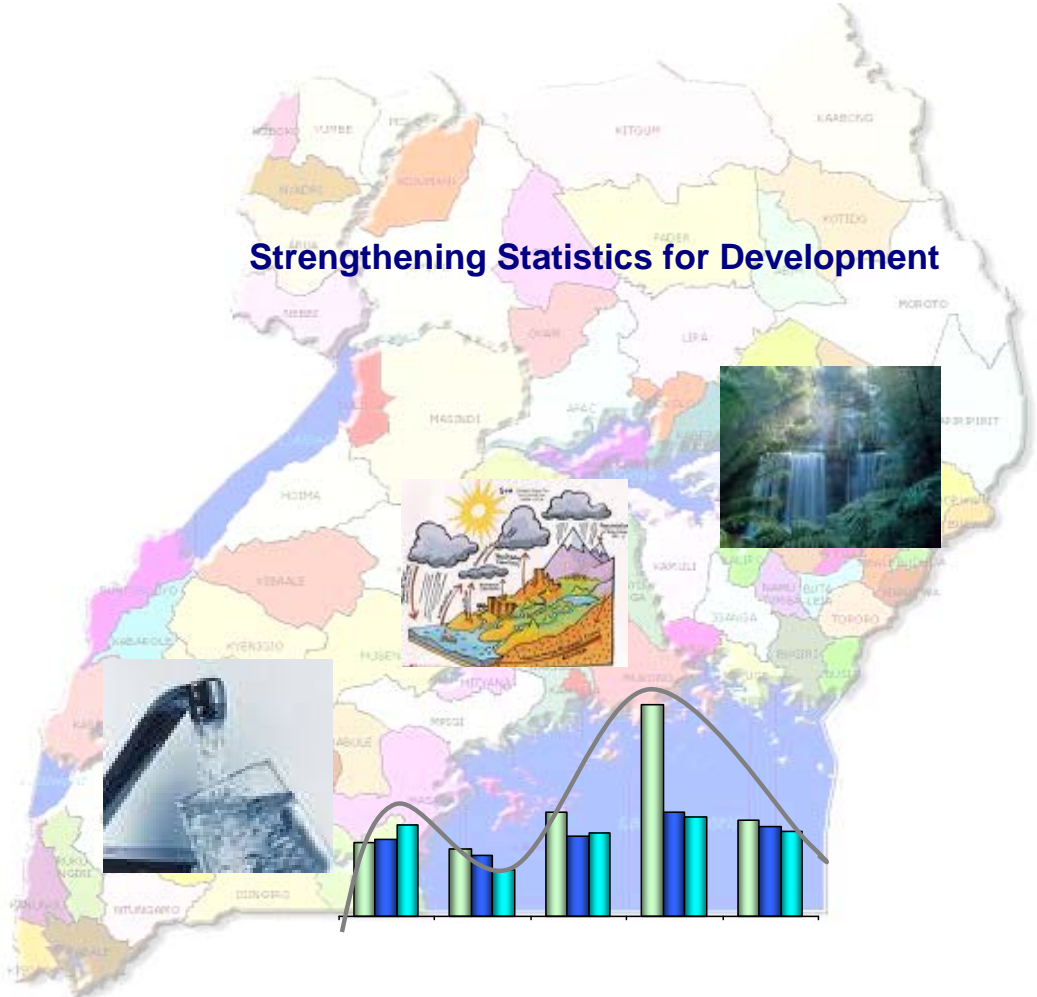




THE REPUBLIC OF UGANDA

## Strengthening Statistics for Development



**MINISTRY OF WATER AND ENVIRONMENT  
SECTOR STRATEGIC PLAN FOR STATISTICS (MWE-SSPS)  
2007/2008-2011/12**

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SECTOR STRATEGIC PLAN FOR STATISTICS (MWE-SSPS)  
2007/2008-2011/12**

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**April 2008**

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## ACRONYMS

<b>DEA</b>	Directorate of Environment Affairs
<b>DESS</b>	Department of Environment Support Services
<b>DoM</b>	Department of Meteorology
<b>DWD</b>	Directorate of Water Development
<b>DWRM</b>	Directorate of Water Resources Management
<b>ENR-SWG</b>	Environment and Natural Resources Sector Working Group
<b>F&amp;A</b>	Finance and Administration
<b>FDS</b>	Fiscal Decentralization Strategy
<b>FPOS</b>	UN Fundamental Principles of Official Statistics
<b>FSSD</b>	Forest Sector Support Department
<b>IT</b>	Information Technology
<b>LGs</b>	Local Governments – Districts, Municipal/Town Councils & S/counties
<b>LoGICS</b>	Local Governments Information and Communication System
<b>M&amp;E</b>	Monitoring and Evaluation
<b>MDA</b>	Ministries, Departments and Agencies
<b>MDGs</b>	Millennium Development Goals
<b>MIS</b>	Management Information System
<b>MWE</b>	Ministry of Water and Environment
<b>NEMA</b>	National Environment Management Authority
<b>NEPAD</b>	New Partnership for Africa Development
<b>NFA</b>	National Forest Authority
<b>NGO</b>	Non-Governmental Organization
<b>NGWDB</b>	National Ground Water Database
<b>NIMES</b>	National Integrated Monitoring and Evaluation System
<b>NWSC</b>	National Water and Sewerage Corporation
<b>PMC</b>	Policy and Management Committee – for the water sector
<b>PNSD</b>	Plan for National Statistics Development
<b>PPD</b>	Policy and Planning Department (The home for the Statistics Section)
<b>RWSD</b>	Rural Water Supply Department
<b>SSPS</b>	Sector Strategic Plan for Statistics
<b>SWOT</b>	Strengths, Weaknesses, Opportunities and Threats
<b>UBOS</b>	Uganda Bureau of Statistics
<b>UWASNET</b>	Uganda water and Sanitation Network – umbrella organization for NGOs in the Water and Sanitation sector
<b>UWSD</b>	Urban Water Supply Department
<b>WAN/LAN</b>	Wide Area Network/Local Area Network
<b>W&amp;E</b>	Water and environment
<b>WFP</b>	Water for Production – water for agricultural production and industrial purposes

<b>WMD</b>	Wetlands Management Department
<b>WQDB</b>	Water Quality Database
<b>WSLD</b>	Water Sector Liaison Division
<b>WSSD</b>	World Summit for Sustainable Development
<b>WSSWG</b>	Water and Sanitation Sector Working Group

## FOREWORD

Comprehensive and quality statistical data is a prerequisite for better (i) definition and measurement of statistical outcomes, (ii) identification of development issues, (iii) policy design and debate and (iv) planning, implementation, monitoring and measurement of the impact development interventions in the sector. The Ministry of Water and Environment treasures and strives to obtain quality statistics. However, like any other line Ministries, Departments and Agencies (MDAs), the challenge of putting in place and sustaining a systematic framework for collecting reliable and timely data, transforming the data into information and sharing across the various stakeholders to serve the above mentioned purposes.

With technical assistance from the Uganda Bureau of Statistics (UBOS), under its “National Plan for Statistical Development (PNSD)” initiative, the Ministry of Water and Environment (MWE), in a highly consultative manner, assessed issues constraining the current sector statistics production line, and defined the strategies and structures for strengthening and delivering the statistics function in the Sector Strategic Plan for Statistics (SSPS).

I personally find the analyses and proposed strategies very informative, practical and timely. The SSPS highlights the vision, mission and objectives of the sector statistics Unit, and provides the budget needed to coordinate and deliver the sector statistics function, and aims to improve the quality, quantity, availability and use of statistics in the sector. I, therefore, appeal to all sector stakeholders to read, internalise and join hands in consolidating and operationalising the strategies.

I thank the Ministry Statistics Committee for putting this Plan together and the Uganda Bureau of Statistics for providing the necessary technical support towards the development of this SSPS.

Remember, “If you cannot measure it, you cannot manage it”



Eng. S. Bomukama.

**For: Permanent Secretary**

## EXECUTIVE SUMMARY

The mission of Ministry of Water and Environment is to “Promote and ensure the sustainable utilization, development, effective management and safe guard of water and environment resources for social welfare and economic development”. The Ministry’s mandate involves policy making, standards setting, national planning, regulation, coordination, inspection, monitoring and back up technical support in relation to water and environment including, weather and climate. In order for the Ministry to fulfill its mission and mandate, comprehensive and quality statistical data is required to, inter alia, (i) define and measure development outcomes, (ii) identify development issues, (iii) inform policy design and debate and (iv) facilitate planning, implementation, monitoring and measuring the impact of development interventions in the sector.

The Ministry values and therefore strives to obtain good quality statistics. However, like in many other Ministries, Departments and Agencies (MDAs), the challenge is to establish and maintain a systematic framework for collecting data, transforming the data into information and sharing the results with the various stakeholders for sector development. The data produced the Ministry’s Statistics Unit, as well as technical departments and autonomous agencies in the sector, are of contestable quality. Many of the existing datasets are inconsistent, incomplete, irregular and outdated. This quality attribute, coupled with inadequate skill and capacity to package and disseminate the data seriously undermine its usage. The Ministry’s statistics function is executed by a small and inadequately equipped unit. The Unit is located in the Policy and Planning Division of the Ministry. The data problem is most pronounced in the environment sector.

The purpose of the Plan for National Statistical Development (PNSD) as a whole and the Sector Strategic Plan for Statistics (SSPS) in particular, is to increase the availability and use of sector statistics. In this regard, the vision of the Statistics Unit, is to become the “Reference Centre for Quality Sector Statistics”, while the mission is “to produce and promote the use of sector statistics” for efficient and effective management of the Water and Environment Sector. The Statistics Unit will take lead in the identification of relevant statistics and design strategies for production and provision of accurate, complete, consistent, and timely datasets, in liaison with sector stakeholders.

In order to successfully implement the SSPS, setting up mechanisms for coordinating data production and management is important. Such mechanisms will guarantee the production of accurate and reliable statistics at various levels. It is also fundamental to motivate and build capacity of the human resource engaged in data compilation, processing and analysis as well as secure and deploy supportive financial resources to boost the planned activities.

## Budget

The plan has been costed at 1.22 billion Uganda shillings equivalent to US\$612,825 at the ruling market rate over the five year period. The major source of funding will initially be from development partners and subsequently by the Government of Uganda

### MWE SSPS Summary Budget (Uganda Shillings “000”)

Strategic Area	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Coordination and Management	88,450	145,050	53,550	146,550	49,050	482,650
Human Resources Development and Management	56,000	69,000	68,500	41,500	58,000	293,000
Statistical Development Programmes	66,000	96,000	96,000	96,000	96,000	450,000
<b>Total(Ug Shs)</b>	<b>210,450</b>	<b>310,050</b>	<b>218,050</b>	<b>284,050</b>	<b>203,050</b>	<b>1,225,650</b>
<b>US\$ “000”</b>	<b>105.225</b>	<b>155.025</b>	<b>109.025</b>	<b>142.025</b>	<b>101.525</b>	<b>612.825</b>

US\$ = 2000 Uganda Shilling



# 1 BACKGROUND

## 1.1 Mandate of the Ministry

The Ministry of Water and Environment (MWE) exists to *“To promote and ensure the rational and sustainable utilisation, development and effective management of water and environment resources for socio-economic development of the country”*. The Ministry’s mandate involves policy making, standard setting, national planning, regulation, coordination, inspection, monitoring and technical support in relation to water and environment. There are two distinct sub-sectors namely; Water & Sanitation and Environment through which the overall sector mission and mandate is fulfilled.

### 1.1.1 Water and Sanitation sub-sector objectives

The policy objectives of the Government of Uganda in the water sub-sector are to:

- a) “manage and develop the water resources of Uganda in an integrated and sustainable manner, so as to secure and provide water of adequate quantity and quality for all social and economic needs of the present and future generations with the full participation of all stakeholders” (MWLE, 1999).
- b) “provide sustainable safe water within easy reach and hygienic sanitation facilities, based on management responsibility and ownership by the users, to 77 percent of the population in rural areas and 100 percent of the urban population by the year 2015, with a minimum of 80 percent effective use and functionality of facilities” (MWLE, 2004). This is more ambitious than the Millennium Development Goal (MDG) which aims to halve the percentage of people without access to safe water by 2015 in Uganda.
- c) “Promote development of water supply for agricultural production in order to modernize agriculture and mitigate effects of climatic variations on rain fed agriculture” (MWLE, 1999).

A Sector Wide Approach to Planning (SWAP)<sup>1</sup> for the Water and Sanitation Sector was adopted in September 2002. In the same line, Government institutionalized the Water Policy Committee (WPC) and the Water and Sanitation Sector Working Group (WSSWG), for overall policy and technical guidance to the sector, respectively.

### 1.1.2 Environment sub-sector objectives

The policy objectives of the Government of Uganda in the environment sub-sector are to:

- a) Promote sound and sustainable management of the environment for optimal social and economic benefits for the present and future generation,
- b) Develop policies, legislations and standards for management of the environment and natural resources,
- c) Ensure adherence to set standards, rules and legislations in management of the environment in general, including forestry and wetlands resources as well as meteorological services.
- d) Promote coordination and collaboration among various actors in environment management,
- e) Mobilize resources for effective management of environment resources,

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<sup>1</sup> SWAP is a mechanism whereby Government and sector development partners support a single policy and expenditure programme (common approach) under Government leadership.

- f) Improve the ability of forests and trees to provide increased economic, social and environmental benefits for all people especially the poor and vulnerable, now and in future generations.

## **1.2 Significance of sectoral statistics**

The Ministry values and therefore strives to obtain quality statistics in order to better; (i) define and measure development outcomes, (ii) identify development issues, (iii) inform policy design and debate and (iv) facilitate planning, implementation, monitoring and measuring the impact of development interventions in the sector. This commitment is manifested in the various initiatives by the Ministry such as the; (i) Village Infrastructure inventory of 1991, (ii) the National Biomass Study of 1992, (iii) annual report on the State of the Environment, (iv) geo-mapping and production of a RWSS-Atlas in 2001, (v) design and review of the WSS-MIS in 2003/04 (vi) formulation and consolidation of the various sub-sector investment plans in both water and environment over the period 1999 to 2008 and (vii) implementation of the Joint Sector Review (JSR) on an annual basis.

Implementation of the above and other initiatives has contributed enormously to the quantity and quality of data produced as well as strengthened the mechanisms for validating and disseminating data. However, there are still several critical data gaps and operational challenges in the current data production mechanism and use of sector statistics.

This Strategic Plan for Sector Statistics (SSPS) articulates the current data production issues in the sector and proposes consistent and practical strategies to address the issues. It provides strategies for attaining efficiency and effectiveness in the production and use of sector statistics. The SSPS provides a thorough stakeholder analysis and defines mechanisms for their collaboration and coordination.

## **1.3 Process of Developing the SSPS**

This Strategic Plan for Sector Statistics (SSPS) was developed as an input into the Plan for National Statistical Development (PNSD) with technical support from Uganda Bureau of Statistics (UBOS). The PNSD provides a framework for strengthening statistical capacity across the entire National Statistical System (NSS) for results-based management.

The development process of this SSPS was spearheaded by the MoWE Statistics Unit located within the Policy and Planning Division. The SSPS is a product of a series of consultative/participatory meetings. Specifically, development of this plan underwent the following processes and steps:

- a) UBOS organized a series of sensitization workshops so as to introduce the PNSD and SSPS concepts to various stakeholders across the NSS through a number of workshops.
- b) Constitution of the Sector Statistics Committee (SSC). This special multi-disciplinary committee<sup>2</sup> was constituted taking into account the need for equitable and effective sub-sector representation.

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<sup>2</sup> The Committee is expected to (i) propel the PNSD concept within the Ministry, (ii) draft and oversee the operationalization of the SSPS, (iii) Co-opt other members and convene regular consultative meetings to fine-tune the SSPS.

- c) The Ministry staff and key sector stakeholders were sensitized about the PNSD and SSPS processes by the SSC and officials from UBOS.
- d) A series of meetings were held with top management for guidance and increased ownership of the SSPS. The SSC shared the proposed roadmap<sup>3</sup> and the draft SSPS with the Ministry's Top Management and key stakeholders.

#### **1.4 Structure of the plan**

The Plan is divided into six sections. The first section gives the background information, the second provides a situational analysis of the sector, the third and the fourth sections address strategic issues for statistics including the vision, mission and the strategies for improving statistical production. Section five presents the implementation plan while the last section contains appendices.

## 2 SITUATIONAL ANALYSIS

This chapter describes the Ministry's status of production and use of sector statistics. It analyses the role of the various sector data producers and users, the scope of data production and use, and the quality of the data produced. It provides the Strengths, Weaknesses, Opportunities and Threats (SWOTs) in data production and management. A brief analysis of the institutional arrangement of the MWE is provided in order to set a platform for better appreciation and assessment of the data needs of the Ministry, and the role of key stakeholders in the production and use of sector statistics.

### 2.1 Structure and Institutional Arrangements in the Ministry

The structure of the Ministry is presented in Annex G. The executive/political arm of the Ministry comprises three ministers, the Cabinet Minister, the State Minister for Water and State Minister for Environment. The technical arm is headed by the Permanent Secretary. The technical arm operates under two key distinct sub-sector Working Groups that formulate sector policies and strategies, approve sector plans and projects, prepare Medium Term Expenditure Framework (MTEF) papers and review sector performance.

The two sub-sector working groups are;

- (i) The Water and Sanitation Working Group, comprising representatives from:
  - a) Directorate of Water Development (DWD) and Directorate of Water Resources Management (DWRM).
  - b) National Water and Sewerage Corporation (NWSC).
  - c) Selected Line Ministries - MFPED, MOH, MGLSD, MOLG, MAAIF).
  - d) Development partners, incl. NGOs represented/coordinated by UWASNET.
  
- (ii) The Environment Sector Working Group, with members from:
  - (a) The Directorate of Environment Affairs (DEA) – made up of 4 departments, namely; Department of Environment Support Services (DESS), Forest Support Services Dept (FSSD), Wetlands Management Dept (WMD) and Department of Meteorology (DOM).
  - (b) The service department of Finance & Administration, incl. the Policy and Planning Division (PPD) where the Statistics function is managed.
  - (c) The two semi-autonomous bodies, namely; (i) National Environment Management Authority (NEMA) and (ii) National Forest Authority (NFA).
  - (d) Selected Line Ministries - MFPED, MAAIF, MTTI/UWA.
  - (e) NGOs and other development partners.

### **2.1.1 Institutional and Management Arrangements in the Water and Sanitation Sub-sector**

The water and sanitation sub sector comprises:

- (i) The Directorate of Water Development (DWD),
- (ii) The Directorate of Water Resources and,
- (iii) (National Water and Sewerage Corporation (NWSC).

The Water and Sanitation component is structured into four main sub sectors:

- (i) The Urban Water and Sewerage sub-sector which is responsible for the planning and development of water and sewerage activities in the urban areas. It supports and regulates the local government/town councils in the management of the Urban Water and Sewerage systems.
- (ii) The Rural Water and Sanitation sub-sector which is responsible for providing support to local governments in the planning and development of water supply and sanitation activities in the rural communities and monitoring the implementation of these programs.
- (iii) Water for Production sub-sector which is responsible for planning and development of water facilities (dams and valley tanks) for agricultural production.
- (iv) The Water Resources Management sub-sector which is responsible for ensuring sustainable and integrated management of the water resources in the country including trans-boundary and international waters. This sub-sector monitors the quality and quantity of the water sources and assesses, approves and monitors compliance of permits for water abstraction and discharge to water bodies.

The Directorates of Water Development (Luzira) and WRM (Entebbe) are the lead technical government agencies for overall management, coordination and supervision of the water sector. The mandate, objectives and functions of DWD, DWRM and NWSC are highlighted in subsequent sections.

#### **2.1.1.1 Directorate of Water Development (DWD/DWRM),**

The Directorate comprises three technical departments and one specialized Division. The various departments/divisions and their roles/functions are:

- a) Rural Water and Sanitation Department - whose mandate is provision of sustainable safe water supply and sanitation facilities, including hygiene in rural areas and provision and effective use of water for production (agricultural production - crop irrigation, livestock and aquaculture) and rural industries.
- b) Urban Water and Sewerage Department - ensures viable urban water supply and sewerage/sanitation systems for domestic, industrial and commercial uses.
- c) Water Resources Management Department - maintains integrated and sustainable water resources management.

- d) Water Sector Liaison Division - is the specialized unit for “effective planning, coordination and management of the water and sanitation sector”.

#### **2.1.1.2 National Water and Sewerage (NWSC)**

NWSC is a semi-autonomous government agency for provision of safe water supply and sewerage/sanitation systems for domestic, industrial and commercial uses in 21 (large) urban water centers namely; Kampala, Jinja/Njeru, Entebbe, Tororo, Mbale, Masaka, Mbarara, Gulu, Lira, Fort Portal, Kasese, Kabale, Arua, Bushenyi/Ishaka, Soroti, Mukono, Malaba, Lugazi, Mubende, Hoima, and Masindi. The three towns of Mukono, Lugazi and Malaba are managed under Kampala, Jinja and Tororo water service areas.

#### **2.1.2 Institutional and Management Arrangements in the Environment Sub-sector**

This component is comprised of one Directorate (the Directorate of Environment Affairs) with 4 mainstream technical departments and 2 autonomous bodies.

##### **a) Mainstream Technical Departments in the Directorate of Environment Affairs (DEA)**

- (i) **Department of Environment Support Services (DESS)** – The Department performs core government functions of policy formulation, setting standards and regulations for efficient management of the environment. DEA liaises with national, regional and international organizations in addition to monitoring divested institutions in the forest sub-sector.
- (ii) **Wetland Management Department (WMD)** – The Department performs core government functions of policy formulation, setting standards and regulations for efficient management of the wetlands sub-sector.
- (iii) **Forest Sector Support Services Department (FSSD)** – The Department provides support services to the forest sub-sector
- (iv) **Department of Meteorology (DOM)** - The mandate of DOM is to monitor weather and climate, analyse the data and provide advisories for safe and economic air navigation, agricultural planning, water resource management, early warning and natural disaster management.

##### **b) Autonomous Bodies**

The two key government agencies in the environment sub-sector are:

- (i) National Environment Management Authority (NEMA).
- (ii) National Forest Authority (NFA).

#### **2.1.3 Management and Support Services**

In addition to the technical components, there are two departments that provide management and support services to the political and technical arms of the Ministry. These are:

- a) **Finance and Administration (F&A) department**, whose range of services covers financial management, accounting, administration and personnel, supplies and facilities management. It provides technical backup support to the Accounting Officer in coordinating cross-cutting activities. The department is in charge of the following specialized units:
- (i) The Procurement and Disposal Unit (PDU) responsible for coordinating and managing all procurement and disposal activities in the Ministry; and to monitor all contracts awarded to ensure that they perform according to the set out terms and conditions in the contracts.
  - (ii) Accounts Section – responsible for processing and overseeing finances.
- b) **Policy and Planning department (PPD)**, whose functions include; planning, monitoring and evaluation, quality assurance, and human resources development. The department is in charge of the following specialized Units:
- (i) Planning, Monitoring and Evaluation (PME) Section, for collection, processing, storage and dissemination of information. The PME section also serves as the Ministry's Information and Resource centre, and is the home for the statistics function.
  - (ii) The Policy Analysis Unit (PAU), responsible for sectoral and inter-sectoral policy analysis, coordination and harmonization. Since the introduction of the decentralization and privatization policy by Government, policy formulation and review is now the most core function of line ministries.
  - (iii) Quality Assurance Section, for checking, verifying and ensuring compliance with set standards.
  - (iv) Human Resources Development, for enhancing the quality and performance of the staff.

## 2.2 Stakeholders Analysis

### 2.2.1 Water and Sanitation sector

#### Key Sector Data producers

At national level, the bulk of water and sanitation data is generated by the technical departments of the Ministry. Other institutions that supplement the technical departments include:

- a) District water offices – These generate and report information and figures on numbers and locations of existing point water sources by technology type and functionality status. In Urban areas, the key data sources are the Private operators within each town.
- b) UBOS – is the principal source for population data, critical in the estimation of access to sector services. UBOS also captures and publishes sector data in their NSDS, UDHS and Annual Statistical Abstract.

#### Key Sector Data Users

- a) Districts – These are the planners and implementers of sector programmes and activities. Districts need information and figures on number and location of existing point water sources

- by technology type and functionality status, etc, to objectively provide the necessary interventions. The data is also needed to feed into the FDS and LOGICS reporting systems.
- b) MFPED – this requires regular/periodic sector performance reports outlining the outputs arising from the funds released for sector development. The reports are mandatory and are pre-requisite for subsequent budget releases to the sector.
  - c) The Parliament of Uganda – Every end of FY, the Parliament demands that a Ministerial Policy Statement (MPS) is compiled and submitted by each line Ministry. The MPS is the basis for approval by Parliament, the budget proposals submitted by the line Ministries.
  - d) Office of the Prime Minister – Is the head of government business and requires quarterly sector progress reports to assess the performance of the sector and to feed into the NIMES.
  - e) President's Office – The Presidents office demands for regular sector briefs used to guide Presidential pronouncements and monitor implementation of political pledges by HE the President (NRM Manifesto pledges).
  - f) UBOS – Requires sector data inputs to publish their Annual Statistical Abstract and to feed/maintain the Uganda info.
  - g) Sector Donors/NGOs – Need performance reports to evaluate the impact of their financial contribution to the sector and determine subsequent support and operational modalities. The key sector development partners comprise multi-lateral and bi-lateral agencies and governments such as; KfW, Danida, DfID, EU, UNICEF, Austria, Sida, as well as NGOs like UWASNET, etc.
  - h) Other Line Ministries – especially, the MoES and MoH which have established a Memorandum of Understanding (MOU) with the MWE on implementation of sanitation and hygiene education in schools and health centers respectively. MAAIF, MEMD and MTTI are key stakeholders in the areas of WFP, river flows and meteorological data respectively.
  - i) Training Institutions – A number of training institutions (Universities & colleges) including students seek sector data for academic purposes.
  - j) Independent Researchers/Consultants – Researchers request for sector statistics to accomplish their assignments.
  - k) Internal use within MWE – by the Policy and Planning Department (PPD) of the Ministry and individual Project managers. Data is used at various levels for policy review and formulation of new projects.
  - l) The press and wider public.

### 2.2.2 Environment sector

The key data producers and users of environment statistics are the following:

#### (i) Data producers

- Department of Meteorology – for weather and climate statistics. The mandate of the Department of Meteorology (DoM) involves development and archiving of a national quality controlled weather and climate data bank that is regularly updated. The **Data Processing and Applied Meteorology division** in the DoM is charged with extracting and processing the available data into weather summaries, basic



climatology statistics for bulletins and reports. Climate information is generated from these reports for the end users including decision makers and planners in different sectors of production.

- The DESS, FSSD, WMD, NEMA and NFA – for statistics on forests, wetlands management and other environment statistics such as environment degradation and pollution levels.
- UBOS - in liaison with URA, for statistics on volumes and value of timber exports, and imports.

**(ii) Data users**

- Weather and climate variables - Weather and climate affect almost all sectors of the economy. Among the key end user sectors today are the following - Water resources and Environment management, Agriculture, Disaster preparedness and management, Energy (esp. UMEME and ESCOM), Health, Transport (esp. Civil Aviation Authority) and Communications, Building and Construction industry, Research and Education (esp. Universities).
- URA, NCST and Uganda Exports Board, for statistics on volumes and values of timber exports and imports, pollutants and other dangerous chemicals.

## **2.3 Status of data production**

### **2.3.1 Water and Sanitation Statistics**

#### **Data Production Mechanisms**

At the national level, the responsibility of production of primary water sector statistics is vested in the three sub-sectors/technical department, namely;

- Rural Water, including Water for Production.
- Urban Water (at DWD & NWSC operational sites).
- Water Resources management (NGWDB, Surface water DB/Hydata, Water quality DB, Water Permits DB).

The sub-sectors strive to execute their responsibility in close liaison and with support from:

- i) Central DWD MIS Unit – which supports the sub-sectors in the following area:
  - Review, develop and maintenance of sub-sector operational DBs and DWD's Data Warehouse.
  - Extract data and information of “routine and general nature” required by DWD senior management and for compilation of various mandatory documents such as the Annual Sector Performance Report, Ministerial Policy Statement and several other political briefs.
- ii) Local Governments/Districts – particularly the:
  - District Water Office, mainly for collection of rural water sub-sector data.
  - Private operators for piped water supplies in urban areas.
- iii) The Statistics Section under the Policy and Planning Department. The sub-sectors expect the statistics section to augment their data collation efforts by:

- Providing input during identification and collection of relevant sector data.
- Coordinating the different data collection initiatives to achieve effectiveness and efficiency in the production and use of sector statistics.
- Liaising with UBOS and MFEP to set and define standards, guidelines and frameworks for data collection, and supervision of the entire sector statistics system.
- Checking, validating and ensuring consistence of the data.
- Carrying out further analysis and interpretation of sector statistics.
- Packaging and disseminating the data within and outside the Ministry.

Table 2 below summaries the existing datasets identified under the Water and Sanitation sub-sector in the Ministry.

**Table 2: Existing data sets in the WSS Sub-Sector**

Dataset Type	Remarks
i) Population figures by rural urban classification	<ul style="list-style-type: none"> <li>• Data Sources – UBOS &amp; Internal projects</li> <li>• Availability – time series since 1991</li> <li>• Issues – incomplete, internal projections often inconsistent with UBOS forecasts</li> </ul>
ii) Financial data (budget, released funds and expenditures figures) by: <ul style="list-style-type: none"> <li>• sub-sector and distinguishing between:               <ul style="list-style-type: none"> <li>- development project</li> <li>- recurrent programs</li> </ul> </li> <li>• source of funds (GoU, Donor, Loans, etc)</li> </ul>	<ul style="list-style-type: none"> <li>• Data Source – MFPEP Estimates of Revenue and Expenditure). Sector BFPs/MTEFPs, Monthly Releases</li> <li>• Issues – Donor component figures are incomplete. Actual expenditure figures are not readily available and are difficult to disaggregate between overhead and investment costs which is critical in the assessment of unit costs</li> </ul>
iii) Ten Sector Golden Indicators, under the following themes <ul style="list-style-type: none"> <li>• Access, equity, per capita investment costs</li> <li>• Sanitation &amp; hygiene</li> <li>• Water for production</li> <li>• Water resources management</li> </ul>	<ul style="list-style-type: none"> <li>• Data Source – Annual Sector Performance Reports (2003, 2004, 2005 &amp; 2006)</li> <li>• Issues – Concept definitions and estimation methods are contestable among stakeholders (e.g. JSR 2006 Undertaking 4).</li> </ul>
iv) Sub-sector specific indicators <ul style="list-style-type: none"> <li>• Rural Water - focusing on the number of point water sources by technology type and functionality status</li> <li>• Urban water – covering production capacities, distribution outlets by category; revenue aspects</li> </ul>	<ul style="list-style-type: none"> <li>• Data Source – Mainly district reports</li> <li>• Issues –               <ul style="list-style-type: none"> <li>- The RWSDB is in place but not updated</li> <li>- The UWSD at DWD is not yet in place</li> <li>- WRM DBs are characterized by incomplete datasets and are incompatible with the rest of the sub-sectors.</li> </ul> </li> </ul>

<ul style="list-style-type: none"> <li>Water Resources Management - emphasizing resource availability and distribution, in terms of quantity and quality.</li> </ul>	
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### 2.3.2 Environment Statistics

#### Data Production Mechanisms

The sub-sector statistics is mainly generated under the following institutions:

- Department of Environment affairs, including NEMA – for variables required to support policy formulation on environment management.
- Meteorology department – for climate and weather indicators.

Table 3 below summaries the existing datasets identified under the environment sub-sector in the Ministry.

**Table 3: Existing data sets in the Environment Sub-Sector**

Dataset Type		Remarks
i)	Under the Dept of Environment Affairs <ul style="list-style-type: none"> <li>Area under dry land, open water and swamps</li> <li>Area under forest cover, by forest type (natural, plantations, etc)</li> </ul>	a) Data Source – National Biomass Study (NBS, 1991) and District Environment Status Reports b) Availability – time series since 1991 c) Issues <ul style="list-style-type: none"> <li>Outdated</li> <li>Incomplete datasets</li> </ul>
ii)	Under Meteorology <ul style="list-style-type: none"> <li>Precipitation (by recording daily amounts in mm and intensity). The commonest measure being the average monthly and annual rainfall</li> <li>Air temperatures (Mean, Maximum; Minimum)</li> <li>Relative humidity and Atmospheric Pressure</li> <li>Solar Radiation and sunshine hours</li> <li>Wind (in terms of direction and speed)</li> </ul>	a) Data Source – Daily field reports b) Issues – <ul style="list-style-type: none"> <li>Poor and scantily distributed station network system across the country. Currently, rainfall data from 500 rainfall stations has been digitized and only 13 stations have had their temperature data digitized.</li> <li>The rest of the parameters (Relative humidity, wind, pressure, solar radiation and sunshine) are still in manuscript form. This data is at risk of being lost as the manuscripts are deteriorating fast.</li> </ul>

In summary, the data available is scanty and outdated. Besides NEMA, the other departments are inadequately equipped with computers and other necessary statistical infrastructure for effective data production and management. The Department of Meteorology uses CLICOM and CLIMSOFT packages for database management and MS EXCEL for data processing..

### **2.3.3 Support Service Departments**

The statistics generated by the two support services departments are as follows:

Under the Finance and Administration Dept

- Staff/Employee records
- Stores inventory – vehicles, computers office furniture, etc
- Financial data as outlined above (under water & sanitation statistics)

Under Policy and Planning Department

- Financial data as outlined above (under water & sanitation statistics)
- Population projections
- Inventory of M&E issues for follow-up

## **2.4 Quality of data**

The quality of the data produced is measured in terms of the key attributes of relevance, accuracy, completeness, consistency, reliability, and timelines of the existing sector datasets:

### **2.4.1 Relevance for stakeholders**

The datasets produced by the Ministry Statistics Unit are relevant to sector stakeholders, and this is attributed to the fact that the data production in the Statistics Unit is demand-driven. The data produced by the Unit is:

- Based on expressed needs by the users, in form of both formal and informal requests,
- Guided by the physical presence of the users during production.

Under the circumstances, the score for this attribute is 5.

### **2.4.2 Accuracy**

Data accuracy is still low, and this attribute scores 2. This is because the data is collected from secondary (administrative sources), with minimum supervision by professional data managers. In the water sector, for instance, inaccuracy stems from use of overloaded, fatigued and ill-motivated extension workers at sub-county level. These officers lack appropriate training and guidance on data collection methodologies, data analysis and other statistical standards, including coordination with other data producers within the sector.

On the side of environment statistics, inaccuracy revolves around inadequate availability of data sets to make meaningful projections. Most data on environment is produced over long time periods, sometimes up to 10 years. For example, data on biomass cover, which was last established in 1992 (Biomass Study) and has not been updated.

### **2.4.3 Completeness**

In terms of completeness, the sector datasets score 2. Most of the available data series do not cover all administrative areas and are not available for all the required time periods. Specifically, the datasets exhibit gaps for new districts and parts of the country experiencing civil strife (wars). Another case in point is in the area of financial data, especially where NGOs are concerned. Incomplete datasets affect the design, implementation and evaluation of development programmes. Completeness of sector statistics needs to be ensured by lobbying and designing comprehensive data production programmes so to fill the data gaps.

### **2.4.4 Consistency**

Sector datasets are not consistency as cited by a number of users. There is conflicting data from various sources such as UBOS (UHDS, NSDS), UNICEF, World Bank, IMF and other International bodies. For that reason, the attribute scores only 2. There is need for concerted efforts to standardize and improve the data collection and analysis methods, including crosschecking the entries and outputs before dissemination to minimize inconsistency.

### **2.4.5 Timeliness**

Timeliness is the worst on the scoreboard. The data users identified late and slow response as one of the main weaknesses of the sector statistics production line. This is attributed to:

- Data required is not readily available.
- Implementation and release of survey results is slow.

The Statistics Unit is prioritizing improved timeliness because data not produced in time is irrelevant and unusable.

## **2.5 Quality assessment framework**

In addition to the measurement in terms of data quality attributes, the quality of statistical outputs/products was evaluated basing on five dimensions as described below:

### **Integrity:**

This dimension focuses on adherence to the principle of objectivity in the collection, compilation, and dissemination of statistics. It encompasses institutional arrangements that ensure professionalism in statistical policies and practices, transparency, and ethical standards.

### **Methodological soundness:**

This dimension assesses whether the methodology for the production of statistics is sound and follows internationally accepted standards and guidelines. This dimension is dataset-specific, reflecting different methodologies for different datasets.

### **Accuracy and reliability:**

This dimension assesses whether the statistical outputs sufficiently portray the reality being measured. It is based on the notion that source data provide an adequate basis to compile statistics; that statistical techniques are sound; and that source data, intermediate data, and statistical outputs are regularly assess

**Serviceability:**

This dimension relates to the need for statistics to cover relevant information on the subject field; that they are disseminated in a timely fashion, with an appropriate periodicity; are consistent internally and with other major datasets; and follow a regular revision policy.

**Accessibility:**

This dimension relates to the need to ensure that data and metadata are presented in a clear and understandable manner, and readily. The metadata should be up-to-date and pertinent; and prompt and knowledgeable support service should be available.

An assessment of the quality of the data produced is outlined below. The scores are rated as: **(Strictly observed – 3 Observed – 2 Not observed – 1)**

QUALITY MEASURE	SCORE	WHY?
<b>Water and Sanitation sector</b>		
<b>1. Integrity</b>		
1.1 Independence of statistical operations	2	Sector statistics are collated and interpreted independently by various sector players
1.2 Culture of professional and ethical standards	1	There is very limited professionalism esp. in terms of sampling
<b>2.Methodological soundness</b>		
2.1 International/regional standards implemented	2	International/regional definitions in place, but not fully implemented, e.g. Access to safe water incl 1.5km walking distance but this is not fully taken into account.
<b>3. Accuracy and reliability</b>	2	The stakeholders have confidence in the outputs. Reliability is low but steadily improving.
3.1 Adequacy of data source	2	Current data sources are good (water) and lacking elsewhere.
3.2 User response monitoring	2	There are several avenues for M&E, incl. SWGs, Annual Reviews, etc.
3.3 Validation of administrative data	2	Mechanisms exist as outlined in 3.2 above.
3.4 Validation of intermediate and final outputs	2	Some Commissioners are not quite keen yet.
<b>4. Serviceability</b>		
4.1 User consultation	2	The culture of user consultation is slowly and steadily picking-up within the sector.
4.2 Timeliness of statistical outputs	2	Sub-sector statistics are always available in time for compilation of various mandatory reports.
4.3 Periodicity of statistical outputs	2	Statistical outputs are always available on a quarterly and annual basis for mandatory reports.

<b>5. Accessibility</b>	3	The sub-sector has embraced the principle of free access to information in an impartial manner.
5.1 Clarity of dissemination	2	There are occasions when clarifications are sought, mainly on definitions and calculation methods.
5.2 Updated metadata	1	There is nothing close to a metadata for the sub-sector.

QUALITY MEASURE	SCORE	WHY?
<b>Environment sector</b>		
<b>1. Integrity</b>		
1.3 Independence of statistical operations	2	ENR is a very technical and expensive area. The operations are normally executed by (foreign) independent private firms.
1.4 Culture of professional and ethical standards	3	Sector statistics are collated by specialized (professional) institutions and private firms.
<b>2.Methodological soundness</b>		
2.1 International/regional standards implemented	3	International/regional definitions in place and fully implemented (Current ENR standards are in conformity with MO, WHO, AEA, etc, standards.
<b>3. Accuracy and reliability</b>	2	
3.1 Adequacy of data source	1	Current data sources are outdated
3.2 User response monitoring	2	There are several avenues for M&E, incl. SWGs, Annual Reviews, etc.
3.4 Validation of administrative data	1	This has not been done in the recent past.
3.5 Validation of intermediate and final outputs	2	
<b>4. Serviceability</b>	2	
4.1 User consultation	2	The culture of user consultation is slowly but steadily picking-up within the sector, under SWAP
4.4 Timeliness of statistical outputs	1	Most sub-sector statistics are outdated (produced over 10 years ago).
4.5 Periodicity of statistical outputs	1	Most ENR statistical outputs are outdated.
<b>5. Accessibility</b>	3	The sub-sector has embraced the principle of free access to information and this is implemented in an impartial manner.
5.1 Clarity of dissemination	2	There are occasions when clarifications are sought, mainly on definitions and calculation methods.
5.2 Updated metadata	1	There is nothing close to a metadata for the sub-sector.

## 2.6 Challenges in the Sector Statistics Production

- Low profile of the Statistics functions in the Ministry.
- Inadequate commitment and support for statistical activities by management and staff both at the centre and sub-national level.
- Inadequate statistics infrastructure across various departments of the Ministry.
- Limited use of Data.
- Lack of integrated approaches in data management.
- Various Ministry Departments are located in Scattered Sites.
- Staff turn over - in districts and projects under the jurisdiction of technical departments is high.
- Continuous creation and funding of parallel, independent and overriding data structures.

## 2.7 SWOT Analysis

The Water and Environment sector is still characterized by a number of factors highlighted in the SWOT analysis of the MOWE Statistics Plan.

### 2.7.1 Strengths

- a) The current MIS is based on decentralized data generation centres (through technical departments). This arrangement is seen as the most practical under the circumstances of understaffing within the PPD and the fact that the primary data is rather technical and therefore best handled by the respective technical officers. The decentralized arrangement also increases trust and ownership of the data, and is the modality most appreciated by the implementers.
- b) Over time, the water sector has procured and installed substantial IT equipment and software. DWD, in particular, has a fairly well developed WAN & LAN in place which in addition to the other infrastructure provide an enabling environment for the sector to implement the SSPS.
- c) The availability of experienced staff within the technical departments and the PPD is another strong area within the sector statistical system.
  - DWD has an MIS Unit in place. The Unit has been improving over time, as the staff gain exposure to challenges of data production. Already, DWD has developed and commissioned a number of operational databases, including the WSS-GIS DB for production of Rural Water Atlases. Furthermore, as the PNSD concept was being introduced; DWD was focusing on of the revitalization of its MIS.
  - The presence of the Ministry Statistics Committee to coordinate streamlining of statistical activities in the Ministry is a step in the right direction. This multi-disciplinary team has changed the perception on statistics in the Ministry.



### 2.7.2 Weaknesses

- a) **Low Profile of Statistics** - The Statistics function is not appreciated within the Ministry due to a number of factors, including:
- Statistics is a small function under the M&E Division, within the Policy and Planning Department (PPD), yet the PPD is also not very pronounced within the Ministry. In addition, the Statistics section is manned by one officer at the level of Senior Statistician. The other approved post of Statistician has remained vacant for a long time, despite reminders to Ministry of Public Service to fill the post. Even technical departments, such as the Department of Meteorology, data handling is a concealed function, under the Division of Data Processing and Applied Meteorology. In the other departments/divisions for instance forestry and wetlands, law enforcement is more emphasized than the statistics emerging out of the enforcement processes.
  - Staff of Statistics Unit are often assigned and compelled to devote most of their time to other non-core activities at the expense of executing core statistical activities. The Senior Statistician is accommodated under the WSLD/DWD without clear a budget line or adequate resources within the mother department, for delivery of statistical services. Under these circumstances, the Statistics Unit cannot deliver to the expectations and satisfaction of the Ministry and other stakeholders.
  - Inadequate commitment and support for statistical activities by senior sector managers which is reflected through inadequate funding and understaffing in the Statistics Section.
- b) **Inadequate data handling equipment across the various departments of the Ministry** - Apart from DWD, the other data production centers, namely; the Department of Environment Affairs, the Department of Meteorology and the Statistics Section are inadequately equipped and underfunded,
- Vehicles – The three institutions lack vehicles for supervision and provision of on spot guidance to collect and handle statistics outside the office. The Forest Department in Nakawa exists without internet connections, and adequate resources to undertake the necessary data collection.
  - Weather and Climate Network - the station network system used by the Department of Meteorology remains poor and scanty across the country. Currently, only 500 rainfall stations are digitized and only 13 stations have had their temperature data digitized.
  - The other sub-sectors have not received technical support from professional Statisticians..
- c) **Limited use of Data** - While there are a number of potential datasets to be compiled, the existing data produced by the Statistics Unit is not sufficiently utilized. The limited use of the existing data is among reasons explained by the following:
- Inconsistencies within the data, inadequate data desegregation and controversies in concepts definitions and methods of measurement.

- Inadequate data demand from some potential users due to lack information about available data in the Unit.
- Shelving rather than sharing of statistical publications, esp. in cases where these are sent to the institution's library, rather than the actual users. The usual end points are databases – the data is rarely analyzed and transformed into information that can easily be consumed by users.
- Lack of integrated approaches in data management, resulting into unnecessary duplication.

It is important that the different dimensions of data quality, namely; relevance, consistency, completeness, accuracy, timeliness, accessibility and data disaggregation are given the necessary attention.

d) **Various Ministry Departments are located in Scattered Sites** – The various departments that make-up the Ministry of Water and Environment are located in several places as follows:

- DWD, PPD, F&A – on Port Bell Road, Luzira
- DEA & NFA – on Port Bell Road, at Nakawa
- Department of Meteorology on Posta Building, Clement Hill Road
- DWRM – in Entebbe
- NWSC & NEMA – both on Jinja Road, but different sites

The scattered nature of the Ministry complicates supervision and information sharing, since departments like DEA are not connected to the WAN. This scenario is also a recipe for the continued establishment of independent Mini-Statistics Units, under various names such as “M&E, MIS & IT” Unit.

### 2.7.3 Opportunities

- a) The expressed and illustrated interest by UBOS to reform the NSS, under the ongoing PNSD initiative. Under this initiative, UBOS:
- Sensitizes and mobilizes data producers about the need to harmonize concepts and definitions. The profile of statistics is raised through sensitization of top sector managers.
  - Supports the development of SSPS and partly mobilizes resources for their implementation.
- b) The pressures created by protocols and treaties accented to by Government, which demand for the production and availability of sector statistics for monitoring and evaluation of the sector. These include for example,
- PEAP review process (i.e., the Annual PEAP Implementation Review/APIR and the standard 5-year PEAP review).
  - East African Community Treaty – The EAC has established various data flows where data has to be provided on a regular basis.
  - MDGs, and other international obligations, such NEPAD and WSSD.

#### 2.7.4 Threats

- a) **Parallel Structures** - The continuous creation and funding of parallel, independent and overriding data structures such as FDS and LOGICS jeopardizes efficiency in the execution of the statistics function. Currently,
- Several projects within the Ministry opt for establishment of independent units with substantial statistical functions and responsibilities, using various names such as MIS, IT, M&E, Communication, Public relations, etc. While this may be quite useful, the threat lies in their level of independence and incompatibility of the data produced.
  - Sector statistics development has had hick-ups arising from the introduction of non-compatible, yet overriding systems such as LOGICS and FDS by line Ministries (namely MoLG & MFPED).
  - **Inadequate commitment of staff at Sub-national Level** - At district and lower levels, statistics production is affected by limited motivation and devotion of the staff.
  - Some districts under report on the existing facilities and over-state population figures to justify more funding.
  - In some cases, NGOs, projects, etc overstate performance and/or refuse to provide data, esp. financial data, thus limiting the required analysis.
- b) **Staff turn over** - in districts and projects under the jurisdiction of technical departments is high. The inconsistency and/or total loss of trained staff impacts negatively on capacity building initiatives and data production.
- c) Inability to appreciate and approve the need for more Statisticians by the Ministry of Public Service (MOP). Consequently;
- The Ministry structure provides for only two professional Statisticians (one Senior Statistician and one Statistician) without any provisions for higher and lower levels of Principal Statistician or Statistical Assistants respectively..
  - Efforts to get the vacant posts filled by Ministry of Public Service have remained fruitless for over 10 years, and the recent restructuring exercise, remained silent about the importance of uplifting the responsibility and manpower for Statistics to Principal or higher levels, despite strong recommendations from the Ministry.

### 3 STRATEGIC FRAMEWORK FOR THE SSPS

#### 3.1 Vision

“To be a coherent, reliable, efficient, and demand driven sector statistical system that supports management and development initiatives of the Water and Environment sector”.

#### 3.2 Mission

To produce good quality statistics for evidence based decision making, planning and management in the Water and Environment sector.

#### 3.3 Strategic Objectives

Realization of the above vision and mission is a function of the three strategic objectives below:

- SO1:** To develop a coherent, reliable, efficient and demand-driven sectoral statistical system that supports management and development initiatives through effective **"Coordination and Management"**.
- SO2:** To strengthen **Human Resource Development and Management** capacity for collection, analysis, dissemination and utilisation of Water and Environment statistics.
- SO3:** To strengthen **Statistical Development Programmes** through generating and disseminating demand-driven statistics.

#### 3.4 Values and Principles

- Integrity
- Accuracy
- Accessibility
- Timeliness

The function of the statistics Unit/Secretariat therefore, as derived from the above vision and mission, is to:

- (i) Coordinate and guide the key sector data producers. The Statistics Unit/Secretariat is expected to provide guidance and technical back-up support in the following areas:
  - Identification of relevant data variables and design of relevant data capture tools,
  - Overseeing the data collection initiatives, including provision of the necessary skills in questionnaire administration,
  - Processing, presentation and interpretation of sector statistics.
- (ii) Liaise with the technical departments to avail data and reports to stakeholders, especially the key data users identified. The Statistics Unit and the Sector Statistics Committee are expected to:
  - Be knowledgeable about the types of data under the various operational databases,

- Check and ensure consistency, accuracy and timeliness of data produced,
  - Provide feedback from the data consumers to data producers, esp. in as far as the data needs are concerned.
- (iii) Carryout further data analysis and produce and disseminate specific statistical products such as:
- Sector Statistical Abstract – giving facts and figures about the nature and performance of the sector
  - Analytical reports based on in-depth studies about critical sector indicators and policy options

## **4 STRATEGY FOR IMPROVING STATISTICS PRODUCTION**

The following are detailed strategies and specific actions for improving the production, storage and dissemination of Water and Environment statistics and indicators:

### **4.1 SO1: Coordination and Management**

#### **The issue**

There is limited appreciation of the role and importance of statistics, among stakeholders and decision-makers at all various levels. The terms “Statistics”, “Monitoring and Evaluation (M&E)”, “Management Information System (MIS)” and “Information Technology (IT)” are used interchangeably and the relationship between them is unclear. There is need to raise the profile of the statistics function in the Ministry, by supporting the functions and services of the Sector Statistics Committee and Statistics Unit beyond the Policy and Planning Department.

#### **Main strategies**

In order to address the above issues, the following strategies will be pursued

- Coordinating and supervising the production and management of statistics in the Ministry.
- Raising the profile of statistics and the Statistics unit/Secretariat in the Ministry.
- Setting up and ensuring effective operation of W&E sector statistical structures.

#### **Specific Actions**

The above strategies will be achieved through the following specific actions

- Revitalise and strengthen the MWE Statistics Unit,
- Establish and operationalise MWE Sector Statistics Committee,
- Assess MWE statistical systems (IT infrastructure, institutional framework/information flow and human capacity),
- Develop and strengthen the MWE statistical IT infrastructure,
- Streamline and strengthen institutional framework for statistical production in MWE,
- Streamline internal management and coordination of statistics,
- Establish and strengthen collaboration with stakeholders,
- Develop and operationalise a MWE web page for Statistics,
- Develop and operationalise policy guidelines and standards for statistical production and management,
- Integrate and align MWE data production activities to government planning and development processes,
- Mobilise and allocate resources for development of MWE statistics,
- Sensitize Heads of Departments and stakeholders on the unified approach to statistical management in the Water and Environment sector,
- Sensitize producers and users of MWE statistics on statistical production and utilisation procedures,

- Strengthen the information sharing network through WAN/Extranets with stakeholders (e.g. semi-autonomous ministry institutions, print media and the audio-visual publicity),
- Develop a monitoring and evaluation system for statistical development,
- Monitor and evaluate the statistical development processes in the sector.

## **4.2 SO2: Human Resource Development and Management**

### **The issue**

The staffing levels for statistics production are low. There is also limited statistical capacity to produce quality MWE statistics and indicators. There is therefore an urgent need for well trained, motivated and equipped staff.

### **Main strategies**

In order to address the above issue, the following strategies will be pursued

- Build human resource capacity for statistics production and utilisation across the entire NSS,
- Developing a comprehensive human resource strategy with uniform training, recruitment and promotion procedures for all staff working in the Ministry,
- Motivating the human resource in the statistics production Line of the Ministry.

### **Specific Actions**

The above strategies will be achieved through the following specific actions;

- Train MWE staff and stakeholders in the generation, analysis and dissemination of MWE statistics and indicators,
- Participate in study tours, attachments and conferences to build capacity and experience for MWE staff in the generation of MWE statistics.

## **4.3 SO3: Statistical Development Programmes**

### **The issue**

The quantity and quality of statistics produced is poor and this negatively affects the use of sector statistics. The attributes of data quality that need attention include improving relevance, consistency, completeness, accuracy, timeliness, accessibility and data disaggregation. A comprehensive and holistic statistical development programme is needed to produce accurate, comprehensive, consistent and timely MWE statistics.

### **Main strategies**

In order to address the above issue, the following strategies will be pursued

- Producing and disseminating relevant, comprehensive, timely and high quality W&E statistics required to inform sector policy, and to the satisfaction of all stakeholders and general public.

- Harmonising statistical generation processes to ensure coherence and standardization in data generation within the sector.
- Designing a central Ministry database.

### **Specific Actions**

The above strategies will be achieved through the following specific actions

- Assess data management processes,
- Review and standardise mechanisms for collection, processing and dissemination of MWE data,
- Produce sector statistics (collect & process) s,
- Conduct studies and surveys,
- Develop / update the data warehouse (data bank),
- Disseminate sector statistics.



## 5 IMPLEMENTATION PLAN

### 5.1 Mechanisms

Implementation of the plan will involve establishing the Statistics Unit; supporting the Ministry Statistics Committee; carrying out statistical advocacy and awareness campaign; promoting teamwork, implementing a feasible IT policy and strategy; as well as designing and implementing statistical programmes to harness and disseminate quality sector data.

The delivery mechanism will be as follows:

- (i) Implementation of the planned activities will be phased over a five year period. Strengthening coordination and management aspects will be prioritized in the first year.
- (ii) The technical departments, with their FPO as the entry point, shall be the main centers for compiling data as highlighted in Annex 4. The focus in the first year shall be to strengthen existing administrative data sources, by developing standard data collection instruments and regular training for data collectors.
- (iii) The Sector Statistics Committee/Secretariat shall provide the necessary technical support, coordination, and quality assurance services, to the sector statistics system. The Unit shall provide support in the following processes:
  - Data collection, including questionnaire design.
  - Work plan compilation and mobilization of the required resources.
  - Data processing.
  - Liaison with UBOS.
- (iv) Top management – shall review/approve work plans.

### 5.2 Monitoring and Evaluation

On the one hand monitoring will undertaken to ensure achievement of the objectives through; tracking inputs, activities and outputs; determine whether implementation is on course and inform management of current and/or potential problems; and prompt management to take corrective actions to ensure that performance conforms to strategy.

On the other hand, evaluation will be conducted to facilitate comparison of the expected with actual results, investigate deviations from the plan, assess and measure the organizational performance levels.

For this plan, M&E will be done at various levels as follows:

- The technical departments shall produce and share both activity-specific reports and quarterly performance reports with the Statistics Committee/Secretariat.
- The Sector Statistics Committee/Secretariat – This will assess completeness, adherence to the proposed reporting frequency and reported constraints and challenges. Reports will be forwarded to top management and shared with UBOS, among others.
- Top management – will receive and provide feedback on operational and strategic issues.
- UBOS – will oversee and ensure quality of sector plans and outputs, as well as give feedback to the sector on a regular basis.

### **5.3 Risk Analysis**

Essentially, strategy implementation involves translating strategic actions into outputs. It focuses on attaining efficiency and requires motivation, leadership skills and coordination among various stakeholders. Successful implementation of this plan (MWE-SSPS) is subject to the following conditions and assumptions:

- Top management and the key stakeholders appreciate and support the plan, including timely release of the required funds.
- Level of commitment of the SSC and ability to develop capacity to operationalize the plan.

### **5.4 Financing Plan**

The MWE Sector Strategic Plan for Statistics will be financed by Government and contributions from development agencies over the next five years. It is expected that the donor contribution will progressively go down with time as government contributions increase.

## ANNEX A: STATISTICAL PRODUCTION SCHEDULE

			Level of disaggregation			
Statistics produced (Current)	Indicators	Design	Administrative	Gender	Frequency of production	Publication/Report
<b>Environmental Degradation</b>						
Forest degradation	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports
Wetland degradation	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports
Land degradation	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports
Soil erosion	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports
Concentration of pollutants in air	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports
Accumulation of solid waste	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports
<b>Biodiversity</b>						
Encroachment into natural habitats	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports
Habitat fragmentation	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports
Species disappearance	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports
Environmental legislations reviewed	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports
Environmental related cases in courts of Law	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports
District / Village- environmental committees	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports
Protected area for biodiversity conservation	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports
<b>Source: MWE (NEMA &amp; DEA); MUIENR, UWA, MoJCA Local Govt. (Districts)</b>						
<b>Climatology and Meteorology</b>						
Average Rainfall	Pre- conditioned	Administrative records	National and District	No	Annual	Reports

			Level of disaggregation			
Statistics produced (Current)	Indicators	Design	Administrative	Gender	Frequency of production	Publication/Report
Average temperature	Pre- conditioned	Administrative records	National and District	No	Annual	Reports
Wind speed (average)	Pre- conditioned	Administrative records	National and District	No	Annual	Reports
Climate change	Pre- conditioned	Administrative records	National and District	No	40 – 50 years	Reports
<b>Source:</b> Meteorology Dept/ MWE						
<b>Geography/Land Area</b>						
Total surface area Dry and wetlands	Pre- conditioned	Administrative records	National and District	No	Annual	Reports
Vegetation coverage	Pre- conditioned	Administrative records	National and District	No	Annual	Reports
Farm Land Agriculture and Land range	Pre- conditioned	Administrative records	National and District	No	Annual	Reports
Open Water and Swamps Wetlands	Pre- conditioned	Administrative records	National and District	No	Annual	Reports
Built up areas	Pre- conditioned	Administrative records	National and District	No	Annual	Reports
Natural Physical Impediments (mountains, hills, rocks)	Pre- conditioned	Administrative records	National and District	No	Annual	Reports
<b>Source:</b> MWE (NEMA,NFA,WID & NBS);, MOLHUD,MAAIF, Local Govt. (Districts)						
<b>Forest and Tree Resources</b>						
Plantation forest coverage	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports
Natural Forest coverage	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports
Other Forest / vegetation types cover	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports

			Level of disaggregation			
Statistics produced (Current)	Indicators	Design	Administrative	Gender	Frequency of production	Publication/Report
<b>Source: MWE,-(NFA/NEMA)</b>						
<b>Wetlands</b>						
Permanent, fresh water wetlands	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports
Seasonal, fresh water wetlands	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports
Permanent, saline water wetlands	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports
Seasonal, saline water wetlands	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports
Man-made wetlands	Pre- conditioned	Surveys and Censuses	National and District	No	Annual	Reports
<b>Source: MWE,-( WID /NEMA)</b>						
<b>Water Resources</b>						
Access to safe drinking water (rural/urban)	PEAP	Administrative records Surveys and Censuses	National and District	No	Quarterly	Reports
Proportion of water users association villages with village accounts	Pre- conditioned	Administrative records Surveys and Censuses	National and District	No	Quarterly	Reports
Use of Improved water source for drinking	PEAP	Administrative records Surveys and Censuses	National and District	No	quarterly	Reports
Household expenditure on water	Pre- conditioned	Administrative records Surveys and Censuses	National and District	No	Quarterly Bi-annual	Reports
Water weed and other invasive species	Pre- conditioned	Administrative records Surveys and Censuses	National and District	No	Annual	Reports
Water collection time	PEAP	Administrative records Surveys and Censuses	National and District	No	Quarterly Bi-annual	Reports
Number of people per <u>public</u> water supply service	Pre- conditioned	Administrative records Surveys and Censuses	National and District	No	Quarterly	Reports
Villages with Water and sanitation	Pre- conditioned	Administrative records Surveys and Censuses	National and District	No	Quarterly	Reports

			Level of disaggregation			
Statistics produced (Current)	Indicators	Design	Administrative	Gender	Frequency of production	Publication/Report
committees User Association					Annual	
Water Quality standards- concentration of pollutants	Pre- conditioned	Administrative records Surveys and Censuses	National and District	No	Annual	Reports
Water for Production (WfP)	PEAP	Administrative records Surveys and Censuses	National and District	No	Annual	Reports
Irrigation coverage	Pre- conditioned	Administrative records Surveys and Censuses	National and District	No	Annual	Reports
<b>Source:</b> MWE/ (DWRM,DWD,WFP & NWSC), MAAIF & UBOS						
<b>Sanitation – at Household &amp; Institution level</b>						
Household sanitation	PEAP	Administrative records Surveys and Censuses	National and District	Yes	Annual	Report
Institutional sanitation	Pre- conditioned	Administrative records Surveys and Censuses	National and District	Yes	Annual	Report
<b>Source:</b> MoH&UBOS						
<b>Demography</b>						
Population Size	Pre- conditioned	Surveys and Censuses	National and District	Yes	Annual	Publication and report
Population growth rates	Pre- conditioned	Surveys and Censuses	National and District	Yes	Annual	Publication and report
Population densities	Pre- conditioned	Surveys and Censuses	National and District	Yes	Annual	Publication and report
Settlement patterns	Pre- conditioned	Surveys and Censuses	National and District	Yes	Annual	Publication and report
Household expenditure	Pre- conditioned	Surveys and Censuses	National and District	Yes	Annual	Publication and report
Literacy rate	Pre- conditioned	Surveys and Censuses	National and District	Yes	Annual	Publication and

			Level of disaggregation			
Statistics produced (Current)	Indicators	Design	Administrative	Gender	Frequency of production	Publication/Report
						report
<b>Source:</b> MoES & UBOS						
<b>Sector Finance</b>						
Sector Budget performance	Pre- conditioned	Administrative records	National and District	No	Annual	Publication and report
Monetary instruments	Pre- conditioned	Administrative records UBOS	National and District	No	Annual	Publication and report
Fiscal instruments	Pre- conditioned	Administrative records	National and District	No	Annual	Publication and report
National budget	Pre- conditioned	Administrative records	National	No	Annual	Publication and report
Government expenditure in other sectors	Pre- conditioned	Administrative records	National and District	No	Annual	Publication and report
Unit costs for key utilities	Pre- conditioned	Administrative records	National and District	No	Annual	
<b>Source:</b> UBOS MFPED, UMEME, Sector Donors/NGOs, LGs (districts), private firms in the sector Oil companies						

## ANNEX B: LOGICAL FRAMEWORK<sup>4</sup>

Hierarchy of Objectives	Indicators (Baselines to be established)	Means of Verification	Assumptions <sup>5</sup>
<b>Overall Objective</b>			
To be a coherent, reliable, efficient, and demand driven sector statistical system that supports management and development initiatives of the Water and Environment sector.	<ul style="list-style-type: none"> <li>World Bank statistical capacity indicator score improved from 73% in 2006 to 85% by 2012.</li> <li>All statistics produced according to internationally recognized standards and in compliance with GDDS standards by 2012.</li> </ul>	<ul style="list-style-type: none"> <li>World Bank Reports</li> <li>IMF, UN Reports, WTO reports</li> </ul>	
<b>Purpose</b>			

<sup>4</sup> In this table, **O** = Out put; **P** = Purpose; **R** = Result. For instance **O.P1** stands for “Output for Purpose No. 1”

<sup>5</sup> General pre-conditions (i) Timely and sufficient financial, human and physical resources to support the sector statistical system are available at all levels (centre, local government & communities), (ii) Strategic partners, with adequate capacity and skills for collecting and using sector statistics exist.



Hierarchy of Objectives	Indicators (Baselines to be established)	Means of Verification	Assumptions <sup>5</sup>
<p>To produce good quality statistics for evidence based decision making, planning and management in the Water and Environment sector.</p>	<ul style="list-style-type: none"> <li>• % increase in sector policies reviewed as a result of informed decisions aided by statistics by 2011.</li> <li>• Priority research areas identified and implemented by 2011/12.</li> <li>• % increase in basket fund and other external resources allocated and released for national development as a result of evidence based planning by 2012</li> <li>• % increase in resource allocation to MWE statistical development in the MTEF by 2011.</li> <li>• % reduction in delays<sup>6</sup> in decision making implementation and delivery of results by 2011.</li> <li>• % increase in statistical utilisation in monitoring and evaluation of the NDP and related sectoral strategies for 3 years beginning from 2009/10.</li> <li>• 20% increase in user satisfaction of MWE statistics from 2008/09 to 2011/12.</li> </ul>	<ul style="list-style-type: none"> <li>• Sectoral review reports</li> <li>• Ministerial policy statements</li> <li>• Research papers published</li> <li>• National Budget Framework Paper (BFP)</li> <li>• Estimates of Revenue and Expenditure</li> <li>• Sector Budget framework paper (Sector BFP)</li> <li>• Evaluation reports for statistical development</li> <li>• User satisfaction survey reports</li> </ul>	<ul style="list-style-type: none"> <li>• Sector data producers adhere to agreed standards and guidelines for data collection</li> <li>• Statistical development prioritised in the national sector budget framework papers</li> <li>• Statistics produced are easily accessed and utilised</li> <li>• Statistics users appreciate its importance</li> <li>• Political and economic stability</li> </ul>

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<sup>6</sup> How will this be calculated

Hierarchy of Objectives	Indicators (Baselines to be established)	Means of Verification	Assumptions <sup>7</sup>
<b>Results/Outputs</b>			
<p><b>O.P1:</b> A coherent, reliable, efficient and demand-driven Water and Environment statistical system established and functional.</p>	<p>1.1 MWE Statistics Unit revitalised, strengthened and operational by 2010.</p> <p>1.2 The MWE Sector Statistics Committee established and functional by 2008/09.</p> <p>1.3 MWE Stretgic Plan for Statistics developed and operational by 2008/09MWE statistical systems (IT infrastructure, institutional collaboration framework/information flow and human capacity) assessed by 2009/10.</p> <p>1.4 MWE statistical IT / infrastructure developed and strengthened</p> <p>1.5 Institutional framework for statistical production in MWE streamlined and strengthened.</p> <p>1.6 Internal management and coordination of statistics streamlined by the end of 2010.</p> <p>1.7 Producers and users of MWE statistics sensitized on procedures for data production dissemination.</p> <p>1.8 Collaborative linkages with Stakeholders established and strengthened by 2009 /10.</p> <p>1.9 A MWE web page for Statistics developed, functional and linked to the NSS website by 2010.</p> <p>1.10 Policy guidelines and standards for statistical production and management developed and operational by 2009 /10.</p> <p>1.11 MWE SSPS integrated and supported within the Ministry planning and budget framework.</p> <p>1.12 Resources mobilisation and allocation to development of MWE statistics increased by</p>	<ul style="list-style-type: none"> <li>• Statistics unit in place</li> <li>• Equipment Inventory</li> <li>• Progress / M&amp;E Reports</li> <li>• Appointment letters to sector statistics committee (SSC)</li> <li>• M&amp;E Reports</li> <li>• SSPS</li> <li>• Assessment reports</li> <li>• M&amp;E / progress reports</li> <li>• Physical infrastructure / assets register</li> <li>• Data production and dissemination guidelines</li> <li>• Meta data report</li> <li>• Activity reports</li> <li>• Minutes of the SSC &amp; Management meetings</li> <li>• Reports / minutes of consultative meetings</li> <li>• Statistics Web Page</li> <li>• Policy guidelines</li> <li>• Standards documents (Meta data for the sector)</li> <li>• Ministry BFP</li> </ul>	<ul style="list-style-type: none"> <li>• Senior sector managers (sector working group) committed to support the implementation of the SSPS</li> <li>• Adequate resources available for the implementation of the SSPS</li> <li>• Technical capacity available to implement the plan</li> </ul>

<sup>7</sup> General pre-conditions (i) Timely and sufficient financial, human and physical resources to support the sector statistical system are available at all levels (centre, local government & communities), (ii) Strategic partners, with adequate capacity and skills for collecting and using sector statistics exist.

Hierarchy of Objectives	Indicators (Baselines to be established)	Means of Verification	Assumptions <sup>7</sup>
	2010/1. 1. 13 All MWE statistics production aligned to government and development processes by 2009/10. 1.14 M&E framework for statistical development by 2009/10	<ul style="list-style-type: none"> <li>• National BFP</li> <li>• Sectoral budgets and releases</li> <li>• Financial reports</li> <li>• NSS statistics calendar</li> <li>• M&amp;E framework</li> </ul>	
<b>O.P2:</b> Capacity for collection, analysis, dissemination and utilisation of Water and Environment Sector statistics strengthened.	2.1 Capacity of MWE statistics unit staff strengthened. 2.2 Capacity of MWE autonomous sector agencies and stakeholders strengthened. 2.3 WB statistical capacity indicator score improved from 73% in 2006 to 85% by 2012. 2.4 All statistics produced according to internationally recognized standards and in compliance with GDDS standards by 2011	<ul style="list-style-type: none"> <li>• Capacity building reports</li> <li>• M&amp;E reports</li> </ul>	
<b>O.P3:</b> Demand-driven statistics generated and disseminated.	3.1 Data management processes assessed by 2009. 3.2 Mechanisms for collection, processing and dissemination of MWE data reviewed and standardised by 2010/11. 3.3 Quality and timely statistics produced 3.4 Studies and surveys conducted according to national and institutional timelines. 3.5 Sectoral data warehouse (data bank) developed and updated regularly 3.6 Sector statistics disseminated in line with NSS dissemination calendar.	<ul style="list-style-type: none"> <li>• Assessment reports</li> <li>• Review reports</li> <li>• Guidelines</li> <li>• Statistical publications</li> <li>• M&amp;E reports</li> <li>• Surveys and study reports</li> <li>• Databank</li> <li>• Dissemination reports</li> </ul>	

Hierarchy of Objectives	Inputs	Budget	Assumptions
<b>Activities</b>			
<p><b>Coordination and Management</b></p> <p>1.1 Revitalise and strengthen the MWE Statistics Unit</p> <p>1.2 Establish and operationalise MWE Sector Statistics Committee</p> <p>1.3 Produce and operationalise MWE Strategic Plan for Statistics.</p> <p>1.4 Assess MWE statistical systems (IT infrastructure, institutional framework/information flow and human capacity).</p> <p>1.5 Develop and strengthen the MWE statistical IT infrastructure</p> <p>1.6 Streamline and strengthen institutional framework for statistical production in MWE</p> <p>1.7 Streamline internal management and coordination of statistics.</p> <p>1.8 Establish and strengthen collaboration with stakeholders.</p> <p>1.9 Develop and operationalise a MWE web page for Statistics.</p> <p>1.10 Develop and operationalise policy guidelines and standards for statistical production and management.</p> <p>1.11 Integrate and align all MWE data production activities to government planning and development processes</p> <p>1.12 Mobilise and allocate resources for development of MWE statistics.</p> <p>1.13 Sensitize Heads of Departments and stakeholders on the unified approach to statistical management in the Water and Environment sector.</p> <p>1.14 Sensitize producers and users of MWE statistics on statistical production and utilisation procedures.</p> <p>1.15 Strengthen the information sharing network through WAN/Extranets with stakeholders (e.g. semi-autonomous ministry institutions, print media and the audio-visual publicity).</p> <p>1.16 Develop a monitoring and evaluation system for statistical development.</p>	<ul style="list-style-type: none"> <li>• Equipment</li> <li>• Technical Expertise-</li> <li>• Office space</li> <li>• Training Manuals and materials</li> <li>• Stationery</li> <li>• Personnel</li> <li>• M&amp;E tools</li> <li>• Consumables</li> <li>• Furniture and fixture</li> <li>• Meeting and workshop venues</li> <li>• Communication costs</li> <li>• Travel costs</li> <li>• Hospitality costs</li> <li>• Courier services</li> </ul>	<p><b>490,650, 000 UGX</b></p>	<ul style="list-style-type: none"> <li>• Timely release of funds and accountability</li> <li>• Competent personnel in place</li> <li>• Available and reliable equipment</li> <li>• Conducive working environment</li> <li>• Minimal bureaucratic procedures</li> <li>• Internal and external corporation in statistical</li> </ul>

Hierarchy of Objectives	Inputs	Budget	Assumptions
<b>Activities</b>			
1.17 Monitor and evaluate the statistical development process.			
<p><b>Human Resource Development and Management</b></p> <p>2.1 Train MWE staff and stakeholders in the generation, analysis and dissemination of MWE statistics and indicators.</p> <p>2.2 Participate in study tours, attachments and conferences to build capacity and experience for MWE staff in the generation of MWE statistics</p>	<ul style="list-style-type: none"> <li>• Equipment</li> <li>• Technical Expertise</li> <li>• Training Manuals and materials</li> <li>• Stationery</li> <li>• Personnel</li> <li>• Consumables</li> <li>• Meeting and workshop venues</li> <li>• Communication costs</li> <li>• Travel costs</li> <li>• Hospitality costs</li> <li>• Courier services</li> <li>• Consultancy services</li> <li>• Soft wares</li> </ul>	<b>293,000,000 UGX</b>	
<p><b>Statistical Development Programme</b></p> <p>3.1 Assess data management processes.</p> <p>3.2 Review and standardise mechanisms for collection, processing and dissemination of MWE data</p> <p>3.3 Produce statistics (collect &amp; process) routine statistics</p> <p>3.4 Conduct studies and surveys</p> <p>3.5 Develop / update the data warehouse (data bank).</p> <p>3.6 Disseminate sector statistics.</p>	<ul style="list-style-type: none"> <li>• Data collection tools</li> <li>• Manuals and materials</li> <li>• Technical Expertise</li> <li>• Stationery</li> <li>• Personnel</li> <li>• Consumables</li> <li>• Meeting and workshop venues</li> <li>• Communication costs</li> <li>• Travel costs</li> <li>• Hospitality costs</li> <li>• Courier services</li> <li>• Consultancy services</li> <li>• software</li> </ul>	<b>450,000,000 UGX</b>	

## ANNEX C: ACTIVITY SCHEDULE (2007/08-2011/12)

In order to achieve the strategic objectives, the activities below will be undertaken over the time indicated in the action plan.

	Activity	Year 1				Year 2				Year 3				Year 4				Year 5			
<b>1</b>	<b>COORDINATION AND MANAGEMENT</b>																				
1.1	Create general awareness on the importance of sector statistics ( <i>through awareness campaigns and regional user producer workshops</i> )																				
1.2	Establish and operationalise MWE Sector Statistics Committee to support SSPS implementation																				
1.3	Organise regular committee meetings to review progress of the SSPS implementation																				
1.4	Establish and equip a central statistical unit (one stop centre) within the Ministry to oversee generation, storage, dissemination and usage of W&E statistics																				
1.5	Procure, install and maintain physical, IT infrastructure/equipment and statistical data management software																				
1.6	Develop and operationalise policy guidelines and standards for statistical production and management in the Ministry.																				
1.7	Establish and strengthen collaboration with stakeholders																				
1.8	Integrate and align MWE data production activities to government planning and development processes																				
1.9	Streamline and strengthen institutional framework for statistical production in MWE																				
2.0	Monitor and evaluate the statistical development processes in the sector																				
2.1	Streamline internal management and coordination of statistics																				
<b>2</b>	<b>HUMAN RESOURCE DEVELOPMENT AND MANAGEMENT</b>																				

	Activity	Year 1				Year 2				Year 3				Year 4				Year 5			
2.1	Staff recruitment ( <i>statistical officers</i> ) and development																				
2.2	Train MWE staff and stakeholders in the generation, analysis and dissemination of MWE statistics and indicators.																				
2.3	Participate in study tours, attachments and conferences to build capacity and experience for MWE staff in the generation of MWE statistics.																				
<b>3</b>	<b>STATISTICAL DEVELOPMENT PROGRAMMES</b>																				
3.1	Produce and disseminate comprehensive statistics in form of reports, facts and figures, bulletins, statistics abstracts, calendars, CDs, etc																				
3.4	Assess data management processes																				
3.5	Carry out surveys/ in-depth studies on water and sanitation indicators in liaison with UBOS																				
3.6	Design appropriate data capture methods, including quality control procedures																				
3.8	Develop and implement an appropriate IT policy																				
3.9	Update and maintain the central Ministry database and sub sector data bases																				
3.10	Support operational databases within the Ministry at departmental and district level																				

## ANNEX D: BUDGET ESTIMATES (2007/08-2011/12) (Uganda Shillings “000”)

	Activity	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
<b>1</b>	<b>Coordination and management</b>						
1.1	Create general awareness on the importance of sector statistics ( <i>through awareness campaigns and regional user producer workshops</i> )	6,000	6,000	6,000	6,000	6,000	30,000
1.2	Procure and install IT infrastructure/equipment and statistical data management software	29,000	10,000	4,500	12,000	0	55,500
1.3	Develop and operationalise a MWE web page for Statistics	5,000	5,000	5,000	5,000	5,000	25,000
1.4	Establish and equip a central statistical unit (one stop centre) with physical infrastructure/equipment	24,450	16,050	14,050	15,550	14,050	84,150
1.5	Streamline internal management and coordination of statistics	24,000	108,000	24,000	108,000	24,000	288,000
1.6	Organise regular committee meetings to review progress of the SSPS implementation	2,000	2,000	2,000	2,000	2,000	8,000
	<b>Sub-total</b>	<b>90,450</b>	<b>147,050</b>	<b>55,550</b>	<b>148,550</b>	<b>51,050</b>	<b>490,650</b>
<b>2</b>	<b>Human Resource Development and Management</b>						
2.1	Staff recruitment and development, incl. training, refresher courses and conferences	34,000	34,000	34,000	34,000	34,000	170,000
2.2	Train MWE staff and stakeholders in the generation, analysis and dissemination of MWE statistics and indicators	22,000	35,000	34,500	7,500	24,000	123,000
	<b>Sub-total</b>	<b>56,000</b>	<b>69,000</b>	<b>68,500</b>	<b>41,500</b>	<b>58,000</b>	<b>293,000</b>
<b>3</b>	<b>Statistical Development Programmes</b>						
3.1	Assess data management processes	35,000	35,000	35,000	35,000	35,000	175,000
3.2	Developing information systems and DBs for handling statistics from administrative sources <sup>8</sup>	10,000	40,000	40,000	40,000	40,000	170,000
3.3	Carry out surveys/in-depth studies on water and sanitation indicators in liaison with UBOS	18,000	18,000	18,000	18,000	18,000	90,000
3.4	Produce & disseminate comprehensive statistics in form of reports, facts and figures, bulletins, statistics abstracts, calendars, CDs, etc.	3,000	3,000	3,000	3,000	3,000	15,000
	<b>Sub Total</b>	<b>66,000</b>	<b>96,000</b>	<b>96,000</b>	<b>96,000</b>	<b>96,000</b>	<b>450,000</b>
	<b>Grand Total</b>	<b>212,450</b>	<b>312,050</b>	<b>220,050</b>	<b>286,050</b>	<b>205,050</b>	<b>1,233,650</b>
	<b>US\$ “000” (1:2000Ugshs)</b>	<b>105.225</b>	<b>155.025</b>	<b>109.025</b>	<b>142.025</b>	<b>101.525</b>	<b>612.825</b>

<sup>8</sup> This will involve, inter alia, execution of activities such as ; Data needs assessment & Collation of existing secondary data, development of review data flows, IT Policy & other standards, as wells as the development of appropriate sub-sector information sub-systems/databases



## ANNEX E: CHALLENGES, STRATEGIES AND PRIORITY ACTIVITIES (2008)

Challenges	Strategies	Priority Activities for the Initial year
<p><b>MINISTRY OF WATER AND ENVIRONMENT</b>  <b>Implementing Dept:</b> Policy and Planning  <b>Headed by:</b> Assistant Commissioner planning</p>		
<ul style="list-style-type: none"> <li>▪ Low Profile of the Statistics function in the ministry</li> <li>▪ Inadequate commitment and support for statistical activities by senior sector managers.</li> <li>▪ Inadequate data handling equipment across the various departments of the Ministry.</li> <li>▪ Limited use of Data.</li> <li>▪ Lack of integrated approaches in data management</li> <li>▪ Various Ministry Departments are located in Scattered Sites</li> <li>▪ Labour turn over - in districts and projects under the jurisdiction of technical departments is high</li> <li>▪ Inadequate commitment of staff at Sub-national Level</li> <li>▪ Continuous creation and funding of parallel, independent and overriding data structures</li> </ul>	<ul style="list-style-type: none"> <li>• Raising the profile of sector statistics and the Statistics outfit in the Ministry</li> <li>• Improving coordination, collaboration, networking and information Sharing</li> <li>• Strengthening and motivating the human resource in the Statistics Production Line of the Ministry</li> </ul>	<ul style="list-style-type: none"> <li>• Sensitization of data Producers and Policy and decision makers on the use and relevance of statistics</li> <li>• Develop a sector meta data</li> <li>• Undertake special surveys to update 2 sector data flows up to district level</li> <li>• Produce and distribute various statistical products to the public</li> <li>• Strengthen the Statistics Unit (recruit staff &amp; equip the Unit and its key data producers)</li> <li>• Train members of the Statistics Committee in MIS &amp; Data Base creation &amp; management</li> </ul>

**ANNEX F: MINISTRY OF WATER AND ENVIRONMENT ORGANOGRAM**

