ESAWAS
REGULATORS ASSOCIATION

REGULATION FRAMEWORK FOR RURAL WATER SUPPLY AND SANITATION AND SMALL WATER SUPPLY SERVICES

June 2025

With support from:
CONRAD N. Hilton FOUNDATION

This document was developed with support from:

CONRAD N. Hilton FOUNDATION

In collaboration with:

African Water and Sanitation Association
Association Africaine de l'Eau et de l'Assainissement
AfWASA / AAEA

WaterAid

unicef for every child

African Forum for Utility Regulators

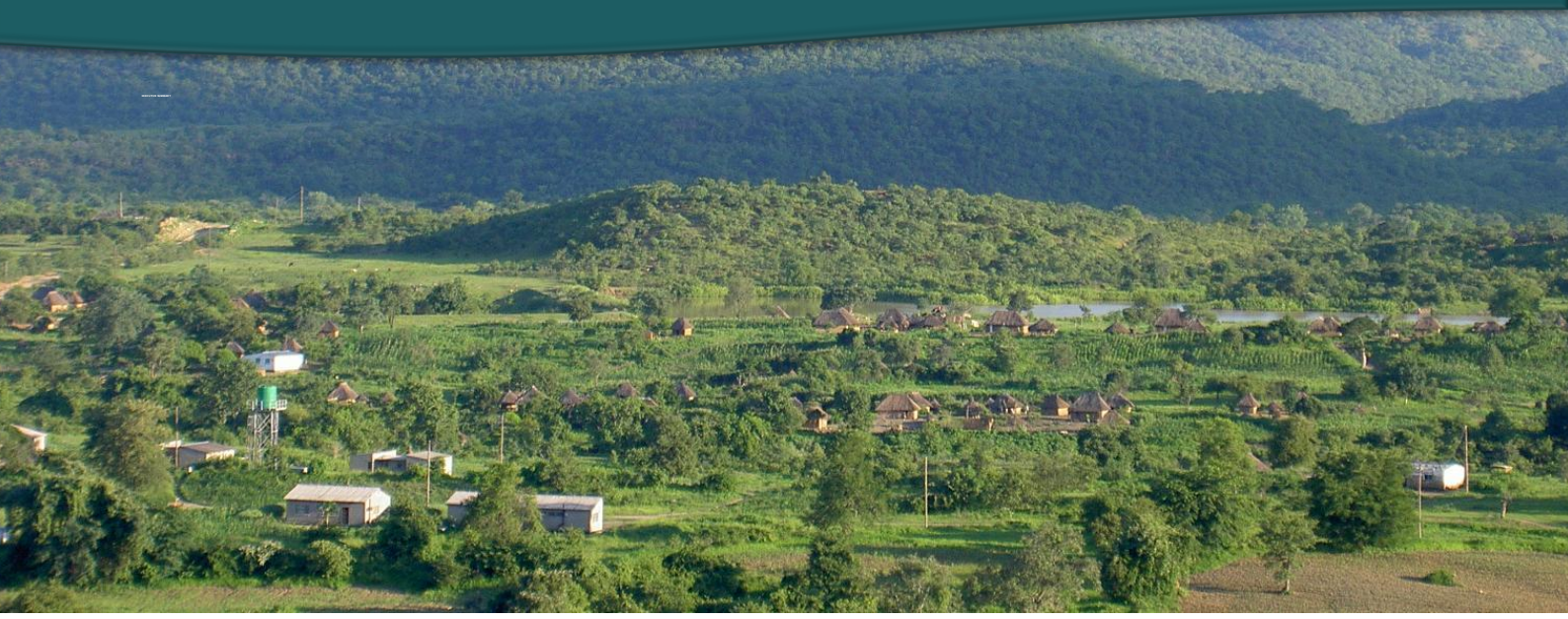
WSUP Water & Sanitation for Urban Populations

WIN Water Integrity Network

secretariat@esawas.org

www.esawas.org

EXECUTIVE SUMMARY



Across Africa, essential progress has been made in expanding access to water supply and sanitation (WSS) and, in turn, achieving the human rights to safely-managed water and sanitation. However, these strides are mostly in urban settings, yet the population in most sub-Saharan African countries remains predominantly rural. With just a few years to the 2030 Sustainable Development Goal (SDG) 6 targets to 'Ensure availability and sustainable management of water and sanitation for all', there is need for pragmatic approaches to correct the imbalance and accelerate access to sustainable WSS services in rural areas.

Rural areas appear to be underserved both in terms of access to WSS and the level of services provided. The challenges that have led to slower -than-expected progress in the rural WSS sub-sector include weak institutional capacity, poor sustainability of services (due to widespread technical failures, non-cost reflective tariffs, and inadequate management models) and inadequate levels of funding relative to the scale of the challenges and rapid population growth. Many challenges related to unclear asset ownership, financing, and service standards have been largely addressed in urban areas under professional management and regulated arrangements. However, in several countries across Africa, rural drinking water systems have deteriorated over the years, while the absence of a regulatory framework to hold operators accountable to well-defined service standards persists. A regulatory landscape study conducted by ESAWAS in 2022 on water and sanitation regulatory frameworks in 54 African Union Member States, shows a major lack of regulation in rural areas.

Evidence demonstrates that regulation impacts society and plays a key role in improving service delivery if instituted effectively. The OECD Principles on Water Governance (2015) recommend that countries "ensure that sound water management regulatory frameworks are effectively implemented and enforced in pursuit of the public interest". Regulation aims at ensuring that Government policy is implemented, and service providers are accountable and supported to deliver reliable, sustainable, and affordable safe drinking water services.

The 2024 WHO Guidelines for Drinking-Water Quality: Small Water Supplies recommend to 'Adopt regulatory approaches that promote a shift towards professionalized operation and management of small water supplies'.

Rural WSS and Small Water Supplies are seeing a significant shift from infrastructure provision to a greater level of professional and sustainable services. There is therefore need for appropriate accountability mechanisms to ensure that services meet acceptable and enforceable performance standards.

The ESAWAS Regulators Association, as a coordinating body and network for WSS regulators across Africa, has been developing harmonized regulatory frameworks at continental level that can be adopted and adapted to country contexts and supporting their implementation. This has accelerated uptake and shortened learning curves for implementing pertinent regulatory mechanisms and approaches to improve sector accountability and service performance.

ESAWAS has developed this guidance document to provide a comprehensive framework and strategy for regulating rural WSS and small water supplies in countries across Africa to professionalise the operations and management of rural water, rural sanitation and small water supplies services under formalised governance and regulatory arrangements to raise the management, quality, sustainability, reliability, inclusion and resilience of WSS service delivery.

The case for regulation can be framed in several ways including:

- Helping to achieve universal access and fulfilment of the objectives enshrined in the UN resolution on the Human Right to Water and Sanitation.[1]
- Professionalising service delivery through clarifying mandates, strengthening accountability pathways, and instituting minimum standards and service levels.
- Securing financing for impact by improving sector governance thereby making WSS service provision more attractive to external investors and more efficiently utilising existing funds.
- Safeguarding affordability of services and sustainability of providers to improve public health, social and economic well-being.

This guidance document focuses on rural WSS and small water supplies in other contexts, detailing key considerations and options for a robust regulatory framework and presenting a top-level implementation strategy. **The service delivery model (SDM) is utilised as the entry point for analysis and recommendations**. This recognises that the optimal regulatory approach and the accountability and regulatory mechanisms to be applied vary based on the SDM, the service being regulated, and regulators and service providers' capabilities, amongst other factors.

The experience of countries shows that effectively managing services and achieving universal access typically requires a combination of SDMs within any given country to ensure the SDM suits the diversity of demographic and socio-economic contexts present and the mixture of technology options utilised *(WaterAid, 2024).*

Under regulation, various service delivery models can be utilised for rural WSS and small water supplies with the objectives of consumer protection and/or commercial viability. Models based on public and private service provision are more dominant. The recommended regulatory approaches are as follows:

Option	Overview	SDMs
Option One: **Direct Regulation of Mandated Service Provider**	The WSS regulator directly regulates different services providers through licensing, contract and / or permitting regimes and, in some cases, statutory provisions within legal instruments	**PUBLIC 1:** National or sub-national utility direct management.
		PUBLIC 2: Local government unit or department direct management
		PRIVATE 1: Private operator management with direct oversight by a regulatory entity.
		CBO 1: CBO management with external support.

[1] UN General Assembly Resolution A/Res/64/292 of 28 July 2010). Even where the human right has not been incorporated into their legislation, it can be a powerful policy hook to improve and formalise service provision, with regulation helping to ensure all segments of society are provided for.

Option	Overview	SDMs
Option Two: **Delegated Regulatory Framework for Multi-tiered Service Provision**	A WSS regulator *directly regulates* the entity with the overall mandate for WSS service delivery (i.e., local government, a utility, or a specialised asset holding entity) and allows this entity to delegate service provision responsibility and assigns the mandate holder limited regulatory compliance oversight of the delegatee.	**PRIVATE 2:** Private operator management with oversight by a specialised asset-holding entity.
		PRIVATE 3: Private operator management with oversight by a utility.
		PRIVATE 4: Private operator management with oversight by sub-national government.
		CBO 2: CBO management with some technical functions formally contracted to a private operator.

This document further outlines recommendations for the Regulation Framework for Rural WSS and Small Water Supplies in the following:

- Policy and legal framework: the enabling environment espoused in policies and legal instruments should explicitly articulate the role of enhanced regulation in achieving professionalised service delivery, mandates of sector actors and the priority service delivery models for application.
- Institutional framework: provides clarity on the division of policymaking (Line Ministry for WSS), regulatory (designated regulatory entity), and service provision mandates (authorised providers) with lead institutions and coordination mechanisms.
- Regulatory mechanisms: describes the regulatory mechanisms that can be applied to achieve different regulatory objectives, including the service provider's financial sustainability, quality of service, public health, environmental protection, and increased resilience. These should be tailored to the type of service delivery model (SDM) and service provided under a differentiated regulatory approach.
- Implementation Strategy: Regulation of any service, especially those with a social good, is an inherently political process requiring adept management and the ability to navigate not only the political economy of the sector but broader public administration frameworks and institutional relationships. It requires a progressive approach, led by a backbone organisation that can oversee (i) stakeholder and political buy-in, (ii) situational analysis and vision formulation (iii) updates and alignment of policies and legal instruments (iv) progressive expansion of regulatory arrangements and mechanisms and (v) continuous reviews for refinement.

The ultimate goal is accelerating access to reliable, sustainable, and affordable safe water and sanitation services to populations in rural and low-income areas through professional-management and stronger accountability under formalized governance and regulatory arrangements.

The recommendations are based on a gap analysis conducted in eight African countries (Ethiopia, Ghana, Kenya, Mozambique, Rwanda, Tanzania, Uganda and Zambia), desk review and wide-ranging stakeholder consultations. This Regulation Framework document therefore represents a purposefully generic resource designed to provide guidance applicable to a broad spectrum of country contexts. *As such, contextualisation and elaboration at the country level is essential.*

CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF BOXES

ACRONYMS

AIAS	Infraestruturas de Abastecimento de Água e Saneamento *(Water Supply and Sanitation Infrastructures)*
ANAEPMR	Agence Nationale pour l'Eau Potable en Milieu Rural (*National Agency for the Provision of Rural Drinking Water*)
ASP	Area Service Provider
CBO	Community-Based Organisation
CBWSO	Community-Based Water Supply Organisations
CU	Commercial Utility
CSO	Civil Society Organisation
CWSA	Community Water and Sanitation Agency
ESAWAS	Africa Water and Sanitation Regulators Association
FBO	Faith-Based Organisation
FPA	Fornecedores Privados de Água (*Private Water Suppliers*)
GWL	Ghana Water Limited
JMP	Joint Monitoring Programme
LA	Local Authority
LG	Local Government
NGO	Non-Governmental Organisation
NWASCO	National Water Supply and Sanitation Council
NWSC	National Water and Sewerage Corporation
OSR	*Operadores de Sistemas Rurais* (Private Operators of Rural Systems)
SDG	Sustainable Development Goal
SDM	Service Delivery Model
WASAC	Water and Sanitation Corporation
WASHCO	Water, Sanitation, and Hygiene Committee
WHO	World Health Organization
WRM	Water Resources Management
WSMT	Water and Sanitation Management Team
WSP	Water Service Providers
WSS	Water Supply and Sanitation
WSSA	Water Supply and Sanitation Authorities
WUA	Water User Association
WUC	Water User Committee

1. INTRODUCTION

1.1. RATIONALE

Water Supply and Sanitation (WSS) are recognised as key drivers of health, economic and social transformation. Across Africa, essential progress has been made in expanding access to water supply and sanitation and, in turn, achieving the human rights to safely-managed WSS. However, these strides are mostly in urban settings, yet the population in most sub-Saharan African countries remains predominantly rural. A notable coverage gap exists between urban and rural areas; 53% and 30% of the urban population across sub-Saharan Africa access a safely-managed water supply and sanitation service, respectively, compared to 15% and 20% in rural areas (JMP, 2022). With just a few years to the Sustainable Development Goal (SDG) 6 targets to 'Ensure availability and sustainable management of water and sanitation for all', **there is need for pragmatic approaches to correct the imbalance and accelerate access to sustainable WSS services in rural areas.**

Most of the population in rural areas and peri-urban or low-income communities rely on small water supplies as a source of drinking water. Sanitation principally focuses on ending open-defecation and constructing improved sanitation facilities. Service provision is fragmented and varies based on the geographical location (urban/rural), the number of customers served, the volume of water supplied, the technology as well as management models employed. Despite the vast diversity, service delivery models, particularly in rural areas, encounter common challenges including unclear asset ownership, lack of financing, weak service management structure, operational, personnel and technical challenges that need policy and regulatory consideration to enhance their sustainability.

WSS sector reforms instituted around the 1990s and early 2000s revised sector governance and established WSS regulators in several African countries to address deteriorating service delivery. Compared to urban WSS, few African countries regulate rural WSS and small water supplies due to the complexity of service delivery. However, this is gradually changing across sub-Saharan Africa as sector regulators take up the responsibility for rural WSS and small water supplies with an ongoing shift in services from mere hardware provision towards a greater level of professionalisation.

Evidence demonstrates that regulation impacts society and plays a key role in improving service delivery if instituted effectively. Critically, there is a positive association between establishing a dedicated regulatory entity that performs regulatory functions in urban and rural areas and being 'on-track' to achieve Sustainable Development Goal 6.1. and 6.2. of universal access to safely managed water supply and sanitation services, respectively (GLAAS, 2022).

In cognizance of the significant contribution of small water supplies in achieving universal access to safely managed drinking water and public health in general, the limited regulation of rural WSS services and small water supplies poses a significant barrier to meaningfully achieving national and international targets and improving public health. A robust regulatory framework and enhanced regulation are thus vital in supporting professionalisation of service delivery and instituting appropriate accountability mechanisms that ensure services meet acceptable and enforceable performance standards, leaving no-one behind *(see Figure One)*.

Figure One: Impact of Effective Regulation

This guidance document provides a comprehensive framework and strategy for regulating rural WSS and small water supplies in countries across Africa to professionalise the operations and management of rural water, rural sanitation and small water supplies services under formalised governance and regulatory arrangements to raise the management, quality, sustainability, inclusion and resilience of WSS service delivery. It represents a purposefully generic resource designed to provide guidance applicable to a broad spectrum of country contexts. As such, contextualisation and elaboration at the country level is essential.

1.2. SCOPE AND DEFINITIONS

This guidance document focuses on rural WSS and small water supplies, detailing key considerations and options for a robust regulatory framework and presenting a top-level implementation strategy.

Rural water, rural sanitation, and small water supplies represent distinct and usually fragmented sub-sectors, each comprising various services, technology options, and Service Delivery Models (SDMs). They are grouped together because they face common significant challenges in their effective regulation. These include the often-vast numbers of highly decentralised, dispersed and heterogeneous service providers, often-low levels of service provider formalisation, the lack of access to reliable and up-to-date data, weak commercial viability, technical regulations not tailored to rural areas or small-scale service providers, insufficient regulatory oversight, etc. These factors make these sub-sectors far harder to regulate effectively than the typically much smaller number of larger urban service providers (usually large public utilities). More significantly, while crucial distinctions exist between the three sub-sectors, there are also substantial overlaps concerning the approaches required to develop and effectively implement a robust regulatory framework for these services.

The following definitions have been utilised for several critical terms repeated throughout this document and help to bound its focus *(see Table One).*

Table One: Definitions

Term	Definition
Rural	Everything that is not urban and peri-urban, covering highly dispersed rural settings through to rural growth centres and small towns that, in many countries, often increasingly mirror many of the key demographic and socio-economic elements of peri-urban areas.
Small water supplies	Include non-piped small water supply schemes such as dug wells, springs, rainwater collection systems or piped supplies delivering water to communal access points.
Water supply	The infrastructure and processes involved in collecting, treating, storing, and distributing water to users.
Sanitation	The infrastructure and processes across the sanitation service chain (capture, containment, emptying, transport, treatment, disposal) that ensure the safe management, disposal or re-use of faecal waste.
Regulatory framework	A set of measures and interventions that govern the sector and its actors. It comprises the policy and legal framework, the institutional framework, and accountability and regulatory mechanisms.
Policy framework	The policies and strategies that outline the government's aspirations - targets, priorities and objectives- for WSS, which increasingly include enhancing WSS regulation.
Legal framework	The legal instruments that give legal backing to regulatory actors' mandates and empowers them to perform key functions, while also providing a basis for a robust regulatory environment.
Institutional framework	The formal organisational structures that determine how policymaking, regulatory, service provision and user mandates and responsibilities for rural WSS and small water supplies are assigned among different actors (state and non-state) and tiers of government.
Accountability mechanisms	The regime used to establish the relationship and answerability between the service provider and regulator, including legal instruments, licenses, contracts, permits and registration.
Regulatory mechanisms	The instruments used on an ongoing basis by regulatory actors to influence the behaviour of the sector and achieve regulatory objectives and ensure compliance with defined requirements.
Service delivery model (SDM)	The setup or approach for how services are delivered including the service provider, service authority and regulator.
Self-supply	Self-supply is the construction of or incremental improvement to water supplies and sanitation facilities by households and small groups, largely through their own means for their own personal use (as opposed to for any commercial purpose).
Service delivery model professionalisation	The process of bringing a SDM for WSS under formalised arrangements with clear structures and accountability for service delivery.
Direct regulation	When the regulatory actor is responsible for directly applying regulatory mechanisms and overseeing their enforcement to the service provider within the regulated SDM.
Regulation via a delegated framework	When a regulatory actor assigns limited responsibility for regulatory compliance oversight to a primary mandated service provider within subcontracted/mult-layered service delivery arrangements.

1.3. AUDIENCE

This guidance document's primary audience is regulatory actors and policymakers across Africa looking to enhance services regulation of rural WSS and small water supplies. This includes existing regulators and regulators under formation or newly formed. Various organisations' crucial role in supporting initiatives and reforms to strengthen rural WSS and small water supplies regulation is recognised. As such, this document is also intended as a resource for multi-laterals and bi-laterals, development partners, civil society and service providers supporting efforts to improve rural WSS and small water supplies services.

1.4. METHODOLOGY

In order to draw lessons to inform the recommendations, a gap analysis was carried out in eight African countries (Ethiopia, Ghana, Kenya, Mozambique, Rwanda, Tanzania, Uganda and Zambia), based on desk review and wide-ranging in-country stakeholder consultations, to assess the current status of rural WSS and small water supplies regulation. This document was also informed by:

- a global literature review centred on (i) existing regulatory practices in contexts beyond the eight gap analysis countries, (ii) outlining emerging developments, challenges and priorities in developing and effectively operationalising regulatory frameworks for the rural WSS and small water supplies sub-sectors, and (iii) identifying key principles for strengthening regulatory frameworks for rural WSS and small water supplies.
- The 2022 ESAWAS urban and rural WSS regulatory landscape study in 54 African countries.
- A joint working group of partners and members with insights in the sector to guide the outputs *(see Annex-Contributors).*
- An in-person consultative meeting hosted by the national regulator PURC-Ghana, including representatives from ESAWAS members, service providers, and various sector partners.

The service delivery model (SDM) is utilised as the entry point for analysis and recommendations. This recognises that the optimal regulatory approach and the accountability and regulatory mechanisms to be applied vary based on the SDM, the service being regulated, and regulators and service providers' capabilities, amongst other factors.

1.5. STRUCTURE

Following this introductory section, the remainder of the document is structured as follows:

- Section Two presents a summary of findings from a detailed gap analysis on the status of rural WSS and small water supplies regulation in Ethiopia, Ghana, Kenya, Mozambique, Rwanda, Tanzania, Uganda and Zambia.
- Section Three provides comprehensive guidance for establishing a robust regulatory framework for rural WSS and small water supplies, including key considerations regarding the policy, legal and institutional framework, top-level policymaking, regulatory, service provision and user functions to be performed, and accountability and regulatory mechanisms to be applied to various recommended SDMs.
- Section Four presents a top-level implementation strategy consisting of five steps for strengthening rural WSS and small water supplies regulation.

Case-study boxes are utilised throughout to present good practices and illustrative examples, while Annex One presents a consolidated set of good practice accountability and regulatory mechanisms.

2. SUMMARY OF GAP ANALYSIS FINDINGS

Headline Findings:

- Regulating rural water supply, rural sanitation and small water supplies represents a common and significant challenge.
- A range of service delivery models (SDMs) exist for rural WSS and small water supplies, with considerable variance among countries in the SDMs utilised and the speed at which more professionalised SDMs are scaled.
- Policy and legal frameworks exist for rural WSS and small water supplies; however, the extent to which regulation is prioritised and regulatory mandates and powers are defined varies.
- The expansion of regulatory agencies' activities into rural and small-town contexts represents a crucial development, utilising a delegated framework to extend regulatory reach.
- Considerable variations exist in the accountability mechanisms employed and the extent to which regulatory mechanisms are applied to different SDMs, with a positive association observed between SDM professionalisation and regulatory mechanism application.

This section presents synthesised findings from an eight-country gap analysis conducted on the status of rural WSS and small water supplies regulation in Ethiopia, Ghana, Kenya, Mozambique, Rwanda, Tanzania, Uganda, and Zambia. This covered the overall institutional framework for WSS, the primary SDMs employed and their performance (quality of service, operational efficiency, financial sustainability), the policy and legal framework, the regulatory models utilised, accountability and regulatory mechanism development and application, and the status of the regulatory environment.

Insights from other African countries are also embedded based on the 2022 ESAWAS landscaping study of the institutional framework for WSS regulation in 54 African countries and a wider literature review.

2.1. SERVICE DELIVERY MODELS (SDMs)

An increasingly diverse set of SDMs is utilised for rural WSS and small water supplies, but there has been highly variable progress in defining and scaling desired models.

The main service providers are

- **Community-Based Organisations (CBOs)** - professional manager under community formalised arrangements.
- **Local Government** (LG) - publicly owned and publicly managed.
- **Commercial Utilities** - publicly owned by the national or sub-national Government, privately managed.
- **Private Operators** - privately owned and/or managed.

Figure Two presents a generic typology of the primary SDMs for rural WSS and small water supply services across Africa, including the actors responsible for service provision and regulation as well as the typical demographic context the SDM is applied in and the types of WSS infrastructure it is used to manage. *Each of the outlined models is not present in every country, and since this provides a top-level overview of the SDMs for rural WSS and small water supplies applied across Africa, some hybrid or country-specific models are not captured.*

The diversity of SDMs is evident across countries and within individual countries as it is increasingly recognised that a plurality of SDMs is required to serve the broad spectrum of socio-economic and demographic contexts and manage different technology options. Particular emphasis has been placed on professionalising the management of rural and small-town water supply services, with a common understanding emerging of the need to move beyond unsupported or poorly supported forms of CBO management.

The extent to which the provision of services by CBOs is promoted varies, but it remains the predominant model for managing rural water supply services, especially point water sources. Compared to models based on a combination of private or public utility provision, less emphasis is placed on establishing professionalised variations of CBO management (e.g., CBO 2) or enabling actors, such as local governments, utilities, or the private sector, to perform mandated support functions (CBO 1). Nevertheless, despite the efforts to upscale alternative SDMs, forms of CBO management remain the predominant SDM for rural water supply services in most African countries.

Rural sanitation focuses on capture and containment, but various actors provide services across the sanitation service chain. The often limited progress in expanding access to improved sanitation services and the challenges of safely emptying pit latrines and disposing of faecal sludge in rural contexts have understandably led most countries to focus on expanding access to improved capture and containment facilities. However, ongoing, often rapid socio-economic and demographic trends have increased the importance of emptying, transport, treatment and disposal or re-use services in many small towns and rural growth centres. Various actors provide these services, including informal private operators (e.g., manual pit emptiers), licensed and unlicensed vacuum tanker operators, local government units, and national and sub-national utilities. The need and demand for these services will rise further, making it essential for regulatory frameworks for rural sanitation to account for emptying, transport, treatment and disposal or re-use services. Several countries have made notable strides in instituting regulation for onsite sanitation and include Rwanda, Zambia, Uganda, Kenya, Burundi and Tanzania.

Figure Two: Rural WSS and Small Water Supplies SDM Typology

	Self-Supply	CBOs		Public Service Provision		Private Service Provision				
	HOUSEHOLD SELF-SUPPLY: Facility constructed or funded and managed by individual household for personal use	**CBO 1:** CBO management with external support from sub-national government, utility, or local mechanic	**CBO 2:** CBO management with some technical functions contracted to a private operator	**PUBLIC 1:** National or sub-national utility direct management	**PUBLIC 2:** Local government unit or department direct management	**PRIVATE 1:** Private operator (or social enterprise or FBO) management with direct oversight by a regulatory entity	**PRIVATE 2:** Private operator management with oversight by a specialised asset-holding entity	**PRIVATE 3:** Private operator (or social enterprise or FBO) management with oversight by a utility	**PRIVATE 4:** Private operator (or social or Safe Water Enterprises (SWE), or FBO) management with oversight by sub-national government	**PRIVATE 5:** Privately owned and operated facilities or services –Social or Safe Water Enterprises (SWE), NGOs and FBOs
Regulator	None	Regulatory entity or ministry		Regulatory entity or ministry	Regulatory entity, ministry	Regulatory entity	Regulatory entity, ministry or asset holding entity	Regulatory entity or ministry		Regulatory mandates often not defined
Delegated oversight	None	Sub-national government or utility		None	Utility or line ministry (if any)	Not applicable	Specialised asset holding entity	Utility	Sub-national government	Sub-national government or utility (if any)
Service Provider	Household	Water committee		National or sub-national utility	Sub-national government	Formal private operator (or social enterprise or FBO)				Informal private operator
		Local mechanic	Private operator							
Demographic Context	Rural, small-town, peri-urban, and urban	Rural and small-town		Rural, small-town, (peri-) urban	Rural and small-town	Rural, small-town, peri-urban, and urban		Rural and small-town	Rural and small-town	Rural, small-town, peri-urban, and urban
Typical Water Supply Services	Point water sources	Predominantly point water sources, but also piped water supply facilities		Predominantly piped water supply facilities, water tankers but also point water sources		Piped water, point water sources and water tankers	Predominantly piped water supply facilities	Predominantly piped water supply facilities but also point water sources and some water tankers		Mainly point water sources but also water tankers
Typical Sanitation Services	Facility construction and management	Limited, but may include support constructing latrines and emptying		Emptying, transport, treatment and disposal		Facility construction and emptying, transport, treatment and disposal				Emptying, transport, disposal
Country Examples	Ethiopia, Ghana, Kenya, Mozambique, Rwanda, Tanzania, Uganda, Zambia	Ethiopia, Ghana, Kenya, Mozambique, Rwanda, Tanzania, Uganda	Kenya, Tanzania, Uganda, Malawi, Central African Republic	Ethiopia, Ghana, Kenya, Tanzania, Uganda, Zambia	Zambia, Ghana	Rwanda, Kenya	Senegal, Benin, Mauritania, Mozambique	Kenya, Tanzania, Zambia	Ghana, Mozambique, Madagascar, Niger	Ethiopia, Ghana, Kenya, Mozambique, Rwanda, Tanzania, Uganda, Zambia, Sierra Leone

National and sub-national utilities (Public 1) increasingly serve rural growth centres and small towns, with a common trend toward consolidation *(see Box One).* The expanded provision of services by public utilities represents a critical development, with traditionally urban-focused utilities expanding into rural and small-town contexts (e.g., in Rwanda, Zambia, Uganda, Kenya, Tanzania) and dedicated rural-focused utilities also established (e.g., in Ghana, Uganda, Ethiopia, Kenya and Tanzania). This results in important benefits from consolidating service provision responsibilities (e.g., economies of scale, enhanced service provider formalisation). However, utilities' capabilities, the speed at which this process occurs, and the extent to which it is properly established within the wider institutional framework vary significantly. Utilities principally focus on water supply service provision, but some offer emptying and transport services.

Box One: Uganda – Uganda's Vision for Managing Rural and Small-Town Water Supply Services (WaterAid, 2024)

Uganda has made considerable progress in defining desired professionalised models for rural and small-town water supply services. They recognise the need for multiple service delivery models that are based on a combination of national – National Water and Sewerage Corporation (NWSC) – and sub-national –Umbrellas for Water and Sanitation (UWS) – utilities, as well as a strengthened form of community-based management (CBM) in which technical functions such as preventative maintenance, procuring spare parts, and repairs are formally delegated to Area Service Providers (which could be a private sector organisation, NGO, NWSC, UWS or a handpump mechanics association).

With financial support from the Government of Uganda and technical assistance from development partners, NWSC and UWS's provision is expanding comparatively rapidly (NWSC manages facilities in 258 towns, UWS serve over 380 towns) and delivering vital improvements in service delivery. Delegation of technical functions from water committees to Area Service Providers is resulting in improved service levels – one Area Service Provider achieved a 98% functionality rate across 18 districts and facilities serving over 320,000 people. However, considerable challenges impede the model's scaling. These include a shortage of potential Area Service Providers, local private sector capacity constraints, the financial viability of rural water supply service provision, and barriers to contracting private operators.

An enhanced role for the private sector is often promoted, but private operators' scale and formality vary widely. Private operators come in many shapes and sizes and provide various services, ranging from managing large piped water supply facilities and occasionally treatment facilities to individual point water sources and water tanker services.

Most countries seek to expand the private sector's role in providing rural WSS and small water supply services. This occurs by formally expanding private operator provision through direct oversight by a regulator (Private 1) as well as oversight via a specialised asset-holding entity (Private 2), a utility (Private 3), or local government (Private 4). Private operator provision is also present more informally when the private sector fills gaps in unserved areas (Private 5).

For the most part, the requisite enabling environment for private operators to effectively provide services at a considerable scale has not been created, and private operators face considerable barriers to effectively providing financially viable services. A few notable exceptions exist, including in Senegal, Benin and Mauritania, where the governments have prioritised expanding private operator provision, eliminating common barriers through establishing long-term contracting arrangements for large-scale service areas *(see Box Two).*

Box Two: Benin – Enabling Private Service Provision at a Significant Scale

Universal access to rural water supply has been a presidential priority since 2016, as articulated in the flagship Government's Programme of Actions. Acknowledging the shortcomings of the historical community-based service delivery model and the limited progress made in accelerating access to water supply, the Government of Benin has initiated sector reforms to recentralise infrastructure provision, mobilise large-scale financing and leverage Public-Private Partnerships at scale. In alignment with these objectives, the National Agency for the Provision of Rural Drinking Water (*Agence Nationale pour l'Eau Potable en Milieu Rural*- ANAEPMR) was created in 2017 as an executing agency, with direct **reporting to the Presidency**, a **clear mandate** for mobilising investments, executing rural water infrastructure development works, contracting private operators and monitoring service delivery with **adequate human resources** to fulfil all aspects of its mandate as well as **sufficient financial resources**.

In 2020, the ANAEPMR launched an international tender to award regional contracts for completing infrastructure works and producing and distributing water for Benin's entire rural population at a unique end-user tariff of FCFA 600/m^3 (USD 0,94 equivalent) countrywide. The design of these 10-year *affermage* contracts sought to attract private operators, limit financial risks, provide the basis for achieving economies of scale and create the conditions for generating a profit margin over time. In addition to coupling works and service management components, these contracts cover a large and diverse service provision area comprising various consumer profiles. They are structured around key performance indicators related to non-revenue water, private connections, water consumption and revenue collection targets to be achieved by 2027 and include a penalty clause in the case of non-compliance. Contracts also require the provision of detailed and real-time technical and financial performance data using a common digital platform. All the above aspects are closely supported and monitored by ANAEPMR, which, amongst other aspects, sensitises users and local politicians for the payment of water and follows up to resolve conflicts.

In 2022, OMILAYÉ/UDUMA was awarded contracts for two lots, with the aim to cover two-thirds of the rural population by 2032, totaling 600 piped schemes (and approx.6 million people). Since 2023, the joint venture has conducted a diagnostic of all existing 400 piped water schemes, executed the priority repairs and started managing functional schemes (to date, 250).[2] To date, the joint venture is not generating a profit, but should reach equilibrium in 2025 with the aim to generate a profit from 2028. Since April 2024, the Government of Benin established the Beninese Water Infrastructure Company as a countrywide asset holding company (rural and urban) responsible for contract implementation and monitoring. The implications for private operators have not yet been communicated, but contract management and regulation should be transferred from ANAEPMR to Beninese Water Infrastructure Company, with the subsequent dissolution of ANAEPMR.

Informal private operators are present in most countries and operate outside developed regulatory frameworks. In most countries (e.g. Ghana, Nigeria), informal private operators provide WSS services without any formal recognition, approval or regulation by government institutions. The scale of these unsanctioned models is high. In Ghana, for example, over 300 informal private operators were identified across just six of the 261 districts. Additionally, household self-supply of water supply services is present across all eight gap analysis countries, but only a small set of countries (e.g. Ethiopia) have formally recognised the model.

[2] The ANAEPMR has mobilised funding to expand the infrastructure base during the contract duration and thus extend the number of piped schemes within the service provision area from 400 to 600.

2.2. REGULATORY FRAMEWORKS

2.2.1. POLICY AND LEGAL FRAMEWORKS

National WSS policies increasingly emphasise the critical role of regulation in broader efforts to professionalise SDMs. National policies for WSS have been developed in the vast majority of African countries (ESAWAS, 2022). In older policies (circa 2000-2010), WSS regulation provisions centred mainly on urban areas. However, several recently developed policies emphasise the need to address key gaps in rural WSS with highlight on enhancing rural WSS regulation, the need for clearly defined service delivery models (SDMs), enhanced enforcement of quality standards and clear guidelines for tariff setting.

Legal instruments at least touching on WSS regulation have been developed in each gap analysis country but often provide more detailed regulatory mandates and powers for water compared to sanitation. A wide-ranging set of legal instruments exists, including Constitutions, Laws, Acts, Decrees, Regulations, By-laws, and Proclamations. These can be cross-sectoral (e.g., a Public Health Act), sector-wide (e.g., a Water and Sanitation Act), or focused on a specific actor (e.g., an Act establishing a utility or a regulatory agency). Legal instruments often more explicitly define regulatory mandates and powers for rural water and small water supplies compared to rural sanitation. Responsibilities for sanitation are often included in local government, public health, and environmental management acts. In these instances, regulatory mandates are usually not sufficiently defined, and specific regulatory powers and functions are sometimes absent. Existing legal instruments often reflect wider sectoral biases toward sewered sanitation, not capturing key elements of regulating the on-site sanitation services predominant across Africa.

Regulators by agency benefit from having stronger legal backing than regulation by ministry or by contract. This is unsurprising because their regulatory mandates and powers are often enshrined within a dedicated Act or as a key component of a consolidated WSS Act. Legal instruments provide the basis for the regulatory actor to perform its mandate, with regulatory responsibilities clearly articulated and the powers of the regulatory actor clearly defined.

2.2.2. INSTITUTIONAL FRAMEWORKS

A wide-ranging set of actors hold crucial functions within the institutional frameworks for rural WSS and small water supplies. The roles and responsibilities assigned across actors span:

- **Policymaking.** Formulation of national policies and strategies for WSS that articulate Government aspirations, sector targets and policy objectives that create the enabling environment for good sector governance, assessing sector progress and mobilising adequate financial resources.
- **Regulation.** Issuing and applying regulatory instruments and tools (regulations, standards, guidelines etc) that establish the 'the rules of the game' for compliance by service providers and protection of users. A regulator can perform these functions *directly* or assign limited compliance oversight functions to another actor as part of a *delegated framework* (e.g., specialised asset holding entity, utility, local government).
- **Service provision.** The provision of WSS services, including managing water supply and sanitation facilities, construction, and, where appropriate, safe emptying of sanitation facilities and the subsequent transport, treatment, and disposal or re-use of faecal waste.
- **User.** Payment for WSS services, the construction of facilities, and holding service providers, regulators, and policymakers accountable.

Within the overall institutional framework, four main regulatory models are utilised for rural WSS and small water supplies, although many hybrids exist. These are.

- **Regulation by Agency.** A regulatory body at least semi-autonomous from the government has discretionary powers to regulate WSS or aspects of WSS. This regulatory agency can be mandated to perform specific functions (i.e., economic regulation) or hold a more comprehensive set of powers for regulating WSS.
- **Regulation by Contract.** An approach whereby a public entity (other than an autonomous regulatory agency) and a service provider agree on contractual clauses determining how key aspects of WSS service provision are defined and controlled, such as tariffs and service standards. In these cases, the contract represents the key document establishing or defining the provisions to be abided by rather than existing regulations or standards.
- **Ministerial Regulation.** A ministry responsible for WSS – or an aspect of WSS – performs regulatory responsibilities for WSS. For example, a ministry is responsible for developing standards and guidelines, overseeing some WSS service providers and applying regulatory mechanisms. For the rural WSS and small water supply sub-sectors, local government often holds these regulatory functions at the sub-national level.
- **Self-Regulation.** This exists where a service provider (typically a public utility or unit of local government) provides WSS services and is legally mandated to perform regulatory activities upon itself. This usually includes setting tariffs and performance standards and carrying out performance monitoring and reporting. Essentially, self-regulation is non-regulation.

Various regulatory models are utilised to regulate rural water and small water supply SDMs. *Table Two* presents the regulatory models utilised for the primary sanctioned rural water and small water supply SDMs in the eight gap analysis countries.[3] It highlights the considerable diversity of models utilised as well as the predominance of regulation by agency, with regulatory agencies for WSS expanding their activities into rural areas through delegated frameworks in Kenya, Mozambique, Rwanda, Tanzania, and Zambia. Limited examples of regulation by contract exist in the eight gap analysis countries; however, the model is utilised at scale in other African countries, especially Francophone countries and West Africa (ESAWAS, 2022). Prominent examples include Senegal, Mauritania, and Benin *(see Box Two)*.

Ministerial regulation is the predominant regulatory model for rural sanitation, but several countries are progressively introducing other regulatory models for emptying, transport, treatment and disposal. *Table Three* presents the regulatory models utilised for rural sanitation across the service chain in the eight gap analysis countries. It highlights that the capture and containment stages of the service chain are largely based on ministerial regulation, with local government generally holding wide-ranging mandates to regulate these services. Other regulatory models are utilised for the subsequent sanitation service chain stages, particularly regulation by agency. Forms of self-regulation are also evident, especially for capture and containment.

Important benefits occur when the overall responsibility for WSS regulation comes under the purview of a dedicated regulatory actor that regulates directly and through a delegated framework. Regulatory agencies' expansion into rural and small-town contexts represents a crucial development, with the regulatory agencies in Kenya, Mozambique, Rwanda, Tanzania, and Zambia using delegated frameworks to expand their regulatory reach. While this represents a nascent development, emerging positive benefits are evident. These include streamlined coordination, greater regulator capacity, and more expansive regulatory mechanism application.

[3] SDMs applied at a limited scale (e.g., as parts of pilots or in just a few isolated instances) or not officially promoted by the government of the given country (e.g., household self-supply) are not included.

HOUSEHOLD SELF-SUPPLY:	CBO 1:	CBO 2:	PUBLIC 1:	PUBLIC 2:	PRIVATE 1:	PRIVATE 2:	PRIVATE 3:	PRIVATE 4:	PRIVATE 5:
Facility constructed or funded and managed by individual household or small-set of households for personal use	CBO management with external support from sub-national government, utility, or local mechanic	CBO management with some technical functions formally contracted to private operator or local mechanic	National or sub-national utility direct management	Local government unit or department direct management	Private operator (or social enterprise or FBO) management with direct oversight by a regulatory entity	Private operator management with oversight by a specialised asset-holding entity	Private operator (or social enterprise or FBO) management with oversight by a utility	Private operator (or Safe Water or social enterprise or FBO) management with oversight by sub-national government	Privately owned and operated facilities or services –Safe Water Enterprises (SWE), NGOs and FBOs

Table Two: Regulatory Models Applied for Rural Water Supply and Small Water Supply SDMs

Country	Regulation by Agency		Regulation by Contract	Ministerial Regulation	
	Direct	Delegated Framework		Ministry	Sub-National Government
Ethiopia	None	None	None	None	CBO 1 (WASHCOs and WUAs); Public 1 (Rural Public Utilities and Urban Utilities); Household Self-Supply
Ghana	Public 1 (GWL)	None	None	None	CBO 1 (WSMTs); Private 4 (SWEs)
Kenya	Public 1 (Small WSP) Public 2 (County Govt)	Private 3 (Private Operators); CBO 1 (Water Committees) Private 4 (County Govt)	None	None	None
Mozambique	Public 2, Private 1	Private 4 (FPA, OSR)	None	None	CBO 1 (Water Committees)
Rwanda	Public 1 (WASAC) Private 1	Private 3	None	None	CBO 1 (Water Committees)
Tanzania	CBO1 (CBWSOs); Public 1 (WSSAs)	Private 3 (Water Kiosk Managers)	None	None	None
Uganda	None	None	Public 1 (NWSC, Umbrella Authorities); CBO 2 (ASPs)	Public 1	CBO 1 (WUCs)
Zambia	Public 1 (CUs)	Public 2 (LAs); Private 3	None	None	CBO 1 (Village WASH Committees)

Table Three: Regulatory Models Applied for Rural Sanitation

Country	Service Chain Stage	Regulation by Agency		Regulation by Contract	Ministerial Regulation		Self-Regulation
		Direct	Delegated Framework		Ministry	Sub-National Government	
Ethiopia	Capture and Containment	None	None	None	None	Household Self-Supply; Private 4; Private 5	None
	Emptying and Transport	None	None	None	None	Private 5	Public 1; Public 2
	Treatment and Disposal	None	None	None	None	None	Public 1; Public 2
Ghana	Capture and Containment	None	None	None	None	Household Self-Supply; Private 4; Private 5	None
	Emptying and Transport	None	None	Private 3	None	Private 5	Public 2
	Treatment and Disposal	None	None	Private 3	None	Private 5	Public 2
Kenya	Capture and Containment	None	None	None	None	Household Self-Supply; Private 4; Private 5	None
	Emptying and Transport	None	Private 3,Public 1	None	None	None	None
	Treatment and Disposal	Public 1	None	None	None	Household	Public 2
Mozambique	Capture and Containment	None	None	None	None	Household Self-Supply; Private 4; Private 5	None
	Emptying and Transport	None	None	None	None	None	None
	Treatment and Disposal	None	None	None	None	None	None
Rwanda	Capture and Containment	None	None	None	None	Household Self-Supply; Private 4; Private 5	None
	Emptying and Transport	Private 1	None	None	None	None	None
	Treatment and Disposal	Public 1; Private 1	None	None	None	Public 1	None
Tanzania	Capture and Containment	None	None	None	None	Household Self-Supply; Private 4; Private 5	None
	Emptying and Transport	Public 1	Private 5	None	None	Private 4	None
	Treatment and Disposal	Public 1	None	None	None	Private 4, Private 5	Public 2
Uganda	Capture and Containment	None	None	None	None	Household Self-Supply; Private 4; Private 5	None
	Emptying and Transport	None	None	None	None	Private 4; Public 1; Public 2	None
	Treatment and Disposal	Public 1	None	None	None	None	None
Zambia	Capture and Containment	None	Household Self-Supply; Private 4; Private 5	None	None	None	None
	Emptying and Transport	Public 1	Private 2	None	None	None	None
	Treatment and Disposal	Public 1	None	None	None	None	None

2.2.3. ACCOUNTABILITY AND REGULATORY MECHANISMS

Various regimes are used to establish the relationship and answerability between a regulator and service providers, with significant differences among SDMs. These accountability mechanisms with time-bound effective periods span:

- **Licenses** - authorise a service provider to operate within a defined jurisdiction, regulatory conditions and quality of service requirements. Licensing is typically enshrined as a regulatory mandate in law and is key in formalising service provision by defining service delivery obligations and performance standards. They are principally used for public utilities but can also be used for other service providers (e.g., private operators).
- **Contracts** - legally binding agreements that outline service delivery obligations, quality standards, performance metrics, and financial arrangements. They are most commonly used in PPPs but can also exist between public entities.
- **Permits** - administrative instruments issued to recognise and approve service providers within a designated area. Unlike licenses, they often do not impose detailed service conditions or performance requirements.
- **Registration** - occasionally required for smaller, deconcentrated service providers such as artisans and user committees. It does not impose compliance obligations but is a first step toward integrating informal, unregulated or voluntary providers into a more structured oversight system and can be used to map operators and collect basic information.
- **Legal instruments** - used to define the mandates and powers of the regulator and the service provider and specify key elements that govern the relationship between both actors (e.g., reporting responsibilities and sanctioning powers).

Various regulatory mechanisms have been developed for compliance by service providers to support their professionalisation and improve service delivery. Their number and application vary considerably among countries and SDMs. Nevertheless, these include standards and guidelines development and dissemination, tariff review and approval processes, data collection, management and reporting, customer engagement, incentives, sanctions and support to service providers. *Table Four* provides a summary of identified regulatory mechanisms.

Table Four: Regulatory Mechanism Summary

Category	Identified Mechanisms
Standards and guidelines development	• Technical standards • Quality of service standards and Minimum Service Levels • Tariff setting and adjustment guidelines • Customer engagement and complaints standards • Pro-poor standards • Governance standards • Proactive risk management guidelines • Environmental protection standards • Health and safety guidelines
Tariff setting, review and adjustment	• Structured process for initial tariff setting and approval • Structured process for annual tariff review and adjustment
Data collection, management and reporting	• Light-touch and comprehensive management information systems • Periodic (Annual, quarterly, monthly, weekly) service provider reporting on required indicators • Periodic regulatory inspections and data collection for each service provider • Production and public dissemination of sector performance reports

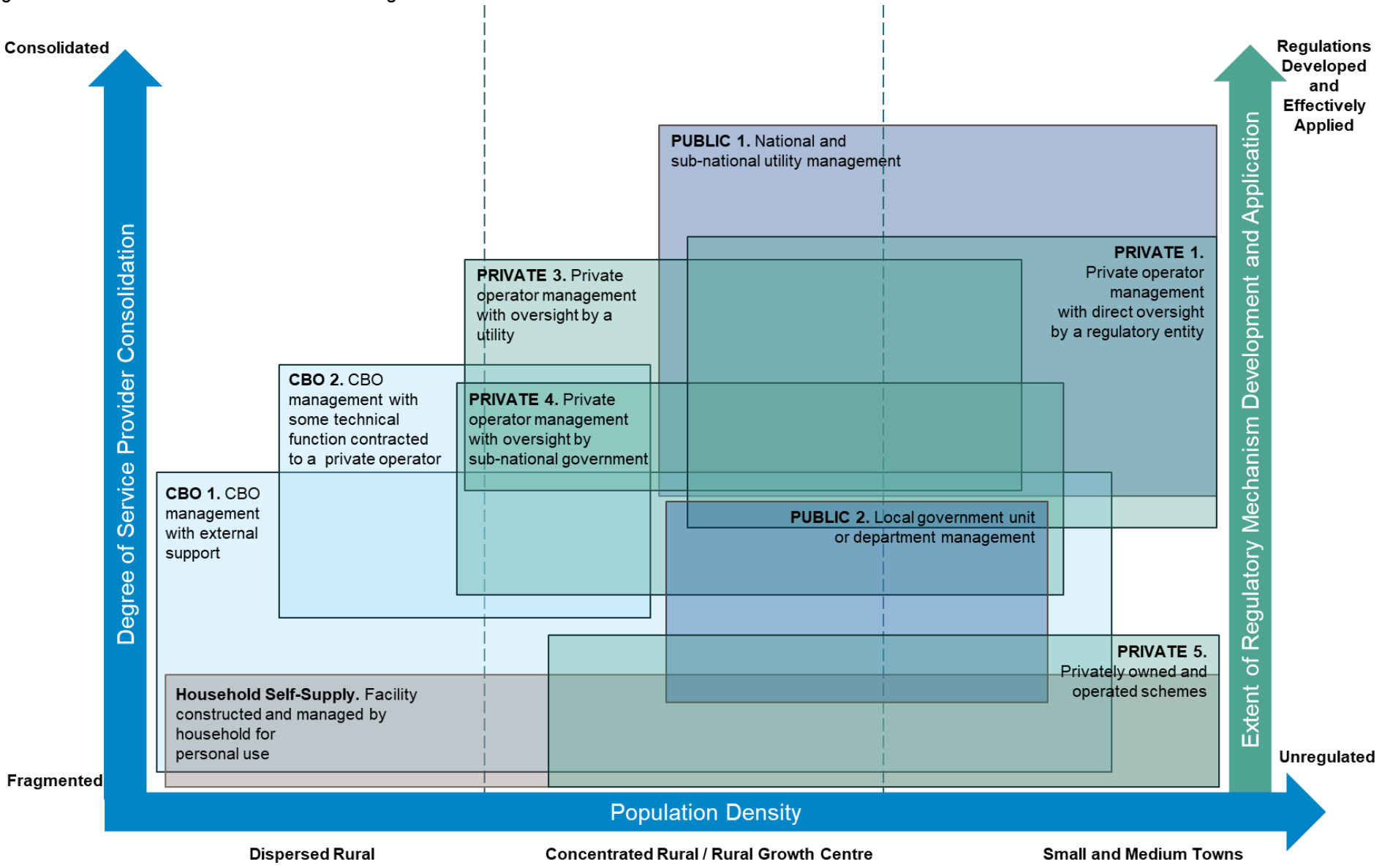
Category	Identified Mechanisms
Customer engagement and accountability	• Customer engagement processes in service delivery operations and feedback • Structured approach for complaint handling at service provider level • Structured approach for complaint handling at the level of the regulator
Regulation by incentives	• Favourable contractual terms, including contract extension and service area expansion • Public recognition of performance in sector benchmarking reports • Provision of reputational and financial awards for positive performance within award ceremonies
Support to SDMs	• Consultation in developing regulatory requirements • Training on regulatory requirements • Ensuring the provision of financial management support and targeted incremental subsidy • Ensuring the provision of support performing technical functions
Pro-active risk management	• Third-party risk assessment • Requirement for and support in conducting sanitary inspections • Requirement for and support in developing and implementing water and sanitation safety plans
Sanctions	• Communicating to competent authorities if illegal, unethical or corrupt behaviour Issuing of a formal requirement (directive) to adhere to stipulated service delivery practices • Issuing of a fine for repeated non-compliance with regulations or formal requirements • Contract suspension or termination • Dissolution of service provider's board or senior management • Dissolution and reformation or reassignment of the service provider • License or permit suspension or removal

Highly variable progress has been made in applying regulatory mechanisms to different rural and small water supply SDMs. *Figure Three*[4] shows the link between the SDM applied for rural and small water supplies, the degree of service provider consolidation, the population density of the area served, and the extent to which regulatory mechanisms have been developed and applied. It highlights a clear association between the SDM and the extent to which regulatory mechanisms are applied. Models based on national and sub-national utilities and private operators, are typically the most regulated SDMs. Crucially, these SDMs are being prioritised in many countries as part of efforts to professionalise service delivery, reinforcing the link between enhancing regulation and establishing professionalised SDMs. Conversely, there has been very limited progress in regulating models based on user committees, informal private operators and household self-supply. Greater progress has been made in applying a comprehensive range of accountability and regulatory mechanisms under models based on regulation by agency.

Limited progress has been made in regulating rural sanitation services, especially the service chain's emptying, transport, treatment and disposal stages. Some important steps have been taken to regulate rural sanitation services, including developing guidelines and standards for sanitation across the service chain in Rwanda, licensing vacuum tankers in Tanzania, and local tariff-setting for emptying services in Ghana. However, for the most part, many of the foundations required for effective regulation are not in place for rural sanitation.

[4] Private 2 is not included as no examples are present within the eight gap analysis countries. However, an example from Benin was studied more briefly as a case study, and this model is well-documented elsewhere (REACH, 2024).

Figure Three: Extent to which each SDM is Regulated



3. RECOMMENDED REGULATORY FRAMEWORK

The recommended regulatory framework for rural water, rural sanitation and small water supplies is based on considerations from the gap analysis findings, wider research and stakeholder consultations. This guidance document utilises a broad interpretation of the regulatory framework, defining it as a set of measures and interventions that govern the sector and its actors. **The regulatory framework comprises three main elements:**

- **Policy and legal framework:** The policy and legal framework provide the underpinnings and enabling environment of the regulatory framework. Policy frameworks refer to the policies and strategies that outline the government's aspirations, targets, priorities and objectives for WSS, which increasingly include enhancing WSS regulation. The legal framework comprises the legal instruments that give legitimacy to regulatory actors' mandates and empowers them to perform key functions while also providing a basis for the regulatory environment.
- **Institutional framework:** The institutional framework refers to the formal organisational structures that determine how policymaking, regulatory, service provision and user mandates and responsibilities for rural WSS and small water supplies are assigned among different actors (state and non-state) and tiers of government.
- **Accountability and regulatory mechanisms:** Accountability and regulatory mechanisms refer to the approaches used to hold service providers answerable (e.g., contracts, licenses, permits) as well as the development and application of a range of regulatory instruments that influence the behaviour of the sector, including standards and guidelines, tariff adjustment, data collection and reporting, complaints mechanisms, incentives, support to service providers, and sanctioning mechanisms.

This section provides guidance on each of these elements. *The guidance is designed to be applicable to the broad spectrum of African country contexts. Therefore, contextualisation and elaboration at the country level is essential.*

3.1. RECOMMENDATIONS FOR THE POLICY AND LEGAL FRAMEWORK

Headline Recommendations:

- Define a vision for professional service delivery, which includes explicitly noting the priority SDMs for application and scaling in different contexts.
- Embed a focus on strengthening the regulation of rural WSS and small water supplies within national WSS policies. This should explicitly articulate the role of enhanced regulation in achieving professionalised service delivery and the roles of different actors.
- Develop a strategy for strengthening the regulation of rural WSS and small water supplies that details (i) the current situation, (ii) headline objectives and the strategic actions and individual activities required to achieve these, (iii) resource requirements and funding sources, and (iv) the approach to monitoring progress.
- Ensure legal instruments have the requisite legal hierarchy and explicitly define regulatory mandates, outline regulatory actors' functions and provide the required legal backing for them to apply accountability and regulatory mechanisms, and provide a basis for a robust regulatory environment.

3.1.1. RECOMMENDATIONS FOR POLICY FRAMEWORK

Sector policies are the foundation for creating the enabling environment for regulating rural WSS and small water supplies. While far from sufficient on their own, having a well-defined overall vision, which is supported by clearly articulated objectives and priority strategic actions *(see Box Three),* can play a vital role in galvanising stakeholders to initiate necessary reforms and expand and intensify regulatory activities for recognised SDMs.

Box Three: Rwanda – National Water and Sanitation Policy, 2023

Rwanda's National Water and Sanitation Policy, 2023 represents a good practice example for how a national policy should address rural WSS regulation. It integrates the National Policy for Water Resources Management (2011) and the National Water Supply and Sanitation Policies (2016) into a single, updated framework. This revised policy aligns with national development goals, the Sustainable Development Goals (SDGs), and emerging challenges such as water security, sustainability, and climate resilience. The policy reaffirms RURA's regulatory role (*the regulation of water and sanitation sector, ensuring tariff setting and enforcing implementation)* and defines the service delivery landscape, which includes direct utility and private operator provision as well as delegated service provision by water committees, and household self-supply. Significantly**, the policy also outlines clear actions to enhance the regulatory framework for rural WSS provision**, including:

- Establishing a strong regulatory framework for water quality standards and enforcement.
- Developing and disseminating guidance tools (e.g., technical guidelines and best practices) for water pollution control and water quality preservation across sectors.
- Conducting rainwater quality assessments and promoting its multiple uses.
- Promoting cost-effective rainwater harvesting and establishing related building guidelines.
- Strengthening monitoring and evaluation (M&E) to ensure the effective implementation of water supply programs and projects.
- Engaging district WASH boards and water user associations/committees to safeguard consumer interests and user rights.
- Encouraging household private water connections at the planning stage, with consideration for one-off subsidies to improve affordability.
- Mandating WASAC Group, as the contracting authority, to conduct regular financial and technical audits to enhance service delivery.
- Developing a Water and Sanitation Law.

- Strengthening the performance measurement framework through the existing WASH Management Information System (MIS).
- Enhancing web-based monitoring and information systems to track operational performance, service quality, contract status, cost recovery, and asset conditions.
- Regulating private water service providers through licensing, tariff monitoring, and field inspections.
- Setting tariffs that balance operation and maintenance (O&M) costs with affordability considerations.
- Regulating water prices at kiosks and public standpipes.
- Creating an enabling environment to encourage private sector participation in sanitation services.
- Developing a robust regulatory framework for both sewered and non-sewered sanitation systems to ensure service quality and compliance.
- Establishing a cost-recovery framework to enhance the financial sustainability of sanitation services.

Table Five details several elements that should be accounted for when embedding a focus on strengthening the regulation of rural WSS and small water supplies within a national WSS policy (AMCOW, 2021).

Table Five: Policy Framework – Salient Regulatory Elements to Consider

Component	Salient Regulatory Elements to Cover in the Policy Framework
Institutional framework	• Define a **vision for professional service delivery**, which includes explicitly noting the priority SDMs for application and scaling in different contexts. • Outline the **overall institutional framework** for WSS, including the responsibilities of policymakers, regulators, service providers and users. This should also cover responsibilities for related sectors, including water resources management and environmental protection as well as mechanisms for engaging the private sector. • Detail the desired **mandates, responsibilities and powers** of different actors in the overall institutional framework. This should place particular emphasis on clearly specifying the responsibilities of regulatory actors, including split in responsibilities between national and sub-national actors and the rationale (e.g., subsidiarity principle, cost, enforcement power). • Specify the **main accountability and regulatory mechanisms** to be developed and applied to influence sector behaviour. • Outline the **coordination mechanisms** to be utilised among sector actors within the WSS sector and related sectors such as water resources management, environmental protection, health, education and agriculture. It should cover both vertical and horizontal coordination mechanisms. • **Capacity development requirements** of sector actors and measures to build the required capacity, including human resources and material capacities (e.g., regional offices).
Service provision and levels	• Recognise the **human right** to water and sanitation. • Outline the **desired level of service and minimum standards** to be achieved in different settings (e.g., humanitarian crises, drought-prone areas). • Specify **timebound targets** for improving coverage rates for these service levels. • **Service resilience considerations** including disaster preparedness and WSS interventions during emergencies (i.e. floods, droughts, earthquakes).

Component	Salient Regulatory Elements to Cover in the Policy Framework
Service delivery models	• Specify the desired **SDMs** for managing different types of rural water, sanitation and small water supplies services across the service chain. If relevant, this should include providing a definition of what constitutes **household self-supply** and guidance on how this model will be addressed. • Detail how efforts to enhance the regulation of rural WSS and small water supplies are linked to wider efforts to **professionalise service delivery**. This should include explicitly articulating what improvements regulation seeks to achieve (e.g., sustainability, service quality, protecting public health, the environment, and consumers' interests).
Funding and financing	• Specify priority **funding areas**, including priority sub-sectors, demographic settings and technology options and mechanisms to ensure the better targeting of available resources. • Outline the **sources** (e.g., tariffs, taxes, transfers, trade) from which funds will be mobilised and leveraged to help achieve sector targets and specify targets for mobilising funds from each of these elements (e.g., target disbursements for WSS as a percentage of government spending). • Articulate the basis and process for **setting, reviewing and adjusting user charges** and measures to be taken to safeguard affordability. • Present where and how **subsidies** will be applied and regulatory actors' roles in defining or informing the level and type of subsidies for different SDMs.
Public health	• Outline responsibilities for **water-borne surveillance**, including approaches to be employed to **safeguard water quality and the prevention of sanitation-related diseases** and regulatory actors' role in applying and supporting their application (e.g., monitoring, water and sanitation safety planning, sanitary inspections).
Environmental protection and WRM	• Present the approaches to be employed and regulatory actors' roles in promoting (i) **resource recovery** from treated wastewater and faecal sludge, (ii) the **control of water resources pollution**, (iii) eliminating the release of **untreated waste** to the environment, and (iv) adapting to the expected impacts from **climate change** and ensuring **climate resilience**.
Equity and inclusion	• Outline **settlement types (e.g., formal, informal) or geographic areas** to be prioritised. • Specify the approaches to be employed and regulatory actors' roles in (i) **eliminating economic and social discrimination** in the provision of services, (ii) meeting the needs of **women and vulnerable groups**, and (iii) safeguarding health and safety and the rights of **sanitation workers**.

Given the wide-ranging set of coordinated actions required to effectively enhance the regulation of rural WSS and small water supplies, it is highly beneficial to develop a dedicated strategy focused on this topic *(see Box Four).* In particular, a dedicated strategy document can further elaborate on priority objectives outlined in policies and play a crucial role in enabling concerted and coordinated action through (i) articulating the current situation, (ii) detailing objectives and the strategic actions and individual activities required to achieve these, (iv) presenting resource requirements, including human resource development, and potential funding sources, and (v) outlining the approach to monitoring and reviewing progress and, as required, making necessary course corrections.

Box Four: Zambia – How a Dedicated Strategy can Guide the Expansion of Regulatory Activities

Zambia benefits from well-established regulatory frameworks for WSS service delivery. However, until recently, regulatory activities were overwhelmingly focused on its 11 Commercial Utilities (CUs) in urban areas, with other service providers and service delivery types receiving little oversight. This began to change in 2018 when comprehensive strategy documents were developed detailing a series of steps and measures to improve the provision and regulation of urban onsite sanitation and faecal sludge management, as well as rural WSS services.

These strategy documents specify objectives in these areas and are guiding the collective action required by setting out measures to be taken by a wide range of actors. This includes detailed action points across aspects such as institutional arrangements, licenses and permits, regulations, by-laws, monitoring and performance reporting, service level agreements and guarantees, standards and guidelines, and inspections. Critically, these documents also outline the budget required for their implementation and specify organisational responsibilities and timeframes for their implementation.

Of note, key action points from these documents that have been – or are being – implemented include:

- Modifying CUs' licenses to cover onsite sanitation and rural water supply and sanitation.
- Developing permitting conditions to guide CUs when they delegate service provision to other service providers (e.g., private operators) for onsite sanitation and rural and small-town water supply service provision.
- Guidelines developed on minimum service levels, water quality monitoring, tariff setting (revised to include rural water supply and sanitation and onsite sanitation), and reporting for rural areas.
- Ongoing data capturing through GIS mapping, including tool standardisation and sharing with stakeholders for utilisation.
- Supporting CUs to develop strategies for delivering or expanding onsite sanitation and rural water supply services.
- Standard operating procedures developed for onsite sanitation and faecal sludge management.
- Key performance indicators identified and a benchmarking framework developed.
- Generic organisational structures developed for delivering onsite sanitation and faecal sludge management services, as well as rural water supply and sanitation.
- Training of private pit emptiers to be engaged by commercial utilities.
- The web based NWASCO Information System reviewed to incorporate onsite sanitation and rural water supply and sanitation for regulatory reporting on sector performance.
- Structures developed for rural water supply and sanitation data collection, validation, and reporting.

3.1.2. RECOMMENDATIONS FOR THE LEGAL FRAMEWORK

The legal framework for regulating rural WSS and small water supplies comprises the legal instruments that give legitimacy to regulatory actors' mandates and clearly delineate responsibilities among institutions. Formally establishing mandates and empowering regulatory actors to perform key functions by enshrining in law is essential for effective regulation while also providing a basis for a robust regulatory environment.

A wide-ranging set of legal instruments focused on – or touching upon – regulating rural WSS and small water supplies include Constitutions, Laws, Acts, Decrees, Regulations, By-laws, and Proclamations, amongst others. Legal instruments can be developed at the national or sub-national level and be cross-sectoral (e.g., a Public Health Act), sector-wide (e.g., a Water and Sanitation Act), or focused on a specific actor (e.g., an Act establishing a utility or a regulatory agency). Therefore, it is crucial to consider the relative legal hierarchy between legal instruments and ensure that they do not contradict each other or duplicate responsibilities. Several countries have benefited from developing consolidated WSS Acts that bring together key provisions related to regulating these services *(see Box Five).*

Box Five: Tanzania – The Water Supply and Sanitation Act, 2019

Tanzania benefits from a comparatively well-defined legal framework for WSS. Of note, the Water Supply and Sanitation Act, 2019 consolidates many key aspects within one document and specifies and provides legal backing to several critical elements, including:

- Clearly stating the **objective** of the legal instrument, in this case, to promote and ensure the right of every person in Tanzania to have access to efficient, effective and sustainable water supply and sanitation services for all purposes.
- Detailing the Energy and Water Utilities Regulatory Authority's **overall regulatory mandate** by outlining how each of Tanzania's Water and Sanitation Authority's shall, in the performance of their functions under this Act, be subject to regulation by the Energy and Water Utilities Regulatory Authority in accordance with the Energy and Water Utilities Regulatory Act.
- Specification of the Energy and Water Utilities Regulatory Authority's **functions and powers** in relation to water supply and sanitation services, including (i) licensing, (ii) establishing standards and guidelines, (iii) approving tariffs, (iv) monitoring, (v) initiating and conducting investigations, (vi) issuing orders, (vii) charging levies and (viii) and reporting, amongst others.
- Detailing key elements in relation to **different service providers**, specifically:
    - The establishment of Water and Sanitation Authorities (including their boards), their powers, functions and obligations, licensing mechanisms, the formation and powers of the board of directors, governance requirements, and financial provisions.
    - The establishment of community-based water supply organisations, their powers and functions, the constitution, registration and clustering of community-based water supply organisations, financial provisions and tailored mechanisms for monitoring and regulating community-based water supply organisations.
- Outlining the responsibilities of **other critical stakeholders**, including the Minister responsible for water supply and sanitation, the Minister responsible for Local Government, the regional secretariats, and local government authorities.

Table Six outlines several elements crucial to consider and ensure are included when reviewing, amending or updating the legal framework for regulating rural WSS and small water supplies.

Table Six: Legal Framework – Salient Regulatory Elements to Consider

Component	Salient Regulatory Elements to Cover in the Legal Framework
Policy-making	• **Policymaking responsibilities**, including a clear articulation of the lead ministry (or ministries), the role of the minister and the split in responsibilities between ministries for different elements of the WSS sector. • The role of the sub-national levels in policymaking and requirement to align with policy directions and strategic actions set at the national level.
Service provision	• The different **SDMs** to be applied in different settings and for various WSS facility types, including the mandated service provider (s) and their powers and obligations. • Which actor represents the **asset owner** under different SDMs and what their responsibilities are. • The responsibility of service providers to comply with developed **regulations, standards and guidelines**, spanning service quality, price, public health and environmental protection. • **Financing aspects** for service delivery, including processes for setting tariffs and charges, the use of subsidies, and responsibilities for capital funding, considering the required life-cycle costs to be covered, measures to safeguard affordability and required approaches to ensure equitable provision.

Component	Salient Regulatory Elements to Cover in the Legal Framework
Service provision	• **Technological options** for different elements of WSS service provision, including across the service chain and considering transitional options in the short- and medium-term (e.g., for treatment and disposal or re-use). • **Disaster preparedness** and WSS interventions during emergencies (i.e. floods, droughts, earthquakes).
Regulatory mandates	• Explicitly defining regulatory actors' **mandates** for different sub-sectors (e.g., water supply, sanitation, water resources management (WRM), environmental protection) and SDMs as well as critical functions such as water-borne surveillance. • Where a **delegated regulatory framework** is used, this should place particular emphasis on articulating the split in mandates between actors at the national and sub-national levels and the hierarchy of accountability in the setup of the SDM.
Regulatory functions and powers	• Regulatory actors' **functions and powers**, should cover: ○ **Licensing, contracting, permitting, and registering** service providers for different elements of service delivery. ○ Developing **standards, guidelines, rules and regulations** for the sub-sectors. ○ Approval process for **tariff setting, review and adjustment**, including responsibilities for safeguarding affordability. ○ **Monitoring and reporting the performance of the sector**, including indicator definition, data collection and management, and producing and disseminating benchmarking reports. ○ **Conducting inspections** on premises/facilities of the providers and data to be availed. ○ **Appellate mechanisms** including establishing and overseeing complaints mechanisms and arbitrating disputes. ○ **Sanctioning powers** to guide enforcement procedures for non-compliant providers. ○ Guiding the **operations of service providers** for professional management.
Regulatory environment	• Safeguarding regulators' **decision-making autonomy**, including ensuring functions like tariff setting is politically and legally insulated and enshrined within the regulator's core mandate. • Steps to build regulatory actors' **financial autonomy** and ensure the requisite financial resources to perform mandated functions (e.g., through levies on service providers). • Ensuring the **selection of Boards and management** for regulators based on competencies and on a competitive process, and independently from the executive branch • Requirements for **transparency and public participation** in developing and applying regulations, including engaging civil society, users, and members of the public in the development of regulations, establishing and supporting CBOs, and widely sharing data and reports. • Mechanisms to ensure **coordination** among regulators and leverage efficiencies. • The relationship between regulators and the Legislative and the Executive, including **accountability mechanisms** over regulatory actors and their reporting requirements.

3.2. RECOMMENDATIONS FOR THE INSTITUTIONAL FRAMEWORK

Headline Recommendations:

- Ensure a well-defined institutional framework for WSS is enshrined within policy documents and legal instruments and explicitly outlines the division of policymaking, regulatory, and service provision mandates.
- Ensure a dedicated lead regulator for WSS exists within the overall institutional framework.
- Tailor the institutional framework based on (i) the current mixture of regulatory models and SDMs employed, (ii) the opportunities for substantive reform, (iii) regulators, local governments, and service providers' capacity and performance, and (iv) the desired SDMs for rural WSS and small water supplies.

A well-defined and appropriate institutional framework, with the explicit division of responsibilities among sector stakeholders, is a prerequisite for effectively providing and regulating rural WSS and small water supplies.

The institutional framework is defined by the policies and legal instruments that determine the mandates and functions of stakeholders, including **policymakers**, **service providers**, **regulators** and **users**, for rural WSS and small water supplies. The following core features should be noted:

- Clearly separating mandates and responsibilities for policymaking, regulation, service provision and user functions to reduce overlaps and conflicts.
- Policymaking functions are assigned to a lead ministry with inputs from supporting ministries, necessitating strong coordination, especially for sanitation.
- Having a dedicated regulator for WSS (this could be a regulatory agency or department within a ministry) distinct from an implementation agency and with the separation of functions for associated sectors (e.g., WRM, environmental protection).
- The option to apply both direct regulation and regulation via a delegated framework with the flexibility of having a consolidated regulatory model where all regulatory functions fall under a lead dedicated WSS regulator.
- Stipulating the service providers and range of accepted SDMs regulated directly and/or through a delegated framework, including the mechanisms for their recognition.
- Emphasising a crucial role for users that extends beyond payment for services and covers participation in community engagement structures and holding service providers, regulators and policymakers accountable.

Table Seven outlines the headline functions, principles and considerations that must be accounted for within the institutional framework. It highlights regulators' critical role at the interface of policymakers, service providers, and users.

Table Seven: Institutional Framework – Headline Functions, Principles and Considerations

	Headline Functions	Principles and Considerations
Policy-making: *Lead ministry*	• Formulating **policies and strategies** on WSS, including determining sector targets and the priority policy objectives to achieve these and clarifying asset ownership responsibilities. • Ensuring adequate **financial resources** are allocated and secured to achieve sector targets and policy objectives for WSS.	• Ensure a clear demarcation of policymaking functions to avoid duplication or gaps, especially for rural sanitation where responsibilities are often split across multiple ministries (AMCOW, 2021).
Regulation: *WSS Regulatory body*	• Issuing regulations, licenses, permits, contracts, guidelines, and standards (including construction standards) that **establish the 'the rules of game'** and specifying the requirements for service providers and users to fulfil their functions within the institutional framework to support the attainment of sector targets and policy objectives. • **Applying regulatory instruments** for compliance with the 'rules of the game', including tariff review and adjustment process, data collection, management and reporting, complaints and accountability mechanisms, incentives, support to service providers, and sanctions. • Ensuring public **access to information** and **public participation.**	• Consolidating overall responsibility for WSS regulation under the purview of one lead regulatory actor can result in many benefits, including streamlined coordination and greater regulator capacity, and the tailored application of a range of accountability and regulatory mechanisms. • The political, legal and financial autonomy of regulators is of paramount importance in reducing political interference and enabling effective regulation (WIN, 2024). • Tailored and progressive approaches to regulation that account for the variable capacity of different regulatory actors and service providers and support the use of differentiated approaches to regulation are required (WHO, 2024; WSUP & ESAWAS, 2020) to ensure interventions are not overly complex for the given context and capacities (World Bank, 2018). Simple and doable beats complicated and shelved.

Service Provision: *Mandated service providers*	• The **provision of WSS services**, including the performance of necessary technical, financial and managerial functions to ensure:
	  ○ The proper management and performance of water supply and sanitation facilities.
	  ○ The construction of WSS facilities, including capture and containment facilities.
	  ○ Safe emptying of sanitation facilities and the subsequent conveyance, treatment, and disposal or re-use of faecal waste.
		• Achieving universal access to WSS services typically requires multiple SDMs tailored to different demographic and socio-economic contexts and technologies (WaterAid, 2024; USAID, 2023a).
		• Consolidating service provision and ensuring there is a clear rationale for regulation that is supportive rather than punitive and not overburdening service providers are crucial factors in helping to overcome the substantial challenges impeding the effective delivery of rural WSS and small water supply services (USAID, 2023b).

Users	• **Payment** for WSS services. • Construction of capture and containment facilities and water supply facilities for personal use.	• Community structures and groups have an important role to play in holding service providers accountable and supporting the application of regulatory mechanisms.

3.2.1. GENERIC INSTITUTIONAL FRAMEWORK

Figure Four presents a summary institutional framework for rural WSS and small water supplies, highlighting key policymaking, regulatory, service provision, and user functions. It is purposefully *generic* and focused on presenting *core* policymaking, regulatory, service provision, and user responsibilities for rural WSS and small water supplies.

Additionally, *Table Eight* provides a more detailed overview of actors' responsibilities within this generic institutional framework.

This generic institutional framework is designed to provide top-level guidance that can be adapted to the country context. This should be done based on a thorough analysis of a country's existing institutional framework, including the current mixture of SDMs utilised, the policy and legal context, the performance and capacity of different SDMs and regulatory actors, sector priorities for SDM professionalisation (recognising that the mixture of SDMs applied and the relative scale of SDMs is constantly evolving), and the opportunities for substantive reform *(see Section 4).*

Figure Four: Institutional Framework Overview

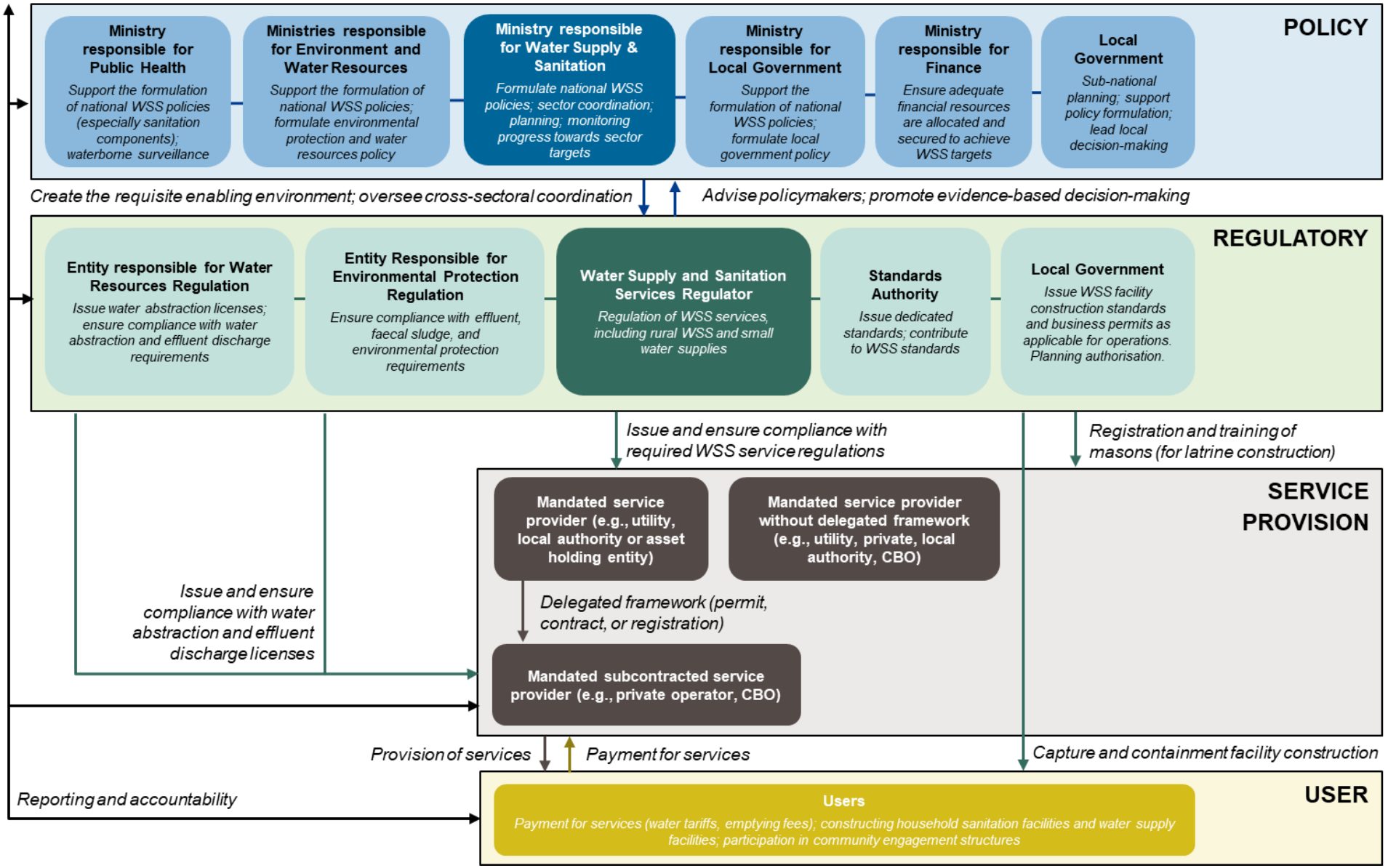


Table Eight provides a more detailed overview of the key functions outlined in *Figure Four.*

Table Eight: Institutional Framework – Division of Key Functions

Institution	Recommended Roles and Responsibilities
Policymaking Functions	
Ministry responsible for WSS	• Coordinating the formulation of a national policy on WSS service provision. • Coordination of sector stakeholders using a sector-wide approach • Developing national plans and strategies guided by credible data to support the attainment of sector targets and policy objectives. • Monitor the implementation of the national WSS policy and progress toward sector targets. • Mobilise sector finance and ensure equitable allocation based on priorities.
Ministry responsible for public health	• Support the development of the national WSS policy to incorporate public health considerations (especially sanitation components, water quality, and WSS in healthcare facilities), including concerning waterborne and disease surveillance.
Ministry responsible for water resources and the Ministry responsible for the environment	• Support the development of the national WSS policy to safeguard use of water resources and impacts on the environment. • Formulation of a standalone national policy on water resources and environmental protection, including the protection of water bodies by controlling the discharge of from waste water treatment plants (WWTP), sludge treatment plants, and septic tanks.
Ministry responsible for local government	• Support the development of the national WSS policy. • Formulate policy on local government, including mandate for planning and guiding facility construction (e.g. sanitation, treatment works etc).
Ministry responsible for finance	• Ensure adequate financial resources are allocated and secured to achieve sector targets and policy objectives for rural water and small water supplies and rural sanitation.
Regulatory Functions	
WSS regulator	• Advising government on effective arrangements for service provision. • Licensing, contracting, permitting, and registration of WSS service providers for the provision of WSS services. • Determination of tariffs that balance affordability and sustainability concerns. • Development and enforcement of regulations, rules, standards and guidelines for the WSS sector, including key performance indicators (KPIs). • Establishing a credible baseline on WSS service provision and guiding providers on the expansion and management of existing WSS facilities. • Public reporting of progress and the performance of all regulated WSS providers. • Detail requirements for the establishment and use of structures and processes for public engagement (particularly of communities) in service delivery.
Local government	• Issue businesses licenses and permits for operations • Guide the construction standards of facilities, including the registration and certification of trained local masons. • Support service planning considerations and, where required approval of service provider • Support national policy formulation and lead local policymaking within the confines of the wider policy and legal context.

Institution	Recommended Roles and Responsibilities
Entity responsible for water resources protection regulation	• Develop water resources protection standards and regulations. • Issue licenses and permits for water abstraction. • Ensure compliance with water abstraction licenses, permits and regulations concerning water resource management and protection. • Ensure compliance with effluent discharge quality pursuant to effluent standards and regulations.
Entity responsible for environmental protection regulation	• Develop effluent, faecal sludge, re-use, and environmental protection standards and regulations. • Monitor and enforce compliance with environmental protection regulations related to the management of water supply facilities. • Monitor and enforce compliance to effluent and faecal sludge quality standards.
Standards authority (or equivalent)	• Production of dedicated national standards on topics of particular importance (e.g., water and effluent quality). • Input into the development of WSS standards and guidelines.
Service Provision Functions	
Mandated WSS service provider with or without a delegated framework	• Provision of water supply services-production, treatment, distribution,- including water tanker / bowser (where appropriate). • Provision of sanitation services for both sewered and non-sewered solutions, including emptying, conveyance, treatment, disposal and re-use services. • Ensure compliance with sector standards and regulations. • Oversight of WSS service provision responsibilities to a subcontracted party using an authorised accountability mechanism / legal instrument. • Reporting on performance (including subcontracted service providers) to the WSS regulator. • Construction, rehabilitation and maintenance of WSS facilities. • Complaints handling and active community engagement in service delivery.
User Functions	
Households	• Payment of approved tariffs for water supply services, including connection fees. • Payment for sanitation services, including construction of onsite sanitation facilities and emptying, in-line with sector standards and agreed rates. • Where permitted and / or promoted, construction of household water supply facilities for personal consumption that comply with sector standards and regulations. • Construction of onsite sanitation facilities for personal use that comply with standards and regulations. • Participation in community engagement structures and use of complaints mechanisms to hold service providers, policymakers, and regulators accountable. • Feedback on non-compliance by providers with quality of service standards/requirements.

3.3. APPROACH TO REGULATING RECOMMENDED SERVICE DELIVERY MODELS

Headline Recommendations:

- Use policy and strategy documents to outline a sector vision for professionalised rural WSS and small water supplies delivery based on clearly defined SDMs.
- Establish a differentiated approach for regulating approved SDMs that tailors the approach to regulation and the accountability mechanisms utilised to the type of SDM, the service being provided, and the regulatory actors' capacity.
- Progressively introduce regulatory requirements and ensure accountability mechanisms are not overburdensome and impede the effective delivery of services at scale.
- Emphasise instruments focused on supporting and building service providers' knowledge and capacity (e.g., technical and financial support, information dissemination, incentives). This is especially important when '*first*' regulating an SDM – in these situations, it is essential to demonstrate to service providers how they benefit from regulation.

The experience of countries shows that effectively managing services and achieving universal access typically requires a combination of SDMs within any given country to ensure the SDM suits the diversity of demographic and socio-economic contexts present and the mixture of technology options utilised (WaterAid, 2024).

Under regulation, various service delivery models (SDMs) can be utilised for rural WSS and small water supplies in other contexts with the objectives of consumer protection and/or commercial viability. A critical element of SDM professionalisation can require Consolidation (when a service provider expands its service into multiple service areas) or Aggregation (when several service areas are grouped together as one management unit). Other common elements of SDM professionalisation include clarifying roles and responsibilities, defining service areas, service provider formalisation and capacity development, and increased support to – and oversight of – service providers.

Regulation can enable SDM professionalisation by supporting each of these elements. Moreover, in all situations, the financial viability of professional WSS services depends on key government decisions regarding the financial, technical and organisational development support provided to SDMs, tariff levels, and public or private responsibility for investment and renewal of capital assets (REACH, 2024).

This section sets out the approaches that should be employed for regulating each of the main SDMs for rural WSS and small water supplies in other contexts *(see Table Nine),* noting the relative strengths and weaknesses of each SDM.

Table 9: Main SDMs

PUBLIC 1 & 2	The provision of WSS services by **national and sub-national utilities** (**PUBLIC 1**), which are increasingly mandated to provide services in rural and small-town contexts, includes historically urban-focused utilities expanding into rural areas and newly-established rural utilities and represents a critical trend across Africa with a focus on improving efficiency and accountability. These utilities mainly serve small towns, rural growth centres and nearby communities, principally managing piped water supply facilities but sometimes providing emptying, conveyance, treatment, and disposal or re-use services. In some contexts, **a unit or department of local government** as owners of WSS infrastructure, also provides WSS services **(PUBLIC 2),** typically in areas where commercial viability may not be tenable.
PRIVATE 1, 2 3, & 4	The provision of WSS services by **private operators** occurs in a range of forms: • Private operator management with direct oversight by a regulatory entity (**PRIVATE ONE**). • A dedicated national asset-holding entity is mandated to delegate service provision responsibility to and oversee large private operators for dedicated service areas (**PRIVATE TWO**). • A national or sub-national utility is the mandated provider for WSS service provision and oversees private operators within its jurisdiction that serve part of its service area or manage specific facilities (**PRIVATE THREE**). • Local government is mandated to ensure the provision of WSS services and oversees private operators within its jurisdiction that serve a dedicated service area or manage specific facilities (**PRIVATE FOUR**). Under each model, private operators principally provide water supply services. However, emptying and transport services are sometimes provided by separate private operators. Private 1, 3 and 4 are each appropriate mechanisms for bringing previously unregulated **informal private operators** into the regulatory sphere as they are incentivised to formalise to protect their areas of service. By including private operators into the rural landscape, service delivery can be transformed by enhanced professionalisation in management.
CBO 1 & 2	**CBO management** is the predominant approach for managing water supply services across rural Sub-Saharan Africa, with water user committees/associations (or equivalent) managing piped and point water sources. The SDM is commonly associated with unsatisfactory services with widespread failures, especially where water committees receive limited external support such as expertise and sustainable funding. However, the approach is demonstrated to work when user committees are properly supported by the entity mandated to ensure the provision of WSS services (i.e., local government, utility, or a technical agency) (**CBO 1**) or technical functions (i.e., preventive maintenance and repair functions, corrective repairs, spare parts procurement) are formally contracted to private operators (**CBO 2**) (USAID, 2023b; USAID, 2019). Delegated private operators can include social or Safe Water Enterprises, NGOs and FBOs. CBOs promote community ownership and principally focus on water supply provision but can also play an important role in sanitation. Both these models are recommended for consideration.
HOUSEHOLD SELF-SUPPLY	WSS facility construction or funding and management by **households**, with in-situ faecal waste treatment. On the water supply side, this SDM is principally utilised in highly dispersed rural settings but is also found in other demographic settings when sufficient quality services are not available from other SDMs. For sanitation, this SDM is found across the broad spectrum of rural areas and occurs organically and as a result of demand-creation approaches such as Community-Led Total Sanitation. *By its nature, household self-supply is not regulated due to extreme fragmentation and complexity of ensuring accountability.*

For each SDM, **Accountability mechanisms** are crucial for establishing the relationship between the service provider (public utility, local government, private operator, or CBO) and regulator to provide a foundation for applying regulatory mechanisms and hold service providers answerable. These include licenses, contracts, legal instruments, permits, registration and memorandums of understanding, each of which can be applied *directly* or via a *delegated framework*. See section 2.2.3.

When determining the approach to regulating any SDM, it is critical to consider the wider sector institutional framework and establish a coherent overall approach to regulating different SDMs. Accordingly, the SDM-specific guidance is presented within two broad options *(see Table 10)*.

Table 10: Options for Regulating Different Service Delivery Models

Option	Overview	SDMs
Option One: **Direct Regulation of Mandated Service Provider**	The WSS regulator directly regulates different services providers through licensing, contract and / or permitting regimes and, in some cases, statutory provisions within legal instruments	**PUBLIC 1:** National or sub-national utility direct management.
		PUBLIC 2: Local government unit or department direct management
		PRIVATE 1: Private operator management with direct oversight by a regulatory entity.
		CBO 1: CBO management with external support.
Option Two: **Delegated Regulatory Framework for Multi-tiered Service Provision**	A WSS regulator *directly regulates* the entity with the overall mandate for WSS service delivery (i.e., local government, a utility, or a specialised asset holding entity) and allows this entity to delegate service provision responsibility.[5] [6] Under this option, the dedicated WSS regulator utilises a *delegated framework* to assign limited regulatory compliance oversight of the delegatee (e.g., private sector, CBOs) to the mandated WSS service provider.	**PRIVATE 2:** Private operator management with oversight by a specialised asset-holding entity.
		PRIVATE 3: Private operator management with oversight by a utility.
		PRIVATE 4: Private operator management with oversight by sub-national government.
		CBO 2: CBO management with some technical functions formally contracted to a private operator.

The nature of the mandated WSS provider influences how it is regulated and the accountability mechanisms used. A specialised asset-holding entity could be regulated via a contract, while a utility could be regulated via a licensing regime. Conversely, when local government is mandated to ensure the provision of WSS services, a more consultative approach is required for ensuring compliance with legal instruments and regulations and could be enshrined in a Memorandum of Understanding (MoU). This involves actions such as the WSS regulator developing guidelines, issuing recommendations, and providing support to the mandated WSS service provider rather than applying more punitive instruments.

The specific approach to regulating each SDM must be contextualised at the country level. This should be done based on a thorough analysis of the existing institutional framework, the policy and legal context, different SDMs and regulatory actors' capacity and capabilities, sector priorities and the opportunities for substantive reform *(see Sub-Section 4.2.)*.

[5] Local government has traditionally held responsibility for ensuring WSS service delivery in rural areas. However, in many countries, utility provision of rural and small-town water supply services is prioritised (IRC, 2021) and, in several countries (e.g., Zambia, Rwanda), utilities have been given the mandate to ensure WSS service provision across dedicated jurisdictions (e.g., the entire country or whole provinces). Additionally, in a smaller set of predominantly West and North African countries (e.g., Senegal, Mauritania, Benin), specialised asset holding entities have been established and are responsible for ensuring the provision of WSS services.

3.3.1. OPTION ONE: DIRECT REGULATION OF A MANDATED SERVICE PROVIDER

3.3.1.1. PUBLIC ONE: NATIONAL OR SUB-NATIONAL UTILITY

Setup: **National or sub-national utility** managing rural WSS and small water supply services. Publicly-owned and privately managed. This is the most recommended approach.

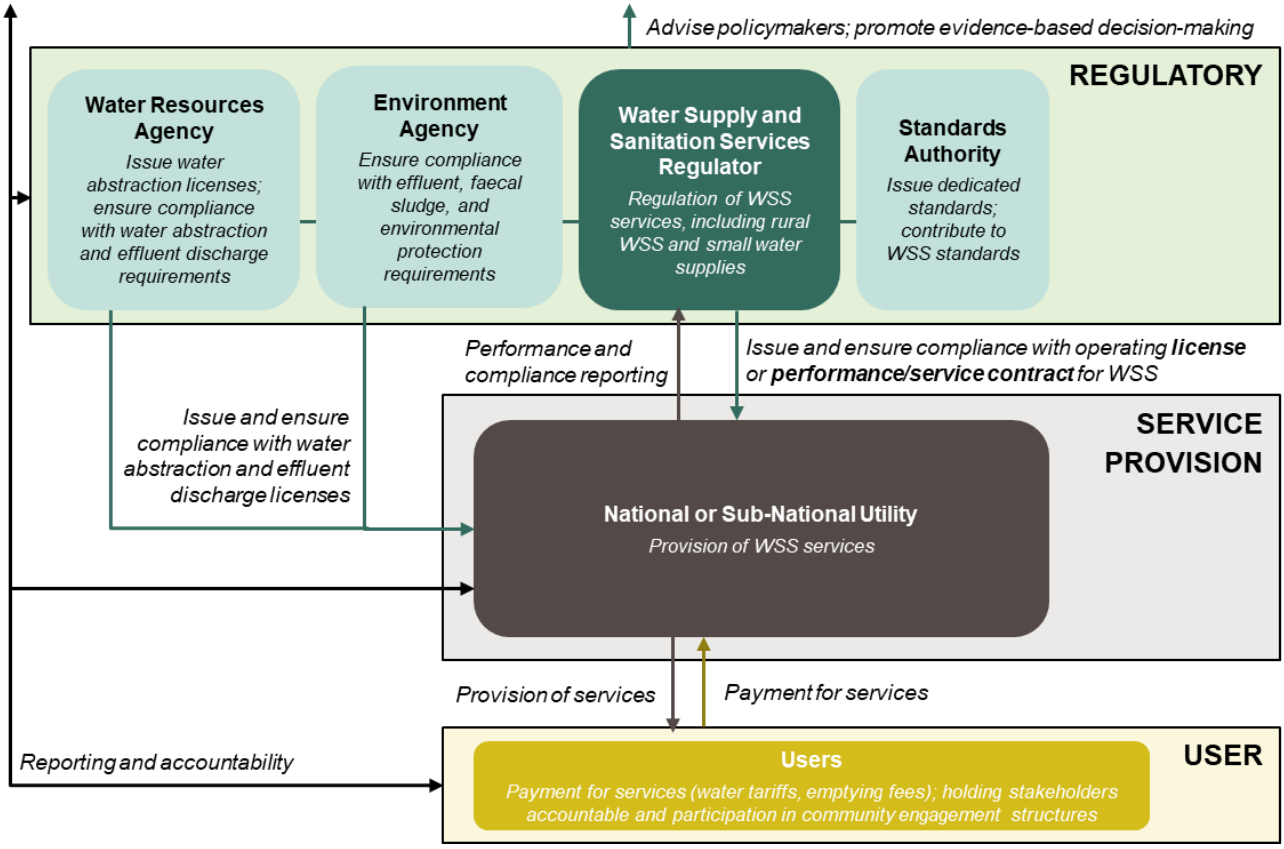
Service Scope: This SDM includes traditionally urban-focused utilities expanding into rural growth centres and small towns or newly-established rural-focused utilities *(Table 11).*

Table 11: Public One – SDM Overview

Demographic Context	Water Supply Services	Sanitation Services
Rural growth centres, small towns as well as nearby communities, multi-village schemes	Mainly piped water supply services but also mechanised point water sources	Emptying and conveyance, treatment, disposal and reuse

Regulatory regime: Regulated **directly** by the WSS regulator via a **license** or a **performance/service contract** (in absence of licensing mandate) for WSS service provision and subsequently holds the national and / or sub-national utilities accountable against this license or performance contract. Many effective examples of this model exist, including in Zambia, Tanzania, Rwanda, Uganda, and Kenya.

Figure Five: Public One – Regulatory Approach and Recommended Accountability Mechanisms



The major **strength** of this SDM is that a clear hierarchy can be established between regulatory entities and the utilities, with legal instruments explicitly defining regulatory actors' mandates and powers in relation to the utility. While often facing capacity constraints and struggling to ensure cost recovery, utilities typically already operate at a modest scale and have at least a critical baseline of technical, financial and managerial capacity that provides a vital foundation for enabling professional service delivery and commercial viability.

3.3.1.2. PUBLIC TWO: LOCAL GOVERNMENT UNIT OR DEPARTMENT

Setup: A **unit or department of local government** managing rural WSS and small water supply services, particularly where commercial viability may not be tenable. Publicly owned and managed.

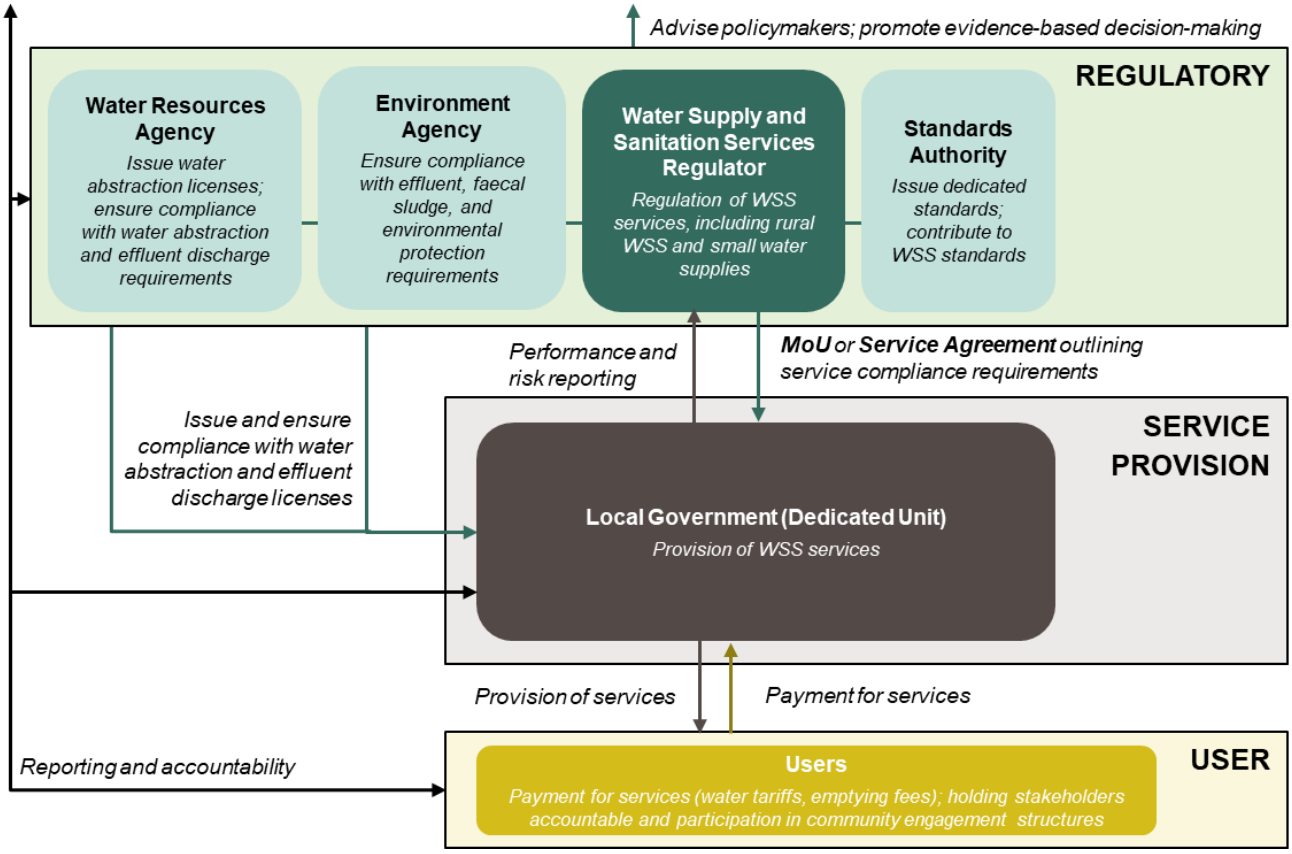
Service Scope: This can encompass entire districts or provincial level with focus on rural growth centres and small towns *(Table 12).*

Table 12: Public Two – SDM Overview

Demographic Context	Water Supply Services	Sanitation Services
Rural growth centres and small towns as well as nearby communities	Mainly piped water supply services but also mechanised point water sources	Construction of facilities, Emptying, transport, treatment, disposal and reuse

Regulatory regime: Regulated **directly** by the WSS regulator using a **Memorandum of Understanding (MoU)** or **service agreement** and will typically have to rely on a more consultative approach to ensure compliance with regulations and legal instruments.

Figure Six: Public Two – Regulatory Approach and Recommended Accountability Mechanisms



This model could pose some common **challenges** in the regulation of local government (e.g., the often unclear legal hierarchy between regulators and local government and associated difficulties in applying more stringent regulatory mechanisms such as sanctions for non-compliance e.g. fines or removal of management) as well as the capacity constraints that local government units or departments responsible for WSS typically face.

3.3.1.3. PRIVATE ONE: PRIVATE OPERATOR MANAGEMENT WITH DIRECT OVERSIGHT BY A REGULATORY ENTITY

Setup: **Private operators** providing services using facilities and infrastructure that they formally own and are, therefore, not delegated by a separate WSS duty bearer or asset owner. Privately owned and managed.

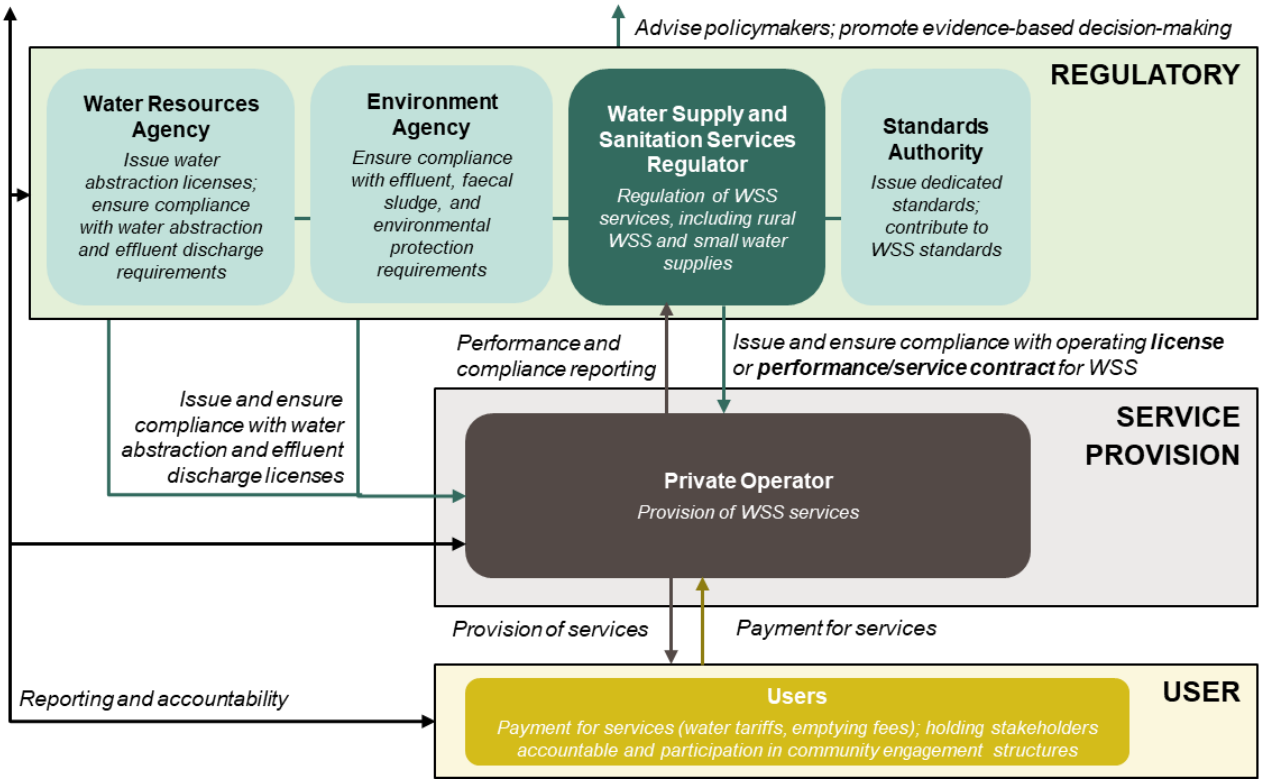
Service Scope: A range of WSS services are provided under this model *(see Table 13),* which principally serves more concentrated areas such as rural growth centres, small towns and peri-urban and urban areas with high potential for commercial viability.

Table 13: Private One – SDM Overview

Demographic Context	Water Supply Services	Sanitation Services
Commercially viable rural growth centres and small towns and peri-urban and urban areas	Principally mechanised point water sources but also small, piped water supply facility and non-mechanised point water sources	Construction of facilities, emptying, conveyance, treatment and disposal

Regulatory regime: Regulated **directly** by the WSS regulator that issues a **license or contract** for service provision and subsequently holds the private operator accountable against these. The regulator prescribes the conditions to be met for private operators' participation in the sector with service quality and cost recovery considerations. The private operators' service area should also be defined and safeguarded. Rwanda and Kenya are examples of this SDM and the approach to its regulation.

Figure Seven: Private One – Regulatory Approach and Recommended Accountability Mechanisms



This model can be used as part of a wider process of formalising previously unregulated informal service providers. The major **strengths** include the ability of this model to complement public utility provision, with private operators providing services or serving settings that other SDMs may struggle to deliver or reach. Additionally, the direct relationship between the private operator and the regulator enables a more active approach to regulation to be employed with applicable sanctions including license/contract cancellation.

3.3.1.4. CBO ONE: CBO MANAGEMENT WITH EXTERNAL SUPPORT

Setup: Community Based Organisation (**CBOs)** delivering services under the direct oversight of a WSS regulator.

The number of CBOs managing and providing WSS services in most countries is very large, thereby often severely hindering effective direct regulation because of the financial, technical and human resources required at the sub-national level. For professionalisation, an aggregated approach can be used whereby multiple CBOs are brought under a single umbrella entity or established as a WSS user association/committee.

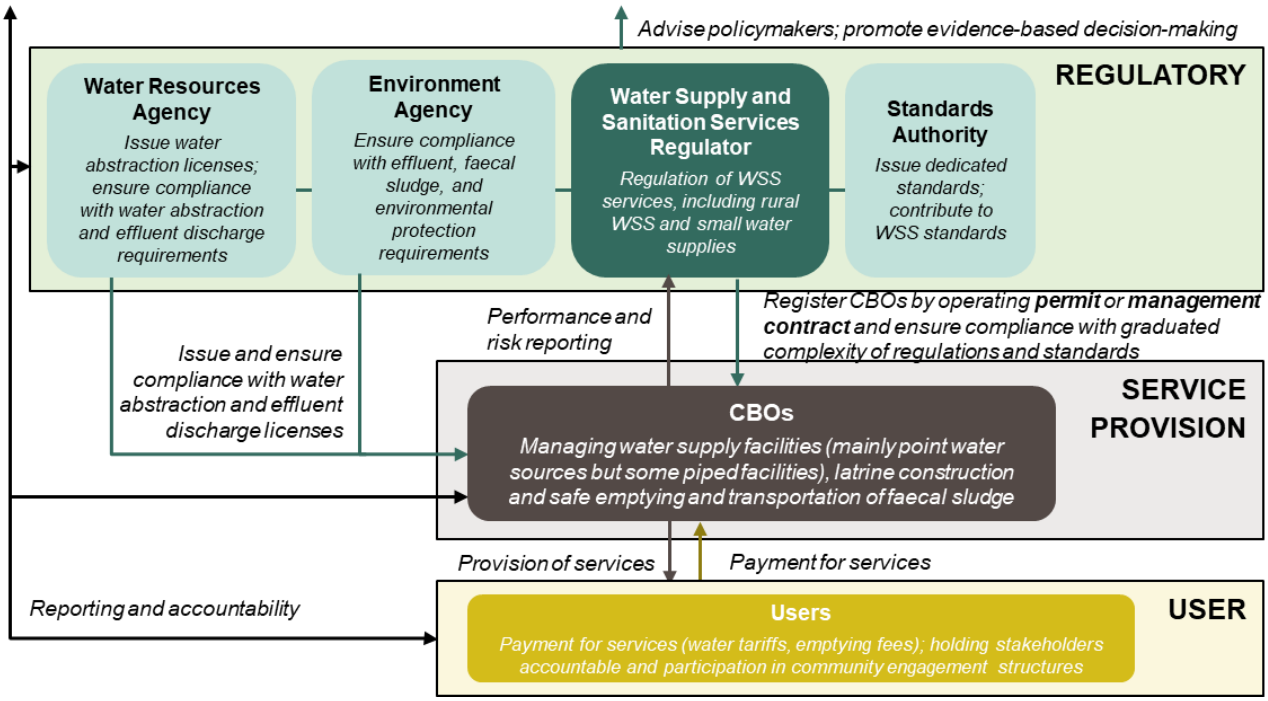
Service Scope: The CBOs provide rural water supply services and also construction of improved onsite sanitation facilities and safely-managed emptying, disposal and re-use of faecal sludge *(Table 14).*

Table 14: CBO One – SDM Overview

Demographic Context	Water Supply Services	Sanitation Services
Principally more dispersed rural areas but some remote rural growth centres and small towns	Managing point water sources (mechanised and non-mechanised) and smaller piped water supply facilities	Onsite sanitation facility construction and safe emptying, disposal and re-use of faecal sludge

Regulatory regime: Regulated **directly** utilising **permits or management contracts** to recognise and approve aggregated CBOs and provide a basis for applying regulatory instruments. Where the aggregated CBO gains sufficient capacity, it can be graduated for **licensing** by the regulator as a Utility.

Figure Eight: CBO One – Regulatory Approach and Recommended Accountability Mechanisms



The composition of the CBOs (including accounting and engineering) should be prescribed by the regulator and/or local government authority especially when fee collection is a direct responsibility. This model should **emphasise technical and financial management support**, including the adoption of approaches to proactive risk management, dissemination of guidance materials, and light-touch incentives. In order for the WSS regulator to directly regulate CBOs, it will be crucial for it to decentralise its operations and, at a minimum, have offices at the regional level. Effective examples of this model exist in Peru and Tanzania.

3.3.2. OPTION TWO: DELEGATED REGULATORY FRAMEWORK FOR MULTI-TIERED SERVICE PROVISION

3.3.2.1. PRIVATE TWO: PRIVATE OPERATOR PROVISION WITH OVERSIGHT BY A SPECIALISED ASSET HOLDING ENTITY/TECHNICAL AGENCY

Setup: **Large private operators**[7] providing rural WSS services across large (e.g., regional) dedicated service areas with contracting and oversight by a specialised asset-holding entity or technical agency established at the national level to ensure the provision of rural WSS services.

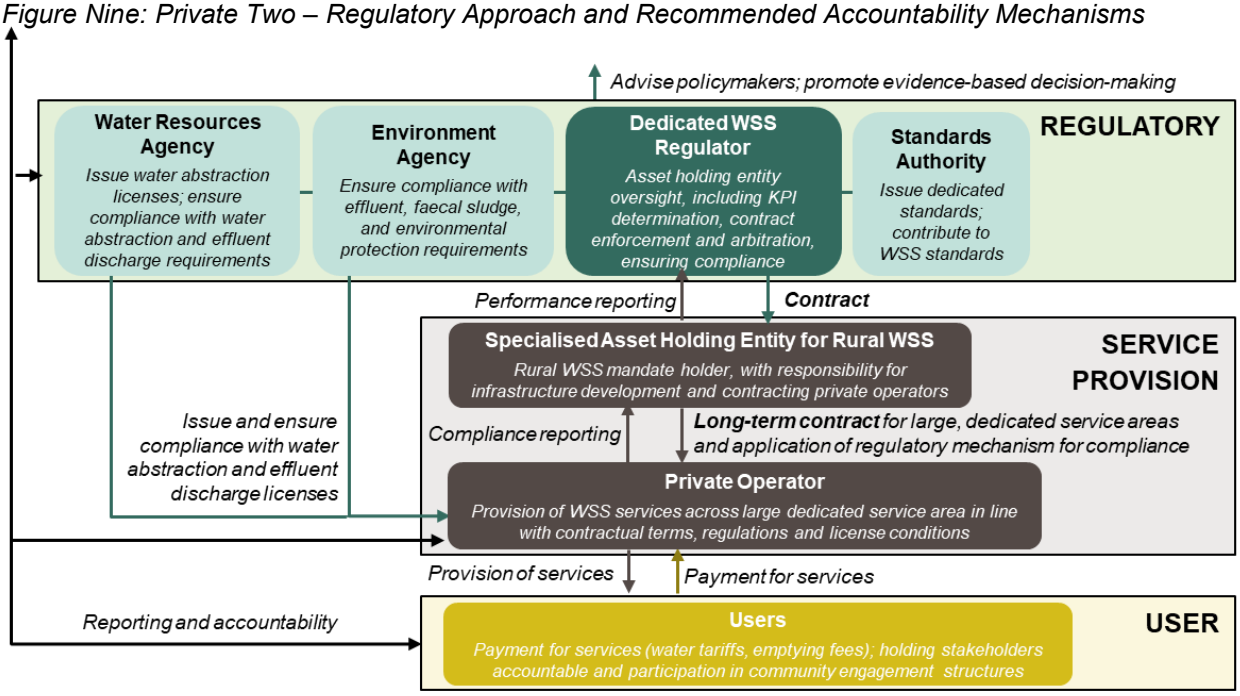
Service Scope: The asset-holder/technical agency is responsible for planning, constructing and maintaining WSS infrastructure while the private operators are expected to provide water supply and sanitation services across the chain and operate at a considerable scale across dispersed rural areas through to large towns with potential for commercial viability *(Table 15).*

Table 15: Private Two – SDM Overview

Demographic Context	Water Supply Services	Sanitation Services
Dispersed rural areas through to large towns with large service areas utilised (consolidation) for commercially viability	Piped water supply facilities emphasised but includes point water sources	Facility construction, emptying, conveyance, treatment, disposal and reuse

Regulatory regime: The asset-holder can have oversight by a WSS regulator to which it is accountable or in absence, can directly perform some limited regulatory functions e.g. compliance to quality of service standards. **Long-term or concession contracts** (e.g., 8-20 years) between the specialised asset-holder and private operators are the main accountability mechanism. These contracts should have terms that sufficiently incentivise private operators, enabling a profit margin to be made while retaining provisions to ensure service quality and recurrent investment in WSS infrastructure. Under this SDM, beneficiary and community structures should be enhanced for dual accountability with private operators and ensure compliance.

Figure Nine: Private Two – Regulatory Approach and Recommended Accountability Mechanisms



This model is recommended for consideration because it offers a **viable pathway** for engaging the private sector at a considerable scale. However, in the countries where it has been implemented (e.g., Tanzania, Senegal, Benin, Mauritania), it is important to note that it could entail considerable sector reforms as well as challenges identifying sufficiently capacitated *homegrown* private operators.

[7] The private operator could be a local private operator, a group of local private operators, or an international company.

3.3.2.2. PRIVATE THREE: PRIVATE OPERATOR PROVISION WITH UTILITY OVERSIGHT

Setup: **Private operators** delivering services under the oversight of a national utility or sub-national utilities with overall responsibility for WSS service provision.

Service Scope: The private operators should be delegated sufficiently large and attractive service areas to attract professional private operators and terms that incentivise good performance and enable economies of scale to emerge (see Table 16).

Table 16: Private Three – SDM Overview

Sub-Sector	Demographic Context	Services
Rural water	Rural areas, rural growth centres and small towns	Small piped water supply facilities; mechanised point water sources
Rural sanitation		Sanitation facility construction (private registered masons); emptying and conveyance services; managing treatment facilities
Small water supplies	Peri-urban and urban areas	Small piped water supply facilities; mechanised point water sources, public taps and kiosks

Regulatory regime: The WSS regulator uses a **delegated framework.** The WSS Regulator issues a **license or performance contract** to a national utility or sub-national utility as the mandated service provider across a defined jurisdiction. The utility is then allowed to assign responsibility for/delegate service provision (Operation and Maintenance) to part of its service area under public-private partnership (PPP) arrangements as follows:

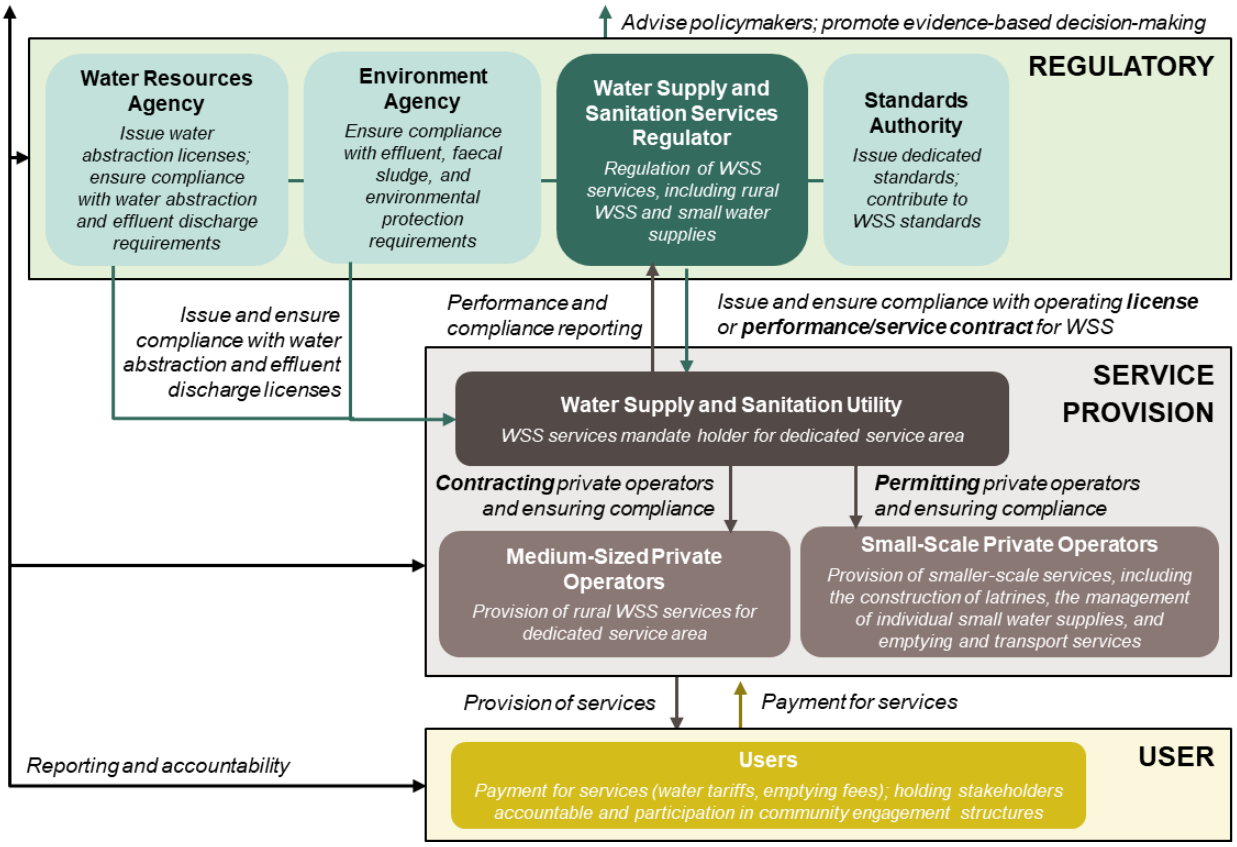
- For **medium to large-sized private rural water supply operators**, services can be formally **contracted** by the utility (with approval from the WSS regulator) with private operators competing for contracts.
- For private operators providing rural WSS and small water supply **services at a smaller scale** (e.g., for sanitation facility construction, managing individual small water supplies, and emptying, transport and disposal or re-use services), the utility can issue **permits** (with oversight from the WSS regulator).

The requirements of these contracts and permits should be designed by the regulator and align with key elements of the utilities' operational license or performance contract for WSS (i.e. technical and operational standards, service quality and tariff regulations requirements), with the utility responsible for monitoring oversight, conducting financial and technical audits, water quality surveillance and reporting private operators' performance to the WSS regulator. The utility also plays a key role in technical assistance and capacity-building for the private operators for compliance adherence.

Local government has a reduced role, principally centred on approving the designated service provider, issuing applicable business licenses, supporting service planning considerations (particularly construction of communal facilities in markets, schools and health centres) and adherence to public health standards. Water User Committees play a role in community engagement, monitoring and conflict resolution. The most prominent examples of variations of this model include Zambia, Rwanda, Kenya and Tanzania.

This SDM has the ability to **complement public utility provision**, with private operators providing services or serving settings that utilities may not serve in the medium-term. It offers a means to bring private operators under the regulatory sphere of a WSS regulator without considerably increasing the regulator's resource and capacity requirements (this is generally required to directly regulate many individual private operators). The major **challenge** of this model concerns ensuring that utilities have the requisite capacity to contract, permit, and oversee private operators as well as ensuring that the utilities' service provision mandate does not interfere with and create conflicts in the performance of their oversight functions. Additionally, significant reforms may be required to reflect utilities' expanded role under this model.

Figure 10: Private Three – Regulatory Approach and Recommended Accountability Mechanisms



Alternative setup: **CBOs** delivering services under the oversight of the mandated WSS service provider (i.e., a national or sub-national utility). This may be a critical consideration for areas with limited viability but can benefit from overall Utility cost cross-subsidisation.

Service Scope: The CBOs principally provide rural water supply services *(see Table 17),* managing facilities where other service providers are not in a position to effectively take over management functions. This model is recommended as a means to bring CBOs within the regulatory sphere.

Table 17: CBO One – SDM Overview

Demographic Context	Water Supply Services	Sanitation Services
Principally more dispersed rural areas but some rural growth centres and small towns	Managing point water sources (mechanised and non-mechanised) and some smaller piped water supply facilities	Sanitation facility construction and safe emptying, disposal and reuse of faecal sludge

Regulatory regime: This SDM is regulated via a **delegated framework**, with the Utility performing oversight functions and water quality surveillance and management. The mandated WSS service provider utilises **management contracts** to recognise and approve CBOs within their overall jurisdiction and provide a basis for applying regulatory instruments and reporting performance to the WSS regulator.[8]

Within this model, particular emphasis must be given to formalising and building the capacity of the CBOs under an aggregated management model. This includes, clearly defining roles and responsibilities and ensuring that members have the requisite skills to perform their functions, ensuring the CBO is registered, and enhancing technical and financial support *(see Box 10 in Annex One).*

[8] For well-capacitated and professionalised CBOs managing large, piped water supply facilities (or even multiple facilities), it may be appropriate to utilise a license. However, a differentiated approach must be employed that focuses on minimum requirements.

3.3.2.3. PRIVATE FOUR: PRIVATE OPERATOR PROVISION WITH LOCAL AUTHORITY OVERSIGHT

Setup: **Private operators** delivering services under the oversight of local government with overall responsibility for ensuring WSS service provision within their respective jurisdiction.

The assigned service areas should be sufficiently large to attract professional private operators and terms that incentivise good performance for commercial viability.

Service Scope: The private operators provide WSS services across a range of demographic settings, preferably for defined service areas that enable economies of scale to start to be achieved *(see Table 18).* Local Government has responsibility for overseeing development of point sources, small-scale piped systems, standpipes and sanitation treatment facilities.

Table 18: Private Four – SDM Overview

Demographic Context	Water Supply Services	Sanitation Services
Commercially viable dispersed rural areas through to large towns (preferably with defined service areas) and multi-schemes	Piped water supply facilities and mechanised point water sources emphasised, but may include some non-mechanised point water sources	Facility construction, Emptying, transport, treatment, disposal and re-use

Regulatory regime: This SDM is regulated via a **delegated framework**. The WSS regulator enters into an **MoU or service agreement** with the local government authority that is the mandated service provider across a defined jurisdiction. The Local Authority is then allowed to assign responsibility for service provision to all or part of its service area by contracting and subsequently overseeing private operators as follows:

- For **medium-sized private rural water supply operators**, the Local Authority (with approval from the WSS regulator) can formally engage private operators based on established criteria using **contracts** (concession management, lease-operator or affermage).
- For private operators providing rural WSS and small water supply **services at a smaller scale** (e.g., for sanitation facility construction, managing individual small water supplies, and emptying, transport and disposal or re-use services), the Local Authority can issue **permits** (with oversight from the WSS regulator). Mozambique is the main example of this model.

Alternative setup: **CBOs** delivering services under the oversight of the mandated Local Government authority responsible for WSS service provision. This may be a critical consideration for less viable areas.

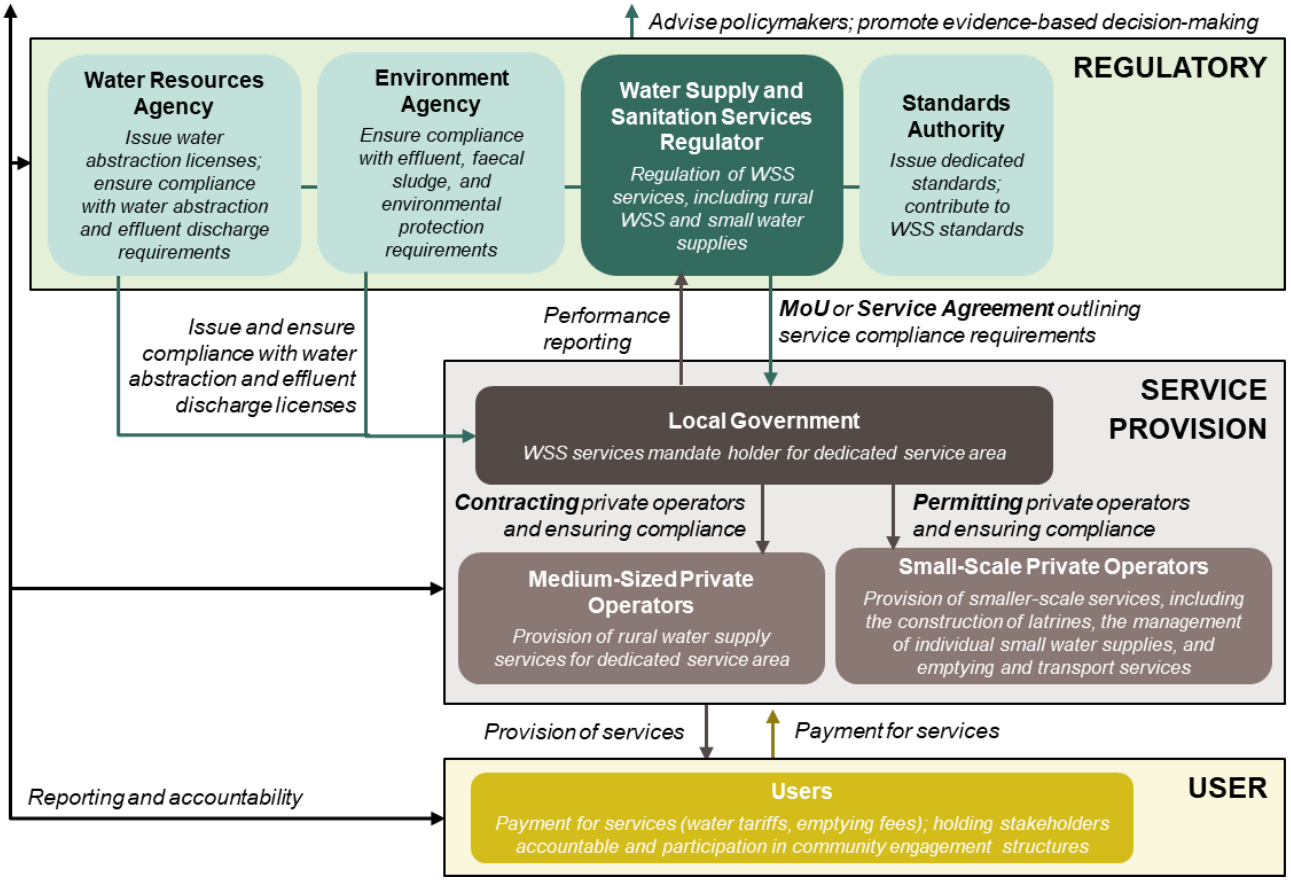
Service Scope: The CBOs principally provide rural water supply and sanitation services managing facilities where other service providers are not in a position to effectively take over management functions.

Table 19: CBO One – SDM Overview

Demographic Context	Water Supply Services	Sanitation Services
Principally more dispersed rural areas but some rural growth centres and small towns	Managing point water sources (mechanised and non-mechanised) and some smaller piped water supply facilities	Sanitation facility construction and safe emptying, disposal and re-use of faecal sludge

Regulatory regime: This SDM is regulated via a **delegated framework**, with the Local Authority performing oversight functions. The Local Authority **registers** the CBOs or utilises **management contracts** to recognise and approve CBOs within their overall jurisdiction and provide a basis for performance monitoring and technical support. The Local Authority can issue directives related to operations and may also be empowered to recruit and dismiss scheme managers.

Figure 11: Private Four – Regulatory Approach and Recommended Accountability Mechanisms



This SDM is recommended for consideration in contexts where local government hold the overall mandate for ensuring WSS service provision and keep an inventory of WSS infrastructure. However, Local government often, not always, has limited capacity to properly contract and oversee private operators. Sub-national governments often rely heavily on government transfers and have limited locally generated revenues. This reliance constrains their ability to carry out regulatory functions comprehensively particularly in under-resourced areas. Nevertheless, this model can be used as part of a wider process of formalising previously unregulated informal service providers. Where the CBO or Private Operators fail to deliver, the Local Authority can reassume management.

3.3.2.4. CBO TWO: CBO MANAGEMENT WITH SOME TECHNICAL FUNCTION CONTRACTING TO PRIVATE OPERATOR

Setup: **CBOs** retaining responsibilities for managing water supply facilities, with private operators formally contracted for key technical functions *(see Table 20)*.

This is principally based on the Area Service Provider model outlined in Uganda's National Framework for the Operations and Maintenance of Rural Water Supply Infrastructure *(see Box One)* and draws insights from comparable approaches applied in Tanzania, Kenya, and Malawi, amongst others. It is recommended for consideration because the formal delegation of some critical technical functions to the private sector has typically resulted in considerable improvements in service quality across several countries.

Service Scope: The private operator provides key technical expertise for WSS aspects that the CBO may not be able to handle such as preventive maintenance, repairs, provision of spare parts and chemicals, water quality surveillance. The CBO focuses on the day-to-day management of the service. Trained and registered/certified artisans/masons carry out onsite sanitation facility construction.

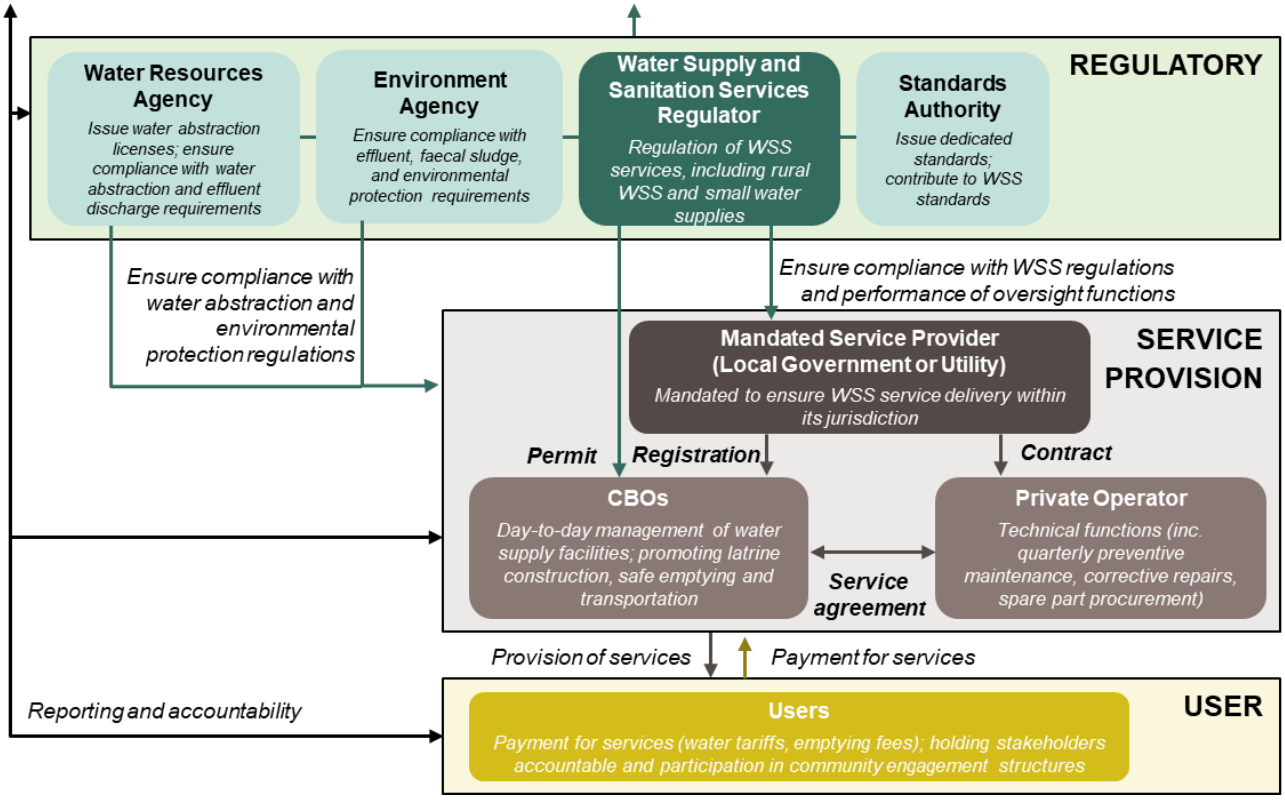
Table 20: CBO Two – SDM Overview

Actor	Demographic Context	Water Supply Services	Sanitation Services
CBO (water committee or equivalent)	Mainly dispersed rural areas but some growth centres and small towns	Day-to-day management (e.g., minor maintenance, tariff collection, user engagement, private operator payment)	Promoting sanitation facility construction and, where appropriate, safe emptying, disposal and re-use
Private operator		Technical functions (inc. quarterly preventive maintenance, corrective repairs, spare part procurement)	Facility construction

Regulatory regime: This SDM is regulated via a **delegated framework**, with the mandated WSS service provider performing oversight functions. This can be the CBO directly or under another entity *(see Figure 12)* with arrangements as follows:

- The mandated WSS service provider (i.e., local government or utility) or regulator uses **permits** to recognise CBOs within their overall jurisdiction
- With the WSS regulator's approval, the mandated service provider formally **contracts** a private operator to be able to provide technical functions for a dedicated service area sufficiently large to attract professional private operators and with terms incentivising good performance.
- The private operator and CBOs enter into a **service agreement** establishing the responsibilities of each party (e.g., technical functions by the private operator and the level of payment by the CBO). These service agreements are based on a model agreement approved by the mandated WSS service provider and the WSS regulator. The mandated WSS service provider arbitrates disputes, where needed, bringing in the WSS regulator.

Figure 12: CBO Two – Regulatory Approach and Recommended Accountability Mechanisms



3.4. REGULATORY MECHANISMS

Headline Recommendations:

- Establish a differentiated regulatory approach that tailors the regulatory mechanisms utilised to the type of SDM, the service provided, and the regulatory actors' capacity.
- Progressively introduce regulatory requirements and ensure applied mechanisms are not overburdensome and do not impede the effective delivery of services at scale.
- Emphasise regulatory mechanisms focused on supporting and building service providers' knowledge and capacity (e.g., technical and financial support, information dissemination, incentives). This is especially important when '*first*' regulating a SDM – in these situations, it is important to demonstrate how they benefit from regulation.

A wide-ranging set of regulatory mechanisms should be developed to support SDM professionalisation and compliance with regulations. **Regulatory mechanisms can be applied to achieve different regulatory objectives, including the service provider's financial sustainability, quality of service, public health, environmental protection, and increased resilience**.

The following tables present an overview of different regulatory mechanisms that should be considered, each of which require tailoring, contextualisation, and elaboration at the country-level before applying to a given SDM. In particular, each mechanism should be designed and applied at the country level in a more or less comprehensive manner based on the capacity of the service providers and regulator, as well as the precise requirements to achieve regulatory objectives *(see Annex Two)*.

Table 21: Standards, Regulations, Rules and Guidelines

Standards, Regulations, Rules and Guidelines	*Formulating and disseminating standards, regulations, rules and guidelines detailing requirements on particular topics, including technical and operational requirements, quality of service, tariff setting and adjustment, customer engagement and complaints, social and pro-poor, governance, environmental protection, pro-active risk management, health and safety etc.*
Mechanism	**Overview**
Technical standards	At a minimum, standards should cover technical specifications (different acceptable technology options and their siting, equipment and practices) for services for • water production, treatment and distribution using networked facilities, mechanised and non-mechanised point water sources, rainwater harvesting etc. • the sanitation service chain (capture and containment, conveyancing, transport, treatment, disposal or re-use).
Quality of service standards	For water supply, at a minimum, • Minimum Quality of Service Standards should cover requirements concerning coverage and accessibility and reliability (e.g., functionality, timely repair, hours of supply, metering, billing, operating hours). • Guidelines for water quality monitoring should define critical water quality parameters and the frequency at which they should be monitored (e.g., weekly, monthly, or annually). They should also specify the appropriate equipment and technology for testing and outline when third-party verification by a certified laboratory is required to ensure accuracy and compliance with standards. For sanitation, at a minimum standard should cover: • Minimum Quality of Service Standards for sanitation service provision (e.g. access to services, safe emptying and transportation, payments, safety of workers, etc). • Requirements for proper facility management, especially the safe handling of faecal waste and when safe emptying is recommended. • Quality of effluent (meeting the standards for discharge or re-use).

Mechanism	Overview
Tariff setting and adjustment guidelines	The following elements should be covered: • The process to be followed for setting the tariff, including the role of different stakeholders. • The process for reviewing the tariff, including the frequency of tariff reviews, the methodology to be employed and requirements for public consultation, community review, as well as approval from the regulator. • Principles to be followed to ensure affordability, equity and pro-poor considerations are balanced with service provider financial viability and service levels, including the use of social and special tariffs for different categories (e.g. water kiosks or communal points). • A clear and consistent definition of cost recovery, distinguishing between operating costs, maintenance, depreciation, and, where appropriate, capital investment recovery. This should include a breakdown of which lifecycle cost components should be recovered through tariffs versus taxes (e.g., subsidies) or transfers. • Definitions for affordability thresholds based on local household income and expenditure data (e.g., water and sanitation costs not exceeding 3–5% of household income). • The use of rising block tariffs or tiered structures to ensure basic needs are met at low or no cost, while higher consumption is charged at full cost-recovery rates. For example, design the first block (lifeline tariff) to cover at least 50 litres per person/day at an affordable rate, as per WHO guidelines. • Tariff payment modalities, including opportunities for seasonal payment to adjust to rural income flows and mechanisms to safeguard affordability and flexible payment mechanisms (e.g., prepaid metering, mobile money, instalment plans) to reduce payment barriers. • Opportunities for internal cross-subsidisation within the tariff structure (e.g., from commercial/industrial to domestic users, or high to low consumers). • Requirements for the regulator to make all tariff-setting processes, decisions and affordability impacts be publicly documented and accessible. • Requirements for periodic affordability reviews within tariff cycles, adjusting based on inflation, economic shifts, and poverty trends.
Customer engagement and complaints guidelines	The guidelines should outline: • A standard complaint-handling procedure and process at different levels (e.g., service provider, regulator and the entity responsible for ensuring WSS service provision within their jurisdiction). • Format for service contract/charter defining the rights and duties of the consumer and provider. • Complaints reporting avenues (e.g., in-person, online via WhatsApp, mobile apps, web interface, and telephone) • Mechanisms to measure consumer satisfaction and obtain customer feedback. This should include specific requirements (e.g., the total number of complaints registered, timelines for resolving complaints, process for escalating complaints, and complaints resolved).
Social and pro-poor standards	The standard should: • Detail a tariff-setting methodology and subsidy approach that safeguards vulnerable populations (e.g., through a lifeline tariff structure, inclusion in tariff consultations). • Include minimum service coverage targets for underserved areas (progressive expansion of services). • Outline technology options suitable and acceptable for underserved areas (e.g., kiosks).

Mechanism	Overview
Governance Guidelines	The guidelines should: • Specify what constitutes good governance by policymakers, regulators, service providers and users. • Detail minimum management and staffing composition, requirements and competencies (level of expertise) for the different SDMs. • Outline requirements for annual and long-term planning (e.g., every five years) as part of the licensing, contracting, or permitting process.
Environmental protection standards	The standards should: • Present recommended and required measures to protect the environment. • Specify siting requirements for water and sanitation infrastructure. • Include fit-for-purpose environmental impact assessments based on the capacity of water, sludge, and wastewater treatment facilities. • Detail how to assess and mitigate climate-related risks, including droughts, floods, and water source degradation.
Proactive risk management guidelines	The guidelines should: • Detail required proactive risk management approaches such as water safety planning, sanitation safety planning and sanitary inspections and how they differ for each promoted SDM. • Include specific risk management guidelines for emptying and inspection of onsite sanitation facilities.
Health and safety standards	• Health and safety guidelines/Standard Operating Procedures for sanitation workers specifying minimum requirements for personal protective equipment (PPE), training, safe handling procedures and vaccinations to ensure workers' safety. • Health and safety guidelines for managing water supply facilities, especially for performing technical functions (e.g., repairs, pressure management, climbing elevated tanks) and water quality management (e.g., handling chemicals).

Table 22: Tariff Setting and Adjustment

Tariff setting and adjustment processes	*Determining a process for setting, reviewing, and adjusting tariffs based on sector guidelines and balancing considerations for affordability with the need to strengthen service providers' financial viability.*
Mechanism	**Overview**
Tariff setting and approval process	• Ensure service providers (and other relevant actors) follow the mandated structured process for the proposal and setting of a tariff for WSS services using established tariff-setting guidelines.
Periodic tariff review and adjustment process	• Ensure service providers (and other relevant actors) follow the mandated structured process for periodically reviewing the tariff for WSS services, including the methodology to be employed and requirements for approval from the regulator to ensure affordability and pro-poor considerations are balanced with service provider financial viability. • Link tariff increases to performance improvements and efficiency gains to build public trust or incorporate automatic indexation based on key criteria. • Enabling the application of an incrementally higher tariff or the application of a surcharge to be utilised for specific purposes (e.g., expanding into rural areas) to reward good performance.

Table 23: Data Collection, Management and Reporting

Data collection, management and reporting	*Developing a Management Information System to guide data collection and analysis, reporting by service providers, regulatory inspections, and developing and disseminating utility benchmarking reports.*
Mechanism	**Overview**
Light-touch MIS	• Light-touch MIS focused on 3-5 golden indicators, including water quality, reliability (hours of supply or functionality), revenue generation, presence and / or frequency of pro-active risk management approaches (e.g., water safety plans, sanitary inspections), service coverage by facility type and governance. • It should be publicly accessible for customers and civil society organisations (CSOs) to help hold government and service providers accountable.

Comprehensive MIS	• Comprehensive MIS focused on an expansive set of indicators. These should cover:
	  ○ *Quality of service*: Water and sanitation coverage (aligned to JMP ladders), service facilities/connections, hours of supply, selected water quality indicators (as per the country water quality parameters), major breakdowns occurrence
	  ○ *Operational efficiency*: metering ratio, non-revenue water, staff cost as a proportion of O&M, staff per 1,000 connections, facility functionality, volume of sludge/water collected, treated and re-used, service interruptions, complaints
	  ○ *Financial sustainability*: O&M cost coverage, revenue collection efficiency, ROA.
	  ○ *Environmental*: Volume of water abstracted, effluent discharge quality.
	  ○ *Pro-active risk management*: Presence of a water safety plan, sanitary inspections, sanitation safety plan, water storage capacity, measures taken to protect critical infrastructure, emergency response plans, contingency strategies for droughts and floods, and financial reserves for crisis management.
	• The MIS should have a publicly accessible interface for customers and CSOs to hold government and service providers accountable.

Service provider reporting	• Requirement to develop and share a periodic (annual, quarterly, monthly etc) report with the regulator, which includes quality of service (e.g., water quality, reliability), operational efficiency, financial sustainability indicators (e.g., revenue generation) and asset management. It can also cover progress implementing the service provider's five-year plan. • The regulator must have mechanisms in place to ensure reported data is accurate, reliable, and reflects the service providers' reality.[9]
Regulatory inspections and data collection	• Annual or quarterly visits to service providers to review operations (technical and financial audits), check the accuracy of data, conduct water quality testing of key parameters, include surveillance inspections on water and sanitation safety planning implementation. • Inspections can also occur when service delivery issues are reported by consumers.
Production and public dissemination of reports	• Production and dissemination of annual reports presenting the performance of the WSS sector and sanctioned SDMs, including quality of service, financial sustainability, and operational efficiency aspects. • These reports should clearly differentiate between subsectors (rural vs urban) and include indicators for networked and off-grid water supply and sewered and non-sewered sanitation. • They should benchmark performance of service providers using comparative analysis and over time.

[9] Key quality control measures may include: (i) telemetry water metering to provide automated and real-time readings, reducing errors associated with manual reporting, (ii) consistency checks to identify discrepancies or anomalies in reported data over time, (iii) photographic records of activities such as infrastructure maintenance or service improvements to verify reported progress, and (iv) citizen and local authorities' reports to validate service levels.

Table 24: Customer Engagement and Complaints

Customer engagement and complaints	*Establishing and supporting processes and structures to engage customers in service provision and regulation, as well as establishing and overseeing structured approaches for complaints handling at multiple levels.*
Mechanism	**Overview**
Customer engagement processes in service delivery operations	• An established and mandatory customer engagement process for informing customers about planned service cuts, works being undertaken, tariff increases, and service extension plans, including timelines for informing customers. • Mandated sharing of data on the quality of the service provided, with special emphasis on water quality breaches. If these occur, the service provider must ensure that consumers are aware that water is not safe for consumption. • Maintain customer feedback channels. • Customer engagement meetings that occur at least annually. • Requirement to conduct periodic customer satisfaction surveys. • Widely disseminate consumers rights to ensure that these are known. • Involvement in regulatory consultations in development of certain mechanisms
Complaint handling at service provider level	• Customer service officer or representative at the facility or scheme level. • Structured approach to complaints handling, including in-person and remote (online, telephone) avenues. Alternative complaint handling platforms can be implemented such as social media groups, community meetings or apps, if these are found to be more appropriate for specific contexts.
Complaint handling at the regulator or oversight entity	• Having, promoting, and using a user-friendly complaints portal for customers to use when they have exhausted complaints procedures with the service provider. • Complaints tracking for those received and resolved

Table 25: Incentives

Incentives	*Applying financial and reputational incentives to service providers to reward good performance.*
Mechanism	**Overview**
Financial	• Performance-linked tariff adjustments e.g. application of a surcharge *(see Box 17)* or automatic indexation • Preferential access to financing, particularly for investment based on specific operational milestones (results-based)
Favourable contractual terms	• Improving contractual terms, including the duration of the contract (extension), to reward good performance.
Benchmarking reports	• The production and dissemination of annual benchmarking reports, which include the performance of rural WSS and small water supply providers (quality of service, operational efficiency, financial sustainability).
Provision of awards	• Annual ceremonies in which good service provider performance is recognised, with awards (e.g., trophies, monetary or materials such as bicycles) given to service providers for a range of categories (e.g., water quality, coverage, hours of supply, functionality rate, revenue generation, cost coverage, connections, best data). Recognitions for performing CEOs and Boards also serve as strong incentives.
Service area expansion	• When good performance is observed, a service provider is allowed to take over additional facilities and jurisdictions and integrate these into its service area, thereby increasing its customer base.

Table 26: Support to Service Providers

Support to Service providers	*Ensuring support is provided to service providers to help enable them to comply with regulatory requirements. The regulator may provide the support directly or ensure a third-party provides the requisite support (e.g., utility, technical agency).*
Mechanism	**Overview**
Widely disseminating regulatory requirements	• Collate all relevant regulatory instruments on the regulator's website. • Directly share physical user-friendly versions of key regulatory requirements with service providers and ensure these are available at the regulator and mandated WSS service providers' offices. • Provide periodic training to support implementation of core requirements.
Ensure the provision of financial management support	• Help establish and ensure the roll out of a structured financial support programme, which includes tariff-setting methodologies, revenue generation and collection, business planning, appropriate record-keeping, financial management planning, market-based approaches and comparative costs of various technologies. • Provide guidance on aggregation or consolidation of SDMs for viability.
Ensure the provision of targeted incremental subsidy	• Help establish and ensure the roll out of subsidies to help fill the gap between service provider revenue generation and required life-cycle costs, support service improvements (e.g., household connections), and to enable more professionalised SDMs to expand their operations in rural areas. • Subsidies by Government or development assistance can include funding of repairs, spare parts, equipment, computers or micro-loans
Ensure the provision of technical support	• Help establish and ensure the roll out of a structured technical support programme, which covers operational management, guidance on preventive maintenance, technical issue resolution, spare parts procurement, sanitation facility construction, safe emptying and transport practices, and treatment facility management. • Ensure oversight entities undertake periodic training on best practices, data reporting requirements and operational efficiency techniques.

Table 27: Pro-Active Risk Management

Proactive risk management	*Developing requirements for and supporting SDMs to implement water safety planning and sanitary inspections as well as enhancing water quality monitoring and supporting the implementation of water quality management practices.*
Mechanism	**Overview**
Identifying risks when designing WSS infrastructure	• Requiring service providers to identify major risks to service delivery/resilience when designing WSS infrastructure based on a defined methodology.
Sanitary inspections	• Mandate sanitary inspections[10] to be conducted by service providers or a third-party (e.g., local government) for surveillance purposes (in addition to the ones conducted by the service providers). • Refer to the Sanitary Inspections Package for Drinking Water Supplies developed by the World Health Organization, which covers various types of water facilities in rural areas, as a basis for developing national standards for safe water provision. • Monitor the implementation of sanitary inspections and, where needed, provide support to responsible entities.

[10] Sanitary inspections are a structured, on-site assessment that uses checklists to identify actual or potential risks of contamination in water supply or sanitation facilities. The purpose is to quickly detect and address hazards that could compromise water quality or hygiene and pose immediate health risks.

Water safety planning	• Mandate water safety planning[11] as recommended by the World Health Organization Water Safety Planning for Small Community Water Supplies guidelines, incorporating climate and service resilience concerns. • Monitor the implementation of the measures identified in the water safety plans and, where needed, provide support to service providers.
Sanitation safety planning	• Mandate Sanitation Safety Planning[12] as recommended by the World Health Organization guidelines for small towns and rural growth centres, incorporating climate and service resilience concerns. • Monitor the implementation of the measures identified in the sanitation safety plans and, where needed, provide support to service providers.

Table 28: Sanctions

Sanctions	*Applying sanctions for non-compliance, including issuing a formal requirement to adhere to prescribed service delivery requirements, fines, license suspension or removal or contract termination.*
Mechanism	**Overview**
Formal requirement to adhere to prescribed service delivery practices	• Issue non-compliance orders (cease-and-desist) before imposing other sanctions, allowing service providers a reasonable period to address identified issues and improve service delivery practices. • Establish and communicate a clear escalation process in cases where providers fail to take corrective action, leading to appropriate sanctions if necessary. • Implement special regulatory supervision for service providers with recurrent non-compliance. This can ensure they receive the necessary support and oversight from the regulator, helping to prevent service disruptions and improve compliance.
Fine	• Issuing of a fine for failing to report on or address issues outlined in a non-compliance order. A timeline for paying the fine should be established, as well as the consequences for non-compliance. • Freezing or reducing tariffs, particularly where service levels deteriorate.
License or permit suspension or removal and contract suspension or termination	• Licenses or permits should be suspended/removed or contracts terminated if service providers do not abide by the terms of the licenses, permits or contracts and, after repeated warnings, they have not taken any action. • This mechanism should only be applied and enforced when repeated non-compliance is observed, and a transition plan must be developed to ensure services are not interrupted.
Dissolution of the service provider or critical personnel	• Dissolution of a service provider's board or senior management for repeated non-compliance or a severe breach of regulations. • Dissolution and reformation of a CBO or reassigning a service area to another operator
Communicating to competent authorities if illegal, unethical or corrupt behaviour is observed	• Communicating to competent authorities if illegal, unethical or corrupt behaviour is observed to initiate legal proceedings against a service provider or a service provider's member of staff that conduct inappropriate or corrupt behaviour or breach regulations. • Holding the head of a service provider personally liable if continuous non-compliance is observed.

[11] A water safety plan is a comprehensive risk management approach for ensuring the safety of drinking water, from catchment to consumer.
[12] A sanitation safety plan is a step-by-step approach to identify and manage health risks along the sanitation chain, with the purpose of protecting public health and the environment by assessing and managing risks associated with sanitation systems.

3.4.1. PRINCIPLES AND REGULATORY MECHANISM TAILORING

Effectively delivering rural WSS and small water supply services is challenging. Regulatory mechanisms should **support SDM professionalisation** and **avoid overburdening** service providers. Across efforts to develop and apply regulatory mechanisms, the following headline principles should be considered:

- Before designing a regulatory mechanism, ensure **clarity concerning the priority regulatory objectives** (e.g., expanding access to services, ensuring affordability, promoting SDM financial viability, improved public health).
- **Tailor regulatory mechanisms** to the context, technology, and SDM being regulated and adopt **differentiated** regulatory requirements and approaches for SDMs as appropriate.
- Emphasise **non-coercive mechanisms** such as incentives, technical and financial support, and information dissemination over punitive approaches (e.g., sanctions), especially when first introducing regulatory requirements and for less capacitated service providers (GIZ, 2019).
- **Progressively introduce** regulatory mechanisms and requirements over time. Be **realistic** and ensure developed regulatory mechanisms can **feasibly** be applied and complied with. This is especially important when expanding regulatory activities to include previously unregulated SDMs.
- **Subsidies and forms of performance-based funding** are necessary for smaller-scale technology options such as manual pumps, solar-powered stations or decentralised treatment facilities that face significant profitability challenges without substantial scale and cross-subsidisation from larger systems (UDUMA, Open Capital Advisors, Osprey Foundation, 2025).
- Account for the rural WSS **political economy** and actors' vested interests by ensuring local stakeholders (e.g., politicians, traditional leaders) and service providers appreciate the rationale for regulation and are consulted in the design and application of regulatory mechanisms.
- Place particular emphasis on supporting **pro-active risk management** (WHO, 2024).
- **Review** the application of regulatory mechanisms and establish **feedback mechanisms** to enable users and service providers to share insights and **adjust the design and application of regulatory mechanisms** based on this feedback and emerging challenges.

Finally, beyond the application of accountability and regulatory mechanisms, regulators also have a critical role in ensuring the adoption and scaling of promoted SDMs is based on an evidence-based process *(see Box Six).*

Box Six: Zambia – NWASCO's Evidence-Based Approach to SDM Selection

Following the development of the 2018 Rural Water Supply and Sanitation: Framework for Provision and Regulation in Zambia, NWASCO has led the development of an inventory of roughly 1,400 small, piped water supply systems in rural through to small-town contexts across Zambia. This covered a range of dimensions, including the location and age of the scheme, who manages the scheme (e.g., commercial utility, local authority, CBO, private operator), source of water and production capacities, source of power, institutions served, number of individual connections and water kiosks, supply hours, water quality, water quality testing and water treatment, and the level of financial performance (amount collected from different sources) and tariff mechanism, amongst others.

In line with the 2018 Rural Water Supply and Sanitation: Framework for Provision and Regulation in Zambia, this information is being used to inform the evidence-based selection of the most appropriate SDM for managing piped rural and small-town water supply services. In particular, it is being used to:

- Prevent commercial utilities cherry-picking the most financially viable piped water supply facilities to takeover and ensure that the selection of facilities for commercial utilities to takeover can be overseen by NWASCO and informed by the current level of service provided, a facility's financial performance and commercial utilities' capabilities', amongst other factors.
- Limit opportunities for political interference in decision-making around the construction, rehabilitation and extension of piped water supply facilities.
- Assist commercial utilities in beginning to assume oversight of other SDMs within their jurisdiction.

4. IMPLEMENTATION STRATEGY

Headline Messages:

- Develop a compelling rationale for regulation to build political support for enhancing rural WSS and small water supplies regulation.
- Base the approach to enhancing rural WSS and small water supplies regulation on robust evidence of the current situation and existing good practices from comparable country contexts.
- Develop a headline vision and strategy to guide the process and coordinate the actions of the wide-ranging stakeholders required to enhance rural WSS and small water supplies regulation.
- Ensure legal instruments provide the necessary foundation for professional rural WSS and small water supplies service delivery and effective regulation.
- Progressively expand regulatory activities through a pragmatic approach tailored to different SDMs and regulatory actors' capabilities.
- Continuously review progress and adapt to account for emerging challenges and good practices.

This section presents the **main phases of a generic implementation strategy** for enhancing the regulation of rural WSS and small water supply services.

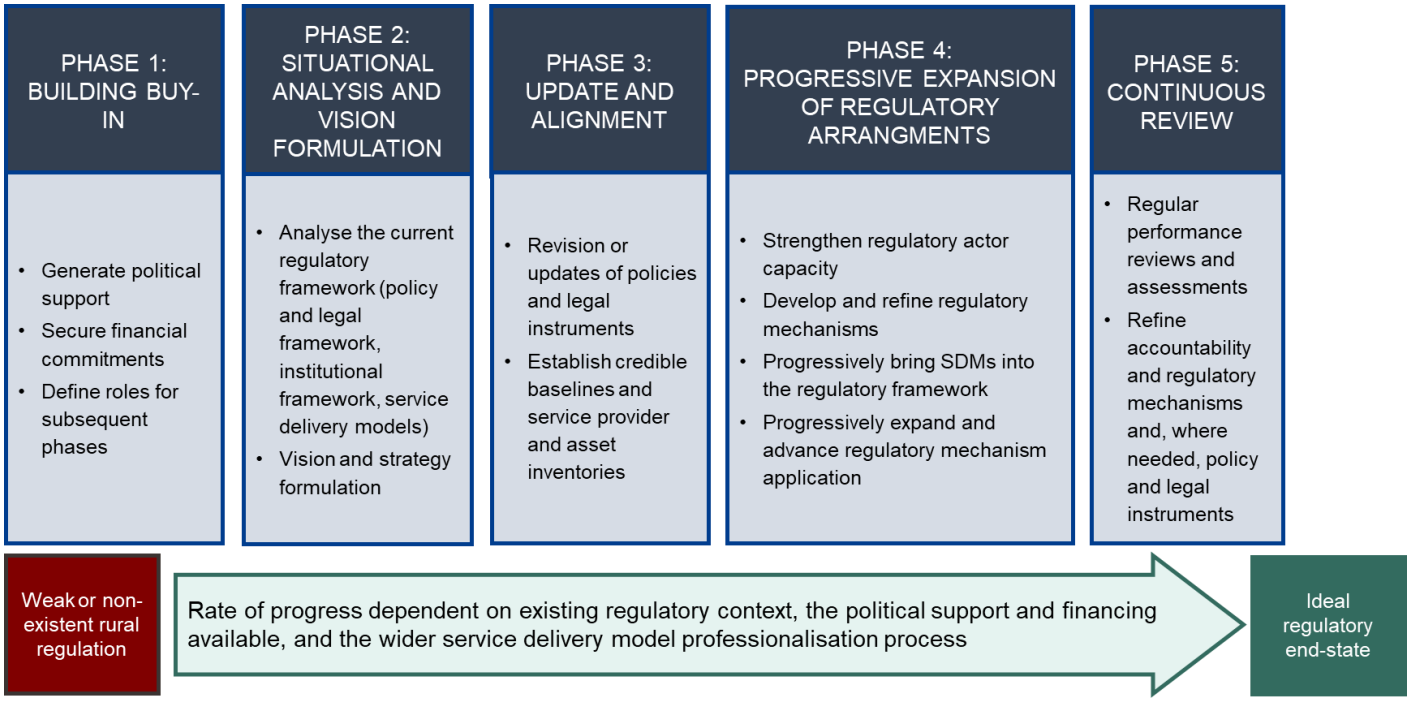
Strengthening the regulation of rural WSS and small water supplies should not be considered lightly. Evidence from the gap analysis and a review of global practices highlights several cross-cutting considerations to account for when initiating efforts to enhance rural WSS and small water supplies regulation:

- Taking the time to **establish the case** for enhancing rural WSS and small water supplies regulation, including engendering high-level political and financial support, is an essential and foundational step. Regulation of any service, especially those with a social good, is an inherently political process requiring adept management and the ability to navigate not only the political economy of the sector but broader public administration frameworks and institutional relationships.
- Developing and operationalising a regulatory framework for a new sub-sector is complex and requires a **progressive approach**; it will inevitably be an iterative process and not always unfold linearly. Facing setbacks and responding in an agile and flexible manner are important.

- While the process should involve a wide-ranging set of actors, it is necessary to **have a backbone organisation** whose role is to keep momentum, bring together other stakeholders when needed and keep a collective eye on the overall goal of enhancing rural WSS and small water supplies regulation. This role is preferably played by an existing regulatory body (where appropriate) or ministry, with support from other entities, including governmental and non-state stakeholders within and outside the WSS sector. Such multi-stakeholder processes benefit from a well-defined, commonly agreed vision, which can serve as a 'north star' to guide different organisations working as part of a broader process.
- Any country looking to follow this strategy should place particular emphasis on **learning from and leveraging the expertise** of the several regulatory actors that have taken impressive steps to begin regulating rural WSS and small water supply services. Peer support should be embedded by engaging ESAWAS and regulatory authorities from countries that have undergone equivalent processes, while development partners should be leveraged to provide technical and financial support. This is particularly important for specialist activities such as interpreting legislation and drafting new legal instruments.

The implementation strategy's main steps *(see Figure 13)* **purposefully align with similar initiatives**, including the WHO Roadmap for Advancing Sanitation Regulation and the WHO Guidelines for Drinking Water Quality: Small Water Supplies (2024).

Figure 13: Implementation Strategy



4.1. PHASE 1: BUILDING BUY-IN

Generate Political Support - Enhancing the regulation of rural WSS and small water supplies requires sustained commitment from various government institutions, including regulatory entities (where these already exist), a range of ministries (e.g., WSS, public administration / local government, finance, health, education), public utilities, and the office of the prime minister or president as well as parliamentarians and the legislative branch of government. It is also critical to bring along development partners and CSOs that can support any reform process. Champions from the national and sub-national levels should be identified within different stakeholder groups, lobbied, and utilised to ensure a diverse set of stakeholders are sensitised to regulation's importance in improving service delivery.

The use of Sector Coordination Working Groups /Joint Implementation Teams has proved successful to support sector coordination and buy-in in several countries. This group should include personnel from regulatory actors responsible for WSS or related sectors (e.g., WRM, environmental protection), ministries (e.g., for WSS, health, education, finance, local government), service providers, sub-national governments, and CSOs. The office of the Attorney General, or equivalent, should be involved to ensure any changes to legislation or policy mandates are complementary and do not create contradictions regarding the hierarchy of laws.

A flagship initiative for emulation is the One WASH national program in Ethiopia with multi-sectoral approach in which different actors came together and agreed to address water supply, sanitation and hygiene as an integrated package through official policies, strategies and development plans. It is supported by several development partners (DPs) and NGOs.

Secure Financial Commitments - Implementing the regulation of rural WSS and small water supplies is an extensive process in terms of time, human resources and specialist expertise. It requires dedicated and reliable financing to cover the costs of facilitating the process, commissioning studies and legal reviews, convening stakeholders to ensure a collective commitment to reform, updating existing policies, legal instruments, regulations, and accountability and regulatory mechanisms, and sensitising and developing stakeholders' capabilities to enable their application. At the beginning of the process, it is recommended that Government develops long-term budget estimates for anticipated direct and indirect costs, including establishing a dedicated unit to manage and oversee the process and map funding sources.

Define Roles - The long-term nature of structural reforms to the regulatory framework makes it imperative to clearly outline the roles and responsibilities of different actors in the process. In cases where a regulatory agency with a core WSS mandate already exists, it is recommended that this institution takes a lead role in coordinating and facilitating the process. The line ministry for WSS should lead the process if no regulatory authority exists. In either scenario, the lead organisation should form a dedicated unit comprising key stakeholders to take forward efforts.

4.2. PHASE 2: SITUATION ANALYSIS AND VISION FORMULATION

Analyse the Situation- The approach to enhancing rural WSS and small water supply regulation should be based on robust evidence of the current situation and existing good practices from comparable country contexts. Three complementary assessments should be undertaken in parallel: (i) policy and legal framework, (ii) institutional framework, and (iii) SDMs and their regulation. *Table 29* details headline elements that each assessment should cover. Across each assessment, it is critical to consider the wider political economy and the underlying factors that enable and constrain change from happening.

Table 29: Situational Analysis

Assessment	Areas to Cover
Policy and Legal Framework	• The extent to which the salient regulatory elements of the policy and legal framework detailed in Table Six and Table Seven, respectively, are in place.

Institutional Framework	• Mapping of formal organisational structures and informal norms that determine how policymaking, regulatory, service provision and user functions for rural WSS and small water supplies are divided among different actors (state and non-state) and tiers of government.
	• Capacity assessment of the key entities with policymaking, regulatory and oversight functions for rural WSS and small water supply services, especially for decentralised tiers of government). This should consider:
	  ○ Budgetary allocations.
	  ○ Human resource headcounts and qualifications (both in theory and in practice). Material and logistical capacities to undertake their stated responsibilities.
	• The extent to which formal policymaking, regulatory, service provision and user mandates are actually implemented in practice.
	• The formal pathways of accountability (typically to the legislature), the extent to which the regulatory actor(s) maintain the autonomy to make decisions without undue political interference, and the extent to which policymakers, regulators, and service providers act with integrity.

Service Delivery Models	• Baseline study to establish the status of service delivery from representative areas based on established criteria and characteristics. Collect primary data on (i) infrastructure type, status and condition, (ii) quality of service provided, including reliability and water quality, and (ii) financial viability. • Overview of SDMs and performance for rural WSS and small water supplies, including compiling pre-existing information on (i) number of service providers and the degree of consolidation or aggregation, (ii) asset ownership, and (iii) scale of operation (people served and facilities managed) and mapping of operational scope, including concessionary areas. • The clarity of service provision mandates between different SDMs and jurisdiction boundaries for further clarification.

These outputs should highlight strengths and weaknesses in the current regulatory framework and provide a robust evidence base for vision and strategy formulation. Outputs should be widely shared and participatory workshops used to validate and socialise findings and update relevant stakeholders on the wider process being conducted.

Vision and Strategy Formulation - Once the assessments have been conducted and the findings validated, it is important to formulate a common vision amongst sector actors for professional rural WSS service delivery and the role of enhanced regulation in supporting this. This should be detailed within a dedicated strategy document focused on rural WSS and small water supplies regulation and link to wider efforts to enhance WSS regulation and professional service delivery. Key elements to cover in the strategy include:

- Policy and legal framework.
- Institutional framework.
- SDM professionalisation.
- Accountability mechanisms.
- Regulatory mechanisms.

As part of this process, a Regulatory Impact Assessment should be conducted to ensure it is clear how the proposed modifications to the regulatory framework fit within the legal space and what impacts, positive and negative, can be envisioned. Once the strategy is validated by key sector stakeholders, an inclusive, sector-wide event should be held to set out the vision and overall strategy, including the next steps in the process. Resources should also be allocated to sensitise stakeholders who cannot attend this event (e.g., those from the sub-national level).

4.3. PHASE 3: UPDATE AND ALIGNMENT

Revise Policies and Legal Instruments - The extent of this phase will be determined by the scope of the reforms and interventions specified in the dedicated strategy document focused on rural WSS and small water supply regulation developed during Phase 2. Nevertheless, in general terms, *Table Five and Six* detail key elements that should be included within the national WSS policy and legal framework and the following aspects are of particular importance:

- Outline the overall institutional framework for WSS, including the responsibilities of policymakers, regulators, service providers and users. This could include, for example, establishing a dedicated regulatory agency or expanding a regulator's mandate into rural areas
- Provisions for mobilising financial and human resources to enable the effective discharge of mandates.
- The SDMs for application in different settings and for various WSS facility types, including the mandated service provider (s) and their powers and obligations.
- Regulatory actors' functions and powers, including their application to different sub-sectors and SDMs.

The Policy and Legal Framework should make provisions to strengthen and safeguard the regulatory environment, including regulators' political, legal and financial autonomy, the process for selecting and dismissing senior personnel, transparency and public participation, coordination, and the relationship between regulators and the Legislative and the Executive.

Establish Baselines and Service Provider and Asset Inventories - Existing data collection and reporting frameworks should be reviewed, a consensus formed amongst sector actors on key indicators to be measured, and a credible baseline subsequently developed concerning the status of rural WSS and small water service provision. This should go beyond accessing service levels and also collect the information required to produce an inventory of both WSS facilities and service providers that includes background information on the facility, legal and institutional information (e.g., asset ownership, SDM type and composition, accountability mechanism(s) employed), the technical and operational performance, the financial performance, and the quality of service provided.

This information will ultimately be required to (i) assess progress towards sector WSS targets, (ii) identify necessary infrastructure improvements before altering or strengthening the SDM and regulatory approach, (iii) enable evidence-based modifications to the SDMs applied, and (iv) to support the targeting of the progressive expansion of regulatory activities.

4.4. PHASE 4: PROGRESSIVE EXPANSION OF REGULATORY ACTIVITIES

It is essential to take a progressive approach tailored to the nature of the SDM, regulatory actors' capabilities, and the extent to which certain foundations for regulation are in place (e.g., infrastructure, formalised service providers, data). Additionally, throughout the process of progressively expanding regulatory activities, it essential to transparently communicate reforms and provide feedback loops.

Strengthen Regulatory Actor Capacity - The level of staffing and the skillsets required of regulatory entities should be determined by the specific regulatory functions to be performed and detailed within the dedicated strategy. Key factors in this equation include the extent to which regulatory functions are performed via a delegated framework and the level of aggregation of service providers. Critically, the determined capacity requirements should extend beyond the dedicated WSS regulator and consider the entities mandated to ensure service provision (e.g., local government, utilities, specialised asset-holding entities), which often play a crucial oversight role.

Measures to support staff learning and development include building training into staff KPIs, supporting exposure visits, which enable senior management and wider staff to see first-hand the work of other regulators in confronting a shared set of challenges, and supporting staff participation in peer-to-peer learning networks.

Develop Accountability and Regulatory Mechanisms - Based on the recommended SDMs and the identified priorities for enhancing rural WSS and small water supplies, a consolidated set of accountability and regulatory mechanisms should be developed. This should ideally build on existing accountability and regulatory mechanisms in place within the sector as well as identified good practice case studies from comparable country contexts *(see Annex One).* During this step, the recommended approach to regulating different SDMs detailed in *Sub-Section 3.3*. should be considered and the regulatory mechanisms and principles for selecting and tailoring regulatory mechanisms presented in *Sub-Section 3.4*. utilised.

The introduction of KPIs that enable the regulator to track and report on the performance of the sector is fundamental. This should be supported by information management systems and the use of digital solutions that can work in low-resource settings.

Strengthen Service Provider Capacity- When expanding regulatory activities, regulators should build trusted relationships with the service providers they regulate and ensure the necessary foundations for regulation are in place. Trust can be enhanced through a two-way exchange, in which the regulator consistently demonstrates a willingness to engage with and learn from service providers, evolving their understanding of service provider needs and how the service provider perceives regulation. The capacity-building role of the regulator should include

- Building **service provider knowledge** and **capacity to comply with regulations**, guidelines and standards.
- Support to service providers in developing and implementing **viable business models**, business plans, tariff-setting, cost recovery and wider financial management.
- Building service provider capacity to **collect and use data** for service planning and performance management
- Provision of training in **operations management and service monitoring**.

Progressively Regulate New Service Delivery Models and Advance Regulatory Mechanism Application - Efforts to regulate new SDMs or SDMs previously regulated under poorly performing arrangements should be progressive, incrementally expanding both the regulated SDMs and the scope of regulatory mechanisms applied. This should focus on enhancing the regulation of priority SDMs, which are part of the overall sector vision for professionalised service delivery.

Once the necessary foundations for regulation have been put in place, the regulatory mechanisms utilised can be progressively expanded with phased implementation, both concerning the range of mechanisms utilised as well as individual mechanism's comprehensiveness. *Tables 21 to 28* present a wide-ranging set of regulatory mechanisms to be considered, while *Annex Two* provides top-level guidance concerning which regulatory mechanisms are appropriate to different SDMs.

4.5. PHASE 5: CONTINUOUS REVIEW

Understanding regulation as a 'living' process is important and calls for a culture of continuous review and refinement. To enable course correction and progressive improvements to the regulatory framework, the following steps are recommended:

- Monitoring the speed at which new mandates are being taken up and accountability and regulatory mechanisms applied and identifying enablers and barriers.
- Undertaking regular performance reviews and assessments of regulatory gaps through third-party validation exercises. Creating a culture whereby results of such reviews are shared transparently.
- Showcasing and adopting emerging good practices for replication.
- Carrying out regular training and orientation for regulatory staff and the mandated WSS service providers.

Refine regulatory mechanisms and approaches and, where needed, policy and legal instruments as the SDMs in question and the recipient population and socio-economic profiles evolve over time and a better understanding of what constitutes viable regulatory activities and service provision is developed.

BIBLIOGRAPHY

AMCOW. (2021). *African Sanitation Policy Guidelines.*

ESAWAS. (2019). *Regulation Strategy and Framework for Inclusive Urban Sanitation Service Provision Incorporating Non-Sewered Sanitation Services.*

ESAWAS. (2022). *The Water Supply and Sanitation Regulatory Landscape Across Africa: Continent-Wide Strategy.*

ESAWAS. (2025). *Framework and Strategy for Regulating Rural Water Supply and Sanitation and Small Water Supplies: Zambia - Country Gap Analysis Report.*

GIZ. (2019). *Regulating Rural Water Supply Services.*

GLAAS. (2022). *National Drinking Water and Sanitation Targets: Extended Methodology and Results from the GLAAS 2021/2022 Cycle.*

IRC. (2021). *Utility-Managed Rural Water Services: Models, Pathways, Drivers, Performance and Areas for Support.*

NWASCO. (2018). *Rural Water Supply and Sanitation: Framework for Provision and Regulation in Zambia.*

OECD. (2015). *The Governance of Water Regulators.*

REACH. (2024). *Performance and Prospects of Rural Drinking Water Services in Francophone West Africa.*

UDUMA, Open Capital Advisors, Osprey Foundation. (2025). *Profitable Rural Water Services: Myth or Reality? Evidence from Mali and Burkina Faso.*

USAID. (2023a). *Emerging Trends in Rural Water Management.*

USAID. (2023b). *Is Consolidation the Answer to Improving Rural Water Services in Low-Income Countries? Lessons from OECD Country Experience.*

WaterAid. (2024). *Professionalising Rural and Small-Town Water Supply Management: The Need to Enhance External Support Arrangements.*

WHO. (2024). *Guidlines for Drinking Water Quality: Small Water Supplies.*

WIN. (2024). *Regulating Urban Sanitation to Prevent Integrity Failures: A Synthesis of Findings from Tanzania, Rwanda, Zambia and Bangladesh.*

World Bank. (2018). *Regulation of Water Supply and Sanitation in Bank Client Countries: A Fresh Look.*

World Bank. (2022). *Water Supply and Sanitation: Policies, Institutions and Regulation.*

World Bank. (https://ppp.worldbank.org/public-private-partnership/water-regulation-separate-regulatory-body-licensing-regime). *Water Regulation: Separate Regulatory Body with Licensing Regime*.

World Bank. (n.d.). *PPP Contract Types and Terminology*. Retrieved from https://ppp.worldbank.org/public-private-partnership/applicable-all-sectors/ppp-contract-types-and-terminology

WSUP & ESAWAS. (2020). *Referee! Responsibilities, Regulations and Regulating for Urban Sanitation.*

CONTRIBUTORS

Joint Working Group Members

	Name	Institution
1.	Angella Rhinehold/Jennifer De France	World Health Organisation (WHO)
2.	Kariuki Mugo	WaterAid
3.	Arnold Cole/Kitka Goyol	UNICEF
4.	Reuben Sipuma	WSUP
5.	Simeon Kenfack	AfWASA
6.	Ivan Zupan/George Osoro	WIN
7.	James Manda	AFUR
8.	Joaquim Jorge	AURAS-Mozambique
9.	John Muruka	WASREB-Kenya
10.	Christopher Tumusiime	WURD-Uganda
11.	Exaudi Maro	EWURA-Tanzania
12.	Abera Endeshaw Abebe	MOWE-Ethiopia
13.	Jacques Nzitonda	RURA-Rwanda
14.	Clara Kasanga	NWASCO-Zambia
15.	Saskia Nowicki	Uptime

Draft Regulatory Framework Consultation Meeting – Accra, Ghana

No	Name of Participant	Institution
1.	Dr. Shafic Suleman	Public Utilities Regulatory Commission- Ghana
2.	Emmanuel Fiati	Public Utilities Regulatory Commission- Ghana
3.	Robert Aziz Tia Abdulai	Public Utilities Regulatory Commission- Ghana
4.	Nancy Atiemo	Public Utilities Regulatory Commission- Ghana
5.	Afua Effah	Public Utilities Regulatory Commission- Ghana
6.	Abukari Jabaru	Public Utilities Regulatory Commission- Ghana
7.	Israel Amenfia	Public Utilities Regulatory Commission- Ghana
8.	Dr. Eric Obutey	Public Utilities Regulatory Commission- Ghana
9.	Deborah Bonney	Public Utilities Regulatory Commission- Ghana
10.	Robert Saka Addo	Public Utilities Regulatory Commission- Ghana
11.	Nll Amul Oblitey	Public Utilities Regulatory Commission- Ghana
12.	Juliet Akuba	Public Utilities Regulatory Commission- Ghana
13.	Charles Biney	Public Utilities Regulatory Commission- Ghana
14.	Philippa Quayson	Public Utilities Regulatory Commission- Ghana
15.	Godfred Kwaku Ennin	Public Utilities Regulatory Commission- Ghana
16.	Wallace Duodu	Public Utilities Regulatory Commission- Ghana
17.	Suzzy Abaidoo	Ministry of Works, Housing and Water Resources - Ghana
18.	Benjamin Banitsi	Water and Sanitation Management Team. Abokobi Boi- Ghana
19.	Dr. Emmanuel Ato Quansah	Community Water and Sanitation Agency- Ghana
20.	Kofi Asare Lartey	Ghana Standards Authority
21.	Lovell Ahiawortor	Ghana Water Ltd
22.	Isaac Kwakye	GA West Municipal Assembly
23.	Basilia Nanbigne	CONIWAS
24.	Ellen Gyekye	GES/SHEP
25.	Patricia Asiedu-Antwi	Water Resources Commission
26.	Ibrahim Musah	WaterAid Ghana
27.	Vida Duti	IRC
28.	Clara Kasanga	National Water Supply and Sanitation Council- Zambia

No	Name of Participant	Institution
29.	Andrew Mwansa	National Water Supply and Sanitation Council - Zambia
30.	Engr. Alake Samuel	Ekiti State Water and Sanitation Regulatory Agency - Nigeria
31.	James Abubakarr Amara	Sierra Leone Electricity and Water Regulatory Commission
32.	Tumusiime Christopher	Ministry of Water and Environment - Uganda
33.	Muyinda Abdu Maliki	Ministry of Water and Environment - Uganda
34.	Reuben Sipuma	Water and Sanitation for Urban Populations
35.	Prosper A.B Ayande	Water and Sanitation for Urban Populations
36.	Barbara Schreiner	Water Integrity Network
37.	Dr. Collins Okrah	CSIR-Water Research Institute
38.	Abera Endeshaw Abebe	Ministry of Water & Energy - Ethiopia
39.	James Manda	African Forum for Utility Regulators
40.	Simeon Kenfack	African Water and Sanitation Association
41.	Ndivyariye Didace	AREEN-Burundi
42.	John Hosea Muruka	Water Services Regulatory Board- Kenya
43.	Ramadhan Kombo Ali	Zanzibar Utilities Regulatory Authority
44.	Exaudi Fatael Maro	Energy and Water Utilities Regulatory Authority (EWURA)
45.	Thanasius Sitolo	Ministry of Water and Sanitation - Malawi
46.	Jennifer De France	World Health Organisation
47.	Kariuki Mugo	Water Aid
48.	Joaquim Jorge	Autoridade Reguladora de Águas e Saneamento -Mozambique
49.	Mawuena Dotse	MAPLE Consult
50.	Christopher Sackeyfio	MAPLE Consult
51.	Mwanika Banda	ESAWAS Regulators Association
52.	Elisabeth Nahimana	ESAWAS Regulators Association
53.	Yvonne Magawa	ESAWAS Regulators Association

Consultancy Team - Aguaconsult

Bill Twyman	Aguaconsult
Analía Saker Stanig	Aguaconsult
Harold Lockwood	Aguaconsult
Robert Gakubia	Independent Consultant
Manuel Alvarinho	Partners for Value
Khuzwayo Tembo	Aguaconsult
Christopher Sackeyfio	MAPLE Consult
Tina Eisle	AQUAY Consultancy
Ephraim Mebrate	Independent Consultant
Anne Namakula	Independent Consultant
Aime Tsinda	Independent Consultant
Pema Lhamo	Aguaconsult

ANNEX ONE: GOOD PRACTICE ACCOUNTABILITY AND REGULATORY MECHANISMS

ACCOUNTABILITY MECHANISMS

Box Seven: Mozambique – Licensing Regime for Smal Water Supplies in Urban and Rural Areas

In urban Mozambique, small private water operators, known as *Fornecedores Privados de Água* (FPAs), coexist with public utilities managed by the government's Asset Holding Entity, FIPAG (*Fundo de Investimento e Património do Abastecimento de Água).* FPAs have emerged due to public utilities and government institutions' limited capacity to ensure universal water service coverage, particularly in peri-urban and low-income areas.

Although FPAs have often operated informally, they are expected to be licensed and are responsible for investing in, operating, and managing their own water supply infrastructure. This typically includes boreholes, small-scale distribution networks, and household connections. To formalize and regulate these operators, the Water Regulatory Authority (*Autoridade Reguladora de Águas e Saneamento* AURAS, IP) developed a licensing regime that allows FPAs to operate legally alongside urban utilities. Licenses are issued by municipalities and grant FPAs the right to serve clearly defined geographic areas, reducing overlap and competition with other FPAs and the larger utilities. Decree 51/2015 sets out the legal framework for licensing private water providers. It defines the conditions under which FPAs may operate, including basic service quality standards, customer engagement, monitoring obligations, and reporting requirements. Many FPAs have welcomed the licensing regime, as it provides legal clarity, reduces disputes over service areas, and improves access to technical support or financing opportunities.

Box Eight: Zambia - NWASCO's Licensing Regime and Minimum Service Guidelines

In Zambia, the national WSS Regulator, NWASCO uses licensing as the main accountability mechanism for its 11 sub-national Utilities with responsibility for both urban and rural WSS services. NWASCO requires licensed providers to comply with license conditions that include clearly defined minimum service standards outlined in the NWASCO Guidelines on Required Minimum Service Levels. These standards specify key performance indicators related to service coverage, water quality, supply hours, billing, and other essential aspects of service provision.

Using these Minimum Service Guidelines ensures that all licensed providers deliver a baseline level of service. Importantly, other SDMs, once they are officially recognized or established, automatically fall under these minimum standards. This integration helps maintain uniformity in service quality standards across different service delivery structures and ensures that regardless of the SDM, providers progress towards the minimum service benchmarks, enabling NWASCO to regulate, monitor, and enforce compliance across the sector.

Box Nine: Uganda –Performance Contracts for National and Sub-National Utilities

The Water Utilities Regulatory Department (WURD) of Uganda's Ministry of Water and Environment utilises performance contracts to regulate the National Water and Sewerage Corporation and six Umbrellas for Water and Sanitation that function as sub-national utilities. Contracts represent the main regulatory tool used by the WURD and were first introduced in 2000. They include the terms and conditions that the service providers have to meet to provide water supply and sanitation services, including but not limited to:

- The service area to be served by the service provider.
- Description of services to be provided to the population within the service area.
- The period of the contract (typically three years).
- Rights and responsibilities of the service provider.
- Performance targets.
- Incentives and penalties applied to achieving the performance targets.
- Proposed tariff structure, tariff adjustments formula and period.

- Business planning and reporting requirements.
- Customer management requirements.
- Dispute resolution mechanisms.

Significant differences exist between the contracts (and their application) for the National Water and Sewerage Corporation and the Umbrellas for Water and Sanitation, recognising the difference in their relative capabilities and positions within the sector. The Ministry of Finance also plays a key role in the contract for the National Water and Sewerage Corporation, particularly in relation to the budget and investment that the National Water and Sewerage Corporation receives.

Box 10: Tanzania – Registering Requirements for Community-Based Water and Sanitation Organisations

In Tanzania, Community-Based Water Supply Organizations (CBWSOs) are responsible for operating and maintaining rural water schemes and must formally register with the Rural Water Supply and Sanitation Agency (RUWASA), as mandated by the Water Supply and Sanitation Act No. 5 of 2019. To register, CBWSOs must submit:

- A constitution or a District bylaw.
- Evidence of community endorsement.
- A management and financial plan.
- Details of the scheme and designated operator (private, NGO, community based).

RUWASA verifies these documents and, if compliant, issues a Certificate of Registration, granting the CBWSO legal authority to manage water services. This approach helps to ensure the greater formalisation, professionalisation, and capacity of CBWSOs and provides an essential basis for applying regulatory mechanisms. Registered CBWSOs are expected to:

- Provide regular performance and financial reports to RUWASA,
- Adhere to technical and service standards,
- Maintain transparent billing systems,
- Participate in capacity-building initiatives.

As of April 2025, the regulatory approach to rural water and sanitation is under discussion.

STANDARDS AND GUIDELINES

Box 11: Tanzania, Rwanda and Uganda – Guidelines for Sanitation across the Service Chain

Tanzania, Rwanda, and Uganda have developed national guidelines and regulatory instruments that cover key elements of the entire sanitation service chain—from containment, emptying, transport, treatment, to safe reuse or disposal.

These guidelines include:

- Minimum standards for onsite sanitation technologies, including capture and containment facilities, septic tanks, and decentralised treatment facilities.
- Licensing and regulation of emptying and transport services.
- Requirements for treatment facility operation.
- Institutional roles and responsibilities across the chain.

While these frameworks have been developed primarily for urban contexts, the core principles—such as health and environmental safety, service quality, affordability, and accountability—are applicable to both urban and rural areas. They provide a strong foundation for progressively realising safely managed sanitation and offer a reference point for adapting enforcement mechanisms and support models in rural settings.

Box 12: Ghana – Service Provision Standards Specific for Water and Sanitation Management Teams

Standards specifically tailored for CBOs operating in rural communities and small towns are developed by the Community Water and Sanitation Agency (CWSA) that oversees Ghana's Water and Sanitation Management Teams (WSMTs). The primary purpose of these standards is to guide the effective and sustainable delivery, management, and monitoring of water and sanitation services. They also serve as a benchmark for assessing the performance of WSMTs and ensuring alignment with national water policy objectives. Key elements covered in these standards include:

- **Service delivery**, which outlines that every person should have access to at least 20 litres of potable water per day (or 60 litres for households with piped connections in small towns) and that water sources must be within 500 metres of the household, serving no more than 300 people per water point. Water availability should be year-round, and the quality must meet the Ghana Standards Authority's guidelines.
- **Community mobilisation and planning**, emphasising that communities should be actively involved in planning processes, decision-making, and capacity building.
- **Management and governance**, requiring that WSMTs operate within legal frameworks, including local byelaws, and that their roles are clearly defined and supported by MMDAs and NGOs.
- **Financial management**, with WSMTs expected to establish transparent accounting practices, regularly collect tariffs, and ensure that funds are available for operation and maintenance (O&M).
- **Operations and maintenance**, including the need for routine and preventive maintenance systems, trained local personnel, and mechanisms to escalate larger system failures to the district level.
- **The enabling environment**, including supportive policies, institutional backing, and community training, all of which are essential to sustaining high-quality service provision.

Box 13: Kenya – National Pro-Poor Water and Sanitation Services Guidelines

The Kenya national WSS Regulator - WASREB (Water Services Regulatory Board)- introduced Pro-Poor Guidelines to help Water Service Providers (WSPs) fulfil their service jurisdiction obligations and systematically track their performance in low-income areas (LIAs).

The guidelines aim to reorient WSPs' priorities, emphasising that serving the underserved must take precedence. The guidelines urge utilities to integrate pro-poor service delivery into their core operations and highlight WASREB's readiness to support WSPs via justified tariff adjustments and facilitating peer-to-peer learning.

Key regulatory requirements under the guidelines include:

- Each WSP must develop a pro-poor policy and strategy, which defines its operational approach in LIAs.
- The process of policy development should include:
    - Assessing and understanding the needs of low-income communities,
    - Formulating clear pro-poor objectives,
    - Evaluating the impact of reforms on the poor,
    - Considering partnerships with alternative service providers,
    - Designing context-appropriate delivery models, and
    - Establishing systems to monitor and review implementation.
- WSPs are required to establish a dedicated pro-poor management unit within their organisational structure.

The guidelines also define what constitutes a pro-poor area and introduce a standardized pro-poor performance indicator which all WSPs must report on.

Box 14: Rwanda – Guidelines for Sustainable Rural Water Supply Services

The Rwandan government has developed comprehensive guidelines and standards to support the engagement of private operators in rural water service delivery. These guidelines, issued in 2019, aim to standardise the Public-Private Partnership (PPP) model for rural water supply and clarify the roles of key stakeholders.

The guidelines define the institutional and operational framework for rural water services, including the responsibilities of:

- The Water and Sanitation Corporation (WASAC) – the national public utility, in its technical oversight role.
- The Rwanda Utilities Regulatory Authority (RURA), in setting and enforcing service standards and tariffs.
- District authorities act as contracting entities and ensure local oversight.
- Private operators are responsible for operating and maintaining water supply systems under delegated management contracts.
- Local communities play a role in oversight and accountability.

The guidelines provide detailed instructions on:

- How to prepare O&M plans.
- How to budget for service delivery.
- The steps to initiate a delegated management contract between districts and private operators.
- Monitoring and reporting requirements to ensure transparency and performance tracking.

This framework promotes a delegated management approach, where the ownership of infrastructure remains public (typically under the district), but operations are entrusted to a private operator through a formal contract. The guidelines were designed to streamline coordination across the multiple actors involved, position the PPP model as the preferred rural service delivery modality, and ensure sustainability, accountability, and professionalization of rural water services.

TARIFF SETTING, ADJUSTMENT AND REVIEW

Box 15: Peru – A Simplified Tariff Setting Process for CBOs

Peru's national WSS Regulator, SUNASS (*Superintendencia Nacional de Servicios de Saneamiento*), has developed a simplified tariff-setting methodology tailored for rural community-based water providers known as JASS (*Juntas Administradoras de Servicios de Saneamiento*). This model is commonly referred to as the "*cuota familiar*" or family tariff. It is designed to balance financial sustainability—by incorporating cost-recovery principles—with operational simplicity, making it accessible to JASS members who often have basic levels of formal education.

The tariff-setting process is established in SUNASS Resolution Nº 011-2021-SUNASS-CD, which provides guidelines for calculating tariffs based on actual and projected expenditures related to water supply operations, maintenance, and basic administrative costs.

Following the expansion of its mandate to include rural water services in 2017, SUNASS has opened regional offices across the country and launched a program to build the capacity of JASS to apply the new tariff methodology. SUNASS regional officials conduct field visits to individual JASS, where they train community leaders on tariff estimation based on local cost structures. Typically, SUNASS annually assesses whether the methodology has been correctly applied and to provide additional support if needed.

Compliance data regarding the *cuota familiar* methodology's application is collected annually by Municipal Technical Areas (*Áreas Técnicas Municipales,* ATM)—municipal-level units responsible for supporting rural WSS services. The latest figures in the SUNASS MIS shows that 20.2% of the JASS apply the *cuota familiar* methodology.

Box 16: Cambodia – Five-year Tariff reviews for Private Operators

Cambodia is one of the few countries where private operators are the main rural water supply service providers, operating at a considerable scale under an "invest, operate, and maintain" model. This approach has been supported by a growing regulatory framework that facilitates private sector participation while safeguarding service quality.

As of February 2025, 407 private water operators are licensed by the Ministry of Industry, Science, Technology and Innovation (MISTI), specifically through its General Department of Potable Water Supply (GDWAT) (Open Development Cambodia, 2025).

A business license for the operation of a clean water supply scheme is required and is granted for a defined service area, either through competitive bidding or direct negotiation. Licensing is valid for 20 years and includes performance requirements — notably, targets for connection rates and expanding the service area to be achieved within 5 and 10 years of operation. A feasibility study must be submitted with the license application, demonstrating both the technical and financial viability of the proposed scheme and compliance with regulatory criteria.

Tariff regulation is governed by the Law on Clean Water Supply Management. Tariffs are determined based on multiple factors, including the geographic area, water source, treatment technology, population served, infrastructure requirements, and production costs. The aim is to balance affordability for consumers with cost recovery and profitability for operators (DFDL, 2023).

Water tariffs are subject to review every five years by MISTI. Any changes to the tariff structure before the five-year mark require prior consultation with the operator. Revisions must be justified by a detailed business plan, which includes operational costs, the operator's profit margin, and the investment recovery needs for infrastructure.

Box 17: Zambia – Sanitation Surcharge

Zambia's National Water and Sanitation Council (NWASCO) has implemented a sanitation surcharge system to address the funding deficit for sanitation infrastructure, particularly in low-income urban areas. It is typically levied at 2.5% of a customer's water bill for Utilities that attain more than 100% O&M Cost Coverage. The sanitation surcharge is applied to all customers, regardless of connection to the sewer system.

A critical feature of this system is the ring-fencing of all collected funds. These funds are designated exclusively for approved sanitation projects within low-income urban communities and include construction of facilities, treatment plants, sewer network, purchase of vacuum tankers etc. NWASCO maintains oversight and approval authority for fund disbursement. Instances of misuse or delayed expenditure can result in the suspension of the surcharge. To-date, eight out of Zambia's eleven commercial utilities have implemented and are collecting the surcharge.

Box 18: Ghana – Fee-Fixing for Sanitation in Ghana

In Ghana, the Local Governance Act, 2016, Act 936 mandates Metropolitan, Municipal and District Assemblies (MMDAs) to set rates for various services provided by MMDAs or private service providers within their jurisdiction through issuing a fee-fixing resolution. While water supply services are excluded, this covers a wide-ranging set of services, including waste management, property rates and sanitation services such as desludging and the disposal of faecal waste. Once passed, the Assembly should publish and actively utilise the fee-fixing resolution, with the Revenue Department of the Assembly using the rates to conduct collections and as a mechanism to ensure compliance by other stakeholders.

The Guideline for Charging Fees for the Provision of Services and Facilities and Granting of Licenses and Permits by Metropolitan Municipal and District Assemblies was developed to guide this process, which is supposed to be conducted annually and be informed by engaging relevant stakeholders such as CBOs, community members, service providers, and businesses.

DATA COLLECTION, MANAGEMENT AND REPORTING

Box 19: Sierra Leone – Improved Data Management in Sierra Leone Informed by Assessing Gaps and Root Causes (WHO, 2024)

Over the years, multiple efforts have taken place in Sierra Leone to generate data on rural water supplies. Awareness of the technical and capacity issues affecting data use inspired the sector to institutionalize the use of a digital platform for collecting, storing and managing water point data. In 2019, the Ministry of Water Resources launched its National Digital Monitoring Approach, which included a requirement for all data to be shared on the Water Point Data Exchange's global data repository.

Efforts are under way to roll out the National Digital Monitoring Approach and ensure routine monitoring informs the development of district water, sanitation and hygiene plans. As of 2023, the sector had trained over 300 staff (mapping officers, environmental officers, educational officers and all nongovernmental organizations) on data management systems, and five costed monitoring and evaluation plans had been developed covering district and national levels. Looking forward, the focus will be on operationalizing plans to use data for decision-making across levels of government.

Box 20: Peru – Adapting Monitoring Frameworks for Small Water Supply Conditions in Peru

In 2016, Peru enacted the *Decreto Supremo* 1280, which redefined the institutional structure for water and sanitation services and, crucially, restored the rural regulatory mandate to SUNASS. Prior to this, SUNASS had focused primarily on urban utilities. With this legislative change, SUNASS was tasked with overseeing the performance and regulation of rural service providers, mainly the rural community-based water providers known as JASS. Recognising the distinct characteristics of rural service delivery, SUNASS developed an adapted model of the urban regulatory framework tailored to the realities of the JASS. This includes:

- **A simplified tariff-setting methodology (*cuota familiar*)** based on cost-recovery principles, designed to be understandable by and applicable to communities with limited technical capacity.
- **A differentiated regulatory regime** that accounts for the voluntary nature of JASS, smaller operational scale, and limited financial and human resources.
- **A focus on guidance, performance monitoring, and institutional strengthening** rather than punitive enforcement.

Under this adapted approach, SUNASS acts more as a facilitator than a sanctioning body—prioritising the documentation of service performance, identifying underperforming schemes, and offering targeted support to improve service delivery. SUNASS has also established regional offices to provide on-the-ground training and follow-up with the JASS on the application of tariff tools and basic management practices.Through this shift, SUNASS has institutionalised a rural-specific regulatory approach, promoting sustainability, accountability, and the gradual formalisation of the JASS, while respecting the community-based nature of rural service provision.

Box 21: Nepal – Improving Evidence-Based Planning and Decision-making through a Digital Data Platform (WHO, 2024)

Historically, Nepal has lacked a consolidated management information system for data on critical aspects of water supply, sanitation and hygiene service provision, with different actors often utilizing their own systems. In 2018, and building on prior data management system initiatives, the National Water Supply, Sanitation and Hygiene Management Information System was developed to address this challenge. This information system covers urban and rural contexts, large and small facilities, and a range of indicators for sustainability, functionality and water quality (added in 2020).

The Ministry of Water Supply is the custodian of the National Water Supply, Sanitation and Hygiene Management Information System, and users have to be registered to upload water quality results (i.e. provide data from a registered laboratory or registered field test kit). Importantly, the Ministry of Water Supply has provided access to the system for a broad set of stakeholders, including other ministries, provincial and local governments, and development partners.

CUSTOMER ENGAGEMENT AND COMPLAINTS

Box 22: Kenya – Maji Voice for Consumer Complaints

The Maji Voice system, under the regulator WASREB, is an innovative tool designed to enhance community engagement by giving residents a straightforward way to share their complaints, concerns, and feedback about water service delivery. It allows people to communicate through multiple channels such as SMS, online portals, emails, and even face-to-face visits. This inclusive approach also helps ensure that even those without internet access or smartphones can participate.

Quantitatively, the impact has been significant. Since its launch, the system has seen the number of reported complaints increase dramatically from around 400 complaints per month in the first year to nearly 3,800. This tenfold increase indicates that community members are more comfortable and willing to speak up. Additionally, the resolution rate of complaints has improved notably, rising from 46% initially to over 94%, with the average time to resolve issues halving from about 71 days to just 32 days.

Box 23: New Zealand – Engaging Small Water Suppliers in the Development of Regulations (WHO, 2024)

In New Zealand, the Water Services Act 2021 expanded the scope of regulated water supplies to include all facilities except those serving a single domestic household. Regulated supplies now include what are referred to as “very small community supplies” that serve up to 25 people, and this regulatory expansion requires an estimated 75,000 additional facilities to be registered by 2025 and to meet national drinking-water quality standards by 2028. This represents a significant undertaking for Taumata Arowai, New Zealand’s independent drinking-water regulator.

To secure their buy-in to participate in regulatory activities, Taumata Arowai released draft standards and regulations to small water suppliers, solicited their feedback and visited many facilities. These engagements directly informed substantial revisions to the standards and rules, reducing the scope of activities that small water suppliers were responsible for undertaking. Revisions made through these consultations included modifications to water treatment and monitoring requirements to address cost and feasibility concerns while ensuring public health protection, as well as increased emphasis on the financial and technical support to be provided to water suppliers.

Box 24: Mozambique – Directly Involving Community Members in the Application of Regulations

To address the challenge of implementing effective regulatory oversight across the entire country, Mozambique implemented a consultative regulation model through local regulatory committees known as CORALs (*Comités de Regulação Local*). This decentralised approach was introduced to extend the presence and effectiveness of the regulatory authority AURAS, IP (Autoridade Reguladora de Águas e Saneamento) particularly in secondary cities and rural areas where regulatory capacity is limited.

CORALs are composed of representatives from civil society, including members of community-based organizations, religious institutions, local associations, and respected individuals from the community. They are selected by Municipalities or District Governments in collaboration with AURA, often based on criteria such as independence, community trust, and knowledge of local water issues.

Once established, CORALs are responsible for monitoring service delivery, collecting user feedback, verifying service quality (e.g. water availability, tariff transparency, responsiveness to breakdowns), and reporting findings to AURA and local authorities. They also serve as a communication bridge between consumers and service providers, facilitating conflict resolution and helping to ensure providers comply with contractual obligations.

INCENTIVES

Box 25: South Africa – Blue Drop and Green Drop Benchmarking Reports

In South Africa, the Department of Water and Sanitation developed Blue Drop (drinking water services) and Green Drop (wastewater) certification programmes. These assess and measure an organisation's ability to provide acceptable drinking water and wastewater services by auditing and benchmarking the performance of participating water services institutions against a set of audit criteria. The results of these audits were published in annual Blue Drop and Green Drop reports and linked to an annual awards ceremony. This served as an important reputational incentive for water services institutions, and the process has been linked to improved performance.

Significantly, the recent Green Drop audits have compared the performance of local government and privately-run wastewater systems against a series of aspects grouped into five areas:

- Capacity Management.
- Environmental Management.
- Financial Management.
- Technical Management.
- Effluent and Sludge Compliance.

These results are presented in highly visual and comparative manner, benchmarking the performance of participating actors against each other as well as the results from past Green Drop audits.

Box 26: Tanzania, Zambia and Kenya – The Production of Detailed Benchmarking Reports (WHO, 2024)

Many regulators produce annual performance reports benchmarking the performance of water supply service providers against a range of key indicators. Water supplies covered by these reports include those serving rural and small towns that are provided by more formalized service providers. Information in these reports is presented in a highly visual manner, including traffic-light colour coding to indicate performance against targets and the inclusion of data from prior years to highlight changes over time.

Reports are typically produced and shared annually as part of wider workshops and award ceremonies to increase accountability. They are often released in line with annual planning and budgeting cycles to help ensure key findings and recommendations can be accounted for within these processes. Additionally, the regulatory actors producing these reports follow up with providers on specific action points and priorities identified within the reports to help ensure necessary corrective measures are taken.

Box 27: Peru – Provision of Awards to the Best Performing CBOs

To strengthen the performance of community-based water and sanitation organizations in rural areas, Peru has implemented a structured incentive programme targeting the Sanitation Services Administrative Boards (*Juntas Administradoras de Servicios de Saneamient*o, JASS).

An annual benchmarking exercise tailored specifically to JASS is at the programme's core. The tool evaluates key performance indicators such as financial management, service continuity, water quality monitoring, infrastructure maintenance, and user engagement. This benchmarking is used not for sanctioning but to promote good practices, transparency, and peer learning among rural providers.

Each year, the top performing JASS are publicly recognised in a national award ceremony organised by SUNASS, where they receive certificates, technical equipment, or other non-financial incentives. This approach helps elevate the profile of rural operators, fosters healthy competition, and motivates continuous improvement—despite limited resources and volunteer-based management structures.

SUPPORT TO SERVICE DELIVERY MODELS

Box 28: Uganda – Using Subsidies to Support the Sustainable Financing of Drinking-Water Service Delivery (WHO, 2024)

Uganda's water supply sector has been evolving rapidly, with the Ministry of Water and Environment transforming the six regional water and sanitation support organizations into Umbrella Utilities focused on small towns and rural growth centres. Since 2017, the Umbrellas have gone from providing technical support to water boards on operations and maintenance to directly managing over 300 facilities serving over 4.4 million people (as of December 2022).

Three sources of sustainable financing have proven essential to these efforts in rural areas:

- **User fees.** Improved revenue collection efficiency (78% in 2019/2020 increased to 87% in 2021/2022) and the doubling of household connections from 2019 to 2022 have increased revenue generation.
- **Subsidies.** The Ministry of Water and Environment regularly provides subsidies. For example, in 2019/2020, the Ministry provided US$ 650,000 in subsidies to the Umbrellas to help cover the cost of service provision.
- **Revenue from other activities.** The Umbrellas are involved in other activities, such as cesspool emptying and water quality testing services, that generate some income (albeit minimal) to complement the revenue from water user fees.

Box 29: Central African Republic – The Circuit Rider Approach to Preventive and Corrective Maintenance

In the Central African Republic (CAR), a circuit rider-based approach is employed to provide technical support to water committees, focusing on preventive and corrective maintenance. Circuit riders are technically trained engineers or technicians who rotate between multiple communities, visiting on a scheduled basis to perform routine checks, troubleshoot issues, and carry out repairs before problems escalate. This proactive approach aims to enhance the durability and functionality of water systems, reducing breakdowns and achieving a functionality rate of over 90%. The model emphasizes capacity building of water committees, empowering them to manage their systems more effectively over time.

Funding for this technical support is secured through a combination of local government contributions, donor funding, or community contributions; however, external assistance from development partners has proven essential in this challenging context. Communities usually contribute labour or small fees, while external support covers the costs of the circuit riders' salaries, transportation, and equipment. The payment structure aims to make the service affordable for communities while ensuring sustainability and professionalism in maintenance services.

Box 30: U.S.A. – Planning for Capacity Development of Small Water Supply Operators (WHO, 2024)

In the United States of America, more than 97% of the 156 000 public water systems are small supplies, serving 10 000 or fewer people. Capacity development of small water supply operators is a fundamental component of the 1996 Safe Drinking Water Act Amendments, which provide a framework for states and water suppliers to work together to protect public health. Every state must formulate a capacity development programme to assist public water systems in building technical, managerial and financial capacities, including operator training and certification (and recertification), asset management and water supplier partnerships. The federal government's Environmental Protection Agency is responsible for ensuring state compliance in operator certification, which is executed through state programmes. Support for capacity-building and certification is also provided by non-state actors and networks, for example the Rural Community Assistance Program and the National Rural Water Association.

Circuit Riders from the Hawaii Rural Water Association and the Rural Community Assistance Cooperation help operators with compliance, maintenance and management issues. They work with operators to troubleshoot problems, provide training, evaluate alternative technological solutions, recommend operational improvements, assist with leak detection, and respond to natural disasters and other emergencies.

Box 31: Madagascar – Standardised Operator Training and Tools that Incorporate Risk Management Principles (WHO, 2024)

In Madagascar, Tatirano Social Enterprise works closely with the regional offices of the Ministry of Water, Sanitation and Hygiene to support operationalization of the national Water Code (1999), which addresses safe drinking water provision in rural areas. Tatirano designs, constructs, operates and maintains rainwater harvesting systems serving schools, hospitals and communities across southeastern Madagascar.

Working in remote and isolated communities and having limited resources for testing, Tatirano gives priority to the proactive inspection and maintenance of water supplies to always ensure microbial and chemical integrity. Local women are engaged to inspect the water supplies on a daily basis. Sanitary inspection questions have also been incorporated into standard monitoring checklists used by the field agents, the results of which are displayed publicly online for transparency and accountability.

PRO-ACTIVE RISK MANAGEMENT

Box 32: Ghana – Requirement to Produce and Implement Water Safety Plans

Ghana is making progress in promoting water safety through the development and implementation of Water Safety Plans (WSPs). These efforts are guided by the National Drinking Water Quality Management Framework (NDWQMF), introduced in 2015. The framework promotes a risk-based approach to managing water quality, aiming to ensure the delivery of safe drinking water across various types of supply systems. WSPs are required for different categories of service providers, including urban water systems managed by Ghana Water Limited (GWL), rural and small-town systems overseen by the Community Water and Sanitation Agency (CWSA), and systems operated by small water enterprises such as the Safe Water Network (SWN).

WSPs in Ghana are expected to include a comprehensive system description, identification and assessment of hazards and risks, development of improvement plans, standard operating procedures (SOPs), monitoring and verification mechanisms, and emergency response measures. They should also address climate resilience, although this component is often underdeveloped in practice. As of the latest assessment, 54 out of 150 water service providers in Ghana had developed and implemented a Water Safety Plan (WSP). This includes 49 out of 50 WSPS under CWSA.

Box 33: Ghana and Kenya – The Water Quality Assurance Fund

The Water Quality Assurance Fund was developed by The Aquaya Institute with initial support from the Conrad N. Hilton Foundation to address critical barriers to water quality monitoring in rural areas. Piloted between 2020 and 2022, the initiative aimed to provide a sustainable solution for expanding access to safe drinking water by linking rural systems with centralized professional laboratories. The Fund has since been scaled up under the REAL-Water program (2021–2026).

The Assurance Fund guarantees payment to local laboratories in cases where rural water systems default on their testing fees or cannot provide water samples during scheduled visits. A third-party holds and manages the Fund, allowing laboratories to engage with rural systems without bearing financial risks. The Fund may also cover partial costs or subsidies during special circumstances, such as during the COVID-19 pandemic or periods of elevated fuel prices. Reimbursements and fines help replenish the Fund over time, while eligibility screening ensures enrolled systems are within practical distance of laboratories and capable of making payments and addressing water quality issues.

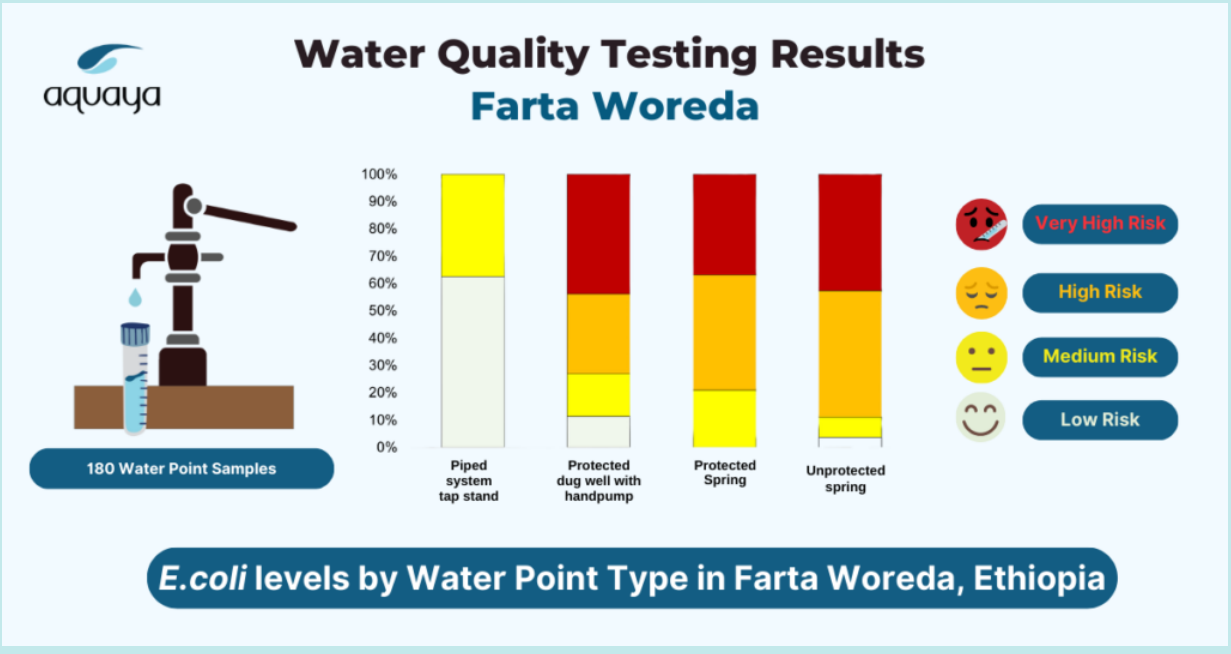
Box 34: Nigeria – Prioritising Higher-Risk Sites for more Frequent Surveillance Activity (WHO, 2024)

The 2023 Nigerian Guidelines for Rural Drinking Water Quality Monitoring and Surveillance define a risk-based approach to surveillance frequency; whereby higher risk sites are prioritized for more frequent surveillance activity. Local government authorities are to conduct sanitary inspections (SIs) and test water quality for the rural water supplies in their areas on a six-monthly basis, during both the rainy and dry seasons. SIs cover the water sources, transport containers, storage facilities and user practices. In addition, local government authorities are to carry out SIs and water quality testing during waterborne disease outbreaks and whenever community monitoring reveals contamination. As a complement to monitoring by surveillance authorities, each community and household water source is to be tested at least monthly by trained community members to verify microbial safety. Owing to lower costs and ease of use, presence–absence testing with hydrogen sulphide vials is used for community-level monitoring and reporting contamination, thus serving as a screening mechanism to identify high-priority sites requiring greater surveillance support.

Box 35: Ethiopia – Simple and Accessible Reporting of Water Quality Data for Non-Technical Audiences (WHO, 2024)

In Ethiopia, a water quality assessment undertaken in 2022 in three target districts (woredas) through collaboration between a local university and an international research institute is helping to prioritize resources for infrastructure development and support corrective action to protect public health. Samples were collected from water points within communities, schools and health care facilities, as well as from household storage containers.

A simplified overview of results was prepared (see the figure) and shared with community members and leaders during dissemination meetings, in highly visual formats to ensure the results and their implications were clear and accessible to non-technical audiences. This approach to disseminating findings in user-friendly formats has motivated action. For example, in Farta Woreda, several community members have fenced their water points and requested that the District Water Bureau chlorinates the water.



SANCTIONS

Box 36: Zambia – NWASCO's use of its Sanctioning Powers

NWASCO has actively used its sanctioning powers to address non-compliance and poor service delivery. These powers include issuing warnings, suspending or revoking licenses, and recommending the appointment of a Statutory Manager to take over a utility's operations temporarily.

A key feature of NWASCO's enforcement approach is the use of special Regulatory Supervision (SRS). This is a corrective and supportive measure applied when a commercial utility exhibits persistent deterioration in service delivery. Under SRS, the utility is placed under close regulatory oversight, and the Minister of Water Development and Sanitation may appoint a Statutory Manager to lead the utility. This process allows time for performance improvements before more severe sanctions, such as license suspension, are implemented. It demonstrates NWASCO's preference for facilitating compliance through structured support rather than immediate punitive action.

In recent years, NWASCO has suspended the licenses of several utilities, including Luapula Water Supply and Sanitation Company and Western Water Supply and Sanitation Company in 2022 due to continued failure to comply with licensing conditions and regulatory directives. In 2024, NWASCO also suspended the license of North-Western Water Supply and Sanitation Company with the dissolution of its Board of Directors by ministerial action.

ANNEX TWO: APPLICATION OF REGULATORY MECHANISMS

Table 31 uses three sets of ticks and crosses to provide top-level generic guidance concerning which regulatory mechanisms should be prioritised for each SDM *(see Table 30).*

As with the other guidance provided, contextualisation and elaboration at the country level is essential. This is especially important concerning the extent and type of requirements placed on service providers by individual regulatory mechanisms and the regulatory objectives the regulatory mechanisms seek to achieve. For example, while technical standards and proactive risk management guidelines are marked essential for all SDMs, the extent and scope of these standards and guidelines for large public utilities must be considerably more comprehensive than others.

Table 30: Regulatory Mechanism Classification

☒	**Not applicable.** This regulatory mechanism does not apply to this SDM and should not be applied. This is because it does not meet the needs of the SDM or is considered too advanced for the SDM.
✓	**Essential mechanism (a must have).** The minimum regulatory mechanisms that should be in place for the given SDM.
☑	**Advanced mechanism.** A comprehensive mechanism to be applied when the regulatory actor has the capacity to consistently apply this mechanism and service provider compliance is realistic.

Annex One presents a series of good practice regulatory mechanisms for each regulatory mechanism category.

CBO 1: CBO management with external support from sub-national government, technical agency or utility	**CBO 2:** CBO management with some technical functions formally contracted to private operator or local mechanic	**PRIVATE 1:** Privately owned and operated facilities or services (private operators, NGOs and FBOs) management with direct oversight by a regulatory entity	**PRIVATE 2:** Private operator management with oversight by a specialised asset-holding entity	**PRIVATE 3:** Private operator (or social enterprise or FBO) management with oversight by a utility	**PRIVATE 4:** Private operator (or social enterprise or FBO) management with oversight sub-national government	**PUBLIC 1:** National or sub-national utility direct management	**PUBLIC 2:** Local government unit or department direct management

Table 31: Regulatory Mechanisms for each SDM

Category	Regulatory Mechanism	CBO 1	CBO 2	PRIVATE 1	PRIVATE 2	PRIVATE 3	PRIVATE 4	PUBLIC 1	PUBLIC 2
Standards and guidelines	Technical standards	✓	✓	✓	✓	✓	✓	☑	✓
	Quality of service standards	☑	✓	☑	☑	☑	☑	☑	✓
	Tariff setting and adjustment guidelines	☑	✓	☑	☑	☑	☑	☑	✓
	Customer engagement and complaints guidelines	✓	✓	✓	✓	✓	✓	☑	✓
	Social and pro-poor standards	✓	✓	✓	✓	✓	✓	✓	✓
	Governance guidelines	☑	✓	✓	✓	✓	✓	☑	✓
	Environmental protection standards	✓	✓	✓	✓	✓	✓	✓	✓
	Proactive risk management guidelines	✓	✓	☑	☑	☑	☑	☑	✓
	Health and safety standards	✓	✓	✓	✓	✓	✓	✓	✓
Tariff setting and adjustment	Structured process for initial tariff setting and approval	☑	☑	☑	☑	☑	☑	☑	☑
	Structured process for annual tariff review and adjustment	☑	☑	☑	☑	☑	☑	☑	☑
Data collection, management and reporting	Light-touch MIS	✓	✓	✓	✓	✓	✓	✓	✓
	Comprehensive MIS	☑	☒	☑	✓	✓	☒	☑	☒

Category	Regulatory Mechanism	CBO 1	CBO 2	PRIVATE 1	PRIVATE 2	PRIVATE 3	PRIVATE 4	PUBLIC 1	PUBLIC 2
	Periodic service provider self-reporting on required indicators	☑	✓	☑	✓	✓	✓	☑	✓
	Annual regulatory inspections and data collection for each service provider	✓	✓	☑	✓	☑	✓	☑	✓
	Production and public dissemination of reports	☑	✓	☑	✓	☑	✓	☑	✓
Customer engagement and complaints	Customer engagement processes in service delivery operations	✓	✓	✓	✓	✓	✓	✓	✓
	Structured approach for complaint handling at service provider level	✓	✓	☑	✓	☑	✓	☑	✓
	Structured approach for complaint handling at the level of the regulator entity mandated to ensure WSS service provision	✓	✓	✓	✓	✓	✓	✓	✓
Incentives	Favourable contractual terms, including contract extension	☒	✓	☑	☑	☑	☑	☑	☒
	Public recognition of performance in benchmarking reports	☑	✓	☑	☑	☑	☑	☑	☑
	Provision of awards for excellent performance within award ceremony	☑	☑	☑	☑	☑	☑	☑	☑
	Service area expansion	*Case Specific*							
Support to SDMs	Widely disseminating regulatory requirements	✓	✓	✓	✓	✓	✓	✓	✓
	Ensuring the provision of financial management support	☑	☑	✓	✓	✓	✓	☑	☑
	Ensuring the provision of a targeted incremental subsidy	☑	☑	☒	☒	☒	☒	☑	☑
	Ensuring the provision of support performing technical functions	☑	☑	☒	☒	☒	☒	✓	☑

Category	Regulatory Mechanism	CBO 1	CBO 2	PRIVATE 1	PRIVATE 2	PRIVATE 3	PRIVATE 4	PUBLIC 1	PUBLIC 2
Pro-active risk management	Requirement for and support in conducting sanitary inspections	☑	☑	✓	✓	✓	✓	✓	✓
	Requirement for and support in developing and implementing water safety plans	☑	☑	✓	✓	✓	✓	✓	✓
	Requirement for and support in developing and implementing sanitation safety plans	☑	☑	✓	✓	✓	✓	✓	✓
Sanctions	Issuing of a formal requirement to adhere to prescribed service delivery practices	✓	✓	☑	✓	✓	✓	☑	✓
	Issuing of a fine for repeated non-compliance with regulations or formal requirements to alter service delivery practices	✓	✓	✓	✓	✓	✓	✓	☒
	License or permit suspension or removal	✓	☒	☑	☒	☒	✓	☑	☒
	Contract suspension or termination	✓	✓	☑	☑	☑	☑	✓	☒
	Dissolution of service provider's board or senior management	✓	✓	☒	☒	☒	☒	☑	☒
	Dissolution and reformation of the service provider	☑	☑	☒	☒	☒	☒	☒	☒
	Communicating to competent authorities if illegal, unethical or corrupt behaviour	✓	✓	✓	✓	✓	✓	✓	✓

Cooperating to Promote Effective Development of Water Supply and Sanitation Regulation