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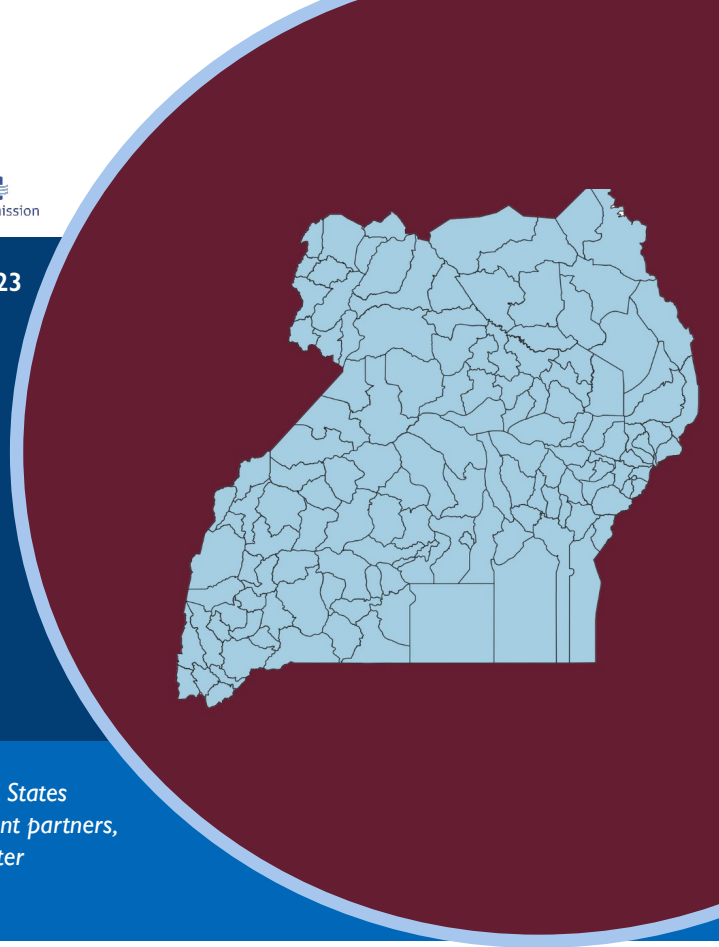


INSTITUTIONAL FRAMEWORK REPORT

AUGUST 2023

UGANDA INSTITUTIONAL FRAMEWORK FOR WATER SUPPLY

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Rural Evidence and Learning for Water (REAL-Water) is an initiative from the United States Agency for International Development (USAID) and supports policymakers, development partners, and service providers to make strategic decisions and implement best practices for water management through implementation research.

COUNTRY OVERVIEW

Uganda is a young, fast-growing, and rapidly urbanizing country: 45 percent of the population is under 15 (United Nations Population Division 2022), the urbanization rate is 5.6 percent per annum, and gross domestic product (GDP) per capita in 2021 was \$884 (World Bank 2023). The country's Human Development Index (HDI) is 0.525, ranking 166th among 191 countries (United Nations Development Programme 2022).

Uganda has a parliamentary system with universal suffrage. The Local Governments Act of 1997 (Government of Uganda 1997) decentralized country governance, devolving specific powers, functions, and funds to local governments¹. Local councils, with guidance from technical officers, empower local governments to provide water services.

The 1995 Constitution (Government of Uganda 1995a) defines clean and safe water as a fundamental right for all Ugandans and divides responsibilities for water service provision between the national government and the 146 district local governments.

According to the World Health Organization/ United Nations Children's Fund's (WHO/UNICEF) Joint Monitoring Program (2020), Uganda's water services have improved substantially over the past 20 years: in 2020, 83 percent of Ugandan households accessed either piped water or improved groundwater, compared to 61 percent in 2000. However, according to Uganda's Ministry of Water and Environment, household water access has remained between 65-69 percent since 2010 (Ministry of Water and Environment 2023).

¹ Local government refers to an entire functional unit of the sub-national government system, comprising political, technical, and administrative roles. Local councils, headed by a democratically elected chairperson and politically appointed members, have planning and policy authority and are responsible for service delivery.

Domestic/municipal and agricultural uses exert the most demand on Uganda's abundant surface water, while drinking water utilizes groundwater primarily. Annual surface water and groundwater abstraction rates will likely remain well below levels that would

threaten sustainable utilization thresholds. However, climate change, increased frequency of extreme weather events, and the fast-growing urban population could exacerbate challenges of water resource and water infrastructure management (USAID 2021).

UGANDA COUNTRY OVERVIEW (World Bank 2023)*

**POPULATION (2021):
45.9 MILLION**

**POPULATION GROWTH RATE (2021):
3.2% PER ANNUM**

**URBANIZATION RATE (2021):
5.6% PER ANNUM**

**HDI (UNITED NATIONS DEVELOPMENT
PROGRAMME 2022):
0.525**

**UGANDA'S GDP PER CAPITA
(2021): 884 USD**

Over the last 30 years, Uganda's HDI value increased from 0.329 to 0.525. Uganda's HDI puts the country in the low human development category, ranking 166th out of 191 countries and territories.

**UGANDA'S GDP DISTRIBUTION
(THE WORLD BANK GROUP 2021):
47% SERVICES
28% INDUSTRY
25% AGRICULTURE**

**POPULATION LIVING ON
LESS THAN \$2.15/DAY (2019):
42%**

* Except where specific citations are provided, all data in the table are reported by the World Bank with the year in which the data represents in parentheses.



UGANDA'S LEGAL FRAMEWORK FOR WATER SUPPLY AND WATER RESOURCES MANAGEMENT

Legal instruments governing water service provision are:

1) THE UGANDAN CONSTITUTION (1995)

- Defines clean and safe water as a fundamental right for all Ugandans.
- Compels the government to take all practical measures to promote good water management at all levels of action.
- Defines the principle of decentralization as the system for local governance in Uganda (Art. 176). (Government of Uganda 1995a)

2) THE NATIONAL ENVIRONMENT ACT (1995)

- Provides the legal framework for the sustainable management of environmental resources, including water.
- Establishes the National Environment Management Authority as the coordinating, monitoring, and supervisory body for that purpose. (Government of Uganda 1995c)
- Includes key statutory instruments such as the National Environment (Wetlands, River Banks, and Lake Shores Management) Regulations (1999) that provide for the protection and sustainable use of wetlands, river banks, and lake shores and The Water (Waste Discharge) Regulations (1998) that provide wastewater discharge and effluent standards.

3) THE NATIONAL WATER AND SEWERAGE CORPORATION ACT (1995)

- Establishes the National Water and Sewerage Corporation (NWSC) as a corporation that operates and provides water and sewerage services in specific entrusted areas. The act assigns NWSC to:
 - Manage water resources in the most beneficial way for the people of Uganda.
 - Provide water supply services for domestic, stock, horticultural, industrial, commercial, recreational, and environmental uses.
 - Provide sewerage systems in the areas appointed under the Water Act of 1995.
 - Develop water and sewerage systems in urban centers ($\geq 15,000$ inhabitants) and large national institutions (hospitals, etc.) throughout the country (Government of Uganda 1995b).

4) THE WATER ACT (1995), CAP 152 & LAND ACT (1998), CAP 227

- Vests all water rights in the government. No water can be obstructed, dammed, diverted, polluted, or interfered with without a permit.

- Defines the powers and functions of Water Authorities as the responsible entities for provision of water supply services and gives the Minister of Water and Environment the authority to demarcate water supply areas and appoint Water Authorities to provide water supply services in these areas through a notice in the Gazette.
- Gives general rights to the occupiers of that land to use naturally existing water sources for domestic use. However, the occupier must receive approval from Ministry of Water and Environment to abstract water on his/her premises (Art. 7) (Government of Uganda 1995d; 1998).
- Includes key statutory instruments of the Water Act such as the Water Resources Regulations (1998) that defines water, drilling, and construction permit rules and The Water (Waste Discharge) Regulations (1998) that provides wastewater discharge and effluent standards.
- The District Water Offices (DWOs) are responsible for planning, implementing, and monitoring all water and sanitation activities in the district. The DWOs apply for District Water and Sanitation Conditional Grants (DWSCGs) and receive support from the national government to plan and implement water provision and public sanitation. DWOs' responsibilities include:
 - Developing a district-wide water and sanitation plan;
 - Managing funds for the provision of water services; and
 - Reporting to the District Council, Ministry of Finance, Planning, and Economic Development, and Ministry of Water and Environment.
- With guidance from the Ministry of Water and Environment, the Ministry of Finance, Planning, and Economic Development dictates the allocation formulas that outline how DWSSCG can be spent and disburses funds to district local governments. The District Council approves DWO's work plans and budgets for water service provision. The Ministry of Local Government (MoLG) is responsible for providing the administrative support, technical advice, guidance, and mentoring required to execute local government district plan processes effectively. (Government of Uganda 1997; 2000).

5) THE LOCAL GOVERNMENTS ACT (1997) & PUBLIC HEALTH ACT (2000)

- In districts and urban centers outside the NWSC's jurisdiction, water service provision and maintenance of facilities is the responsibility of local councils under the guidance and support of the central government.
- Local councils must take lawful and necessary measures to prevent the pollution of any water supply, which the public has the right to use for drinking or domestic purposes. Districts are the legal owners of water infrastructure (Government of Uganda 1995d; 1997) and must purify any water supply used for drinking or domestic purposes that is known to be polluted (Government of Uganda 2000).

6) THE NATIONAL CLIMATE CHANGE ACT (2021)

- Provides the legal framework for Uganda to pursue its climate action commitments under the United Nations Framework Convention on Climate Change (United Nations 1992), Kyoto Protocol (United Nations 1997), and Paris Agreement (United Nations 2015).

- Mandates the creation of a Framework Strategy on Climate Change, as well as a National Climate Action Plan and District Climate Action Plans, reviewed every five years, to operationalize the Act. These measures will formalize the institutional arrangements needed to identify, monitor, mitigate, and adapt to climate change pressures (Government of Uganda 2021).

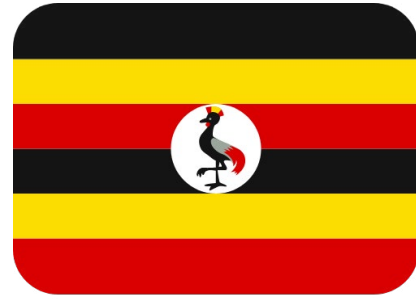


IMAGE 1: The flag of Uganda.

UGANDA’S WATER AND ENVIRONMENTAL POLICIES

1) Vision 2040 outlines Uganda’s national development plan to become an upper middle-income country within 30 years (2010–2040). This document reinforces the government’s commitment to achieve the Sustainable Development Goal for Water (SDG6) by increasing access to piped water and toilet facilities, as well as developing water treatment systems (National Planning Authority 2013).

2) Since 2020, National Development Plan III (NDP III) 2020/21–2024/25 guides integrated sector development through 18 programs aimed at moving the country closer to achieving the goals set out in Uganda Vision 2040. As defined under the Human Capital Development Programme of NDP III, access to safe water should increase to 85 percent in rural areas and 100 percent in urban areas by 2025 (National Planning Authority 2020). The Ministry of Water and Environment leads implementation of the Natural Resources, Environment, Climate Change, Land, and Water Management Programme, increasing the ministry’s focus on integrated water resource management (Ministry of Water and Environment 2022).

3) The Strategic Investment Plan for the Water and Environment Sector, Uganda (2018-2030) establishes investment requirements to meet sector priorities for water resource development and environmental management, largely aligned with SDG6 commitments. The accompanying sector investment model supports annual investment planning by allowing decision-makers to update and analyze funding needs to meet sector targets (Strzepek, Boehlert, and Willwerth 2018).

4) The National Water Policy (1999) promotes an integrated approach to manage water resources in ways that are sustainable and most beneficial to the people of Uganda. The approach is based on the government’s recognition that water is a social and economic good. The policy is divided into water resources management and the development of water uses. Water resources management covers the allocation and protection of water resources. Water development and uses covers domestic water supply, water for agriculture, and other water uses (i.e., industry, hydropower, and recreation) (Ministry of Lands, Water, and Environment 1999). An updated policy (2021) was submitted to parliament for review in

late 2022. Revisions largely focus on adopting transboundary water resource management guidelines that conform with provisions of the Water Convention.

5) The National Environment Management Policy for Uganda (2014) seeks to address environmental issues in a holistic and integrated manner. It emphasizes the following activities:

- a) Prioritizing watershed management to control, conserve, and regulate the water balance in the catchment regions;
- b) Empowering lower levels of governance to systematically respond to local water challenges; and
- c) Ensuring that water resources contribute to socio-economic development (Government of Uganda 2014).

6) The National Water Quality Management Strategy (2006) aims to safeguard the quality of the country's water resources. This strategy highlights the importance of water quality management and frames an approach for achieving water quality standards. In particular, it established a three tier water quality laboratory system with an apex national water quality laboratory, regional laboratories in the four Water Management Zones (WMZs) to support stakeholders to monitor water quality at the catchment level and basic laboratories for all water schemes (Ministry of Water and Environment 2006).

The Uganda National Bureau of Standards (UNBS) coordinated formulation of the water quality standards, which now follow the harmonized East African Community drinking water quality standards (Tables 1 and 2).

7) The Uganda National Climate Change Policy (2015) recognizes climate change monitoring, mitigation, and adaption as integral to economic and social development. The policy seeks to elevate climate change issues within national and local policies, plans, and budgets and support stakeholders from all sectors to adopt actions that may promote climate resilience (Ministry of Water and Environment 2015).

8) The Tariff Policy for Small Towns, Rural Growth Centers, and Large Gravity Flow Schemes (2009) describes the tariff structures for different types of water service delivery, which should be formulated in accordance with Section 94 of the Water Act. For small towns and rural areas (which include rural growth centers and gravity flow schemes), the operation and maintenance (O&M) costs should be fully covered by the consumers, unless there are unavoidable circumstances, in which case the government may provide a subsidy. In the case of large gravity flow schemes, the tariff is paid as a water tax that is imposed per household every year (Ministry of Water and Environment 2009).

9) The National Framework for Operation and Maintenance of Rural Water Infrastructure in Uganda (2020) sets guidelines for all sector actors that use and maintain water supply facilities in rural areas outside the jurisdictions of NWSC and the Umbrella Authorities of Water and Sanitation (UAs). With a foundation of community-based management, the framework introduces entrepreneurial and public-private partnership arrangements as a means to professionalize rural water system management. The framework promotes a rural water system management model built on four principles:

- i. Area-based approach where a contracted, professional area service provider (ASP) takes responsibility for O&M of all rural water facilities within the area (sub-county, a cluster of sub-counties, a district, or a cluster of districts);
- ii. Professional management structures with clear roles and responsibilities, including contractual obligations and performance indicators;
- iii. Financial sustainability where all users pay for water services, but government subsidies support infrastructure rehabilitation and initial capacity building of the professional management structures; and
- iv. Availability of quality spare parts, a core responsibility of the ASP (Ministry of Water and Environment 2020).

Two manuals help guide implementation of the framework: i) Water Supply Service Boards Operational Manual (Ministry of Water and Environment 2021b) and ii) Operational Manual for the Area Service Provider (Ministry of Water and Environment 2021a).

I0) The Pro-Poor Strategy for the Water and Sanitation Sector (2006) aims to improve the effectiveness of WASH pro-poor services. The strategy establishes the need for operational water quality monitoring and appoints service providers to ensure that low-income households are consuming safe water (Ministry of Lands, Water, and Environment 2006).

I1) The Water and Sanitation Gender Strategy (2018) acknowledges that water and sanitation policies affect men and women differently and aims at developing a gender perspective in the sector. Specifically, the strategy provides guidelines to operationalize gender-sensitive program planning, implementation, monitoring, and evaluation. Additionally, it aims to increase the number of women in leadership position among water, sanitation, and hygiene (WASH) committees (Ministry of Water and Environment 2018).

TABLE I: Uganda drinking water standards – primary parameters for routine water quality monitoring.

Source: Uganda National Bureau of Standards (UNBS) 2014

PARAMETER	MAX IN TREATED POTABLE WATER - PIPED WATER	MAX IN NATURAL POTABLE WATER - NON-PIPED SUPPLIES
Fluoride	1.5 mg/L	1.5 mg/L
Arsenic	0.01 mg/L	0.01 mg/L
<i>E.coli</i>	Absent in 100 mL	Absent in 100 mL
Total coliforms	3 coliform organisms in 100 mL in any one sample	10 coliform organisms in 100 mL in any one sample

TABLE 2: Minimum frequency of water sampling for surveillance in Uganda.

Source: Uganda National Bureau of Standards (UNBS) 2014

POPULATION SERVED	MINIMUM FREQUENCY OF SAMPLING SHOULD BE MORE FREQUENT DURING THE RAINY SEASON
< 2,500	1 sample every month
2,500 to 10,000	2 samples every month
10,000 to 25,000	3 samples every month
25,000 to 100,000	10 samples every month
> 100,000	10 samples every month per 100,000 of population served

UGANDA'S WATER ACCESS AND INFRASTRUCTURE MANAGEMENT

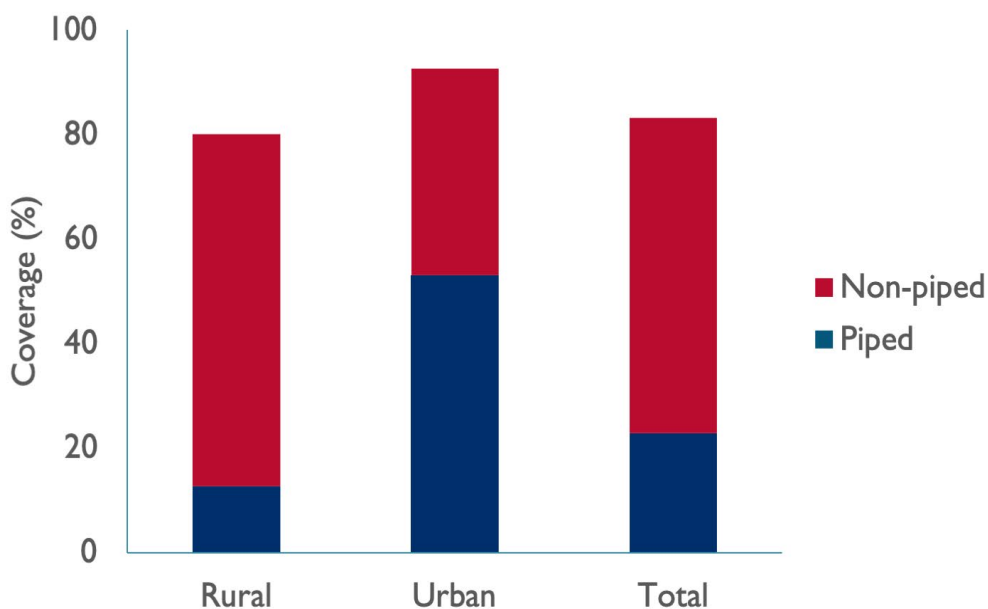


FIGURE 1: Uganda's primary household drinking supplies by facility type in 2020.

SOURCE:WHO/UNICEF (2020)

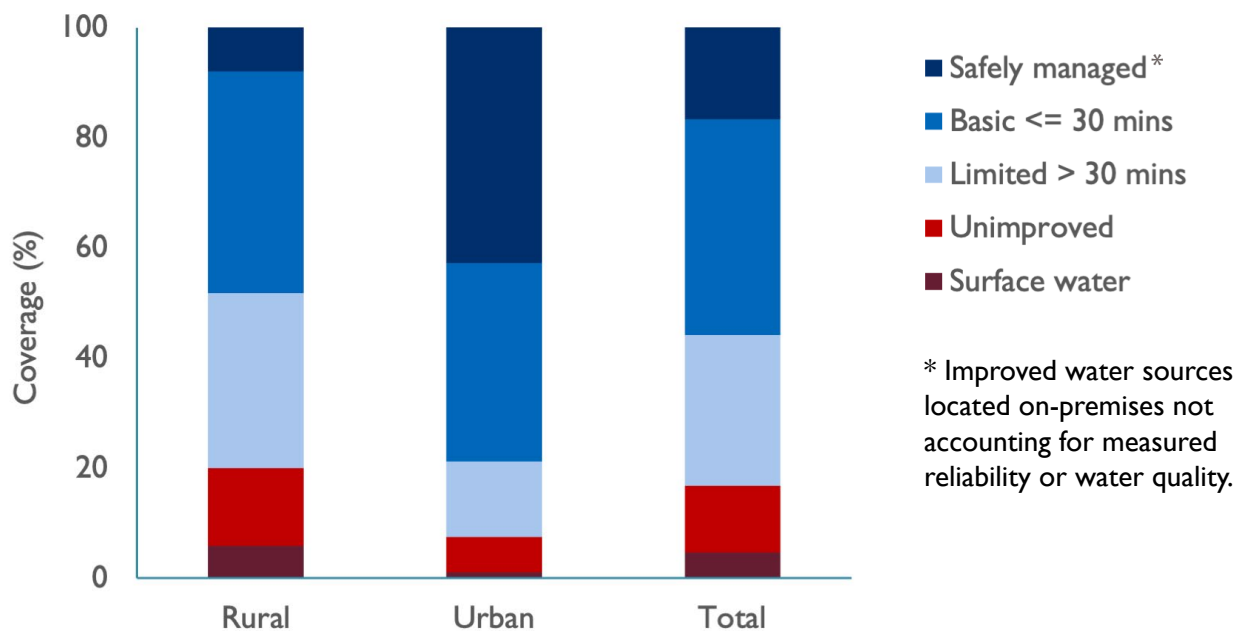


FIGURE 2: Primary household drinking water service levels in Uganda in 2020.

SOURCE:WHO/UNICEF (2020)

DRINKING WATER ACCESS

The WHO/UNICEF Joint Monitoring Programme (2020) reports overall access to improved water sources at 83 percent, with the majority of Ugandan households (~60 percent) relying on non-piped water supplies for drinking (Figure 1). As seen in Figure 2, approximately 27 percent of all households spend more than 30 minutes to collect water from an improved source (limited service), and approximately 39 percent access an improved source within a 30-minute roundtrip (basic service). Less than one in five households (~17 percent) have improved water services located on premises (safely managed).

Disparities, however, in infrastructure and service level coverage exist between urban and rural areas. Over 50 percent of urban households access piped water supplies, compared to approximately 13 percent in rural areas (Figure 1). Approximately 43 percent of urban households have improved water services located on premises (safely managed), compared to 8 percent in rural areas (Figure 2). Reliance on surface water and other unimproved sources that are highly susceptible to contamination is less common in urban areas (7 percent of households) compared to rural areas (20 percent) (WHO/UNICEF 2020).

In 2020, 90 percent of urban schools had at least basic drinking water services while 10 percent relied on improved, but distant (more than a 30-minute roundtrip) drinking water sources. In rural areas, 54 percent of schools had access to basic drinking water services, 34 percent had limited water services, and 12 percent had no water services. Almost all healthcare facilities relied on basic (51 percent) or limited (47 percent) water services, with 2 percent having no water service access in 2020 (WHO/UNICEF 2020).

WATER INFRASTRUCTURE, MANAGEMENT, AND TARIFFS

Uganda has over 1,200 piped systems, the majority being managed by four Water Authorities that have performance contracts with the Ministry of Water and Environment. In 2021 (i) NWSC operated 262 piped water schemes serving over 18 million people; (ii) the six UAs managed 571 schemes, directly operating 303 of them serving around 4.5 million people; (iii) Buikwe District local government operated 24 schemes serving approximately 35,000 people; and (iv) Kalangala Infrastructure Services Limited operated 7 schemes serving approximately 35,000 people. All other piped systems are managed by private operators and communities (Ministry of Water and Environment 2022). Since 2017, these figures have been evolving rapidly as the government has promoted UAs to take over privately operated small, piped water systems and NWSC has launched an initiative to accelerate water service coverage in line with national development priorities.

For piped schemes managed by NWSC, governed by NWSC Act, Cap 317 (Government of Uganda 1995b), tariffs are designed to cover the full

costs of O&M, together with depreciation of technical installations. Cross subsidization is promoted through stepwise water tariffs, and pricing is determined at the national level. Tariffs at piped schemes managed by the other three Water Authorities (UAs, Buikwe District local government, and Kalangala Infrastructure Services Limited) are structured and approved by the Ministry of Water and Environment according to the Tariff Policy for Small Towns, Rural Growth Centers and Large Gravity Flow Schemes (Ministry of Water and Environment 2009) and the Water Act, Cap 152 (Government of Uganda 1995d).

Uganda has numerous point water sources: approximately 43,000 boreholes, close to 22,000 shallow wells, and more than 29,000 protected springs. Community-based management supports 82 percent of point sources, while institutions or individuals manage 16 percent, and private operators manage approximately 1 percent (Ministry of Water and Environment 2022). Water users are expected to pay their respective water user committee, but actual payments are rare due to low enforcement, poor management structures, and lack of incentives (Uganda Water and Sanitation NGO Network (UWASNET) and NaNa Development Consultants 2020; Lockwood, Mulumba, and Henry 2018). Functionality estimates of point water sources range from 85 percent (Ministry of Water and Environment 2022) to around 60 percent (Fallas et al. 2018; The Water Trust 2022).

UGANDA'S EVOLVING FRAMEWORK FOR WATER PROVISION AND MONITORING

TABLE 3: Overview of water provision responsibilities in Uganda.

Setting	Large urban centers	Small towns	Rural growth centers	Rural settlements
Population	>15,000	15,000–5,000	5,000–500	<500
WATER SUPPLY				
Gazetted Water Authority	National Water and Sewerage Corporation (NWSC)			
	Umbrella Authorities (UAs)			
	Private operators: Buikwe and Kalangala			
	provide management and O&M services at rural facilities			Local Councils (Area Service Providers)
SURVEILLANCE WATER QUALITY MONITORING AND REGULATION				
Drinking water/ Water resources	The Directorate of Water Resources Management's Water Quality Management Department working through four Water Management Zones.			
OPERATIONAL WATER QUALITY MONITORING				
Drinking water	Gazetted water authorities			

In large urban centers, NWSC is responsible for piped water provision. Increasingly, NWSC is also extending piped water service in small towns and rural growth centers. In addition to operating and managing infrastructure, NWSC is in charge of operational monitoring to ensure that the water distributed meets national drinking water standards.

Prior to 2017, in small urban centers, local councils appointed Water Supply and Sanitation Boards (WSSBs) who then contracted private operators to operate and maintain small piped systems, and in theory, monitor water quality. Since 2017, the mandate of the Ministry of Water and Environment's UAs has changed from primarily providing technical assistance with O&M and water quality monitoring to WSSBs, to managing and operating piped systems directly. Effectively, the UAs have become regional utilities

responsible for infrastructure maintenance and operational water quality monitoring, gradually taking over piped systems in rural growth centers. The Minister of Water and Environment, through the power and function outlined in the Water Act (1995), designated water supply areas and appointed the UAs as the Water Authorities in these areas, changing the role of UAs.

In rural areas, water infrastructure (primarily handpumps) operation and management typically relies on community-based arrangements. Before 2020, sub-county councils were supposed to appoint a WSSB to support water user committees in managing individual water points, but this rarely happened in practice. Since 2020, the new Operation and Maintenance Framework promotes infrastructure maintenance through professional area service providers contracted by district WSSBs, while sub-county WSSBs

support water user committees in mobilizing user payments and maintaining sanitation and hygiene around water points. The new Operation and Maintenance Framework will likely operationalize slowly, meaning unsupported community-based management will have continued prevalence in rural areas.

Independent surveillance of water quality is the responsibility of the four WMZs. These entities

were established in 2006 as deconcentrated structures² of the Ministry of Water and Environment to strengthen catchment-based water management, enforce local government water laws and regulations, and carry out monitoring and evaluation activities in their respective areas. WMZ responsibilities include monitoring drinking water systems as well as monitoring natural water resources, but do not include direct water provision.

TABLE 4. Detailed Ugandan water provision framework.

INSTITUTIONS	ROLES AND RESPONSIBILITIES IN WATER SERVICE PROVISION	
Water Policy Committee (WPC)	The WPC advises the Ministry of Water and Environment on development of integrated sustainable water management policies. WPC comprises representatives from seven ministries, NWSC, Uganda National Meteorological Association (UNMA), and National Environment Management Authority (NEMA).	
Ministry of Water and Environment	The Ministry of Water and Environment has the overall responsibility for setting national policies, standards, and priorities for the development of water provision services.	
	Directorate of Water Development (DWD)	<p>The DWD is responsible for:</p> <ul style="list-style-type: none"> Managing, coordinating, and regulating water supplies and sanitation activities (rural and urban areas); Providing support to local governments to develop capacity and guide the utilization of grants; and Constructing and rehabilitating piped water schemes in small towns and rural growth centers.
	Rural Water Supply and Sanitation Department (RWSSD)	The RWSSD builds programs to develop staff capacity for water provision and monitoring in rural areas. RWSSD collaborates with the Rural Water and Sanitation Regional Support Centers Support Centers, which are deconcentrated structures operating in the districts.
	Urban Water Supply and Sanitation Department (UWSSD)	The UWSD oversees and supports water supply and sanitation service delivery in areas outside the NWSC's mandate. The department has two regional deconcentrated units: UAs and Water and Sanitation Development Facilities.
	Water Utility and Regulation Department (WURD)	WURD is responsible for setting, monitoring, and enforcing water service standards through performance contracts with gazetted Water Authorities, including NWSC, UAs, and private operators.

² Deconcentrated structures of government are a means of administrative decentralization in which certain functions are shifted to different levels of the central government (e.g., regional offices). Deconcentrated structures are given authority over specific responsibilities which are vested in the central government, but have been redistributed to lower-level units.

Water and Sanitation Development Facility (WSDF)	The four WSDFs fund new water supply and sanitation schemes and major rehabilitation projects in small towns and rural growth centers. After completion, WSDF schemes are handed over to NWSC, local authorities, or UAs for O&M.
Umbrella Authorities	UAs are regional structures of the Ministry of Water and Environment, officially designated (since 2017) as Water Authorities responsible for the management of piped systems not covered by NWSC. Prior to 2017, these organizations were called umbrella organizations and were responsible for O&M backup support. As of 2022, the Minister of Water and Environment had gazetted 571 schemes to the six UAs, with 303 already under their direct management.
Rural Water and Sanitation Regional Support Centers (RWSRCs; formally Technical Support Units [TSUs])	RWSRCs are the links between the Ministry of Water and Environment and local government. The RWSRCs' predecessor, the TSUs, were established under the Ministry of Water and Environment to build capacity at the district level following the decentralization of rural water supply and sanitation. The six RWSRCs provide capacity building, monitoring, and technical backup support to local governments, especially in utilizing the District Water and Sanitation Conditional Grants (DWSCGs). They are relatively influential at the district level.
National Water and Sewerage Corporation	NWSC is a parastatal corporation responsible for the delivery of water supply and sewerage services in urban centers. NWSC's gazetted service areas (jurisdiction) increasingly include small towns and rural growth centers. Expanding from 20 service areas in 2011, NWSC managed 262 areas in 2022. To promote effective and efficient service delivery, service areas are clustered into operational areas (56 in 2022), which are grouped into regions (5 in 2022).
Private Operator	Private operators manage small piped systems, in theory, under a management contract with the sub-county. With the designation of the UAs as service providers, private operators are phasing out. However, private operators designated as Water Authorities (i.e., Buikwe District Local Government and Kalangala Infrastructure Services) through a performance contract with WURD managed 31 schemes in 2022.
Area Service Providers (ASPs)	ASPs are local expert entities that professionally manage rural water systems under a performance contract with a district WSSB or regional WSSB. ASPs can be utilities, companies, nongovernmental organizations/community-based organizations (NGOs/CBOs), or Hand Pump Mechanics Associations. ASPs should have the requisite experience and capacity to conduct routine maintenance and repairs and keep accurate and systematic financial and operational records. ASPs will likely employ managerial staff and field technicians (e.g., handpump mechanics and system operators).
Water User Committees (WUCs)	WUCs , under the former community-based management model, were a voluntary, locally elected team of 5–9 community members entrusted to take care of the management of rural point sources. Under the new O&M Framework, three-person WUCs are primarily responsible for mobilizing water users to make payments and maintain sanitation and hygiene around the water source.
Ministry of Local Government	The MoLG is responsible for providing administrative support and technical advice to local governments in developing district water plans. The Ministry of Finance, Planning, and Economic Development dictates the allocation formulas that outline how local governments can spend DWSCGs in the district. The DWO, with support from the Ministry of Water and Environment through the RWSRCs, develops work plans and budgets. The District Council can recommend changes to work plans and makes the final approvals.

Local Governments (districts, towns, sub-counties)	The local governments (districts, towns, sub-counties) , with approval from their local council, are responsible for the provision and management of water and sanitation services in rural and urban areas outside the jurisdiction of NWSC, in liaison with the DWO and UAs.
District Water Office	The DWO is the central institution coordinating district water and sanitation services. The DWO elaborates the district water plans and is responsible for executing them with funding from the DWSCGs. The DWO has an oversight and architect role of water management in the district. Typically, they do not manage specific operations directly, such as maintenance or infrastructure development.
Sub-county Water Supply and Sewage Board (SCWSSB)	The SCWSSB no longer manages (directly, or more commonly, through private operators) small piped system but serves in an oversight role. They are an important link between the community and the service provider (the UAs, private operators, or ASPs).
Uganda Water and Sanitation NGO network (UWASNET)	UWASNET is a national umbrella organization mandated to coordinate non-state actors, and facilitate learning and collaboration among nongovernmental, development, and government partners. NGOs and CBOs support the provision of water and sanitation services (construction of facilities, mobilization of communities, training of communities and local governments, promotion of hygiene, serving as ASPs), as well as advocacy and lobbying.

TABLE 5. Detailed Ugandan water quality monitoring framework.

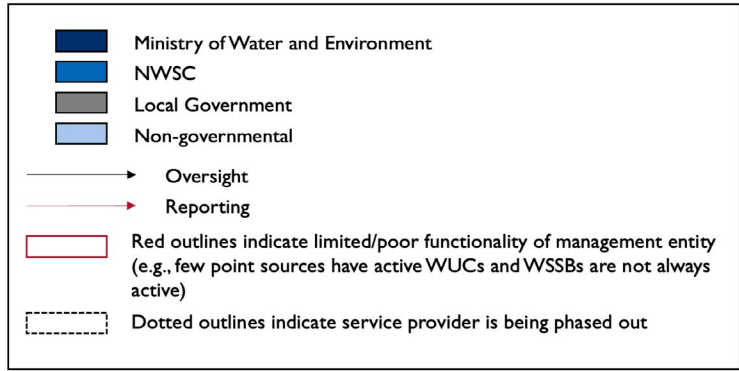
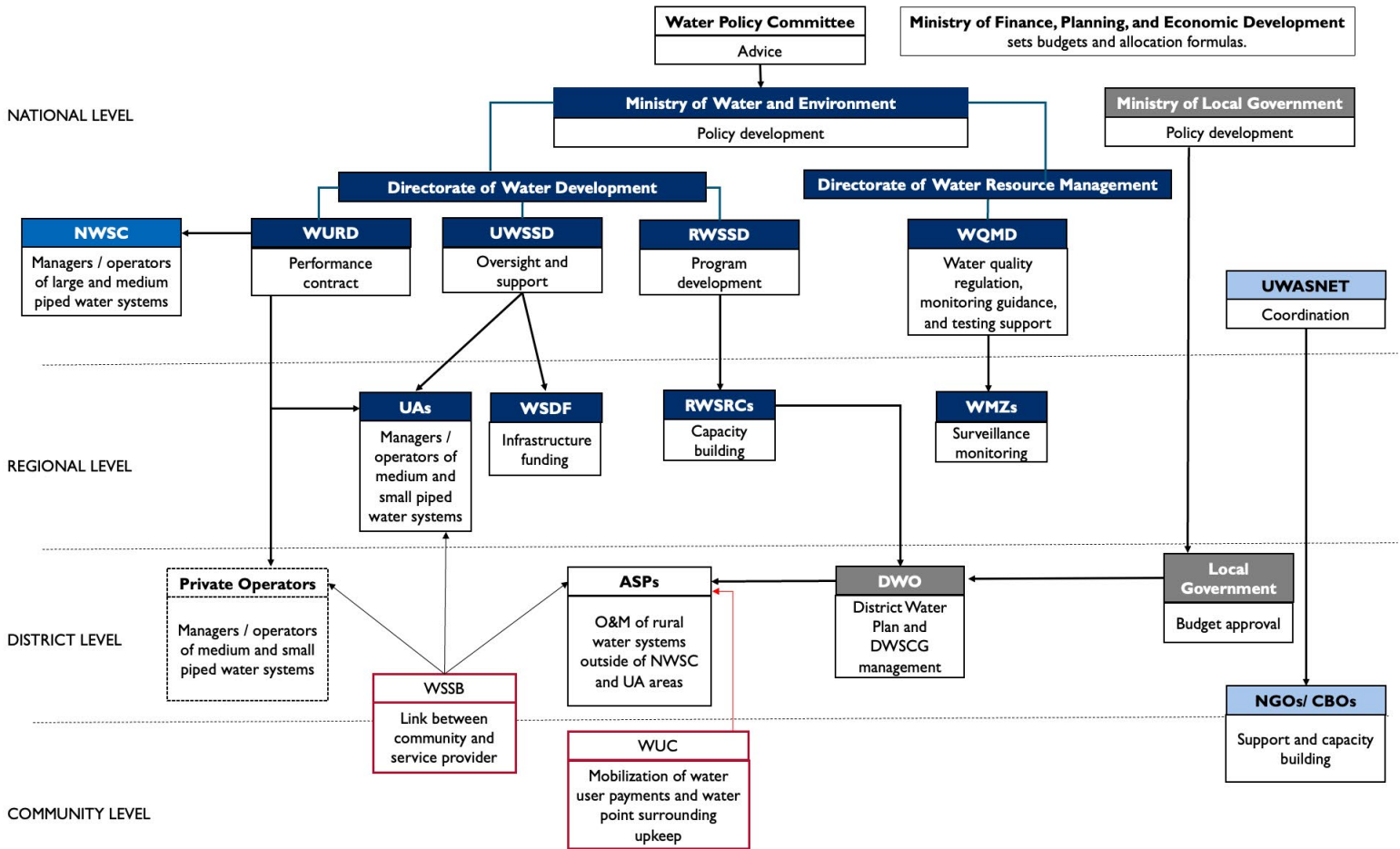
	INSTITUTIONS	ROLES AND RESPONSIBILITIES FOR WATER QUALITY MONITORING
	Uganda National Bureau of Standards (UNBS)	The UNBS coordinates setting standards for drinking water quality.
Ministry of Water and Environment	The Ministry of Water and Environment has the overall responsibility for setting national policies, capacity building, standards, and priorities for water quality management.	
	Directorate of Water Resource Management (DWRM)	The DWRM is responsible for water resources planning and regulation, water resources monitoring and assessment, and water quality management. The Water Quality Management Department has the mandate for monitoring of water resources and regulation of drinking water quality. The DWRM works through WMZs and regional water quality laboratories.
	Water Management Zones	WMZs were established in 2006 as deconcentrated structures of the Ministry for Water and Environment. They enforce local government laws and regulations and carry out monitoring and evaluation of integrated water resources management activities in their respective areas. The regional water quality laboratories in the four WMZs are responsible for monitoring drinking water supplies as well as surface water bodies in their catchment basins.

<p>Directorate of Water Development</p>	<p>The DWD is not directly involved with water quality monitoring, but supports local governments through the RWSRCs and provides water quality performance targets for the NWSC and the UAs.</p>
<p>Rural Water and Sanitation Regional Support Centers</p>	<p>The RWSRCs, formally TSUs, support districts with capacity building to develop water quality testing systems.</p>
<p>Water Utility and Regulation Department</p>	<p>The WURD is responsible for setting, monitoring, and enforcing water quality targets for the NWSC, UAs, and private operators managing piped systems through performance contracts.</p>
<p>Umbrella Authorities</p>	<p>UAs are responsible for operational water quality monitoring in all the systems they operate, and must comply with national standards. In addition, UAs are responsible for providing water quality monitoring support to registered systems that they do not operate.</p>
<p>National Water and Sewerage Corporation</p>	<p>NWSC is responsible for operational water quality monitoring in all of their systems, in compliance with national standards. The NWSC has 70 water quality testing labs across Uganda, covering wide areas. Areas report to regional centers, which report to NWSC headquarters. Headquarters makes most decisions regarding what parameters are tested and with what methods and equipment.</p>
<p>District Water Office</p>	<p>The DWO is responsible for water quality monitoring of point sources and piped systems not managed by NWSC or the UAs. Although the 2006 Water Quality Management Strategy gives the DWO and the District Health Office responsibilities to monitor service provision at point sources, this mandate is poorly implemented at the district level.</p>



Photo Credit: Ugurhan

IMAGE 2: A village near Kampala city in Uganda.



List of Acronyms

- ASP:** Area Service Provider
- CBO:** Community Based Organization
- DWD:** Directorate of Water Development
- DWO:** District Water Office
- DWSCG:** District Water and Sanitation Conditional Grant
- NGO:** Non-governmental organization
- NWSC:** National Water and Sewerage Corporation
- RWSRC:** Rural Water and Sanitation Regional Support Center
- RWSSD:** Rural Water Supply and Sanitation Department
- UA:** Umbrella Authority
- UWASNET:** Uganda Water and Sanitation NGO Network
- UWSSD:** Urban Water Supply and Sanitation Department
- WMZ:** Water Management Zone
- WQMD:** Water Quality Management Department
- WSDF:** Water and Sanitation Development Facility
- WSSB:** Water Supply and Sewerage Board
- WUC:** Water User Committee
- WURD:** Water Utility and Regulation Department

FIGURE 3: Institutional framework for water supply and monitoring.

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