

# ENVIRONMENTAL STATISTICS: SITUATION IN FEDERAL REPUBLIC OF NIGERIA



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### **NIGERIA: GEOPOLITICAL**



- **Official name:** Federal Republic of Nigeria.
- **Official language:** English.
- Capital City: Abuja.
- **Type of Government:** Civilian Administration
- Head of State: Chief Olusegun Obasanjo
- Head of Government: Chief Olusegun Obasanjo.
- **Ruling Party:** Peoples' Democratic Party (PDP).
- Location: West African Sub-Region; bordering the North Atlantic Ocean, between Benin Republic, and Cameroon.
- Border countries: Republic of Benin (773 Km); Cameroon 1,690 (Km); Chad (87 Km); and Niger (1,497 Km).
- Climate: Varies equatorial in south, tropical in centre, arid in north. Rainfall: 500 - 1800mm Temperature: Minimum Temperature - 200C - 250C. Maximum Temperature - 280C - 320C.
- Terrain: Generally varied with rugged hills, undulating slopes, gullies, waterlogged
- **Administrative Structure:** 36 States; 774 Local Government Councils: About 250 Ethnic Groups.
- **National Assembly:** Senate + House of Representatives
- Location: West African Sub-Region; bordering the North Atlantic Ocean, between Benin Republic, and Cameroon.
- Marce area: 923,770 km2
- Land area: 910,770 km2; Water area: 13,000 km2
- **Land boundaries:** 4047 km
- **Vegetation types:** Ranging from the Mangrove forest/high forest in the South, to the Savannah woodland/Grassland and in the middle belt to the dessert areas in the far north.
- Maritime claims:
- Continental shelf: 200m depth or to the depth of exploitation
- **Territorial sea:** 30 nautical miles.
- *Exclusive Economic Zone:* 200 nautical miles.

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- Climate: Varies equatorial in south, tropical in centre, arid in north. Rainfall: 500 – 1800mm; Temperature: Minimum Temperature - 200C – 250C. Maximum Temperature - 280C -320C.
- Terrain: Generally varied with rugged hills, undulating slopes, gullies, waterlogged areas, flat and undulating land surfaces. Specifically, it is characterized by southern lowlands merging into central Hills and plateaus; mountains in southeast, plains in the North.
- Natural Resources: Forests, Crude Oil, Natural Gas, Solid Minerals e.g. Bitumen, Tin, Limestone, Columbite, Iron Ore, Coal etc, Marine and Aquatic resources e.g. fish, shrimps etc
- Industries: Oil (Upstream and Downstream), Agro-processing and manufacturing, Farming, Iron and Steel processing, Plastics, Textiles, and Pharmaceuticals.
- Natural Hazards: Occasional floods, rain storms, Drought and Desertification



# **NIGERIA: OVERVIEW**

- Nigeria has a total land area of 923,773 square Kilometres and is richly endowed with abundant and diverse resources, both renewable and non-renewable. The country is blessed with mineral, physical, biological and energy resources. The mineral wealth of the country is vast and should enable it to establish a firm industrial base for rapid economic development. From the mangrove and rain forests of the south, through the various savannahs, and semi-arid ecosystems of the north, the nation is richly endowed with fishery resources, wildlife, timber, medicinal plants, mineral resources, water, ornamental and food crops.
- In general, the environment provides all life support systems in the air, on water and on land as well as the materials for fulfilling all developmental aspirations.
- However, the Nigerian environment today is faced with many problems, arising from the impacts of human activities and natural phenomenon.

# **Critical Environmental Problems in Nigeria**

- (a) Sheet erosion
- (b) Gully erosion

- (c) Coastal and Marine erosion and land subsidence occur particularly in the coastal areas
- (d) Flooding occurs throughout Nigeria in three main forms; coastal flooding, river flooding and urban flooding.
- (e) Drought and Desertification
- (f) Oil Pollution from spills, oil well blow-outs, oil ballast discharges and improper disposal of drilling mud from petroleum prospecting have resulted in problems such as: the loss of the aesthetic values of natural beaches due to unsightly oil slicks; damage to marine wildlife, modification of the ecosystem through species elimination and the delay in biota (fauna and flora) succession; and decrease in fishery resources.
- (g) Urban Decay and Squatter Settlements:
- (h) Industrial Pollution and Waste:
- (i) Municipal Solid Waste:
- (i) the various non-biodegradable household petrochemical products such as polythene bags, plastic containers, Styrofoam packages and tyres which litter Nigerian cities; and (ii) the about 80 million litres of crankcase oil disposed from mechanic workshops; industries, power stations and commercial houses discharged carelessly into drains and ground surfaces in the cities.
- (j) Concrete Jungles/cities
- (k) Loss of Fauna and Flora:
- (1) Climatic Change/Ozone Layer Depletion Nigeria also has had to contend with global environmental issues such as climatic change or global warming is due to the increasing concentrations of atmospheric warming or green house gases (GHG), especially carbon dioxide (CO2) whose concentrations have increased from 280 parts per million (PPM) in the 1800s to about 380 parts per million (PPM) now.

## **Environment Statistics: Definition and Importance**

- Set of variable indices on the state of the environment collected in a time frame to indicate:
- Type of changes over time;
- Degree of changes;
- Source/cause of changes;
- Effects of the observed changes on the environment and human wellbeing;
- Policy options for effective management
- Environmental Statistics are some of the most important data required for the various aspects of socio-economic planning and environmental monitoring at the local and national levels in the economy. Almost all socio-economic activities of man affect the environment, hence environmental statistics cut across many sectors.

# Situation of Environmental Statistics in Nigeria

Environmental Statistics cut across the activities of many development Agencies in Nigeria, including: Federal and State Ministries of Environment; Federal Office of Statistics; Federal Ministries of Mines and Power; Petroleum Resources; Solid Minerals; Federal Works; Agriculture and Rural Development; Water Resources; Nigeria National Petroleum Company (NNPC); National Planning Commission; National Electricity Power Authority (NEPA) - Energy Statistics; Research Institutes, FMENV/University Linkage Centres; Environmental NGOs, etc.

- Hitherto, most data collected by the various agencies were contained in technical reports and files, with limited chances for comprehensive collation and analysis;
- However, in recent time, there has been a growing institutional awareness and concern for environmental statistics in Nigeria. This include:
- The establishment of Environment Statistics in the Federal Office of Statistics (FOS) in 1992 under the National Accounts Division to facilitate the long term integration of environment Statistics into National Accounting, with the aim of preparing environment accounts as a satellite Accounts in accordance with 1993 UN System of National Accounts (SNA);
- The establishment of the Federal Environmental Protection Agency in 1988 (FEPA) and the expansion of the Agency's mandate in 1992 to include the conservation of biodiversity and natural resources which later led to the establishment of a Data and Information Management Unit in the Agency (FEPA) as part a World Bank-assisted Environmental Management Project in 1993/96. The data derived from the Forestry, the Soil, the Water resources and the then FEPA nodes were to be networked through a central data base at FEPA. Unfortunately the idea could not be realized because only Forestry node could produce any substantial data out of all the nodes.
- The establishment of a National Data Bank Unit on Environmental Statistics in the National Planning Commission in 1996, the Unit which has now been transferred to the FOS;
- Creation of a full-fledged Federal Ministry of Environment by the present Administration in June 1999 and subsequent establishment of a full-fledged Department of Planning, Research and Statistics in the new Ministry in compliance with Government's directive for all Ministries;
- Nigeria's active participation in the UNEP-INFOTERRA network, with substantive input to the National Portal on the **INFOTERRA Website** (http://www.unep.net).

#### **Availability and Sources of Environmental Statistics in Nigeria**

- Most environmental data in Nigeria are collected under the mandate of the various Government Ministries/Agencies, Environment NGOs, and Private Enterprise.
- There are a lot of environment-related data in Nigeria which are not readily available as they are usually scattered in the various Government Agencies/Departments in form of technical reports/publications or in files that are not easily accessible as a comprehensive database for this purpose is yet to be put in place. With about 30 Universities, about 28 Research Institutes, a number of Polytechnics and Colleges of Education, several Environmental NGOs, an expanding list of environment Consultants/Researchers, the scope of environmental statistics in Nigeria is wide. Few years ago, we did an inventory of

sources of environmental information and areas of focus in Nigeria, which was published (metadata). However, the actual available data are yet to be collated. What we need now collation, domestication and harmonization/standardization of the available data

- Also, due to lack of continuity of monitoring, accessibility to up-to- date statistical data on the environment is a big problem.
- Often time, standard/format of measurement may vary from Agency to Agency, and indeed from the global standard; thereby making such data unsuitable for international use.

# **Difficulties Encountered in Data Collection in Nigeria**

- Problems against effective data collection in Nigeria include:
- Lack/inadequate funding for data collection by professionals on the field due to poor political will arising from inadequate understanding of the role of environmental statistics in national development ;
- Non-standardization of data collection;
- Inadequate/high turnover of manpower;
- Lack of appropriate materials and equipment for data collection, processing and storage/retrieval;
- Bureaucratic bottleneck;
- Poor coordination/collaboration among relevant Agencies;
- Excessive protection of Organizational secrecy for fear of taxation

#### New and Emerging Initiatives on Environment Statistics in Nigeria

- INFOTERRA National Network: Nigeria is an active member of the UNEP-INFOTERRA Global Environmental Information Exchange Network with National Focal Points in 177 Countries. The Federal Ministry of Environment has identified about 80 Desk Officers for INFOTERRA services in Nigeria to facilitate public access to environmental information. These Desk Officers are located in the Ministry's Technical Departments/Parastatals/Field Offices and State Environment Ministries/Agencies nationwide. It is intended that these Officers will facilitate the collection and dissemination of environment data/information nationwide. These Officers will also work in collaboration with the Field Officers of the Federal Office of Statistics in the 36 States and the Federal Capital Territory.
- There is an on-going project on the Development of a Framework on Poverty Tracking in Nigeria which is being supported by the UNDP for the National Poverty Eradication Programme (NAPEP);

- At the Headquarters level, there is a growing collaboration between the Federal Ministry of Environment and the Federal Office of Statistics and other relevant Agencies in addressing the UNSD questionnaire.
- UNIDO has developed a database for the Federal Ministry of Industries and is currently inviting relevant Government Agencies, including the Federal Ministry of Environment, to join the network in generating industry-related data. It is hoped that most of the data to be fed into the industry database will provide good inputs into our national efforts on environmental statistics.
- Government's new policy on "Service Delivery", NEEDS, SEEDS, LEEDS, will support initiatives on environmental statistics;
- UNDP Programme Support on the Development of Poverty-Environmental Sustainability Indicators/Training Module on Mainstreaming Environment into National Agenda – as part of this process, a team of Consultants has been recruited to:
- review existing information on poverty-environment and environmental sustainability indicators at state and national levels;
- propose key aggregate poverty-environment indicators that can be used to link the poverty monitoring systems;
- review existing data collection systems that can provide povertyenvironment indicators;
- design a system that will link the proposed poverty-environment indicators with the existing local and national data management institutions such as the Federal and State Offices of Statistics (FOS);
- develop training modules on poverty-environment indicators and use to build capacity of sectoral Ministries and institutions on their mainstreaming into policies and plans.
- Currently, a stakeholders workshop is holding at the Confluence Beach Hotel Lokoja, Kogi State, Nigeria (28th February -2nd March 2005), to discuss the draft reports of the Consultants on:
- (i) Development of Poverty-Environment Sustainability indicators in Nigeria; and,
- (ii) Development of Training Modules for the Training of Policy Makers on Mainstreaming Environment into the National Development Agenda.

## **Conclusions**

A new wind of change is blowing – there is a new awareness among key Agencies of Government and among key Officers on the need for environmental statistics in national development; a new awareness and determination for collaboration and cooperation. This workshop is a timely event that will speed up this wind of change towards the development of a sustainable approach for the acquisition, processing, management and dissemination of environmental statistics in Nigeria.