environmental) budgets, as well as to check the executive arm of government through legislative oversight functions (Ayade, 2003). The legislature can also influence environmental policy by serving on the parliamentary committee on the environment. The judiciary interprets (environmental) laws, and jurists, as members of the government's judicial arm, interpret the growing number of interconnected environmental concerns brought to their attention.

Corporate actors

Corporate environmental governance assesses the manner in which businesses manage their environmental action, risks, and possibilities. All companies or businesses own the environment a duty of care, which falls under the purview of corporate environmental governance. Environmental risk and impact reduction is said to make a company more sustainable, competitive, valuable and profitable. Environmental governance, according to White and Klerman (2004), entails including the listed key business development considerations:

- Environmental policy (targets, objectives, strategy);
- Environmental values (vision, mission, principles);
- Environmental performance (use of Key Performance Indicators, business development, liabilities, compliance, eco-efficiency, benchmarking).
- Environmental process (management systems, reporting and verification, environmental accounting, transparency, stakeholder dialogue, monitoring and review, internal control, initiatives);
- Environmental oversight (communication, training, direction, responsibility);

With these considerations in mind, it is expected that companies and businesses will develop best business practices for producing goods and services in such a way that provides regulatory compliance; perform their corporate responsibilities; and begin the production of unbiased environmental audits and yearly environmental reporting alongside annual financial reports.

Non-state actors

Backstrand & Saward (2005) opine that wider involvement of non-state actors in multilateral environmental decisions, usually in a range of context such as goal-setting, awareness campaign, soliciting, supervising, consultation, and execution, increases environmental governance's democratic legitimacy. Non-State Actors (NSAs) are stakeholders who are not representatives of states but perform on a global scale and have the potential to influence international relations (Higgot et al., 2000; Arts et al., 2001). Civil society, the media, and non-governmental organizations (NGOs) are among the non-state environmental governance actors in Nigeria, regardless of their levels of operation (local, national, or international).

In Nigeria, there are numerous non-governmental organizations (NGOs) dedicated solely to environmental protection, conservation, and awareness. Among them Women Environmental Programme (WEP), the Havids Centre for Environment and Development, the Bioresources Development & Conservation Programme, the Association for Waste Recovery & Renewable Energy, the Grassroots Community Development Initiative, and the Africa Safe Water Foundation. They participate in a variety of development programs, from disaster management to sustainable livelihoods; environmental awareness to watershed development; and joint forest management to policy input. They are also crucial in the formulation of environmental policies, as well as in garnering public commitment to environmental conservation Their activities are so beneficial that the government regards non-governmental organizations (NGOs) not only as organizations that will assist in the implementation of their programs, but also as collaborators in policy and program development.

Nigeria is a vast and diverse country, therefore, one of the most effective ways of reaching the widest possible audience is through mass media. Apart from setting an environmental agenda, mass media is an extremely effective tool for environmental communication (Babalola et al., 2010; Tsegyu and Ogoshi, 2015; Valenti, 2021; Waititu, 2021). As a result, the media plays an important role in environmental governance in Nigeria.

Frameworks for environmental governance in Nigeria

In Nigeria, environmental management has been centered on the National Environmental Policy, alongside a slew of legislation, standard, guidelines and regulations aimed at conserving natural resources and protecting human health. Therefore, the commitment of key actors to the development, enactment and enforcement of environmental standard and norms, legislation and regulations can be used to evaluate environmental governance, environmental policy formulation and implementation, national and local plans and programs development and implementation, establishment and operation of environmental organizations that monitor, execute and supervise all aspects of the system, and the state's dedication to international environmental international treaties and law.

According to the foregoing, environmental governance has three dimensions: legal, policy, and institutional frameworks. The three frameworks are holistic in nature, with components that are interconnected and mutually dependent on one another. For policy formulation and implementation to be successful, an enabling institutional environment is required. The legislation establishes the regulatory and fiscal tools required to achieve the policy objectives. These institutions provide the human and technical resources required to carry out environmental policy implementation activities and programs.

Legal framework

Legislation is critical to environmental governance as it is an inherent and necessary component of governance. "The rule of law is an extremely powerful tool for streamlining and redirecting critical national activities" (Fagohun, 2012). The legislation is a powerful tool for environmental planning and protection, as well as pollution control and prevention. Nigeria has a plethora of laws relating to environmental management and control, whether explicitly or implicitly. The Constitution, legislative statutes, and international treaties, protocols, and conventions all contain references to these. The only positive provision in the Nigerian Constitution dealing with environmental protection and management is found in Section 20 of the 1999 Constitution, which states that "the state shall protect and improve the environment and safeguard the water, air, land, forest, and wildlife of Nigeria." Regrettably, this section of the Constitution is non-justiciable, and as a result, the Nigerian government cannot be compelled to implement the aforementioned provision to protect the Nigerian environment. To address this constitutional shortcoming, numerous legislative statutes have been enacted and several international treaties have been ratified to safeguard and protect Nigeria's environment.

Nigeria's statutes are made up of acts, laws, decrees, edicts, and ordinances. A statute enacted by the Federal Legislature is referred to as an "Act." A statute passed by a state's House of Assembly is referred to as a "law." The central military government's enactment or proclamation is referred to as a "decree," whereas the state military government's is referred to as an "edict." Ordinances are laws passed by the Nigerian Central Legislative Assembly prior to October 1, 1954, when Nigeria adopted a Federal Constitution.

The Federal Environmental Protection Agency (FEPA) Act was passed in 1988, in apparent response to the Koko toxic waste dump incident, in which an estimated 3,000 tons of toxic waste were illegally dumped in Koko port by Italian businessmen. The creation of FEPA could be considered the beginning of environmental governance in Nigeria. However, following a barrage of criticism, FEPA was scrapped in 1999, and its functions were taken over by the Ministry of Environment. The Act was reviewed to make way for the passage of the National Environmental Standards and Regulations Enforcement Agency (NESREA) Act in 2007.

The mandate to actively participate in the evolving process of global environmental protection was given to Nigeria and many other countries at the Stockholm Conference in 1972. Aside from the Stockholm Conference, several other international treaties, protocols, and conventions are critical to environmental governance in Nigeria. These are some examples:

- The Universal Declaration of Human Rights 1948
- Convention on the prevention of marine pollution by dumping waste and other matters, 1972. International Convention for the prevention of pollution of the sea by oil 1954 (as amended in 1962 and 1969).
- The Convention on the High Sea 1958
- United Nations Conference on Desertification (UNCOD) 1977
- International Conference on the Establishment of an International Fund for Compensation for Oil Pollution Damages, 1978.
- African Charter on Human and People's Rights, 1983.

- Convention for cooperation in the Petroleum and Development of the Marine and Coast Environments of West and Central Africa, 1984
- United Nations Conference on Environment and Development (UNCED), 1992
- United Nations Convention to Combat Desertification UNCED, 1994
- Vienna Convention for the protection of the ozone layer
- Rio Declaration on Environment and Development and several others

All of the treaties and conventions mentioned above are important sources of environmental legislation in Nigeria.

Policy framework

Prior to the 1989 adoption of the National Environmental Policy, Nigeria seemed to have no distinguishable and articulated national policy goals for the country's environment. (Okorodudu-Fubara, 1998). The National Policy on the Environment was unveiled by the government on November 27, 1989. This policy identifies key sectors in which environmental sustainability and concerns should be interconnected with the general developmental agenda. The policy document covers detailed guidelines for achieving sustainability in fourteen critical sectors of the nation's economy, including human population, air pollution, energy production, agricultural chemicals, mining and mineral resources, toxic and hazardous substances, land use and soil conservation, sanitation and waste management, marine and coastal area resources, noise in the workplace, water resource management, and forestry, wildlife, and protected areas.

The policy's objectives include preserving and using natural resources and the environment for the benefit of current and future generations; helping to ensure environmental quality for health and quality of life; restoring, sustaining, and improving the ecosystem and ecological processes required for the biosphere's functioning in order to maintain biodiversity and the principle of optimum sustainable utilization in the use of natural resources; and raising citizen awareness of the policy's objectives.

The National Environmental Policy is a set of actions centered on a conceptual model that establishes links among environmental problems and their causes, effects, and solutions. The policy, as a framework document, specifies sector specific and cross-sectoral strategic policy statements and actions for the country's environmental management. The following guidelines are critical to achieving this policy's strategic objectives:

- The Public Trust Doctrine, which identifies that the State is a custodian of all-natural resources, the satisfaction of which is subject to a degree of control necessary to protect the legitimate rights of all sections and stakeholders within the broader context of strategic national interests:
- Environmental Offsetting, which stipulates that If the general obligation to protect threatened or endangered species and natural systems that are of special importance to sustaining life, providing livelihoods, or general well-being cannot be met for exceptional reasons of overriding public interest, the proponents of activity must undertake such costeffective offsetting measures to restore as nearly as possible the lost environmental services to the community.

- The Polluter Pays Principle, which states that the polluter should shoulder the cost of pollution prevention and remediation;
- The User Pays Principle, which requires that the cost of a resource to a user include all environmental expenses involved with its extraction, conversion, and use (such as the costs of alternative or future uses foregone);
- The Precautionary Principle, which states that where there is a risk of serious or irreparable damage, a lack of comprehensive scientific understanding should not be used to delay costeffective measures to prevent environmental degradation;
- The Pollution Prevention Pays Principle, which incentivizes industries to invest positively in the protection of the environment;
- The Principle of Intergenerational Equity, which specifies that the needs of the current generation must be met without jeopardizing the future generational need;
- The Principle of Intra-generational Equity, which indicates that groups of individuals within the country and the current generation have an equal right to benefit equally from the exploitation of resources and an equal right to a safe and healthy environment;
- The Principle of Participation, which implies that decisions should be made directly by the people themselves or through their chosen representatives, as much as possible.

The National Environmental Policy is an overarching policy structure in Nigeria. Although, the need for secondary environmental policies and guidelines required for carrying forward the detailed tasks of everyday environmental governance cannot be gainsaid. However, all secondary policies, guidelines, action plans or other instruments relating to the environment fall within the general intendment of National Policy on the Environment. Nigeria's environmental policy covers national standards and guidelines on environmental protection. These include:

- National Policy Guidelines on Sanitary Inspection of Premises
- National Policy Guidelines on Solid Waste Management
- National Policy Guidelines on School Sanitation
- National Policy Guidelines on Market and Abattoir Sanitation
- National Policy Guidelines on Excreta and Sewage Management
- National Action Plan on Environmental Sanitation
- National Policy Guidelines on Food Sanitation
- National Policy Guidelines on Pest and Vector Control

The policy was updated in 1999 and 2016 to address new environmental concerns and issues (www.thisdaylive.com). In addition to the current draft policy documents from 1991 and 1999, The 2016 Policy is predicated on the basic responsibility to protect the environment as stated in Section 20 of the Federal Republic of Nigeria 1999, that "State shall protect and improve the environment and safeguard the water, air, land, forest, and wildlife of Nigeria." In addition, Nigeria

has signed a number of international treaties and conventions governing environmental issues. The combined thrust of these instruments forms the foundation of the National Environmental Policy.

Institutional framework Nigeria's institutional framework for environmental governance is made up of all public and civil society organizations that make valuable contributions to the implementation of environmental policy goals and are accountable for managing and conserving the environment. These organizations include, among others, international aid agencies, government agencies, and non-governmental organizations (NGOs). The three tiers of government are typically represented in the governmental institutional framework, namely federal, state, and local. Departments and sections within the institutional setting are comprised of various headships and functions, most of which are managed by bureaucratic forces, with Ministers, Commissioners, Directors, etc., responsible for service delivery. The Federal Environment Protection Agency (FEPA), created in 1988, was the first public environmental agency to be established. Ten years later, every one of 36 states and the Federal Capital Territory had already established their own environmental protection agencies. In 1999, a new Civilian Administration made environmental issues a top priority on its development agenda by establishing the Federal Ministry of Environment to control both public and private institutions and organizations assigned to perform daily activities that could facilitate environmental protection in Nigeria. The Ministry's establishment is an effort of the Federal Government to create a well-articulated, effective, and efficient organization that will effectively address and manage environmental problems in Nigeria in a holistic manner, free of duplication of work and competitive pressure among various government agencies.

As part of the process, FEPA, along with other pertinent departments and units from relevant ministries, was moved to be part of the new Federal Ministry of Environment. The Department/units affected include the Forestry Department of the Federal Ministry of Agriculture (including the Wildlife, Forestry Monitoring, Evaluation, and Coordinating Unit – FORMECU); the Forestry Research Institute of Nigeria of the Federal Ministry of Agriculture; the Environmental Health and Sanitation Unit of the Federal Ministry of Health; and the Oil and Gas Pollution Control Unit of the Federal Ministry of Petroleum Resources; the Federal Ministry of Works and Housing's Coastal Erosion Unit, Environmental Assessment Division, and Sanitation Unit; and the Federal Ministry of Water Resources' Soil Erosion and Flood Control Department. Similarly, some states have established full-fledged ministries of environment to replace their existing environmental protection agencies (Adelegan, 2005). The NESREA Act became law in 2007, effectively replacing FEPA as a parastatal within the Ministry of Environment. The Agency is responsible for the enforcement of all environmental laws, standards, guidelines and regulations, among other things. This responsibility also includes enforcing environmental conventions, treaties, and protocols towards which Nigeria is a signatory. Other notable Nigerian public environmental regulatory agencies include the National Biosafety Management Agency (NBMA) and the National Oil Spill Detection and Response Agency (NOSDRA). Other notable Nigerian public environmental regulatory agencies include the National Biosafety Management Agency (NBMA) and the National Oil Spill Detection and Response Agency (NOSDRA) (NOSDRA).

The number of Non-Governmental Organizations (NGOs) concerned with environmental protection has also increased significantly. While they have made steady contributions to policy achievement, their contribution is insignificant because they do not take direct responsibility for environmental management in Nigeria.

Assessing the effectiveness of environmental governance in Nigeria

Within the purview of this study, the success or failure of environmental governance in Nigeria is measured by the following indicators: governance effectiveness; policy implementation; legislation and enforcement; institution efficiency; of the existing environmental governance system. This is premised on the reality that these indicators have been consistently validated as tools for effective environmental governance in Nigeria in the literature (Matemilola & Elegbede, 2017)

Governance Effectiveness

Engagement; accountability and transparency, rule of law, adaptability; prevailing opinion; equity and justice; efficiency and effectiveness are the pillars of good environmental governance (PRIA, 2013; Adedibu, 2015; Ogunkan, 2021). Regrettably, these precepts have been ignored, particularly in Nigerian environmental decision (Fagbohun, 2012; Adeboyejo, 2017; Ogunkan 2021). Public participation in environmental governance is still restricted in scope of open access to environmental information, and public participation in environmental decision-making processes is still a work in progress, with many challenges such as limited economic growth to support a growing population and a contradictory regulatory framework. (Odemene, 2015). Although there has been relatively improvement in participation, it remains modest and below the level that would have a substantial influence on decision-making. Owing to the foregoing, many members of the public and communities still have doubts about the government's and companies' intentions, as well as their ability to successfully protect the environment. (Adomokai &. Sheate, 2004). Furthermore, the current situation in Nigerian politics demonstrates a general lack of accountability, which has provided an incentive for corruption. This is extremely detrimental to effective enforcement of environmental laws at all levels of government. Environmental officers, for example, are said to be more interested in visiting areas that appear to be more financially profitable to them. Infringements on environmental planning laws are frequently left unpunished, with little bribe paid to enforcement officers (Ogunkan, 2017; Ogunkan, 2021)

Policy implementation

The extent to which a policy is likely to achieve environmental improvements in terms of sustainable resource use, ecosystem and human health protection, and prevention of environmental degradation is associated with environmental effectiveness. However, with the unabated and everrising scope and severity of the environmental problem in Nigeria (Adeboyejo, 2017; Ogunkan, 2021), it can be rightly concluded that Nigeria's national environmental policy has been ineffectual in attaining sustainable economic growth and development. More pertinently, the environmental policy in Nigeria has been thwarted due to a lack of direct or indirect citizen involvement in the formulation and implementation of environmental policy guidelines (Akamabe and Kpae, 2017). The situation is hampered further by the limitation placed on the provision relating to the environment in the 1999 constitution. For instance, in the 1999 constitution, there is no clear definition of the agency or level of government that has the power to supervise the environment and the authority to impose rules or set the standards on polluters. This does not augur well for the trans-border attribute of environmental pollution in Nigeria. Generally, environmental policies are influenced by political, economic, and social circumstances determining their context, dimensions, and associated ideological structure. (Couturier & Thaimai, 2013). Therefore, Nigeria's commitment to environmental policy is driven toward the integration of the governance, environmental, social and economic sustainability pillars. The major flaw in Nigerian environmental policy, however, is a lack of implementation. Despite the National Policy on

Environment's lofty intentions to achieve sustainability, management and governance have fallen short of the ideals of the Policy. This is mainly due to the absence of public engagement in the development and implementation of the policy (Fagbohun, 2012). The implementation is also shaky and "ding-dong," hampered by growing and entrenching corruption (Onyenekenwa & Agbazue, 2011).

Legislation and enforcement

Over a long period, the legal aspect of environmental governance in Nigeria has seen tremendous development, from scratch to comprehensive coverage of diverse context environment and natural resources, as well as the activities linked to their discovery, improvement, extraction, refining, use, and disposal. The environmental legislation in Nigeria, which began in 1979, has recorded over thirty environmental laws that provide regulations for pollution control and prevention, ecological protection, and resource utilization in Nigeria. (Ogunkan, 2017). There is evidence that Nigeria's environmental legislation has benefited from lessons learned from developed-country experience, as well as innovations spurred by internal environmental pressure. It is thus encouraging that Nigeria's environmental legislation has progressed from near-nothing to the current state of environmental legal system, with the centralized power of environmental protection and management agencies. (Ogolla, 1995). Nonetheless, legislation as a component of environmental governance continues to face several challenges and issues. There is no denying that Nigerian environmental statutes are extensive, broad, and comprehensive, but the main issue is that enforcement is trivial: quite so much time elapses from noncompliance to enforcement; the punishment obtainable for noncompliance is grossly inadequate; and injured parties are not fairly recompensed. In addition, some environmental offenses are punished administratively rather than through corrective measures or criminal prosecution. (Ijaiya & Joseph, 2014). Other major challenges in enforcing environmental laws in Nigeria include a lack of modern technology (Ijaiya & Joseph, 2014); a poor judicial response to green culture (Fagbohun, 2012); ineffective supranational adjudicatory institutions for the global environment, which encourages the transborder movement of waste and toxic chemicals (Ibrahim and Imam, 2015) and poor political approach (Budnukaeku, 2022). It is also interesting to note that the vast majority of international multilateral environmental treaties to which Nigeria is a signatory have yet to be domesticated. This is yet another challenge to Nigeria's legal framework for environmental governance.

Institutional efficiency

NESREA as a major institutional agency of environmental governance continues to provide deterrence against infringements in Nigeria. In December 2014, the Agency obtained a ruling against a telecommunications company before the Kaduna Federal High Court, the ruling which was upheld by an Appeal Court, ordering the company to remove its mast located in a residential area. The agency's intervention resulted in the reducing pollution of some facilities, including tanneries in Kano and telecommunications facilities in Owerri and Enugu. The NESREA Regulations have further armed the Agency to launch a full-fledged offensive on antienvironmentally friendly operating facilities. Carrying out an Environmental Impact Assessment of the project before its startup, which was previously not done (Ibrahim and Imam, 2015). Despite significant successes, NESREA, Nigeria's institutional agency for environmental governance, has not been successful in effecting the arrest of the offender, resulting in further environmental deterioration. The general inability of responsible agencies to protect the environment by implementing and enforcing relevant regulations and laws is a major factor contributing to Nigeria's continued degradation of the environment (Erhun, 2015). This is attributable to several

factors including limitations in the legal framework, institutional bottlenecks, corruption, insufficient funding, poor governance, intimidation, and ignorance, among others (Ikelegbe & Onwuemele, 2012; Ijaiya & Joseph, 2014).

From the foregoing analysis, it is established that environmental governance in Nigeria has been ineffective due to several key factors including poor environmental governance, poor policy implementation, incomprehensive legal framework; weak enforcement of environmental laws; weak institutional agency; and lack or inadequate public participation.

Policy considerations for improving environmental governance in Nigeria

Having concluded that environmental governance in Nigeria, as it is, is less effective to achieve sustainable environmental management in the country and given the political and socio-economic realities in Nigeria, the following are put forward for policy consideration to improve the governance's quality in order to achieve the seemingly elusive sustainable environment in Nigeria.

Good governance

Good governance is required for sustainable environmental management (Erhun, 2015). The very term "good governance" implies that governance can be bad. Governance is good once all of the factors that are making it inefficient are resolved, expunged, or addressed (PRIA, 2013). To be considered good governance, it must be transparent, inclusive and people-oriented. It must be accountable and open. It must respect people's rights to participate in decisions affecting. Good governance should help make the optimum use of resources, promote the rule of law (UNDP 1997), and mobilize resources from various sources. Environment conservation and improvement can only be actualized effectively within the structure of good governance. Therefore, it is crucial to analyze the possible positive transformations that can improve the functioning of environmental governance in Nigeria as alternatives to the current format. It is affirmed that government alone cannot solve environmental problems (Pring & No'e, 2002)). The capacity of a country to promulgate enforceable law and to formulate implementable and sustainable environmental policies is enhanced by its ability to involve civil society in shaping political decisions which affect their lives. Participation in environmental policy decision efficaciously connects the general public to environmental governance. Accountability and transparency are more attainable by involving individual, who are at the centre of possible reasons, consequences, and answers to environmental problems. This action gives democratic legitimacy to environmental decision-making, an essential element to achieving good environmental governance. (Bulkeley & Mol, 2003). In light of the foregoing, Nigerian governance should encourage informed and organized public participation. This becomes necessary to ensure freedom of speech and association, as well as an organized civil society. In making sure that good environmental governance is improve in Nigeria, the formulation and enactment of environmental policies and laws must be inclusive, transparent and clear. The environmental policies and laws must be, implementable and enforceable. The process should enable substantive public engagement, particularly citizen's active involvement in environmental decision making, citizen's access to information disclosure, and equal protection under the law; transparency and integrity must be maintained at all levels, from the individual to the institutional. There should be effective institutional arrangements within and between governmental bodies involved in environmental protection, as well as the ability to resolve environmental issues fairly and quickly, mostly through the courts.

Comprehensive, comprehensible and enforceable environmental enactment

The management of the environment in Nigeria is governed by several laws and regulations. According to the most recent count, there are 60 environmental enactments and policies spread across different sectors of the economy. However, many of these laws are fragmented and are implemented in fragmented ways. This action promotes corruption and wastes time. (Onyenekenwa & Agbazue, 2011). Aside from that, the only positive provision in the Nigerian Constitution dealing with environmental protection and management is as contained in Section 20 of the Constitution. The provision is, however, generally non-justiciable. Furthermore, the Constitution makes no specific reference or provision regarding the authority of national governments and smaller political subdivisions to enact environmental legislation. (Fagbohun, 2012). All these loopholes in the environmental legislation in Nigeria is an indication that Nigeria requires a coherent, inclusive, integrated, more sophisticated, all-encompassing and wellstructured environmental system to serve as a guiding principle in Nigerian environmental legislation (see also Erhun, 2015). Moreover, some of these laws that seek to protect the Nigerian environment were not effective because the penalty and sanctions prescribed in cases of violations ranging from fines to imprisonment are not realistic, more stringent sanctions and penalties are needed. As a result, it is recommended that most Nigeria's environmental laws should be reformed to remain appropriate for modern demands and relevant to current societal values. A comprehensive and comprehensible environment statute is expected to address the problem of enforceability that characterized the current environmental laws in Nigeria.

Strengthening of institution framework

The harmonization of roles and functions, as well as a review of sanctions and structure to ensure the institution's independence, are among the recommendations for strengthening NESREA's services. So, it is imperative to remain dedicated to the mission and not be sidetracked by the revenue-generating function. Specifying that the three public interest representatives named in the Act will be nominated from the constituency of organized Civil Society, which will be represented by leaders from the NGO sector, and Professional Groups will support public interest decision-making. Corruption should be checked among officers of NESREA. However, the fight against corruption of the present administration is a welcome initiative in addressing endemic corruption in Nigeria.

Other recommendations

Nigeria's environmental governance should embrace the principle of sustainability. According to Weiss (2000), Sustainability entails that the goals of economic success, social equity, and environmental protection should all be integrated into future sustainable planning. The integration of these objectives will promote the effective management of economic and social development, as well as protection of the environment, in a congruent rather than adversarial manner (Erhu, 2015). The government may be enthusiastic about the goals, policies, and methods for achieving sustainability. This will, however, necessitate the commitment and legitimate participation of all segments of society in order for this goal to become a reality. Working around this necessitates the formation of a partnership comprised of both shareholders and environmental stakeholders.

In this particular respect, Nigeria should embrace a National Strategy for Sustainable Development—a method that identifies key principles and priorities set short- and long-term goals, matches up policy and legal tools to those goals, and develops a procedure and timeline for accomplishing them—a process that represents a shift from the conventional fixed plan and toward

"operating an adaptive system that can continuously improve." (Dalal-Clayton and Bass, 2002). The National Sustainable Development Model drives the rapprochement of the short-term election period with long-term planning; the main objective of growth in the economy with environmental and social sustainability; and the benefits of policy coherence through greater coordination with the move toward decentralisation (Swanson and Pinter, 2006). The framework of Nigeria's environmental governance will be made more sustainable as a result of this.

In Nigeria, a main hindrance to environmental governance is a lack of funds. Despite the government's frenzied efforts providing resources for environmental management projects at all levels, there is still a massive disparity between both the resources appropriated and the subsisting environmental problems (Ikelegbe & Onwuemele, 2012). As a result, the government's budgetary allocation for environmental protection should be increased. However, the country's current economic downturn may prove challenging. This implies that Nigeria will necessitate the help and support of relevant international, bilateral and multilateral organizations such as the World Bank/International Development Association (IDA), United Nations, Global Environmental Facility (GEF), and International Monetary Fund (IMF). The IMF and World Bank/IDA may consider converting the country's debt service flows into investment opportunities in environmental protection and management programs and projects. Despite the fact that ignorance of the law should not be an acceptable excuse for violating environmental planning laws, it is clear that both the literate and non-literate sections of the Nigerian population are unaware of environmental planning laws (Ikelegbe & Onwuemele, 2012). As a result, there is a pressing need to launch a robust public awareness campaign about environmental laws. The media, as an actor in environmental governance, can play an important role in this regard.

Conclusion

This study examined the challenges and opportunities associated with using environmental governance as a tool for sustainable management of Nigeria's environment. It was found that Nigeria's current environmental governance frameworks are inadequate for addressing the scale of the country's environmental issues. The study highlighted the need for comprehensive and clear institutional and legislative frameworks for effective environmental governance. It emphasized that sustainable environmental management requires governance systems where legal, policy, and institutional responsibilities are shared among shareholders and various stakeholders. The study suggests that fostering good governance could lead to a more effective, productive, and sustainable environmental management system in Nigeria.

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