



# UGANDA BUREAU OF STATISTICS

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## Present State of Environment Statistics in Uganda

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(FDES)

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# Outline

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2. National Environment Mgt Authority (NEMA) & National Environment Mgt Policy (NEMP)
3. The Uganda Bureau of Statistics (UBOS) & Plan for National Statistics Development (PNSD)
4. Environment Information in Uganda
5. Efforts to improve environment statistics in Uganda

# 1. Introduction

## 1.1 General Information:

- Uganda is found within the Great Lakes region of Africa and shares common borders as seen in picture
- Area is 241,551 km<sup>2</sup> of which land area (excluding open water & swamps) constitutes 197,097 km<sup>2</sup> and open water and swamps constitute 43,941 km<sup>2</sup>.
- Min altitude ASL is 620m (Albert Nile) & the Max altitude ASL is 5,110m (Mt. Rwenzori peak). As a result of this high altitude, Uganda's would be tropical climate is modified considerably.
- Temp range from 15°C - 30°C , Avg =21°C.
- Rainfall ranges 750mm to 2000mm around victoria

MAP OF UGANDA



## **1.2. Environment & Natural Resources, and Uganda's Economy.**

- Uganda is endowed with a rich and diverse ENR base which supports economic growth and livelihoods security. There are strong linkages between ENR and other sectors of the economy notably agriculture, tourism and health in addition to supporting the attainment of regional and international commitments such as the MDGs/SDGs. Indeed in spite of the on-going structural transformation, Uganda is still a natural resource based economy, with ENR significantly contributing to food and energy security, GDP, employment, foreign exchange earnings and local revenues. Eighty five per cent (85%) of the population is highly dependent on natural resources for their livelihood.
- Save its significant contribution, ENR is under threat from both natural and man-made drivers of change including; poverty, rapid population growth, unplanned urbanization, expansion of informal settlements, industrialization and the impacts of climate change and variability among others. Fragile ecosystems including hilly and mountainous areas, riverbanks, lakeshores and rangelands are facing encroachment and degradation. Pollution levels are also on the increase and the country is contending with new and emerging environmental issues arising from e-waste, unsound use of chemicals, oil and gas development and the impacts of climate change.

### 1.3. Multilateral Environmental Agreements and Regional Agreements

•Uganda has ratified and is implementing several International Conventions and Protocols, most notably the Convention on Biological Diversity (CBD), the United Nations Framework Convention on Climate Change (UNFCCC), the Convention to Combat Desertification and Drought (UNCDD) among others. As a member of NEPAD, apart from subjecting its governance process to the African Peer Review Mechanism (APRM), Uganda prioritizes investment in ENR and sustainability. Similarly, Uganda is a member of the 10-country Nile Basin Initiative (NBI) whose programmes and policies influence Uganda's natural resources management frameworks, including the management of trans-boundary water resources.

•At the regional level, Uganda is a member state of the East African Community (EAC) and consequently, is signatory to its protocols. Key among these is the EAC Protocol on Environment and Natural Resources (2006) and the EAC policy on Climate Change.



## 2. National Environment Management Authority (NEMA) and the National Environment Management Policy (NEMP) 2014

- Environmental information is vital in planning and decision making processes especially those involving sustainable development and natural resources management. The Government of Uganda adopted a National Environment Policy in 1994 and one of the policy objectives is to collect, analyse, store and disseminate reliable information relating to environmental management issues. This was further strengthened in 1995 by the National Environment Act Cap 153 which put in place the institutional framework that established the National Environment Management Authority (NEMA).
- NEMA is the principal agency responsible for the management of the environment in Uganda. It coordinates monitors and supervises all activities in the field of environment. The Authority thus has the some mandate for the management of some environment information in the country.
- It is now twenty years running in the implementation of the Environment Policy, and this calls for stock taking of the achievements, setbacks, future opportunities and priorities for improved environmental management in Uganda to **accommodate NDP, SDGs, Vision 2040. A draft NEMP 2014 available**



## 2.1 Out puts of National Environment Management Policy (NEMP) 1994

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- Increased environmental information and education through the generation and sharing of environmental information using two yearly National State of the Environment Reports (**SOER**), holding policy dialogues and debates and outreach programmes. Also, on a regular basis, national communication reports are prepared and submitted to the secretariats of international conventions.
- Established a system for sound management of environmental aspects of oil and gas throughout the petroleum value chain through; development of sensitivity atlases, environment monitoring plan, Strategic Environment Assessment (SEA), Environment Impact Assessment (EIA) and Audit processes, public education and awareness, establishment of an office in the Albertine Graben, regular monitoring and inspections, oil waste management and review of environment legislation to include aspects of oil and gas;
- To mention but a few**



## 2.1.1 Environment information issues NEMP

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• Sustainable management of environmental resources and the need to continuously anticipate new and emerging challenges requires availability of timely, up-to-date and accurate information.

### **Guiding principles**

- The right to live in a clean and healthy environment should carry a right to be informed about environmental issues;
- Environmental info of an unclassified or non-proprietary nature in all sectors should be available to all users;
- Legal and institutional guidelines on info management should be well defined;
- All data collection, analysis and information dissemination on existing and emerging environmental issues should be coordinated and standardized;
- The development of district and sub- county monitoring and evaluation capabilities is critical to improvement of environmental information management; and
- The primary institutional responsibility for specialized data collection should remain with the lead agencies but a centralized system for data storage, analysis and sharing is essential.





## 2.1.1 Environment information issues NEMP (ctns)

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### Strategies are to:

- Develop and implement an environment information knowledge management system and communication strategy;
- Develop legislation and guidelines on environmental information gathering, sharing and dissemination;
- Strengthen the Environmental Information Network (EIN) and the Environmental Information System in NEMA
- Promote use of ICT in information dissemination;
- Strengthen environment information units within lead agencies through training and logistical support, and formally link them to the national environmental information network to be operated by the information centre;
- Document, evaluate, store, disseminate and utilize existing indigenous knowledge and practices with regards to environment and natural resource management.



### 3. UBOS and PNSD

#### **3.1. Uganda Bureau of Statistics (UBOS):**

Established by the Act of Parliament in 1998 as a semi autonomous body, UBOS is mandated to develop and maintain an integrated, coherent and reliable National Statistical System (NSS). The Bureau, therefore, has the dual role of producing and disseminating quality statistical information (including Environment statistics), and coordinating, monitoring and supervising the NSS. In totality, the Bureau produces key statistics to support and inform the National and International Results Based Management (RBM) development agenda.

The NSS includes; **producers**, **Suppliers** and **Users** of Statistics. Other producers, suppliers and users of statistics in Uganda are varied according to their mandates and responsibilities.

**Directorate of Agric & Envir Statistics (DAES) in UBOS:** To emphasise the importance attached to Environment statistics, UBOS created a Directorate (DAES) to specifically handle Agriculture and Environment Statistics. The DAES is responsible for production and coordination of quality agricultural and environment statistics that supports policy development and management.



### 3. UBOS and PNSD

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#### **3.2. Plan for National Statistics Devt (PNSD):**

Production of statistics is a combined effort and involves contributions by various MDAs that produce different statistics. To this end, the Bureau, in collaboration with selected MDAs, developed and implemented a five-year PNSD (2006/07 – 2011/12) as a comprehensive framework for strengthening statistical capacity in Uganda. The framework requires all data producing MDAs, including the Bureau, to develop and implement their own Sector Strategic Plans for Statistics (SSPS) as building blocks for the PNSD. The Bureau was guided by an annual work-plan in FY2012/13 pending review and update of the new strategy.

The different Sector Strategic Plans for Statistics (SSPS) (including that of Water and Environment) 2013/14-2017/18 are based on the theme “Enhancing data quality and use” and are hinged on six strategic areas of: Data development and management, Coordination and management of the NSS; Quality assurance of statistics; Dissemination and usability of statistics; Human resource development and management; and Support services.



## 4. Environment information in Uganda

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Environment data and statistics is still in its infancy in terms of readily availability and where it is available, there are still issues with quality and standardisation. Furthermore, there has not been a specific legal framework on access to environmental information apart from the entire Statistics Act 1998. The NEMA initiated programmes whose key elements were: the development of an Environment Information Network (EIN); a strategy for integrating environmental information into the development planning process; and the development of a training program in support of the environment information networks at the national and district levels.



<b>Institution</b>	<b>Data produced</b>
National Forestry Authority	Landcover data, vegetation data
Uganda Bureau of Statistics	socio-economic and demographic environment information, livestock, waste information, crop data etc
Agriculture Planning department	Crop data, fertilizer use
Climate Change Unit	Emissions inventory
Kawanda Agricultural Research Institute	Soils data
Fisheries Department	Fisheries data/Aquatic biodiversity
Uganda National Meteorological Authority	Climate data
Department of Physical Planning	Landuse data



Institution	Data Produced
Lands and Surveys Department	Topographic maps
National Forestry Authority	Forest data, biodiversity in forest and other land use
Ministry of health	Environmental Health
Directorate of Water Development	Water quality, quantity
Ministry of Energy and Mineral Development	Energy, Petroleum data, Fuel use
Wetland Department	Wetlands data
NEMA	National State of Environment Reports, District State of Environment Reports.
Uganda Wildlife Authority	Protected areas and some biodiversity information, wildlife numbers
Nature Uganda	Some Biodiversity data
Ministry of Works, Transport & communic	Data on road distances, age of cars, number of cars
Makerere University Institute of Environment and Natural Resources	Biodiversity data



## Data Gaps

Despite the efforts to produce environmental data there still exist data gaps and challenges.

The following data gaps have been identified;

- Regular emissions data still a problem
- Fertilizer data continues to be difficult in collection
- Inconsistent collection of data leads to missing data sets for some years thus making it difficult to make accurate predictions;
- Limited data on the contribution of the ENR sector to the Ugandan economy, poverty reduction and improved livelihoods;
- Density computations in the waste sector leading to inaccurate numbers- capacity building is required.
- Lack of up to date data on soils, Uganda's major natural asset, topographic data, meteorological data etc are all not up-to-date;
- No reliable data on Maximum Sustainable Yields (MSY) of ENR and the existing natural resource stocks;
- Limited physical water data
- There is limited information on the impact of climate change on the economy, livelihood security and the natural resource base;



## Challenges and Constraints

- Limited technical expertise and specialized equipment for unlike social-economic data, ENR data is unique and highly technical;
- Uncoordinated ad hoc surveys in the sector with unproven methodologies.
- Manpower constraints in the ENR subsectors
- High costs of data collection, storage and dissemination;
- Difficulty of quantifying some of the ENR variables;
- Lack of access to appropriate indicators for some of the ENR variables and the absence of general consensus on using them;
- High costs of ENR data collection, storage and dissemination;
- Lack of modern and efficient data collection equipment, computing facilities for digitizing the data;
- Lack of standardization and harmonization of data leading to unreliability, non-uniformity and conflicting data sets;
- Limited incentives for collecting data by public institutions partly because for any sale of data, money has to be remitted to the national treasury where it is difficult to get it back to the data generating sector/institution;
- Vandalisation of specialized data collection equipment in remote areas. The Uganda National Meteorological Authority (UNMA) and Lands and Survey, specifically suffer from this problem;





## **5. Current Efforts to improve Environment statistics**

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Uganda Bureau of statistics as the coordinator of the Plan for National Statistics Development (PNSD) has embarked on efforts to bring together all the Environment statistics/data producers to have a Sector Strategic Plan for Environment Statistics. The plan is hinged on the six strategic goals/objectives mention earlier. With in the sector, there are sector strategic committees on environment statistics which steer statistics development in the sector (data quality, harmonization of definitions etc)

Information will be collected from all the Ministries Departments and Agencies (MDAs) in this sector and an annual environment statistics abstract/bulletin is written. This will ease work during compilation of other environment reports like the State of Environment Report (SoE).

A proposal has been written and letters to the different environment data producers are under preparation.

Low Emission Capacity Building Project; for emissions inventory in agriculture, transport, waste, LULUCF industry led by Climate Change Department but with UBOS a member of the TWG



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**Thanks**