



AFRICAN UNION  
INTERAFRICAN BUREAU  
FOR ANIMAL RESOURCES



Sweden  
Sverige

---

# POLICY MEASURES TO STRENGTHEN REGULATORY FRAMEWORKS FOR SUSTAINABLE COASTAL, MARINE TOURISM AND MINING ACTIVITIES TOWARDS AQUATIC BIODIVERSITY AND ECOSYSTEMS CONSERVATION IN NIGERIA



**Citation:** AU-IBAR, 2023. POLICY MEASURES TO STRENGTHEN REGULATORY FRAMEWORKS FOR SUSTAINABLE COASTAL, MARINE TOURISM AND MINING ACTIVITIES TOWARDS AQUATIC BIODIVERSITY AND ENVIRONMENTAL IN NIGERIA

**Disclaimer:** The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official Policy or position of the African Union – Inter African Bureau for Animal Resources.

All rights reserved. Reproduction and Dissemination of material in this information product for educational or other non-commercial purposes are authorized without any prior written permission from the copyright holders provided the source is fully acknowledged. Reproduction of material in this information product for resale or other commercial purposes is prohibited without written permission of the copyright holders.

Requests for such permission should be addressed to:

The Director  
African Union – Inter African Bureau for Animal Resources (AU-IBAR)  
Kenindia Business Park, Museum Hill, Westlands Road  
P.O. Box 30786-00100, Nairobi, KENYA  
Or by e-mail to: [ibar.office@au-ibar.org](mailto:ibar.office@au-ibar.org)

Published by AU-IBAR, Nairobi, Kenya

**Copyright:** © 2023 African Union – Inter African Bureau for Animal Resources (AU-IBAR)

**Acknowledgements:** The Director of AU-IBAR wishes to acknowledge the consultancy services by the Mr. Oladipo, who developed these policy measures for sustainable coastal, marine tourism and mining activities for aquatic biodiversity conservation and environment protection in Nigeria. The Director also extends appreciation to the experts who contributed immensely to the identifications of the policy measures during the national stakeholders' workshop

Special thanks go to the Swedish International Development cooperation Agency (SIDA) for the ongoing cooperation and the team at AU-IBAR for the editorial work. This work was done with financial support by the Government of Sweden, through the Embassy of Sweden to the African Union.





## TABLE OF CONTENTS

BACKGROUND	I
A REVIEW OF THE VARIOUS SECTORS, THEIR SOCIO-ECONOMIC IMPORTANCE AND THEIR IMPACT ON AQUATIC BIODIVERSITY AND ENVIRONMENTAL MANAGEMENT	I
COASTAL AND MARINE ECOSYSTEM	I
POLICY OBJECTIVES AND STRATEGIC POLICY ACTIONS FOR COASTAL MARINE TOURISM (CMT) SECTOR	3
OVERVIEW OF THESE INSTRUMENTS RELATING TO TOURISM SECTOR	4
OIL AND GAS EXPLORATION	5
POLICY OBJECTIVES AND STRATEGIC POLICY ACTIONS FOR OIL & GAS EXPLORATION	6
OVERVIEW OF THESE INSTRUMENTS RELATING TO ENVIRONMENT MANAGEMENT IN OIL & GAS SECTOR	7
MINERALS MINING	12
POLICY OBJECTIVES AND STRATEGIC POLICY ACTIONS FOR MINING SECTOR	13
OVERVIEW OF THESE INSTRUMENTS RELATING TO MINERAL MINING SECTOR	13



## BACKGROUND

### ***The African Union Inter-African Bureau for Animal Resources (AU-IBAR)***

With a mandate to support and coordinate the utilization of livestock, fisheries, aquaculture and wildlife as resources for both human wellbeing and economic development in the Member States of the African Union, the AU-IBAR - a specialized technical office of the Department of Agriculture, Rural Development, Blue Economy and Sustainable Environment (DARBE) of the African Union Commission (AUC)- is currently undertaking intervention in the fisheries, aquaculture sector. This intervention is guided by the Policy Framework and Reform Strategy for fisheries and aquaculture in Africa (PFRS), which aims at improving governance of the sector for increased sustainable contribution to food security, livelihoods and wealth creation. Deriving from the framework of the African Union 2063, the Africa Blue Economy Strategy (ABES) provides guidance for the development of an inclusive and sustainable blue economy that significantly contributes.

## **A REVIEW OF THE VARIOUS SECTORS, THEIR SOCIO-ECONOMIC IMPORTANCE AND THEIR IMPACT ON AQUATIC BIODIVERSITY AND ENVIRONMENTAL MANAGEMENT.**

### **COASTAL AND MARINE ECOSYSTEM**

The Nigeria's coastal and marine environment stretches for about 853 km along the coastline and inland for a distance of about 15km in Lagos in the west to about 150km in the Niger Delta and about 25km east of the Niger Delta. It consists of barrier bar/lagoon system, the Mahin mud coast, the Niger Delta, Strand coast and a moderately wide continental shelf. The coastal and marine ecosystems are highly interactive ecosystems whose management requires fully integrated approaches to ensure the health of all species that are in them - as well as supporting human activities that depend on them in a positive and sustainable manner. The health of these systems is essential to support their storage and recycling of nutrients, protecting shorelines and filtering pollutions.

Like many ecosystems in Nigeria, the marine and coastal area of the country is affected by many environmental problems that are being addressed for sustainable development. Industrialization, tourism, urban development, and oil and gas exploration and exploitation have infringed on the people and their environment, leading to the opening up of previously pristine ecosystems characteristic of the region. This has in turn led to alterations of habitats, biodiversity loss, deforestation and pollution.





While natural hazards, such as floods, are clearly responsible for some of the environmental impacts, industrial activities have no doubt aggravated them. In general, the coastal and marine ecosystems have generally been treated as resources for exploitation without much emphasis on protecting and replenishing them for sustainable development. Unsustainable fishing methods decimate fish stocks. These ecosystems are badly used as discharge areas for wastes from land-based activities including industrial effluents, human wastes, storm drains and toxic wastes from extractive activities.

The current rising human population pressure, silting and land use patterns and changes are major threats to the coastal and marine ecosystems. Major areas of environmental challenges include:

- pollution from oil spills, gas flaring, industrial and agricultural effluents, sewage and solid wastes;
- modification of ecosystem in the form of biodiversity loss, coastal erosion, flooding, deforestation, salt water intrusion and invasive/exotic species; and
- depletion of fisheries resources.

Urbanization pressures have led to major wetland and marine ecosystem destruction through efforts at land reclamation. Alien species invasion pose special challenges in the use of the ecosystems for transportation, fishing and other activities. Canalization for movement of industrial equipment has facilitated salinization of inland fresh water ecosystems leading to water stress and related loss of aquatic resources.

Livelihoods and the ecosystem -that coastal and marine tourism relies on - is under threat from over-extraction, consumer behavior, and two priority issues: climate change and environmental degradation. Strengthening the resilience of CMT requires various interventions at all levels of Government. Biodiversity protection, nature-based solutions to climate adaptation, blue investments, and greener and more sustainable (coastal and marine) tourism practices can offer cost-effective and longer-lasting solutions for building more resilient ecosystems, communities, and economic activities. At the same time, they can provide additional sources of revenue and employment.



## POLICY OBJECTIVES AND STRATEGIC POLICY ACTIONS FOR COASTAL MARINE TOURISM (CMT) SECTOR

S/N	Policy Objective	Strategic Policy Actions
1	To inculcate biodiversity values in Coastal Marine and Tourism (CMT) development and conservation of aquatic resource among citizenry	<ul style="list-style-type: none"> <li>i. Regularly engage relevant stakeholders on best practices on sustainable coastal and marine tourism development;</li> <li>ii. Provide the tourism sector a road map and clear direction to maximize opportunities in the tourism sector with due regards to conserving aquatic biodiversity and environmental sustainability;</li> <li>iii. Promote sustainability and inclusivity for aquatic biodiversity conservation and ecosystems</li> <li>iv. Create awareness on the impact of weather and climate change;</li> <li>v. Build capacity, share knowledge and ensure community participation and management of coastal and marine ecosystems;</li> <li>vi. Enhance capacity for research, development and proper dissemination of information</li> <li>vii. Improve mechanisms for regular knowledge exchange; and</li> <li>viii. Promote Stakeholders' Engagement for an economically viable sector to drive business and conservation.</li> </ul>
2	To ensure activities and developments in the coastal and marine sector comply with all environmental protection and health laws, guidelines and regulations	<ul style="list-style-type: none"> <li>i. Coordinate the roles of all agencies interfacing on the management of coastal and marine ecosystems to ensure policy coherence and optimum resource protection;</li> <li>ii. Speedy domestication of ratified conventions, treaties into national legislations by all tiers of government;</li> <li>iii. Designate areas with endemic species and demarcate such areas as Marine Protected Areas to make them no-go areas for industrial or other harmful human activities of any sort;</li> <li>iv. Properly identify climate change drivers (Human and Natural Scenarios); and</li> <li>v. Adhere to strict Environmental Impact Assessments (EIA) when considering activities such as aquaculture that places demand on marine ecosystem resources</li> </ul>
3	To improve and enhance coastal area biodiversity, sustainability and economy	<ul style="list-style-type: none"> <li>i. Promote business concepts to drive new opportunities provided by aquatic biodiversity conservation and tourism;</li> <li>ii. Control physical growths including reclamation of wetlands for socio-economic developments;</li> <li>iii. Prepare and implement a harmonized Integrated Coastal Zone Management Programme;</li> <li>iv. Promote actions to protect and preserve land masses that help defend coastal areas and communities from the impacts of ocean waves;</li> </ul>





S/N	Policy Objective	Strategic Policy Actions
4	To encourage collaborations in Research and Development in the development of Coastal Marine Tourism Sector in Nigeria	<ol style="list-style-type: none"> <li>i. Use research to direct evidence-based decision making and policy development;</li> <li>ii. Strengthen Research institutions and encourage capacities for research;</li> <li>iii. Support and promote research and cross-sectoral capacity enhancement in the conservation, protection and management of marine and costal resources;</li> <li>iv. Strengthen funding and infrastructural supports to research institutes;</li> <li>v. Encourage coordination and synergies among the research institutes, universities and other relevant Agencies;</li> <li>vi. Promote innovative ways to fund activities through responses to call for proposals and grants</li> </ol>
5	To provide support for the development of resilient Infrastructure in Coastal Marine Tourism Sector	<ol style="list-style-type: none"> <li>i. Build a resilient infrastructure that will withstand the effects of climate change;</li> <li>ii. Deploy early warning systems for preparedness and responses to adverse weather conditions;</li> <li>iii. Promote ideal security architecture for security issues that allow for ownership by Nigerians</li> </ol>

## OVERVIEW OF THESE INSTRUMENTS RELATING TO TOURISM SECTOR

- Provisions of the National Tourism Policy (NTP) of 2005;
- Nigeria Tourism Development Master Plan of 2002 (Provide policy thrust to enhance the tourism sector);
- The Nigerian Tourism Development Corporation (NTDC) Act 2004 (Amended 2022);
- The Presidential Council on Tourism;
- Federal Ministry of information and culture (Tourism Department);
- State and Local Tourism Committees;
- The Companies and Allied Matters (CAMA) Act 2020 -governs the formation and regulation business entities in Nigeria;
- National Office for Technology Acquisition and Promotion (NOTAP) Act 2004;
- The Nigerian Investment Promotion Commission (NIPC) Act 2004; and
- The Companies Income Tax Act Cap C21, LFN 2004.



## OIL AND GAS EXPLORATION

Oil and gas are the major sources of foreign exchange earnings for Nigeria. The sector contributes only 19.80 % to the nation's rebased and further revised GDP. Nevertheless, the operations in the sector and the heavy reliance on it for income combine to pose acute challenges on the environment. Oil and gas operations have direct impact on the environment including on soil, water and air quality. This is also a major industrial complex releasing tonnes of greenhouse gases and adding to the climate challenge. Seismic operations have impacts on deforestation and on biodiversity loss including impacts on aquatic and terrestrial life forms.

Decades of oil spill in the Niger Delta have been estimated to be in the magnitude of one Exxon Valdez per year. The impacts are widespread in soils, as well as in marine and coastal ecosystems.

Gas flares not only constitute an economic waste but also poses serious air quality and health hazard.

Toxic wastes, produced water and drilling mud and drilling cuts leave extensive footprints in the oil field communities' environment

The environmental challenge is aggravated by less than optimum management and protection of pipelines have led to pipeline accidents and tampering by third parties manifesting from vandalism and sabotage.

Poor decommissioning practices and management of non-producing oil wells pose environmental challenges and add to incidents of spills and accidents.

Lax control of oil refineries and petrochemical complexes lead to release of carbon particulates impacting air quality; toxic effluents impacting surface and ground water systems and soils.

The classification of communities that have oil and gas installations on their territories as host communities pose special challenges and tend to divide communities, instigate disharmony and promote negative responses.





## POLICY OBJECTIVES AND STRATEGIC POLICY ACTIONS FOR OIL & GAS EXPLORATION

S/N	Policy Objective	Strategic Policy Actions
1	To ensure that developments in the sector comply with all environmental protection and health laws, guidelines and regulations	<ul style="list-style-type: none"> <li>i. Enhance surveillance of the operating areas to maintain biodiversity;</li> <li>ii. Ensure that all oil industry companies operate with global industry best practices and standards;</li> <li>iii. Enforce provisions of statutory instrument/regulations, guidelines etc such as Petroleum Industry Act (PIA), National Oil Spill Detection And Response Agency (NOSDRA) Statutory Instrument (S.I)26 etc;</li> <li>iv. Regularly review Policies and guidelines;</li> <li>v. Upward review of defaulters' penalty for violating policies and regulations;</li> <li>vi. Ensure that biodiversity conservation plans are integrated into the business plans in the oil and gas sector;</li> <li>vii. Increase gas utilization capacity instead of permitting total flaring; and</li> <li>viii. Encourage enhanced collaboration between relevant Regulators.</li> </ul>
2	To ensure strict Environmental and Social Impact Assessment of oil and gas exploration	<ul style="list-style-type: none"> <li>i. Require strict Environmental and Social Impact Assessments before permits are issued for oil and gas activities. Since oil and gas fields have lifespans there must be an approved and verifiable decommissioning plan for each installation before operations commence;</li> <li>ii. Secure fragile ecosystems, places of cultural/heritage significance, and ensure that important land/seascapes are off-limits to oil and gas exploration and exploitation activities;</li> <li>iii. Integrate communities' inputs and participation in environmental planning and protection strategies and measures without compromising on technical knowledge and expertise; and</li> <li>iv. Develop an appropriate Stakeholder Engagement Plan</li> </ul>
3	To ensure enhanced response to environmental pollution arising from oil and gas exploration	<ul style="list-style-type: none"> <li>i. Acquire improved technology to mitigate pollution;</li> <li>ii. Strengthen regulatory Agencies to address promptly pollution issues as well as increase monitoring of operating areas;</li> <li>iii. Ensure quick responses to reported oil spills;</li> <li>iv. Ensure that any individual or community preventing Joint Investigation Visit (JIV) / response to oil spill should be penalized or prosecuted;</li> <li>v. Establish a system for monitoring types and stocks of chemicals used and the quality and performance of plants such as Floating Production Storage and Offloading (FPSO) platforms and including integrity checks of ships, barges, pipelines and other equipment and installations;</li> </ul>
4	To encourage Research and Development in the development of local solutions to oil and gas pollutions	<ul style="list-style-type: none"> <li>i. Increase research and development in sustainable engineering practices;</li> <li>ii. Develop local solutions to manage our biodiversity;</li> <li>iii. Support enhancement of capacity and requisite technical knowledge in communities; and</li> <li>iv. Increase funding for research and data collection</li> </ul>



## OVERVIEW OF THESE INSTRUMENTS RELATING TO ENVIRONMENT MANAGEMENT IN OIL & GAS SECTOR

### 1. **The Nigerian Urban and Regional Planning Act CAP NI38, LFN 2004**

The Urban and Regional Planning Act is aimed at overseeing a realistic, purposeful planning of the country to avoid overcrowding and poor environmental conditions

### 2. **Land Use Act CAP 202, LFN 2004**

The Land Use Act places the ownership, management and control of land in each state of the federation in the Governor. Land is therefore allocated with his authority for commercial, agricultural and other purposes.

### 3. **Harmful Waste (Special Criminal Provisions) ACT CAP HI, LFN 2004**

The Harmful Waste Act prohibits, without lawful authority, the carrying, dumping or depositing of harmful waste in the air, land or waters of Nigeria.

### 4. **Hydrocarbon Oil Refineries Act, CAP H5, LFN 2004.**

The Hydrocarbon Oil Refineries Act is concerned with the licensing and control of refining activities. Relevant sections include the following:

- Section 1 prohibits any unlicensed refining of hydrocarbon oils in places other than a refinery;
- Section 9 requires refineries to maintain pollution prevention facilities.

### 5. **Exclusive Economic Zone Act, CAP E11, LFN 2004.**

The Exclusive Economic Zone Act makes it illegal to explore or exploit natural resources within the Exclusive zone without lawful authority.

### 6. **Petroleum Refining Regulation**

Section 43 (3) requires the Manager of a refinery to take measures to prevent and control pollution of the environment.

### 7. **Mineral Oil Safety Regulations and Crude Oil Transportation & Shipment Regulations**

These Regulations prescribe precautions to be taken in the production, loading, transfer and storage of petroleum products to prevent environmental pollution.

### 8. **Petroleum Products and Distribution Act, CAP PI2, LFN 2004.**

Under this Act, the offence of sabotage which could result in environmental pollution is punishable with a death sentence or an imprisonment term not exceeding 21 years.

### 9. **Territorial Waters Act, CAP T5, LFN 2004.**

The Territorial Waters Act makes punishable any act or omission committed within Nigerian waters which would be an offence under any other existing law.





#### **10. Nuclear Safety and Radiation Protection Act, CAP NI42, LFN 2004.**

The Act is concerned with the regulation of the use of radioactive substances and equipment emitting and generating ionizing radiation. In particular:

- Section 4 provides authority to make regulations for the protection of the environment from the harmful effects of ionizing radiation.
- Section 15 and 16 makes registration of premises and the restriction of ionizing radiation sources to those premises mandatory.
- Section 37 (1) (b) allows an inspector verify records of activities that pertain to the environment.
- Section 40 clarifies that the same regulations guiding the transportation of dangerous goods by air, land or water should also apply to the transportation of radioactive substances.

#### **11. Nigerian Mining Corporation Act. CAP NI20, LFN 2004.**

This Act establishes the Nigerian Mining Corporation. It has authority to engage in mining refining activities and to construct and maintain roads, dams, reservoirs, etc. In particular:

- Section 16 creates a civil liability on the corporation for the physical or economic damage suffered by any person as a result of its activities.

#### **12. Quarantine Act, CAP Q2, LFN 2004.**

The Quarantine Act provides authority to make regulations for preventing the introduction, spread and transmission of infectious diseases such as cholera, yellow fever, typhus, etc.

#### **13. River Basins Development Authority Act, CAP R9, LFN 2004.**

The River Basins Development Authority is concerned with the development of water resources for domestic, industrial and other uses, and the control of floods and erosion.

#### **14. Pest Control Production (Special Powers) Act, CAP P9, LFN 2004.**

The Pest Control of Production Act is concerned with export produce conditions and pest control. In particular:

- Section 1 provides an inspector authority to take emergency measures to control pest infestation of produce.

#### **15. Agriculture (Control of Importation) Act, CAP A93, LFN 2004.**

The Agriculture Act and its Plant (Control of Importation) Regulations are concerned with the control of the spread of plant diseases and pests.

Worth noting is:

- Section 6 which allows authorized officers to take emergency control measures, and provides for the recovery of costs and expenses incurred by the officers in controlling the situation



**16. Animal Diseases (Control) Act, CAP A17, LFN 2004.**

The Animal Disease (Control) Act makes it an offence to import any animal, hatching egg or poultry into Nigerian except under a permit. The following sections are relevant:

- Section 5 provides an inspector with the authority to take emergency measures where necessary.
- Section 13 requires owners of trade animals to possess a movement permit and ensure the fitness of their animals.

**17. Bees (Import Control and Management) Act, CAP B6, LFN 2004.**

It is an offence, under this Act, to import bees or apicultural materials into Nigeria without a valid permit. A person could also be held liable for exceeding the terms of his permit.

**18. Civil Aviation Act. CAP C13, LFN 2004.**

The Civil Aviation Act promotes public safety by providing regulations to secure the safety of persons and property in the aircraft and others who may be endangered by it.

**19. Factories Act, CAP F1, LFN 2004.**

The Factories Act promotes the safety of workers and professionals exposed to occupational hazards. Under this Act, it is an offence to use unregistered premises for factory purposes. In particular:

- Section 13 allows an inspector take emergency measures or request that emergency measures be taken by a person qualified to do so in cases of pollution or any nuisance.

**20. Water Resources Act, CAP W2, LFN 2004.**

The Water Resources Act is targeted at developing and improving the quantity and quality of water resources. The following sections are pertinent:

- Section 5 and 6 provides authority to make pollution prevention plans and regulations for the protection of fisheries, flora and fauna

**21. Hides and Skins Act, CAP H3, LFN 2004.**

The Hides and Skins Act and its Regulations are concerned with the preparation, quality and trade of hides and skins. It prohibits the use of unlicensed premises or enclosure as a place for the preparation or buying of hides and skins for export.

**22. The Federal National Parks Act, CAP N65, LFN 2004.**

The National Parks Act is concerned with the establishment of protected areas used for resource conservation, water catchments protection, wildlife conservation and maintenance of the national ecosystem balance.

**23. Niger-Delta Development Commission (NDDC) Act, CAP N68, LFN 2004.**

The Niger-Delta Development Commission Act is concerned with using allocated funds to tackle ecological problems arising from the exploration of oil minerals in the Delta.





- Section 7 (I) (b) empowers the Commission to plan and to implement projects for the sustainable development of the Delta in the field of transportation, health, agriculture, fisheries, urban and housing development, etc.

The Commission, under this Act, has a duty to liaise with oil and gas companies and advice stakeholders on the control of oil spillages, gas flaring and other related forms of environmental pollution.

#### **24. Criminal Code Act, CAP C38, LFN, 2004**

The Act contains the basic criminal law offences that relate to damage to the environment, public health and natural resources. Some environmental offences include: causing a public nuisance; fouling the water of any spring, stream, well or reservoir of a place; and violating the atmosphere in any place so as to make it noxious to the health of persons in general in the neighborhood.

#### **25. Climate Change Act, 2021**

The Act provides a framework for Nigeria to achieve low greenhouse gas emissions (GHG) through inclusive green growth and sustainable economic development and the implementation of Nigeria's commitment to net zero emissions declared at COP26 in 2021. It establishes the National Council on Climate Change, which will be tasked with implementing the countries climate Action Plan.

#### **26. National Climate Change Policy for Nigeria (2021 –2030)**

The goal of Nigeria's Climate Change Policy will be achieved through the attainment of the following objectives: i. Implementing adaptation and mitigation measures that promote low-carbon development; ii. Strengthening capacities and synergies at local, sub-national and national levels and at individual and institutional levels to implement climate change response; iii. Promoting scientific research, technology and innovations to address the challenges of climate change; iv. Developing and implementing appropriate strategies and actions to reduce the vulnerability of Nigerians to the impacts of climate change across all sectors

#### **27. Petroleum Industry Act, 2021**

An Act to provide Legal, Governance, Regulatory and Fiscal Framework For The Nigerian Petroleum Industry, the Development of host communities, and for related Matters. The property and ownership of petroleum within Nigeria and its territorial waters, continental shelf and exclusive economic zone is vested in the Government of the Federation of Nigeria.

#### **28. National Policy on Environment, 2017**

The Policy states that Nigeria is committed to safeguarding the country's natural and built environment for the use of present and future generations. This commitment demands that efficient resource use and the reduction of environmental impacts be a core requirement of all developmental activities.



### **29. National Guidelines and Standard for Water Quality 1999**

This is to guide water management with regards to maintaining safe quality of water for various uses throughout the country and in order to improve the quality of the environment and to free it from pollutant and other environmental and health hazards

### **30. National Guidelines on Environmental Management Systems (EMS) 1999**

EMS provides a mechanism that integrates economic growth, sustainable development and environmental management within a business organization. It is a proactive approach to sustainable environmental management, which aims to enable organizations reduce their risks and liabilities, whilst enhancing their corporate image

### **31. Nigeria's Nationally Determined Contribution, 2021 updates**

This updated NDC provides a high-level and strategic vision for climate action in Nigeria. It sets out what Nigeria commits to doing to support the implementation of the Paris Agreement, and in particular the aims of the Agreement set out in Article 2, to:

- Limit the increase in global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels;
- Increase the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development; and
- Make finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.

### **32. Water Resources Act, Cap W2, LFN, 2004**

The Act is aimed at promoting the optimum planning, development and use of the Nigeria's water resources; ensuring the co-ordination of activities that are likely to influence the quality, quantity; distribution, use and management of water; ensuring the application of appropriate standards and techniques for the investigation, use, control, protection, management and administration of water resources; and facilitating technical assistance and rehabilitation for water supplies.





## MINERALS MINING

Every state in the nation boasts of deposits of solid minerals. The proposition that states can become economically viable by developing and exploiting these mineral resources has become common wisdom. The implication for the environment of a massive national push for the extraction of solid minerals will be acute degradation. Mining is generally accompanied by environmental degradation. Remediation and mitigation of impacts often do not lead to full restoration. Open cast mining has a tendency to displace individuals and/or communities and leave unsightly scars in the environment. Pollution from surface and underground mines include those from acid mine drainage, tailings and other wastes. Solid minerals extraction impact fresh water supplies and may equally decimate aquatic resources and poison communities that depend on such sources for potable water. Mining related activities have health impacts, including effects from heavy metals and other toxic elements. Workers and communities may be exposed to high levels of toxic chemicals used in the processes of mining and refining of ores. Preponderance of unregulated artisanal and industrial scale mining means uncontrolled environmental degradation with extensive implications for human health and that of other organisms. Environmental degradation and land uptake by mining activities impacts agricultural production as well as other sources of local livelihoods thus deepening poverty in vulnerable communities.

The drive for investments in the sector by transnational corporations poses new challenges especially related to the extremely friendly tax and regulatory regimes that may likely be extended to them.

### **Key challenges include:**

- inadequate skilled manpower to regulate, monitor and enforce compliance to the provisions of the Minerals and Mining Act/regulations;
- lack of Mining equipment, tools and faculties for monitoring mining activities in the mines field;
- inadequate infrastructural facilities at remote mining sites e.g access roads and power supply;
- lack of adequate awareness on the part of operators on sustainable mining practices;
- problem of illegal mining in some of the remote mining areas;
- child labour issues in mining due to poverty mining communities; and
- lack of funds to remediate environmental degradation due to past mining activities.



## POLICY OBJECTIVES AND STRATEGIC POLICY ACTIONS FOR MINING SECTOR

S/N	Policy Objective	Strategic Policy Actions
1	To ensure that developments in the sector comply with all environmental protection and health laws, guidelines and regulations	<ul style="list-style-type: none"> <li>i. Encourage research and weighing comparative advantages between solid minerals and other environmentally friendly products and activities;</li> <li>ii. Require regular environmental evaluations and risk management plans for all minefields as prerequisite planning tools as well as regular audits throughout the life span of the particular fields;</li> <li>iii. Proscribe solid minerals prospecting and mining in fragile ecosystems including coastal waters, forests and other areas of high heritage value;</li> <li>iv. Demand regular air and water quality monitoring in operational areas;</li> <li>v. Ensure suitable decommissioning and closure of mines and the full restoration of all mining sites and quarries; and</li> <li>vi. Engage in full rehabilitation of communities whose environment has already been degraded by mining activities including taking steps to promote recovery of biodiversity and artifacts of cultural significance.</li> </ul>
2	To strengthen collaboration amongst various stakeholder groups in the sector	<ul style="list-style-type: none"> <li>i. Strengthen the existing collaboration with Security Agencies (Ministerial Surveillance Task force);</li> <li>ii. Strengthen and expand collaborations amongst relevant Ministries, Departments and Agencies (MDAS and Stakeholders); and</li> <li>iii. Include locals [comprising Women and Youth] in the ministerial surveillance task Force.</li> </ul>
3	To ensure enhanced compliance to statutory and environmental obligations by mineral Title Holders	<ul style="list-style-type: none"> <li>i. Regulate all levels of mining including those at artisanal scales;</li> <li>ii. Employ more professionals (~300);</li> <li>iii. Create direct line budget for capacity building, purchase of operational equipment, vehicles;</li> <li>iv. Dedicate proceeds accruing as Royalties from solid minerals to funding; and</li> <li>v. Internalize environmental costs as operational costs of the mining entities.</li> </ul>

## OVERVIEW OF THESE INSTRUMENTS RELATING TO MINERAL MINING SECTOR

- a. The Nigerian Minerals and Mining Act (NMMA) 2007;
- b. Nigerian Mineral and Mining Regulations 2011;
- c. The National Environmental Standards & Regulations Enforcement Agency (Establishment) Act 2007;
- d. The Constitution of the Federal Republic of Nigeria 1999 (as amended);
- e. The National Environmental Impact Assessment Act;
- f. The Mines and Quarries Act;
- g. The Explosives Act; and
- h. The Foreign Exchange (Monitoring & Miscellaneous Provisions) Act.





African Union  
Inter-African Bureau for Animal Resources (AU-IBAR)  
Kenindia Business Park  
Museum Hill, Westlands Road  
P.O. Box 30786  
00100, Nairobi, KENYA  
Telephone: +254 (20) 3674 000 / 201  
Fax: +254 (20) 3674 341 / 342  
Website: [www.au.ibar.org](http://www.au.ibar.org)  
Email address: [ibar.office@au-ibar.org](mailto:ibar.office@au-ibar.org)