

THE REPUBLIC OF UGANDA

MINISTRY OF WATER AND ENVIRONMENT

DIRECTORATE OF WATER DEVELOPMENT

WATER UTILITY REGULATION DEPARTMENT

REGIONAL PERFORMANCE REVIEW REPORT



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The urban water and sanitation sub-sector has undergone series of reforms since year 2001. These were aimed at ensuring services are provided with increased performance and cost effectiveness. The Ministry set up a Water Utility Regulation Unit in 2009 under the Directorate of Water Development and has since transformed into a Department (WURD) whose mandate is to regulate Water supply service provision in the country. Regulation Water Authorities is done by contract as enshrined in Cap 152 of the Water Act. The Water Authorities include NWSC established by Act of Parliament, Regional Umbrella Organizations (Regional Water Authorities) and Local Governments for some Small Towns (STs) and Rural Growth Centers (RGCs).

WURD stepped up efforts to strengthen performance monitoring by establishing Regional regulation units at the existing Water and Sanitation Development Facilities (WSDFs) across the different regions including; Northern, Central, Eastern, and South-West regions. To further improve on regulation of water supply, 6 Regional Umbrellas for Water and Sanitation were declared and Water Authorities with an additional role of directly undertaking Operation and Management (O&M) of Water supply systems gazetted to them.

The additional role for Umbrella Organization calls for re-organization and planning to undertake the various O&M tasks. In order for WURD to ease performance monitoring, a clear platform for ensuring sustainable water provision is inevitable. The department organized regional performance review meetings were conducted to assess their preparedness to undertake direct O&M for the 210 towns gazetted to them. Efforts were also made to include NWSC managers for the respective regions for curtsy and follow up on the cost per 20 liter Jerrican of water at public stand points that are meant to serve the poor under the pro-poor strategy.

WURD is generally been mandated to undertake both economic and technical regulation of WSS service provision to strike a balance between quality of the service, consumers interests and financial sustainability of operator (Water Authorities). The tasks generally include; (a) Development of Standards and Guidelines, (b) Tariff Setting, (c) Performance Monitoring of annual key performance indicators (KPIs), (d) Customer protection and (e) Competition.

Scope and target

The activity was conducted during the 3rd quarter of financial year 2017/2018. The target was the Regional Umbrella mangers and there technical teams, NWSC managers in the regions visited, Representatives from Water for Production, Facility Manager among others. During field visits, the PSP attendant, scheme operators, plumbers, commercial officers and water users were targeted.

Methodology

This involved desktop analysis (Using UPMiS data) of various issues based on the different KPIs to indentify key issues for discussion, held meetings team members at regional level including Umbrella and NWSC manager, Water for production, WSDF managers, Umbrella staff and communication officers. At the Water Supply Systems, the regulation team interacted with consumers, operators, commercial officer and PSP attendants. A total of six water supply systems were visited. These were selected based on their performance guided by the UPMiS records and Efforts were also made to visit NWSC towns. This was done to better understanding of the operation and management issues faced with the water authority. These included Namayumba in Central, Masafu-Busia in Eastern, Nakapiripirit in Karamoja, Minakulu in Northern, Kaihura in Mid-West and Katuna in South-West and Muhanga (NWSC).

FINDINGS

This section presents the finding from the Regional performance review meeting including None Revenue Water (NRW), Assets management, Reporting compliance, Metering efficiency, billing and collection efficiency, Tariff application and approval, pro-poor intervention, customer care and competition among water authorities.

PERFORMANCE MONITORING

The Department advises the Minister to enter into Performance Contract (PC) with Water Supply Service Authorities (WSSAs) with stipulated annual performance targets. This is done by collecting and reviewing technical and commercial service performance and benchmarking and publishing information on quality of water and sewerage services. Utility Performance Monitoring System (UPMiS) is a strong platform that facilitates reporting and data collection on the performance of Utilities used for sector reporting.

Non-Revenue Water

Sub-Saharan Africa experience challenges in water availability, accessibility, and management. Water utilities are faced with high water losses both physical due to leakages and commercial losses due to water theft, improper data handling and improper metering. About 35% of water produced is lost in South Africa, Tanzania, and Mozambique while Zimbabwe looses about 53%. Although not as much as Zimbabwe, Uganda's big utility (NWSC) experienced about 39% NRW for Kampala (2017). The 6 regional umbrella authorities have experienced high NRW over the three months. The Central and Mid-West regions experience slightly low NRW of 25.5% and 27.8% while South-West is at 81.5%, Karamoja ate 50%, Northern at 39% and Eastern at 35%.

The Central umbrella organisation has stepped up efforts to reduce NRW. They reported a reduction from 50% before takeover to 21% after taking over O&M of the schemes. Based on the reported figures through UPMiS, schemes some gazetted schemes still experience high non-revenue water including Jezza-46%, Kiboga-57%, Kyamulibwa-42%, Kyatiri-62%, Nakawuka-48%. There is therefore need to curb this very high non-revenue water.

The Eastern and Karamoja Umbrella are still experiencing high non-revenue water of about 47% and over 50% for Karamoja. The following schemes in Eastern experience high NRW including Muyembe-38%, Namwendwa-39%, Katakwi-54%, Ochero-55%, Suam-84% while Karamoja has the following schemes with high NRW including Alerek-28%, Morulem-29%, Namalu-31%, Kapedo-32%, Nakapiripirit-52%, Nabilatuk-52%, Lopei-55%, Rengen-61%, Kopoth-63%, Loroo-82%, Nakapelimoru-100%, Chesabun-Moruita-100%

The Mid-West Umbrella organisation experiences about 27.8% however only 15% of the water supplied is metered. The following are schemes with high NRW; Businge-Buhumuriro-35%, Malere- 38%, Rugombe-40%, Kabale (Kamwenge)-40%, Kasenda-51%, Rweihamba-62%, Kayinja-81%.

The South-West Umbrella has the following schemes with high NRW; Rugaaga-30%, Bikurungu-37%, Katuna-58%, Rubuguri-63%, Ryakarimira-82%, Kiyenje-Bwanga, Kyezimbire, Migyera (Rukungiri), Kanyinamigyera, Mwihe A, Karunoni, Mwihe B, Banyara, Nyakabingo (Rukungiri), Kinanira, Nyangorogoro (Kabale), Buhoma, Nyarushanje, Karenganyambi, Kabuga (Rukungiri), Kigata, Bukiro, Kamuhembe, Rurama, Bugangari-Katabushera, Buraro, Kasumang and Kabuyanda have NRW at 100%.

Northern region experiences with about 49% NRW and the following towns have high NRW; Ovujo 29%, Oyam-29%, Kamdini-31%, Agweng-32%, Adwari-46%, Otuke-49%, Wadelai-58%, Alebtong-59% and Olilim at 84%. During the regional performance review meetings, it was noted that high physical water loses are as results of erroneous figures, faulty meters (inefficient meters), lack of bulk meters slightly below two fifth of the gazetted schemes in Northern Region have no functional bulky meters, leaking pipes and this was experienced in Minakulu and Kamdin in Northern Region. The commercial losses were largely due to water theft, meter bypass and deliberate cutting of pipes especially in Karamoja region.

In order to balance the commercial viability and operational cost recovery, the Umbrella organisations are urgently required to take note of the following recommendations.

- There is need to urgently ensure meters are installed at all points (private meters and bulky meters) and utilities are encouraged to utilise the standardised guidelines for private and bulky meters.
- The regulator also requires the umbrella organisation to have dialogue meetings with the water users through the water user committees to deal with issues of water theft and deliberate cutting of pipes.
- The integrity of information submitted through UPMiS is still lack and water authorities are urgently required to validate this information to avoid erroneous figures.
- The authorities need to have clear demarcations for the water supply main and bulky meter at major line to improve tracking water losses.
- The aging schemes and the ever increasing population calls for urgent need to have substantial investment in overhauling the water supply systems especially Namayuba, Kaihura, Minakulu,.

OPERATION AND MAINTENANCE OF UMBRELLA ORGANISATION MEMBER SCHEMES

It should be noted that 210 scheme are gazetted under Umbrella organisation for direct Operation and maintenance. Over 100 water supply schemes have noted yet been gazetted and Umbrella organisations are expected to provide operation and maintenance support. During this regional performance review the regulator noted that this role was shunned by the urge of taking over the towns gazetted to the Umbrellas due to human resource constraints.

- The Umbrella organisation are urgently required to devise mechanisms of how to continue providing O&M support to members scheme and the department finalises plans to have all schemes gazetted.

ASSETS MANAGEMENT

It should be noted that better assets management helps in better operations and sustainability of the water supply systems. The Umbrella organisations lack a clear record of the entire asset for the gazetted schemes this affects their efforts to replace and service assets. There is no organised system of registering all the assets.

Land Wrangles from owners once schemes taken over by either NWSC or Umbrella organisation across the 6 regions. They mangers highlighted depreciation of assets thus the need for replacement including bulk and small meters, pumps as well as having more training in asset management. Karamoja expressed challenges in managing assets since most of the assets are buried and they have no information on As Built drawings and only rely on taking note of assets during repairs and replacements.

Assets ownership most especially Land as noted in Northern Region-Manakulu where the water source area is under the ownership of a different person. Whereas NWSC is expected to pay ground rent, it is usually difficult given challenges of who owns land where the water supply system is located.

- There is need to engage local leaders on issues of land ownership before project implementation.

Reporting Compliance

The teams noted that reporting compliance among the different regional water authorities is still low. In the last three month overall slightly above one fifth of the towns had three reports in UPMiS with about 5% in central, 21% in Mid west, 24% in Northern, 46% in South West while 54% in Karamoja regions had 3 reports. The poor reporting relate to challenges f human resource with designated officers running other tasks.

nuble 1. Number of guzetted towns and number of reports				
Regions	Three Reports n (%)	Two Reports n (%)	Only one n (%)	No Reports n (%)
Central (n=43)	02 (4.6)	30 (69.8)	2 (4.6)	09 (20.9)
Eastern (n=35)	-	12 (34.3)	5 (14.3)	18 (51.1)
Karamoja (n=24)	13 (54.2)	11 (45.8)	-	-
Northern (n=45)	11 (24.4)	31 (68.9)	1 (2.2)	02 (4.4)
Mid West (n=28)	06 (21.4)	12 (42.9)	1 (3.6)	09 (32.1)
South West (n=35)	16 (45.7)	17 (48.6)	2 (5.7)	-
Overall (n=210)	48 (22.9)	113 (53.8)	11 (5.2)	38 (18.1)

Table 1: Number of gazetted towns and number of reports

In Karamoja, the low reporting compliance was attributed to limited access to computers so data is manually gathered and updated in office in Moroto. This is also the issue with the other regions.

- During the reviews with Umbrella mangers, the Regulator took note of multiple reports as one of the constraints in reporting compliance. The water authorities are urgently required to step up efforts towards assigning one staff the task of updating reports in UPMiS to ensure all towns have prompt and timely data in UPMiS for all the months.

Metering Efficiency

Whereas there is 100% metering for the schemes gazetted to CUWS and EUWS, The NUWS, South-West Umbrella and Mid-West Umbrella experience high rates on none metering for example, slight below two fifth of the gazetted towns in NUWS have none functional bulky meter and only 15% of connection are metered in South-West.

Lack of metering introduces cheating and makes it hard for billing and revenue collection thus affecting the financial sustainability of the WSS.

All the regional Umbrella Authorities are required to ensure metering at all levels (bulk and private meters)

Billing and Collection efficiency

The Umbrella organisations have been able to achieve collection efficiency of about 85% during the re-organisation and takeover of schemes. They are commended for this good achievement and encourage continuing improving. The umbrella organisations are waiting for a robust billing system is needed to incorporate all payment channels and will be up-scaled in all the regions.

Tariff Setting

The tariff determination tools used include the comprehensive business planning tool and the cost, revenue and expenditure customised tool. During the performance reviews, it was noted that the business planning tool is not used in tariff determination and scheme are mainly using a customised cost, revenue and expenditure tool to determine the tariff. Although the charged tariffs are not approved by the Minister, they are cost reflective and system specific as opposed to standardised rates as that of NWSC. During the regional performance review meeting the regulator took note of challenges of water affordability among consumer in rural growth centre especially in south western region which call for the need for a customised tariff for rural towns gazetted to NWSC.

The challenge of charging a flat fee and none metering of 85% of 1,113 was noted in Mid Western Umbrella organisation. This constrains billing attempts and leads to low collections thus affecting operational cost recovery. The Umbrella Organisation should consider the current costs as they prepare tariff approval document and this inevitably require more engagements with the water consumers.

In Karamoja, the willingness to pay for water is low because the people are used to free things coupled with political cheap popularity of telling people that water is for free (given by government)

Region	Average Tariff
Central	3, 470 per unit volume of water
Eastern	2,595 per unit volume of water
Karamoja	2,471 per unit volume of water
Northern	3,049 per unit volume of water
Mid-West	3,423 per unit volume of water
South-West	2,591 per unit volume of water

Tariff charged by Umbrella organisation

- Need for a comprehensive tariff review in the sub sector as well as coming up with rural tariff for some rural areas.
- The different regional water authorities are urgently required to submit their tariff application proposal for review and approval to the Minister. There is need to take into consideration issues of affordability, cost reflective and self sustenance (cost recovery.
- There is need for a rural tariff for NWSC especially for rural growth centre schemes.

CUSTOMER PROTECTION

Receive and resolve customer complaints, resolve disputes between customers and service providers, develop customer management guidelines and guidelines for customers in terms of their rights and responsibilities. Furthermore, disseminate information to customers and consumers regarding tariff increases and other relevant information about water and sewerage services.

The Managers of Umbrella Authorities admitted that there are no tracking mechanisms of getting feedback from the customers and promised to make improvements to communicate and get in contact with the customers. In the Eastern region, it was noted that there team members from the Umbrella Organisation who moves around to capture customer complaints and give feedback.

The Umbrella Organisations did not have a customer relations desk across all the regions. They are strongly urged to have an officer designed to handle customer compliant and also conduct customer satisfaction surveys to determine their level of satisfaction and how to improve on service levels.

- Proposal to have public hearings to complement the customer satisfaction surveys that will be conducted. The Umbrella organisations are encourage to put in place a customer care desk because this was found missing in all the area. This will help in quickly attending to customer complaints, improving on service quality through feedback from customers and increasing on collection efficiency in the different regions.
- Need to have more formal engagements with the water user committees

PRO-POOR INTERVENTIONS

Pro-Poor (NWSC vendor charge more than 50shs), low commercial relevance on the side of the vendor, water scarcity. In Kitoma, venders are challenged with the fewer number of PSPs coupled with high demand making forced of demand and supply to determine the tariff. In this case most consumers have been exploited paying for 20 liter jerrican prices ranging from 500 to about 1000 although NWSC charges vendors only 25 shillings per 20 liter jerrican of water

- NWSC needs to step up efforts in ensuring all PSP vendors charge a uniform tariff of 50 shillings per 20 liter jerican of water by have price tags on the PSPs.
- There is need to have a formalised working relation with the PSP attendant say having a formal PSP operation contract where the attendant is expected to follow the set rules in the contract.
- There is urgent need to increase on the number PSP to increase on access to water by the poor.

COMPETITION

Identify economically viable service areas and recommend variations to these areas on an on-going basis; resolve any dispute between different service providers, including with respect to bulk tariff issues and network access with a view to providing a level playing field for all types of providers.

Network access; there are no clear boundaries and demarcations for system geographical coverage (Shared schemes by NWSC and Umbrella organisation in South Western Region that is Ndyakalimira and Kigatta)

- There is urgent need to mappout the geographical locations within which the gazetted scheme covers. This calls for the regulator to supported with the necessary in fracture to mappout the different service networks for the water supply schemes in the short run. In the long run for new establishments, there is need for this to be incorporated in the designs with the regulator on board throughout all the level to check relevant standards.

Overall Recommendations

PICTORIALS



Meeting with South Western Team including NWSC Manager



Meeting with Eastern Team including NWSC Manager



Meeting with Northern Team including NWSC Manager



Group photo in the Northern Region



Masafa water source area



Ag. Asst. commissioner observing the faulty bulky meter at Minakulu



Reservior at Katuna WSS



Group photo at Kaihura WSS



Group photo at SWUWS



Group photo at the Eastern Facility



Meeting at Masafa WSS in Busia



Engaging with the PSP attendant in Masafu WSSB



Reservior at Masafu WSSB



Meeting with the Karamoja Team



Group photo at Karamoja Umbrella



Inspecting the meter at a PSP in Nakapiripiriti



Nakapiripiriti water treatment



Nakapiripiriti water source and reservior

References

- 1. Non-Revenue Water in Sub-Sharan Africa (July 2016); https://www.prnewswire. com/news-releases/non-revenue-water-in-sub-saharan-africa-300299040. html
- 2. Paper: The Challenge of Reducing Non-Revenue Water (NRW) in Developing Countries, How the Private Sector Can Help: A Look at Performance-Based Service Contracting by The International Bank for Reconstruction and Development/The World Bank (Dec, 2006)