

BEST PRACTICE

Collection and digitalisation of asset data fosters ownership, pride, and staff engagement

TOPIC:

AM1 – Collection and digitalisation of asset data

COP:

Asset Management

WOP:

WOP – Uganda and Kenya



MORE INFORMATION:



CHALLENGE

Asset management in water utilities offers numerous benefits, enhancing operational efficiency, cost-effectiveness, and service delivery. It ensures systematic monitoring and maintenance, pre-empting issues in infrastructure and reducing the risk of failures. By implementing proper maintenance schedules, it extends asset lifespan, maximizing their value and reducing lifecycle costs. Understanding asset conditions aids in effective risk mitigation, enhancing resilience against natural disasters or system failures. This approach also brings cost savings over time, avoiding emergency repairs and optimizing resource allocation. Data-driven insights empower better decision-making regarding infrastructure investments and upgrades. Compliance with regulations, reliable water supply, improved sustainability, and transparent reporting further underscore the advantages. Ultimately, effective asset management leads to improved infrastructure performance, cost savings, risk mitigation, and superior service delivery, while ensuring adherence to regulatory standards. Collection and digitalisation of asset data is the first step towards professional asset management based utilities. This step is time consuming and requires dedicated trained field staff. Major challenges are

- (i) the absence of a dedicated asset manager to structure the process, and
- (ii) limited experience and affinity within the operational staff for data registration and digitalisation

APPROACH

Asset data collection surveys are conducted by employees in the main and branch offices, followed by GIS mapping. Staff were trained to do so. With time, field staff became more familiar to Asset Management (AM), fostering a sense of ownership and enhancing their administrative and digital competencies. Utilizing this asset data, plans better for medium-to-long-term investments, while effective operation and maintenance routines were established, aimed at minimizing system failures and maximizing the economic lifespan of various system components. Collaboration with field staff, including plumbers and meter readers, who received training from peers, proved highly beneficial and persuasive in catching up with necessary skills and knowledge.



RESULTS

Asset registration and digitalization significantly elevate the professionalism in managing system infrastructure, enhancing operational maturity. This process streamlines investment planning and fosters systematic water distribution while addressing water loss challenges. CRWB Malawi targets registering over 50% of distribution assets in GIS by 2025, surpassing 75% by 2026, and achieving complete registration by 2030. NWSC strategically recruited young professionals to expedite asset registration, boosting operational efficiency and structured investment planning. CRWB's asset database aims to curtail water losses and augment revenue from water sales. Initial GIS registration prioritizes all distribution assets, including mains, reservoirs, distribution lines, valves, customer connections, leaks, and faulty meters, despite challenges in evaluating current asset performance comprehensively.

SUCCESS FACTORS

Success factors for the introduction of AM were (i) strong commitment from top management, (ii) support from VEI short term experts to introduce a systematic approach, (iii) opportunity to mobilise field employees (plumbers & meter readers) to participate in data collection, and (iii) the positive interaction with trained peers. The training and involvement of field staff was appreciated while **sharing the direct gains** from the collected data (detailed mapping) was most welcomed as it supported the operational work (**quick wins**).

FURTHER INFORMATION

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Do also consult the peers and library of the CoP AM



OTHER

The Global Water Operators' Partnerships Alliance (GWOPA) helps water operators help one another to provide quality services to all. GWOPA is an international network alliance supporting water operators to engage in WOPs. WOPs are peer support exchanges between two or more water operators, carried out on a not-for-profit basis with the objective of strengthening operators' capacity and performance to provide better services to more people (www.gwopa.org).

WaterworX is a major Dutch WOP program engaging over 50 water operators in their joint effort to capacitate peers, strengthen their work processes, and ultimately improve performance (www.waterworxprogramme.com).