

ACHIEVEMENTS IN THE WATER AND ENVIRONMENT SECTOR

ensure that appropriate dam safety practices are part and parcel of all plans and programs for the better management of hydroelectric power generating facilities.

Compliance to regulations and conditions of Water Act, water abstraction and wastewater discharge permits has greatly improved.

Three hundred regulation brochures and booklets were produced and 1 Advert of valid Drilling Permits issued; 1 Newspaper advert/supplement regarding regulating boreholes and groundwater abstraction in urban areas was run in the New vision News Paper. These activities have contributed to the increase in the number of new water permit applications and application and annual fees.

Data was received from 75 surface water and 29 ground water stations. The data was processed in accordance with data management procedures to ensure that data of high quality is available to users. Several checks were made, and data that passed all the steps was archived in the databases. This data was also processed to retrieve meaningful information that can be disseminated to users and provide an updated state of water resources in the country.

Implementation of catchment-based water resources management

Water Management Zone operations

Water management zones were established by the ministry of water and environment under the directorate of water resources management for the purposes of de-concentrating water resources management in order to implement catchment-based Integrated Water Resources Management (IWRM) concentrated to the four Water Management Zones (WMZs) of Kyoga, Victoria, Albert and Upper Nile continued to be consolidated. The focus has continues to be moving water resources management services closer to where action is needed, and mobilizing local communities and other stakeholders to achieve catchment-based integrated water resources management. Support to the WMZ offices continued with deployment of 2 interns in each WMZ who are being trained to provide additional technical support to the current team of five people per zone in view of the increased demand for water resources management services.



The WMZ teams have continued to engage in raising awareness among the key stakeholders about the need to promote integrated planning, management and development of water resources following a catchment-based approach. WMZ staffs now participate fully in coordination meetings of other de-concentrated sector structures (Technical Support Units, Water and Sanitation Development Facilities, and Umbrella Organizations) and always provide water resources related technical support and advice to the stakeholders in the zones.

WATER QUALITY

The Ministry of Water and Environment (MWE) conducts drinking water quality assessments to ascertain compliance of these sources with National Drinking (potable) water Standards 2008, class I and II. In addition, MWE operates a National water quality monitoring network comprising 119 stations located in major lakes, rivers, ground water and waste discharge establishments. Water quality monitoring is carried out by the four Water Management Zones (WMZs which include Kyoga Water Management Zone (KWMZ), Albert Water Management Zone (AWMZ), Victoria Water Management Zone (VWMZ) and Upper-Nile Water Management Zone (UWMZ).

MWE also conducts water quality assessments on drinking and waste water effluents for compliance with National standards checks. Standards 2008, class I and II. Out of the 119 monitoring stations, 105 were monitored in the financial year under review, representing 88% achievement, a slight improvement from last financial year where achievement was at 84%.

MWE procured a set of water quality monitoring equipment and accessories to detect and identify presence/absence of toxic wastes from oil and gas activities in the Albertine Graben. The monitoring equipment and its accessories comprise three components namely: National Command and Control Centre (NCCC) located at MWE's Directorate of Water Resources in Entebbe; Mobile Unit that will be movable from one location to another and two Fixed Stations located at Pakwach town water Supply and Bugoma, Hoima (King Fisher oil fields) on Lake Albert. The system of the three components now relays information remotely to the Water Quality Management Department in Entebbe.

Two staff from the Ministry completed training on the equipment's Operation and Maintenance requirements in the United States and mobilization of stakeholders in the Albertine Graben for installation of the equipment was conducted. The equipment was installed, test run and commissioned.

Water Quality Assessments

A Case of Water quality status of Lake Bisina Eastern Uganda

Lake Bisina is one of Lake Kyoga's satellite lakes located bordering Kumi, Soroti and Katakwi districts, East of lake Opeta. The lake is a Ramsar site with great tourist potential in terms of bird watching and sports fishing.

Until now, not much water quality assessments and monitoring have been done on this lake yet the lake forms part of the key ecosystems in Kyoga Water Management Zone (KWMZ). The Zone carried out water quality assessments to establish water quality monitoring sites in the Lake for purposes of data and information gathering for future references.

Benefits of the lake

1. Fishing by the local communities where catfish and tilapia are common fish caught in the lake.
 2. Navigation, it is the shortest route between Kumi to Katakwi by boat. Government has constructed a ferry which is expected to start operation this financial year 2015/16.
 3. Bird watching by tourists.
 4. Animal/cattle watering.
- Monitoring of compliance of wastewater effluent discharge plants with the water (waste) effluent discharge standards (1999) was done by MWE, where a total of 37 wastewater effluent discharge plants were monitored, compared to 32 last financial year. 37 samples were taken to measure the performance of this indicator has been increasing as compared to two years ago when only two samples were collected. This is attributed to the regular compliance monitoring visits by the WMZs in addition to self-monitoring done by the industries.

INTERNATIONAL AND TRANSBOUNDARY WATER AFFAIRS DEPARTMENT

The department of International and transboundary water resources handles a number of international and transboundary initiatives, projects and programme issues like;

- Policy Reviews to account for national interest in trans-boundary water resources.
- Institutional reviews for improved management of cross-border river basins
- Investments and Projects in trans-boundary basins and catchments

Trans-boundary agreements, laws, policies, standards

MoUs have been developed and signed for Sio-Malaba/Malakisi Basin, and Kagera Basin respectively by the countries in which these transboundary basins are found, for the joint management and development of the shared water resources in the river basins. Lake Victoria Basin Commission (LVBC) is coordinating the development of a Water Resources Management Bill for Lake Victoria Basin. The draft Bill is currently with the Council to the Community (CTC) for input, before subsequent submission to the next Sectorial Council of Ministers (SECOM) for consideration prior to final adoption



by EAC Council of Ministers and enactment by the East Africa Legislative Assembly. The Water Release and Abstraction Policy for Lake Victoria Basin Policy, jointly developed by the five East African Community (EAC) Partner States through the LVBC Secretariat, was controversially concluded and adopted by the Council of Ministers of EAC in 2012. The policy recommends a new regime to regulate the outflow of water from Lake Victoria through the Nalubaale and Kiira hydropower generation facilities at Jinja and downstream on the Nile. MWE has coordinated continued engagement with partner states Kenya, Tanzania, Rwanda and Burundi to review the Policy, to include provision of guidance on abstraction of water from the Lake Victoria Basin that contributes to Lake Victoria, and also to evaluate the impacts of the Policy to partner states.

In the period under review, Uganda provided input to LVBC Regional Project Coordination Team (LVBC/RPCT's) roadmap for implementation and promotion of adherence to the regional standards for discharge of industrial and municipal effluent. The Standards were officially circulated to Partner States for implementation in January, 2015.

Efforts continued during the year for final ratification of the Cooperative Framework Agreement (CFA) for the Nile Basin countries by Uganda. **Support and coordination of trans-boundary organizations** A number of trans-boundary organizations have continued to be supported through both financial contributions and or providing technical guidance.

Several Nile Basin Initiative (NBI) governance meetings of the Nile Council of Ministers and Nile Technical Committee were held, as well as the Nile Basin Development Forum. The key outcomes of the meetings are i) Upscaling the Power programmes (Semliki HEP project) and the Natural Resources Projects (Inland water way sector investment programme on L. Albert), in the Nile Equatorial Lakes (NEL) region, ii) Ratification of Nile Basin Cooperative Framework Agreement (CFA); and iii) the approval of Memoranda of Understanding (MoUs) for Cooperation in 2 (two) Trans-boundary River Basins between Uganda and other riparian countries; Uganda and Kenya for Sio-Malaba/Malakisi and Uganda and Burundi/Rwanda/Tanzania for River Kagera

Various Lake Victoria Basin Commission (LVBC) governance meetings of the Council of Ministers and Policy steering Committee meetings were held during the year under review. The key outcomes of the meetings were i) Extension of operation by LVEMP II by 2.5 years; ii) approval of Water Quality standards for EAC; and iii) Water Resources Bill for the EAC; iii) the implementation of the New Water Release and Abstraction Policy to address Uganda's water use concerns. The Department has supported and coordinated participation in governance and technical meetings as well as implementation of activities of Sio-Malaba-Malakisi River (SMM) Basin Management, Kagera River Basin Management, AMCOV, IGAD Initiatives, IHP (UNESCO)-Nile FRIEND, Operational Nile Water Resources, WMO and World Water Forum.

The Ministry of Water and Environment under the Lake Victoria Environmental Management Project Phase Two (LVEMP II) handed over solid waste management equipment worth Ushs. 4.2 billion to Kampala Capital City Authority (KCCA). The equipment that were handed over late July 2015 by the Minister of Water and Environment, Hon. Prof. Ephraim Kamuntu included six tipper trucks with a capacity of 1.5 tons each, two double cabin pick-ups and two hoe loaders.

In an effort to conserve and protect the environment, the Lake Victoria Environmental Management Project Phase Two (LVEMP II) supported a group of disable persons in Masaka District with five tricycles for purposes of collecting plastic wastes. The group known as Masaka Union of Disable Persons—in short MADIPU has 50 members, comprising 35 males and 15 females. The group is involved in collecting solid waste plastic materials, sorting, grading and selling as a way to conserve and protect Nabajjuzi stream—which pours into Lake Victoria.



PLASTIC WASTE: MADIPU workers transporting solid plastic waste to collection center using tricycles

DIRECTORATE OF ENVIRONMENT AFFAIRS



The Ministry of Water and Environment (MWE) through the Directorate of Environment Affairs (DEA) is responsible for the management and protection of the environment i.e. wetland and forest natural resources.

The DEA is divided into three departments namely; Wetlands Management Department (WMD), Department of Environment Sector Support Services (DESSS), and Forest Sector Support Department (FSSD) working closely with the Climate Change Department (CCD) which reports directly to the Permanent Secretary.

These four departments work hand in hand with National Environment Management Authority (NEMA), National Forest Authority (NFA) and Uganda National Meteorology Authority (UNMA) to ensure that all environment resources are utilized in a sustainable manner.



Minister of Water & Environment, Prof. Ephraim Kamuntu (R), Executive Director KCCA, Ms. Jennifer Musisi (C) and the National Project Coordinator LVEMP II, Mr. Sowdeagudde at the handover ceremony of solid waste equipment to KCCA