ENVIRONMENTAL STATISTICS:
SITUATION IN FEDERAL REPUBLIC OF NIGERIA

Being Country Report Presented at the

Workshop on Environment Statistics
Held in Dakar, Senegal
28th February – 4th March 2005

By the Nigerian Participants:

- Mr. Adeyinka, M. A. (Chief Environmental Scientist)
  - Tel: 234-803-3528753
  - E-mail: wunmimadeyinka@yahoo.com

- Mr. Bankole, P. O. (Assistant Director)
  - Tel: 234-803-7260542
  - E-mail: Philip_Olab@yahoo.com

- Dr. Olaye Solomon (Assistant Director)
  - Tel: 234-803-7177289
  - E-mail: FOS_NAD@yahoo.co.uk
NIGERIA: GEOPOLITICAL

- Official language: English.
- Capital City: Abuja.
- Type of Government: Civilian Administration
- Head of State: Chief Olusegun Obasanjo
- Head of Government: Chief Olusegun Obasanjo.
- 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).
- Terrain: Generally varied with rugged hills, undulating slopes, gullies, waterlogged
- National Assembly: Senate + House of Representatives
- Location: West African Sub-Region; bordering the North Atlantic Ocean, between Benin Republic, and Cameroon.
- Total 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 desert 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.
Border countries: Republic of Benin (773 Km); Cameroon 1,690 (Km); Chad (87Km); 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, water-logged 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
- Coastal and Marine erosion and land subsidence occur particularly in the coastal areas.
- Flooding occurs throughout Nigeria in three main forms; coastal flooding, river flooding and urban flooding.
- Drought and Desertification
- 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.
- Urban Decay and Squatter Settlements:
- Industrial Pollution and Waste:
- Municipal Solid Waste:
- 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.
- Concrete Jungles/cities
- Loss of Fauna and Flora:
- 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
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 is 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 times, 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 poverty-environment 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.