# Institutional aspects of environment statistics

#### **Botswana Experience**

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## Background

- Botswana is semi-arid country with rainfall ranging from 350mm-650 mm per annum
- Total land area 582 000 sq km
- Population 1.7 million
- Number of cattle is 2.7 million
- Mining is critical sector constitutes 82% of exports

## Introduction

### Importance/Need of Environment Statistics

- Provides important information for monitoring environmental changes
- Provides necessary information for decision making
- Informs priority, target/threshold setting and necessitates intervention

### Institutional Aspects

- Most central government ministries have a portfolio responsibility of some environmental aspect
- In fulfillment of their mandate they deal with some aspect of data collection and analysis
- This is not done in an integrated manner, therefore gaps are inherent and duplication is inevitable

### **Data providers**

#### LAND

- Department of Land Boards allocates tribal land
- Department of Lands allocates state land
- Dept of Town and Regional Planning -
- Department of Surveys and Mapping

#### WATER AND SANITATION

- Department of Waste Management and Pollution Control
- Department of Water Affairs
- Water Utilities Corporation
- District Councils
- CSO (census data)
  WASTE
- Department of Waste Management and Pollution Control
- District Councils
- CSO (census data)

### Data Providers cont'd

#### NATURAL RESOURCE MANAGEMENT

- Department of Environmental Affairs (coordination)
- Department of Forestry and Range Resources
- Department of Wildlife and National Parks
- National Herbarium (National Museum)
- Lands Boards AGRICULTURE
- Crop Production
- Pest Control Unit

### Institutional Arrangements

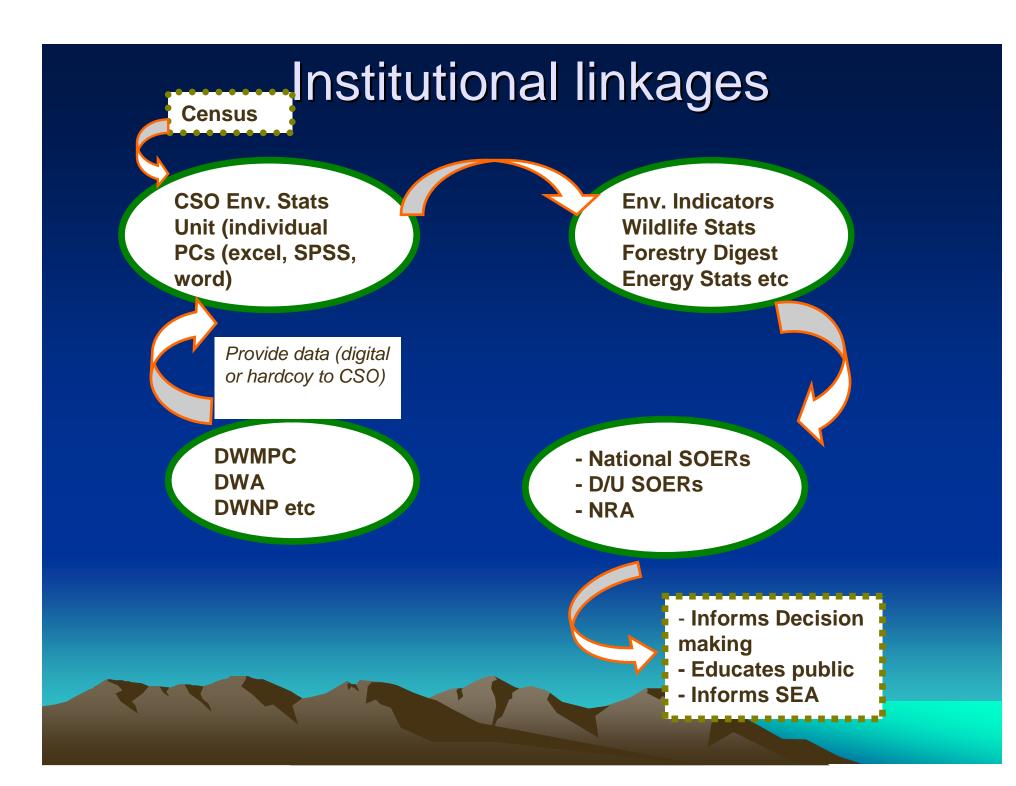
NCS was established in 1990 in recognition of the need for sustainable development.

### The primary goals are;

- Increase the effectiveness with which natural resources are used and managed
- Integrate the works of sectoral ministries and interest groups throughout Botswana

### Institutional Arrangements

- In order to achieve the primary goals of the NCS, there is need for reliable and timely data
- The Central Statistics Office (CSO) has provided a crucial role in that regard
- Botswana government crafted the Statistics Act in 1969, which established the CSO
- The Act mandates CSO to collect, compile and disseminate official statistics through Statistical reports and the CSO website (www.cso.gov.bw)
- The Environment Statistics Unit (ESU) was established 1995 in response to Agenda 21, to which Botswana is a signatory
- The role of the ESU is to collect and compile environment related data



## Challenges

- Environment related stats are scattered over many departments (lack of coordination)
- Data not digitized and is stored in unlinked systems and varied formats
- No data collection standards
- Inadequate monitoring capability
- Lack of capacity (financial and human resource) to collect data
- Unavailability of time series data
- Unreliable of measurements/methods of data collection

## Strategies

- DEA through the envisaged EMA Bill to guide data collection (through environmental indicators) and request data providers to avail data.
- Develop data standards to harmonize data formats
- Develop an EIS for easy storage and retrieval
- Establish the EAC (as a directorate) to enhance the coordination capability of DEA
- Enhance institutional capacity through collaboration with other stakeholders such UNDP, UNEP, e.g ESP (collaboration between GOB and UNDP)

### Conclusion

- There is a pressing need to put in indicators, norms and standards to facilitate accurate and timely reporting on environmental conditions.
- Coordination of data collection and reporting mechanisms should be clearly defined and established.