



MINISTRY OF WATER AND ENVIRONMENT SOUTH WESTERN UMBRELLA OF WATER AND SANITATION AUTHORITY



OPERATION AND MAINTENANCE OF PIPED WATER SUPPLY AND SANITATION SYSTEMS

Uganda Water and Environment week, 19th - 23rd March 2018

Introduction

While the Government of Uganda through the Ministry of Water and Environment (MWE) and in collaboration with Development Partners have increasingly constructed piped water supply and sanitation facilities throughout the country with a view of increasing access to safe and clean water to the people, the biggest challenge has always been performance and sustainability of the facilities. Performance ensures that the beneficiary communities enjoy the benefits of the water systems all the time as needed while sustainability ensures that the services is available for as long as its design life time.

The MWE has put in place several strategies with a keen interest in ensuring that the objectives for which water facilities are developed is felt in the communities. Such successful strategies include the south western Umbrella of water and sanitation (swUWS) which has been and continue being key in supporting the operation and maintenance (O&M) and also direct management of the water supply and sanitation systems in the south western region. The south western region here consisting of the sixteen districts of Mbarara, Isingiro, Ntungamo, Kisoro, Ibanda, Bushenyi, Buhweju, Mitooma, Sheema, Rukungiri, Kanungu, Rubirizi, Rubanda, Rukiiga, Kabale and Kisoro. The swUWS has extended services to 105 water supply and sanitation systems in the region with 33 of such systems being under the direct management of the swUWS and 72 under the O&M support.

Integrating regional utility management

Cognisant of the fact that there are currently over 1,000 water supply systems in the country and whereas the MWE through the four regionally based water and sanitation development facilities (WSDFs) are constructing about 30 schemes annually substantially increasing the number of schemes not adequately managed but attended to by the respective beneficiary communities whose capacities are often insufficient, the regionally based utility model being promoted through the umbrella organisations has been found relevant and effective. This is a vibrant idea intended to ensure that all the water supply systems in the country are managed effectively and efficiently hence ensuring improved functionality and sustainability for long term social-economic gains to the communities in the country. During the financial year 2017/2018 the Minister for Water and Environment gazetted the swUWS as the water authority in charge of managing several schemes including Katuna, Rwene, Ryakarimira, Kabirizi, Karukara, Rwenshama, Bikurungu, Katabushera, Bwanga-Kiyenje, Kisiizi, Buhunga, Kasumanga, Rugaaga, Rubuguri, Mwihe A, Mwihe B, Kinanira, Karunoni, Kabuga, Nyakabingo, Migyera, Karenganyambi, Kanyinamugyera, Kamuhembe, Kigata, Nyangorogoro, Kyezimbiye, Kabuyanda, Buhoma, Buraara, Ruraama, Banyara and Bukiro. Accordingly, the swUWS has employed three different management models in managing these schemes. There has been tremendous improvements in the schemes.

The New Vision reporter talked to Mr. Martin Wamalwa, the Manager of the South Western

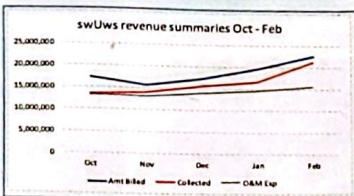
Umbrella of water and sanitation on the viability and progress of the regional public water utility management in the country.....

Tell us more about the public water utility model in water supplies. Is it a new model?

Public water utility model simply refers to providing services through an autonomous entity with government or community participation. That is an entity even when supported by the government but has some degree of financial and administrative autonomy. It is important to note that water is essential and crucial for the socioeconomic cohesion of the population, and should be subject to certain public service regulations. It is easier and relevant to regulate many service providers where you can compare performance unlike in a monopoly where service regulation is poor hence no guarantee of quality service for the community. It's a model practiced in many countries including Kenya, Zambia, South Africa, etc. It is important to note that in these countries where regional utilities have been used to manage water supplies, the regulation function is highly recognized which significantly leads to good service to the community. In Uganda, we initially adopted the use of private water operators and scheme operators in managing the water supplies in small towns and rural growth centres but due to several challenges this model didn't produce the desirable results. We are currently promoting this model through the regionally based Umbrellas of Water and Sanitation.

In your region in the south west has there been anything to talk about?

The performance of the systems has improved, for example non-revenue water (NRW) has reduced from 45% to 19%



in Katuna, in Rwene NRW has dropped to less than 5%. Little breakdowns and leakages have been reported since October 2017 this has been attributed to increased vigilance and proactive strategies that has ensured success of the model. We have put in place a stable and sustainable revenue and accountability system which ensures that capital investments in the schemes is guaranteed. We are massively metering connections that are not metered, providing extension and new connections to unserved

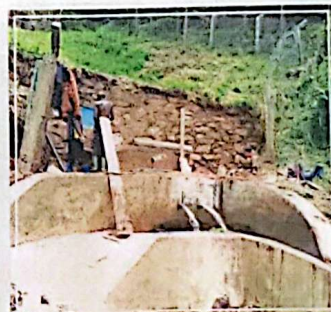
areas. We have mobile technical crews that rotate around the schemes to ensure functionality is up-to-date. We have a water laboratory in Kabale town equipped with competent staff that carryout regular water quality tests in all the schemes

How can you guarantee success of this model?

The support of the beneficiary community is important. Our approach is to ensure that the communities remain part of the management structure i.e. we are not abolishing the water and sanitation boards (WSSBs) that have been there, we are integrating them into water management committees hence they remain part and parcel of the reform process. Another principle is to retain as much as possible to existing water tariff. Some of these schemes are gravity flow schemes which have minimum O&M costs hence will not pay a similar tariff like pumping schemes. We are keeping and we intend to keep as much as possible a low tariff. We shall use more qualified and experienced scheme operators, who are based in the communities and have a direct understanding of the local conditions of the schemes. The reform process is still young but we are putting in place a revolving fund to ensure continued financial stability, a human resource capacity building system, a revenue and accountability system, communications strategy and more importantly a proactive approach. We also intend to build a strong relationship with the local leadership and the user communities. We shall maintain great focus to the attributes of effective utility management including though not limited to customer satisfaction, community and stakeholder engagement, financial viability, operational resiliency, product quality, infrastructure stability, water resource adequacy and human resource development.

What are some of the challenges you have encountered in promoting this concept?

Operational challenges have been minimum since the Umbrella has been existing since 2002, however, lately there have been weather conditions that have affected our skins. Landslides affected some of our schemes like Kisiizi in Rukungiri and Karenganyambi in Kisoro.



Repairs at Karenganyambi scheme in Kisoro recently affected by landslides. While such harsh weather conditions have been and will always be a challenge our proactive strategy and resiliency coupled with community and stakeholder involvement, the schemes' functionality can only be guaranteed



Operation and Maintenance of piped water supply and sanitation systems in small towns and small towns is key in ensuring socio-economic growth of the communities. The Major objective of operation and maintenance of water supply system is to provide sustainable, equitable, consistent, economic safe and adequate water. Operation of system in general means ensuring effective routine running of system timely and daily while maintenance in general means up keep of structures/system including planned, preventive or corrective maintenance, repairs etc. some of the good O&M practices include fencing off water sources, regular checking of leaking pipe networks, water quality monitoring, etc.



A dedicated and motivated team ensures improved service delivery. Efficiency and effectiveness in service is embedded in strong management systems such as accountability, communication, human resource development, remuneration, finance, feedback management and equipment. The south western Umbrella of water and sanitation is the clear path to ensure the schemes in the region are functioning at their best



Fencing water sources and other facilities regulates and limit access thereby protecting them from malicious damage