



Clean Technology Hub
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Strengthening Sustainable Governance and Administration for Effective Environmental Management in Nigeria

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1. Introduction

Nigeria is combating severe environmental challenges threatening its social, economic, and ecological stability. From widespread deforestation and pollution to the impacts of climate change, the country's natural resources and public health are under increasing pressure¹. Nigeria's forests are rapidly depleting, air and water quality have deteriorated, and desertification is advancing, especially in the northern regions. These issues are compounded by poor enforcement of environmental regulations, inadequate institutional coordination, and low public engagement in environmental matters. Strengthening sustainable governance and administration is critical for effective environmental management, sustainable development, and the well-being of future generations in Nigeria.

Sustainable governance includes the principles of sustainability in its podium to balance economic, social, and environmental needs within decision-making processes. It is an indispensable way to ensure long-term ecological health, resource efficiency, biodiversity conservation, transparency, accountability, and inclusiveness in governance². Although governance is widely recognized as one of the most imperative factors in achieving effective environmental management, sustainable environmental management remains an abstraction in Nigeria³. There is, therefore, the broad consensus within both scholarly and political debates that 'governance' rather than "government" is

¹ The World Bank. (2024). <https://www.worldbank.org/en/country/nigeria/overview>

² Folke, C., et al. (2016). *The Science of Planetary Boundaries: Implications for Governance and Sustainability*. *Ecology and Society*, 21(4), 41. doi:10.5751/ES-08728-210441

³ Ogunkan, David (2022). 'Achieving sustainable environmental governance in Nigeria: A review for policy consideration.' <https://doi.org/10.1016/j.ugj.2022.04.004>

a pivotal domain for the realisation of societal transformation processes guided towards a sustainable environment.⁴

The country's environmental governance framework includes policies such as the [National Environmental Policy \(2016\)](#) , the [Environmental Impact Assessment Act \(1992\)](#), and the [Climate Change Act \(2021\)](#). Despite these efforts, significant gaps remain in enforcement, data collection, and stakeholder involvement. This policy brief highlights the key challenges facing Nigeria's environmental governance, discusses existing policy gaps, and provides recommendations for strengthening sustainable governance to protect the environment. It calls on policymakers to take urgent action to ensure environmental laws are enforced, agencies coordinate effectively, and communities are involved in preserving Nigeria's natural resources.

2. Key Environmental Challenges in Nigeria



2.1 Deforestation and Land Degradation

Nigeria has a total land area of 923,786 km² with a population of about 180 million people. According to the [Food and Agriculture Organization \(FAO\), 2015](#) , about 7.7% of the total land area of the country is classified as forest and 2.9% of the total land area as other woodland, with a total growing stock of 936 million. Nigeria's forests are disappearing at an alarming rate due to illegal logging, agricultural expansion, and fuelwood extraction. The country loses approximately 3.7% of its forest cover annually, which equates to about 1.14 million hectares lost between 2000 and 2020⁵. This rapid deforestation threatens biodiversity but also undermines the ecosystem's ability to absorb carbon

⁴ Oyefara, J.L., (2013). 'Good governance and environmental sustainability in Lagos State, Nigeria: Can the state achieve goal seven of millenium development goals (MDGs)'.European Scientific Journal (2013), pp. 41-55

⁵ Ugboma, Peters. (2014). 'EFFECTS OF DEFORESTATION ON SOIL FERTILITY IN DELTA STATE, NIGERIA'.
<https://www.delsu.edu.ng/elt/EFFECTS%20OF%20DEFORESTATION%20ON%20SOIL%20FERTILITY%20IN%20DELTA%20STATE,%20NIGERIA.pdf>

dioxide, exacerbating climate change. Additionally, the loss of forests affects local communities that depend on these ecosystems for their livelihoods.

Land degradation is also a growing problem, particularly in northern Nigeria, where desertification affects approximately 351,000 square kilometers. This has resulted in reduced agricultural productivity, food insecurity, and increased conflicts over dwindling land and water resources⁶. Without effective interventions, these trends are likely to accelerate, putting further strain on Nigeria's environment and population. The country has made several efforts to address this problem but the result is insignificant. This made Nigeria signify its interest in joining the holistic [United Nations Convention to Combat Desertification](#) (UNCCD) process to address land degradation through setting voluntary preliminary Land Degradation Neutrality (LDN) targets to be achieved by 2030⁷.



2.2 Pollution and Environmental Health Risks

Pollution in Nigeria, especially in urban areas and the oil-producing Niger Delta region, poses significant health and environmental risks. The Niger Delta is one of the world's most polluted regions, with over 1,000 oil spills recorded in 2022 alone⁸. This ongoing pollution has contaminated water bodies, reduced soil fertility, and harmed aquatic life, severely affecting the livelihoods of local communities. In major cities like Lagos, air pollution levels frequently exceed the [World Health Organization \(WHO\) guidelines](#), with particulate matter concentrations often five times higher than the recommended safe limits.

⁶ Ignatius, Audu & Adie, Linus. (2018). 'Desertification in Northern Nigeria: Causes and Consequences'. https://www.researchgate.net/publication/354423993_Desertification_in_Northern_Nigeria_Causes_and_Consequences

⁷ The Global Mechanism. (2018). Final report of the Land Degradation Neutrality Target Setting Programme . https://www.unccd.int/sites/default/files/ldn_targets/Nigeria%20LDN%20TSP%20Country%20Report.pdf

⁸ The Cause of pollution. <https://report.bayelsacommission.org/chapters/the-causes-of-pollution>

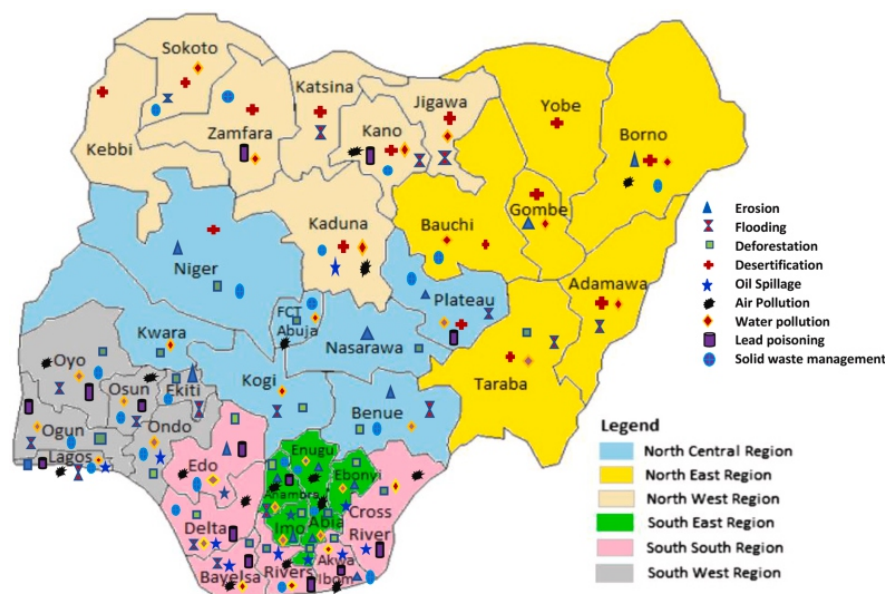


Figure 1: Map of Nigeria showing different locations and environmental problems. From *Heliyon*. 2021 Mar 23;7(3):e06330.

doi: [10.1016/j.heliyon.2021.e06330](https://doi.org/10.1016/j.heliyon.2021.e06330)

The health consequences of pollution are severe, leading to respiratory illnesses, cancers, and premature deaths. Indoor air pollution from biomass use for cooking further exacerbates these issues, especially among women and children. Strengthening governance and regulatory frameworks to address pollution is essential for safeguarding public health and achieving sustainable environmental management.



2.3 Climate Change Vulnerability and Impacts

As Africa's largest economy, Nigeria's wide range of livelihoods, agricultural practices, and commodities are threatened by climate change⁹. Nigeria is highly vulnerable to climate change, with rising temperatures, unpredictable rainfall patterns, and extreme weather events becoming more frequent. Northern Nigeria faces the threat of advancing desertification, while coastal regions are

⁹ US Agency for International Development. (2023). 'Nigeria Climate Change Country Profile'
<https://www.usaid.gov/climate/country-profiles/nigeria#:~:text=Rising%20sea%20levels%20increase%20vulnerability,negatively%20impacting%20health%20and%20nutrition.>

vulnerable to sea-level rise and coastal erosion, with some areas losing 25 to 30 meters of land each year. The impacts of climate change are already being felt across various sectors, including agriculture, water resources, and public health, affecting millions of people¹⁰.

The government has taken steps to address climate change, such as signing the Paris Agreement and enacting the [Climate Change Act \(2021\)](#). However, implementation of climate policies remains weak, and the capacity to adapt to the changing climate is limited. Strengthening sustainable governance is critical for integrating climate adaptation and mitigation strategies into national development planning.

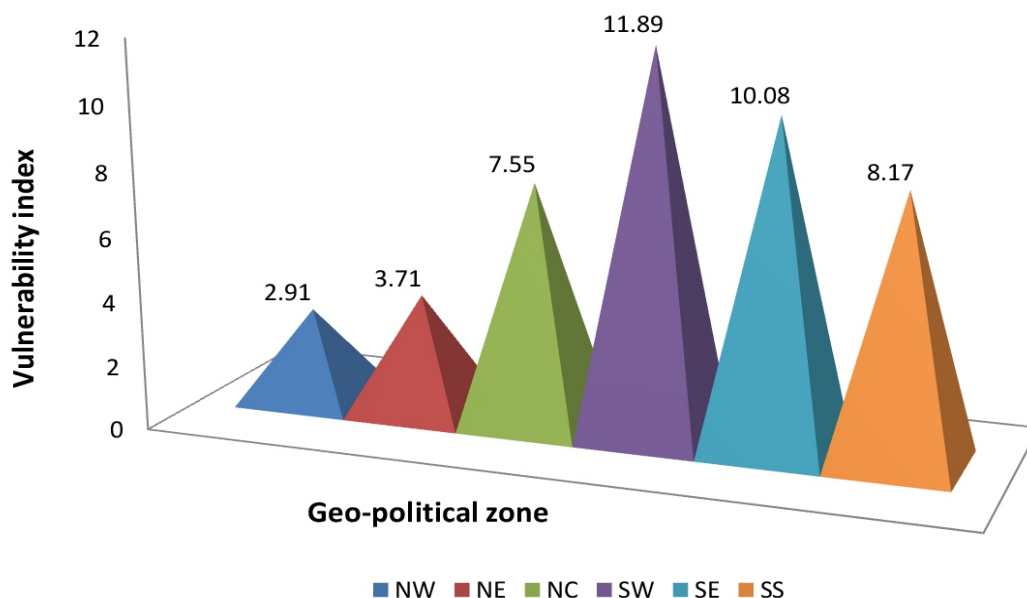


Figure 2: Climate change vulnerability by geopolitical zones in Nigeria. From A.Ignatius. 2016. *Rurality and climate change vulnerability in Nigeria: Assessment towards evidence-based even rural development policy*. DOI:[10.17169/REFUBIUM-21841](https://doi.org/10.17169/REFUBIUM-21841)

¹⁰ Iliya, Bauchi. (2017). 'Vulnerability of the Nigerian coast: An insight into sea level rise owing to climate change and anthropogenic activities' *Journal of African Earth Sciences*. Volume 134, October 2017, Pages 493-503. <https://doi.org/10.1016/j.jafrearsci.2017.07.019>



3. Policy Gaps and Challenges in Environmental Governance

3.1 Weak Enforcement of Environmental Laws

Environmental laws and regulations in Nigeria are often poorly enforced due to limited funding, corruption, and insufficient monitoring capacity. For instance, only about 23% of reported oil spills in the Niger Delta between 2015 and 2021 were properly remediated. This lack of enforcement undermines the credibility of existing laws and allows for continued environmental degradation, with little accountability for polluters.

Inadequate training and resources for regulatory agencies like the National Environmental Standards and Regulations Enforcement Agency (NESREA) further hinder their ability to enforce laws effectively. There is a need for dedicated efforts to increase the technical and operational capacity of these agencies to monitor, report, and take action against environmental violations¹.

¹ Lawrence, A, SAN & Irene Aigbe. 'An Appraisal of the Mechanisms of enforcement of Environmental Laws in Nigeria'. <https://journals.ui.edu.ng/index.php/uiir/article/view/1262/1016#:~:text=Atsegbua%2C%20SAN%26%20Irene%20Airen%20Aigbe,existing%20laws%3B%20lack%20of>

3.2 Fragmented Institutional Framework and Coordination Issues

The environmental governance landscape in Nigeria is characterized by overlapping mandates among institutions such as the [Federal Ministry of Environment](#), [NESREA](#), and state environmental agencies. This fragmentation leads to confusion, duplication of efforts, and gaps in policy implementation. For example, while NESREA is responsible for enforcing environmental regulations, the Ministry of Environment sets the policy framework, resulting in occasional conflicts over roles and responsibilities.

Strengthening inter-agency coordination and creating a unified environmental governance framework can help resolve these issues. It would also enable a more holistic approach to addressing complex environmental problems, such as climate change, which require coordinated actions across various sectors¹².

3.3 Limited Public Engagement and Awareness

Environmental policies and programs in Nigeria often lack meaningful public engagement and participation. Many citizens are unaware of existing environmental laws and the implications of their activities on the environment. Public involvement in decision-making processes is also minimal, reducing the effectiveness of policy implementation and community-based conservation efforts.

Increasing public awareness through education and outreach, coupled with mechanisms for stakeholder participation, can help foster a culture of environmental stewardship. Community engagement is especially important in addressing localized environmental challenges, such as deforestation and pollution, where local knowledge and participation can significantly improve outcomes.



4. Recommendations for Strengthening Sustainable Governance and Environmental Management

4.1 Enhance the Enforcement of Environmental Regulations

- Increase funding and resources for regulatory bodies to improve their monitoring and enforcement capabilities. This includes providing modern equipment and training to enable effective surveillance and compliance monitoring.
- Establish a dedicated environmental enforcement task force to oversee the implementation of laws and ensure that violators are held accountable.
- Leverage technology, such as satellite imagery and drones, to monitor environmental activities in real-time and detect illegal activities like logging and oil spills.

4.2 Improve Inter-Agency Collaboration and Institutional Coordination

- Develop a National Environmental Governance Framework that delineates the roles and responsibilities of different institutions, promoting collaboration rather than competition.
- Facilitate the establishment of cross-sectoral committees to tackle complex environmental issues, with representatives from various agencies, civil society, and the private sector.
- Create a centralized environmental information system that integrates data from all relevant institutions, making it easier for agencies to share information and coordinate responses.

² The UNDP. <https://www.undp.org/nature/our-work-areas/environmental-governance>

4.3 Promote Public Awareness, Participation, and Community-Led Initiatives

- Launch nationwide campaigns to educate the public about the importance of environmental conservation and the existing laws designed to protect the environment.
- Encourage community-based natural resource management initiatives by providing incentives for sustainable practices, such as payments for ecosystem services or tax breaks for eco-friendly businesses.
- Involve civil society organizations and local communities in environmental decision-making processes, ensuring that policies reflect the needs and aspirations of those most affected by environmental issues.

5. Call to Action

Urgent action is needed to strengthen sustainable governance and administration for effective environmental management in Nigeria. Policymakers must prioritize enforcing existing environmental laws, improving institutional coordination, and involving the public in conservation efforts. By taking these steps, Nigeria can not only protect its natural resources but also support economic growth and improve the quality of life for its citizens. The time to act is now—strengthening governance frameworks and implementing these recommendations will pave the way for a sustainable and resilient future.