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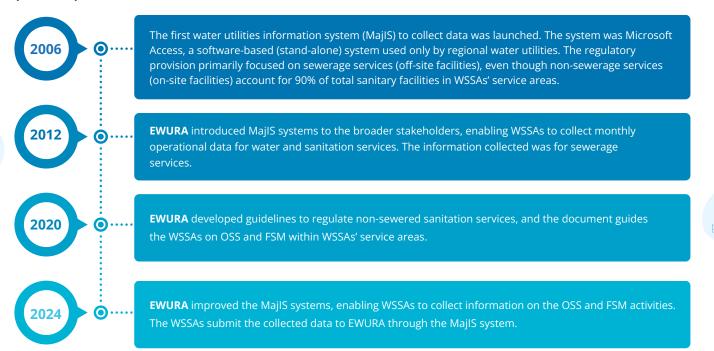Energy and Water Utilities Regulatory Authority
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Water Utilities Information System (MajIS)

A fit-for-purpose sanitation data tool

MajIS is a web–based system used by the Energy and Water Utilities Regulatory Authority (EWURA) to collect data and track the development of water and sanitation service provision including on–site sanitation (OSS) and fecal sludge management (FSM) from water supply and sanitation authorities (WSSAs) in their service areas in Tanzania.

2006
The first water utilities information system (MajIS) to collect data was launched. The system was Microsoft Access, a software-based (stand-alone) system used only by regional water utilities. The regulatory provision primarily focused on sewerage services (off-site facilities), even though non-sewerage services (on-site facilities) account for 90% of total sanitary facilities in WSSAs' service areas.

2012
EWURA introduced MajIS systems to the broader stakeholders, enabling WSSAs to collect monthly operational data for water and sanitation services. The information collected was for sewerage services.

2020
EWURA developed guidelines to regulate non-sewered sanitation services, and the document guides the WSSAs on OSS and FSM within WSSAs' service areas.

2024
EWURA improved the MajIS systems, enabling WSSAs to collect information on the OSS and FSM activities. The WSSAs submit the collected data to EWURA through the MajIS system.

The MajIS tool enables EWURA to effectively execute its regulatory functions of monitoring WSSAs' performance by establishing guidelines, such as performance benchmarking guidelines (2022), OSS and FSM guidelines (2020), national sanitation options and construction guidelines (2012), guidelines for the construction of improved toilets and environmental sanitation (2014), and waste and wastewater quality monitoring guidelines for water utilities (2020). EWURA shares these guidelines with WSSAs and makes them available on EWURA's websites.

The system allows WSSAs to access modules essential to their sanitation service operations. An example is the business plan modules that WSSAs are required to develop and submit for EWURA's approval. The business plan includes performance targets for OSS and FSM interventions and strategies to attain safe and effective sanitation service and management targets.
- To ensure the guidelines' effective implementation, EWURA provides capacity-building support for the preparation of business plans, customer service charters, and water quality and monitoring programs, among other things.

EWURA regulates 26 regional WSSAs, 52 district and township WSSAs, and seven national project WSSAs.

The need for EWURA to prepare a guideline covering OSS and FSM stemmed from the Water Supply and Sanitation Act of 2019 requirements. The Act specifies that WSSAs are mandated to provide water supply and sanitation services covering both OSS and FSM. The guideline includes standard operating procedures, business model options for providing FSM, and monitoring, evaluation, and enforcement of FSM. Information is collected on MajIS to enable EWURA to monitor the implementation of the OSS and FSM regulations. This information covers components of the sanitation value chain as follows:

1. DATA GENERATION

EWURA, through MajIS and other data sources, collects data across the five sanitation service chains: capture and containment, emptying, transportation, treatment and disposal, and enduse/reuse.

- EWURA provides data standardization by defining terms and methods of data collection and analysis through the guidelines.
- EWURA offers capacity-building support through collaboration with local government authorities and the WSSAs to train their staff in data reporting and standardization. It also conducts data validation at regular intervals for quality checks.

2. DATA ANALYSIS

EWURA measures the performance of the WSSAs against key performance indicators (KPIs) and compliance requirements, as well as the efforts made in attaining the performance targets in the business plans. Examples of the 12 KPIs are as follows;

- Installed water production capacity
- Water production
- Number of water connections
- Staff productivity
- Population directly served with water
- Non-revenue water
- Revenue collection efficiency
- Average hours of service
- Compliance with wastewater quality

3. DATA OPERATIONALIZATION

The output data from MajIS is used by EWURA and WSSAs to make informed decisions. This data enables EWURA to assess:

- Compliance of WSSAs to license conditions and agreements.
- Performance of WSSAs and make recommendations on investments needed to close the gaps in service delivery.

The data also enables WSSAs to:

- Identify areas for improvement in sanitation service delivery.
- Benchmark their performance against other WSSAs, thereby facilitating cross-learnings.

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