



THE STATUS OF THE WATER SUPPLY AND SANITATION REGULATORY LANDSCAPE ACROSS AFRICA

EASTERN AFRICA – REGIONAL REPORT



REGIONAL FINDINGS OVERVIEW

Evidence suggests that a well-functioning regulatory system and the application of a robust set of regulatory mechanisms can play a crucial role in delivering and managing safe and reliable WSS services. Effective regulation demands alignment with country specific reforms, governance systems, political economy and development objectives. However, there has been limited reference material on the setup of these frameworks across Africa that can serve as replication points for countries intending to institute effective regulation.

This report provides an overview of WSS regulation across the Eastern African region in 14 countries: Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Mauritius, Rwanda, Seychelles, Somalia, South Sudan, Sudan, Tanzania, and Uganda.

Key findings and overviews are based on a study initiated by ESAWAS and cover: the WSS context, policy and legal backing for WSS regulation, regulatory arrangements, different spheres of regulation (regulated service providers, regulated service delivery types), regulatory mechanisms, and the regulatory environment.

Water Supply and Sanitation context: Except for four countries, water supply and sanitation (WSS) coverage in Eastern Africa has been steadily improving over the last 20 years; however, significant challenges remain. Improvements in coverage have not occurred at the speed required to meet the Sustainable Development Goal (SDG) Six targets of universal safe and reliable WASH services for most countries in the region. The average coverage rates for at least 'basic' water supply and sanitation services in Eastern Africa's fourteen countries are 56% and 36%, respectively (JMP, 2020).¹ These are significantly lower than the equivalent average water supply coverage rate and marginally higher than the average sanitation coverage rate for Sub-Saharan Africa. Various systemic weaknesses have impeded progress toward universal WSS.

Policy and Legal backing: National WASH policy documents have been developed for 11 of the countries in Eastern Africa, however, some of these policies do not have provisions specifically for WSS regulation. Policy documents have been developed more for water supply than sanitation, illustrating a common bias towards water supply. In terms of the legal framework, nine out of fourteen countries have an appropriate legal backing for regulating water supply services. Three countries do not have a legal instrument to back regulatory activities for sanitation. However, for the countries with legal instruments, these do not provide sufficient detail on mandates or functions of the different WSS subsectors (urban sanitation, rural sanitation).

Regulatory models: A variety of regulatory models exist for WSS service delivery, but ministerial regulation is the predominant model currently applied in Eastern Africa. Four main regulatory models are utilised to regulate WSS service delivery:

- I. **Regulation by Agency.** A regulatory body (semi-) autonomous from the government has discretionary powers to regulate WSS or aspects of WSS.
- II. **Regulation by Contract.** A public entity other than an (semi-) autonomous regulatory agency and a service provider agree on contractual clauses that determine how key aspects of WSS service provision are defined and controlled, such as tariffs and service standards.
- III. **Ministerial Regulation.** A ministry performs some or all regulatory responsibilities for WSS and does not use contracts as a core regulatory tool for WSS service provision.
- IV. **Self-Regulation.** A service provider (typically a public utility or unit of local government) is legally mandated to perform key regulatory activities upon itself (i.e., setting tariffs and performance standards, performance reporting).

Table A details the regulatory models (✓) applied per country and in total across the Eastern Africa Region, highlighting the predominant² ones (marked as 🟢). It highlights that most countries have mixed regulatory

¹ A basic water supply services refers to drinking water from an improved source, provided collection time is not more than 30 minutes for a roundtrip including queuing. A basic sanitation service is the use of improved facilities which are not shared with other households.

² The predominant regulatory form refers to the regulatory form under which the primary service provider in each country is regulated. In most cases, this refers to how a national or regional utility is regulated.

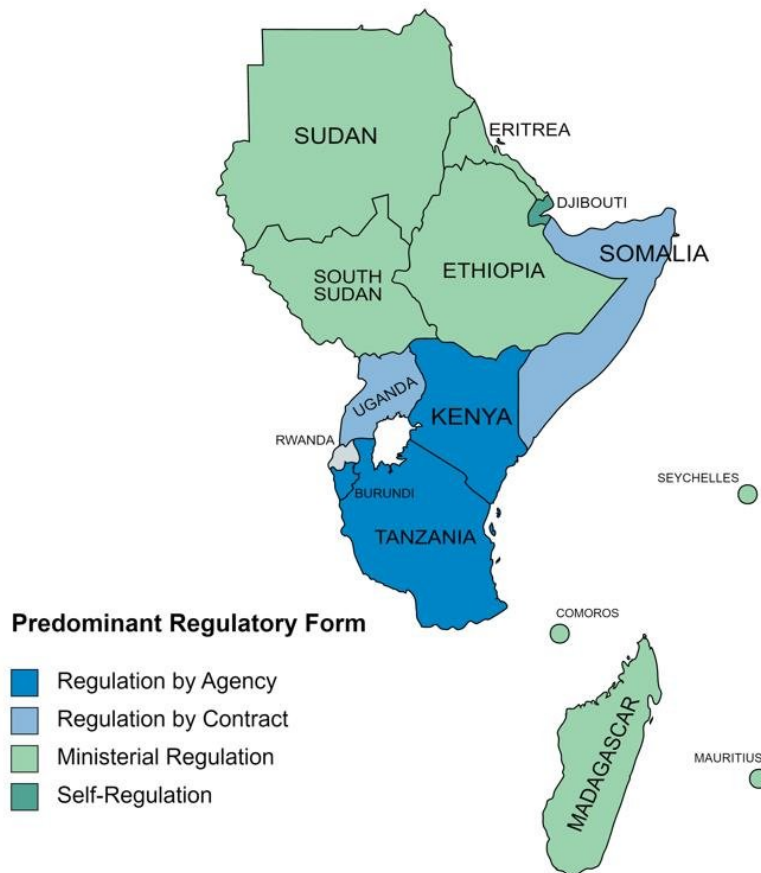
frameworks based on multiple regulatory models applied across the four WSS sub-sectors (urban water supply, rural water supply, urban sanitation, rural sanitation) and for different service providers. This table depicts the regulatory model established in the legal instruments; however, it is important to note, that in some countries a very limited set of regulatory activities are currently being undertaken. This reflects how different regulatory frameworks have been developed to account for the wide range of WSS service providers and the governance structures across different country contexts.

Table A: Regulatory models Applied for Water Supply and Sanitation Service Provision

Country	Regulatory model			
	Regulation by Agency	Ministerial Regulation	Regulation by Contract	Self-Regulation
Comoros	✗	✔	✗	✗
Djibouti	✗	✔	✗	✔
Eritrea	✗	✔	✗	✗
Ethiopia	✗	✔	✗	✗
Kenya	✔	✗	✗	✗
Madagascar	✗	✔	✔	✗
Mauritius	✗	✔	✗	✗
Rwanda	✔	✗	✗	✗
Seychelles	✔	✔	✗	✗
Somalia	✗	✔	✔	✗
South Sudan	✗	✔	✗	✗
Sudan	✗	✔	✗	✗
Tanzania	✔	✔	✗	✗
Uganda	✗	✗	✔	✔
Total for the regulatory model applied	4	11	3	2
Total for the predominant	3 (21%)	8 (57%)	2 (14%)	1 (7%)

The use of multiple regulatory models and the variations in their application makes it is useful to note the primary regulatory model applied in each country. Figure A presents this.

Figure A: Predominant Regulatory models Applied for Water Supply and Sanitation Service Provision



In some East African countries, WSS regulation is starting to receive concerted attention and reform.

Over the last 20 years, WSS service provision regulation has advanced in varying degrees among the countries. Tanzania, Rwanda, Kenya, Seychelles and Uganda have made significant progress, whereas Djibouti, Eritrea, Sudan, and South Sudan have limited WSS regulation. Countries such as Comoros, Madagascar, and Mauritius have plans to reform WSS regulation and have taken significant steps to legally establishing independent regulators that are expected to begin operations in the coming years. Furthermore, there are some successful case studies from countries such as Rwanda, Kenya, and Tanzania where national regulatory agencies are beginning to regulate smaller, decentralised service providers (i.e., water committees, private vacuum tanker operators) and the services they provide (i.e., point water sources, onsite sanitation), which have largely been neglected to-date across Africa.

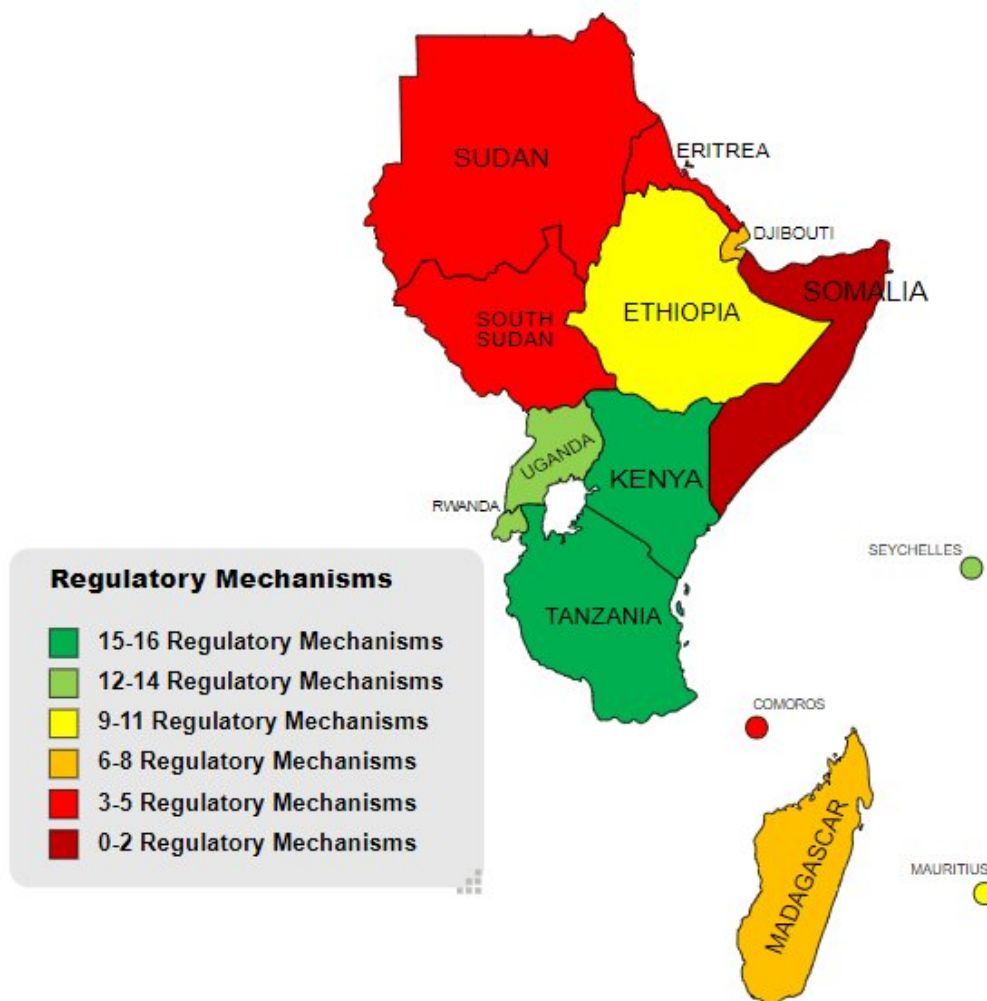
Spheres of Regulation: Regulatory activities primarily focus on the main WSS service providers in each country and the piped water supply and sewered sanitation services they predominantly provide. Most countries' primary regulatory actors concentrate on the large formal WSS service providers (i.e., national or regional utilities and large private operators) that primarily serve urban and peri-urban areas. These service providers are the focus of the various regulatory mechanisms in place, while smaller, decentralised service providers have received less attention. Furthermore, WSS regulation primarily focuses on piped water supply services and – to a lesser extent – sewered sanitation. This is despite recent attention in some East African countries (i.e., Tanzania, Rwanda, Seychelles) to regulate onsite sanitation services.

Regulatory mechanisms: Varying levels of progress have been made in developing and applying regulatory mechanisms; however, greater emphasis has been given to developing mechanisms for water supply relative to sanitation. A regulatory mechanism is an intervention or process used by a regulatory actor to guide and influence the behaviour and performance of key stakeholders within the WSS sector, particularly service providers. Figure B provides a summary of each country's performance regarding the development of 16 regulatory mechanisms across four areas:

1. Standards and guidelines³ (six regulatory mechanisms)
2. Monitoring and performance reporting⁴ (six regulatory mechanisms)
3. Incentives⁵ (two regulatory mechanisms)
4. Sanctions⁶ (two regulatory mechanisms)

It highlights moderate performance across the East African region, with high variations among countries. Only seven of the fourteen countries have developed at least 9 of the 16 regulatory mechanisms. Of the four investigated areas, greater progress has been made across the East African region in developing standards and guidelines compared to performance reporting and incentives and sanctions.

Figure B: Top-Level Overview of Regulatory Mechanisms for WSS Service Provision



³ Six regulatory mechanisms were investigated in relation to standards and guidelines. These were: (i) Whether standards and guidelines exist for service levels and water quality; (ii) Whether standards and guidelines exist for tariff rates, tariff setting and tariff adjustments; (iii) Whether standards and guidelines exist for the planning activities of WSS service providers (i.e., business planning, financial projections, accounting, annual reporting); (iv) Whether standards and guidelines exist for citizen involvement and complaints mechanisms; (v) Whether standards and guidelines are designed to help ensure poorer and potentially marginalised populations receive affordable services; and (vi) Whether standards and / or guidelines exist for environmental protection.

⁴ Six regulatory mechanisms were investigated for monitoring and performance reporting: (i) Whether appropriate quality of service indicators are periodically tracked by the regulator; (ii) Whether appropriate economic efficiency indicators are periodically tracked by the regulator; (iii) Whether appropriate operational sustainability indicators are periodically tracked by the regulator; (iv) Whether regulated service providers regularly (i.e., annually) submit reports and data to regulatory actors; (v) Whether regulatory actors annually inspect and audit regulated service providers; and (vi) Whether annual reports produced on sector and regulated service provider performance

⁵ Two regulatory mechanisms were investigated for incentives: (i) Whether regulatory actors use financial incentives to promote improved service provider performance; and (ii) whether regulatory actors use reputational incentives to promote improved service provider performance.

⁶ Two regulatory mechanisms were investigated for sanctioning: (i) Whether regulatory actors have the ability to issue fines to service providers; and (ii) Whether regulatory actors have the ability to suspend, remove, or transfer service provider licenses.

Regulatory Environment: While there are examples of good practice, significant gaps exist in the regulatory environment for WSS service delivery in most East African countries in terms of autonomy, participation, and transparency. It is important to note that regulatory actors are frequently part of a Ministry with broader WSS responsibilities, and their regulatory activities are funded through central government budgeting processes, affecting their autonomy to adjust regulations and tariffs. Additionally, regulatory actors only produce reports on the performance of WSS service providers that are made publicly available in five of the fourteen East African countries. Despite these common challenges, Kenya, Rwanda, and Tanzania have taken important steps in ensuring the autonomy of lead regulatory actors, increasing public participation in developing and applying WSS regulations, and enhancing transparency through regular public sharing of information and performance data.

CONTENTS

1. INTRODUCTION	1
1.1. STRUCTURE.....	1
2. WATER SUPPLY AND SANITATION CONTEXT	2
3. POLICY AND LEGAL FRAMEWORKS FOR WATER AND SANITATION REGULATION	6
3.1. POLICIES AND FRAMEWORKS	6
3.2. LEGAL INSTRUMENTS	6
4. REGULATORY FRAMEWORKS	10
5. SPHERES OF REGULATION.....	15
5.1. REGULATED SERVICE PROVIDERS	15
5.2. REGULATED SERVICE DELIVERY TYPES	20
6. REGULATORY MECHANISMS	23
6.1. STANDARDS AND GUIDELINES.....	25
6.2. MONITORING AND PERFORMANCE REPORTING.....	25
6.4. SANCTIONS.....	32
7. REGULATORY ENVIRONMENT.....	36

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1

INTRODUCTION

1. INTRODUCTION

The attainment of Sustainable Development Goal (SDG) 6 on ensuring the ‘availability and sustainable management of water and sanitation for all’ is a crucial target for most countries. Across Africa, many systemic weaknesses undermine WSS service provision, contributing to the failure to expand access at the required rate and deliver sustainable and equitable services over time. A well-functioning regulatory system is a key-driver in delivering safe, equitable and reliable water supply and sanitation (WSS) services. Regulators ensure that service providers are accountable and supported to perform effectively, provide services equitably, that the tariffs and other financing tools help achieve sustainability while meeting the needs of the urban poor, and that key performance indicators are available for purposes of service provider benchmarking and sector performance reporting.

There is no single ‘best-practice’ or one-size-fits-all approach to regulating WSS service delivery. Various arrangements exist for regulating WSS service delivery, including regulation by agency, regulation by contract, ministerial regulation, and self-regulation. However, there has been limited up-to-date reference material on the different regulatory setups across Africa. This lack of insight limits the understanding of common challenges and trends as well as the determination of good practices to serve as models for replication in countries looking to improve WSS regulation or institute necessary reforms. Within this context, the Eastern and Southern African Water and Sanitation Regulators Association (ESAWAS) commissioned a study to map the status of WSS regulatory arrangements in all 55 African countries.⁷

This report provides an overview of WSS regulation across the Eastern African region in 14 countries: Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Mauritius, Rwanda, Seychelles, Somalia, South Sudan, Sudan, Tanzania, and Uganda. It includes a top-level summary of the regulatory frameworks for WSS in rural and urban areas and the closely related sub-sectors of environmental protection and water resources. Information is also provided on the legal and policy backing for WSS regulation, different spheres of regulation (regulated service providers, regulated service delivery types), regulatory mechanisms, and the state of the regulatory environment. This region report is drawn from country reports which provide more detailed country-specific information, while a separate continent-wide report presents a top-level overview of the status of WSS regulation across Africa.

1.1. STRUCTURE

The remainder of this report is structured into the following sections:

- **Section 2** presents an overview of the socio-economic and WSS context of the region.
- **Section 3** details the legal and policy frameworks for WSS regulation, providing key information on whether legal instruments sufficiently support WSS regulation.
- **Section 4** outlines the different regulatory models and regulatory frameworks for WSS regulation.
- **Section 5** presents how different service providers and service delivery types are regulated.
- **Section 6** presents the regulatory mechanisms that have been developed – and applied – across four aspects: standards and guidelines, monitoring and performance reporting, incentives, and sanctions.
- **Section 7** focuses on the regulatory environment for WSS regulation.

Across each of these sections, a number of case studies are provided in boxes to showcase good practices or illustrate broader trends in the regulation of WSS services.

⁷ The full list of 55 countries is based on the African Union’s Member States. See: https://au.int/en/member_states/countryprofiles2

2

WATER SUPPLY AND SANITATION CONTEXT

2. WATER SUPPLY AND SANITATION CONTEXT

Eastern Africa represents a diverse context for WSS, both among and within countries. Figures 3 and 4 present coverage rates for at least 'basic' water supply and sanitation services and plot these against per capita national income.⁸ For Eastern Africa WSS services coverage, a general trend can be observed between per capita Gross National Income (GNI) and WSS coverage, with Seychelles having the highest WSS coverage and the highest GNI per capita and South Sudan and Eritrea the lowest WSS coverage and lowest GNI per capita.⁹ Some countries like Mauritius, Comoros and Rwanda are outliers as they have significantly higher WSS coverage rates compared to other countries with similar GNI per capita. It is of course important to highlight that a country's level of income or economic development is not the only determinant for WSS coverage.

Figure 3: At Least 'Basic' Water Supply Coverage and GNI per Capita (PPP)

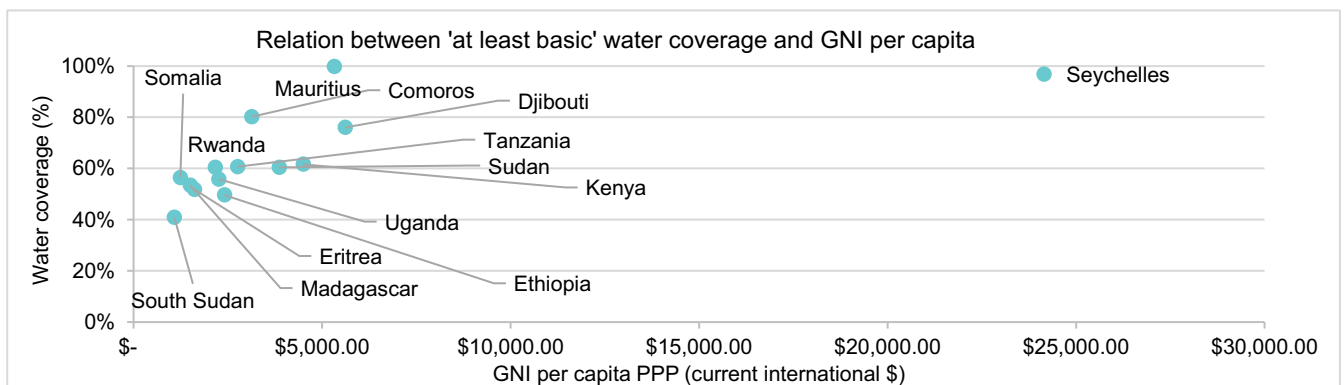
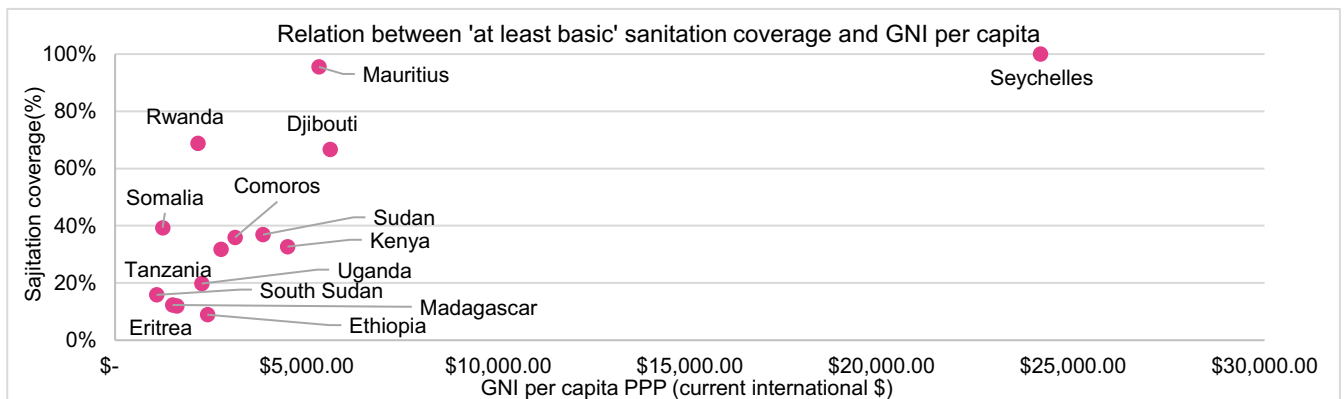


Figure 4: At Least 'Basic' Sanitation Coverage and GNI per Capita (PPP)



East African countries have had different rates of progress in improving WSS services. Figures 5 and 6 present how WSS coverage rates have changed over the last two decades. The majority of the countries in Eastern Africa have steadily improved in WSS coverage, with Comoros being the only country in which water supply coverage has decreased considerably since the 2000s. It is particularly noteworthy the accelerated rate at which Tanzania, Ethiopia, Uganda, Kenya, Rwanda and Somalia have improved water supply coverage, and Djibouti, Tanzania, Rwanda, and Somalia in sanitation.

⁸ Data presented in this section is predominantly sourced from the Joint Monitoring Program to aid analysis between countries based on a comparable methodology. However, Table One also includes country reported data on four key indicators.

⁹ A relation between GNI per capita and WSS coverage has previously been described in the literature (Jeuland, et al. 2013).

Figure 5: At Least 'Basic' Water Coverage (2000-2020) – East African countries

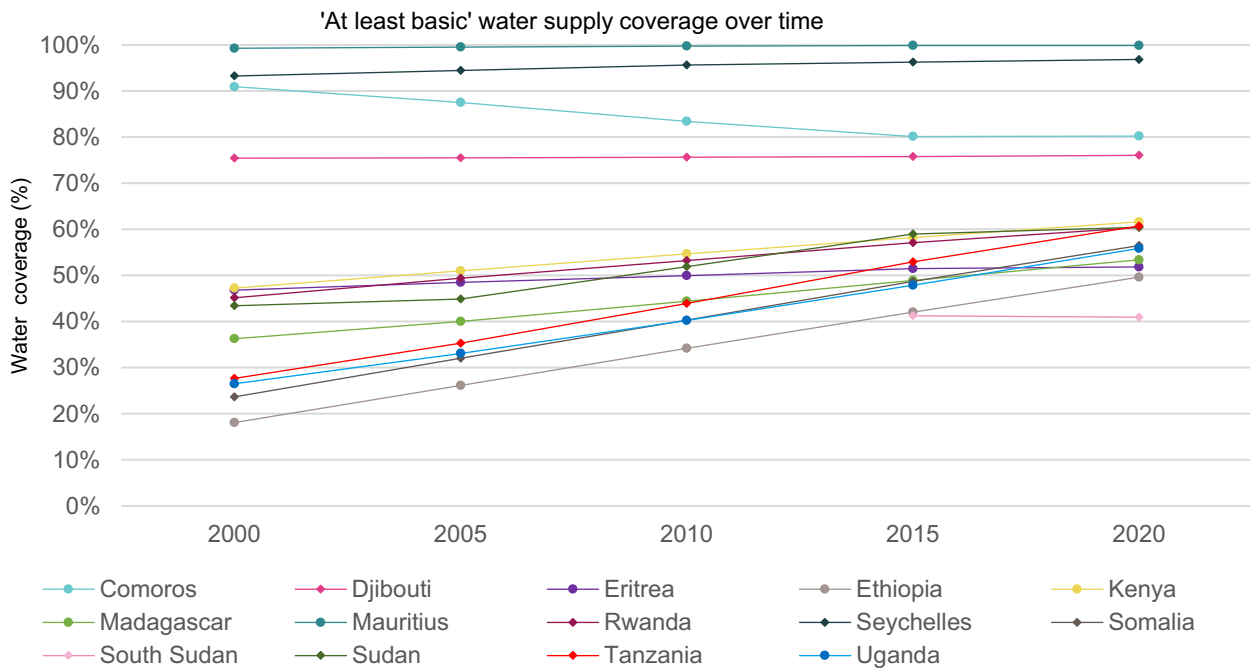
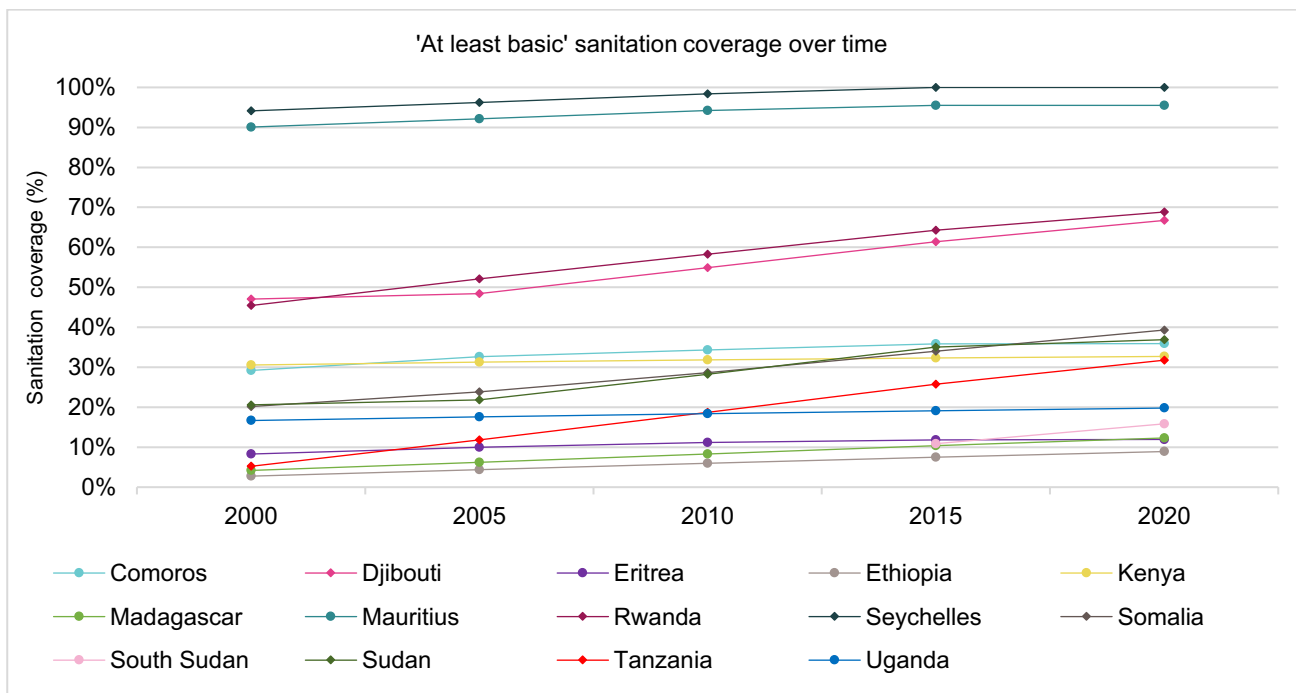


Figure 6: At Least 'Basic' Sanitation Coverage (2000-2020) – East African countries



Eastern Africa also represents a diverse context in terms of economic and developmental dimensions.

Table 2 presents data for each of the fourteen East African countries for a wide range of key indicators, spanning economic, human development, demographic, climatic fragility, and WSS aspects. Across each of the indicators detailed, Table 2 highlights varying levels of performance or conditions for delivering WSS services and highlights how Eastern Africa encompasses a broad spectrum of contexts. It is important to highlight that most of the countries did not have a reliable or updated source of information to report on WSS coverage and some key performance indicators and in these cases, it is labelled as “no data”.

Table 2: Eastern Africa Socio-Economic and Water Supply and Sanitation Indicators¹⁰

Country	Income Classification	GNI per Capita (PPP)	Population	Rural Population (%)	Human Development Index (Rank, Max. 189)	Fragile States Index (Rank, Max. 179)	Climate Vulnerability and Readiness Index (Rank, Max. 182)	At Least 'Basic' Water coverage (%) (JMP)	Water coverage (%) (Country Reported)	At Least 'Basic' Sanitation Coverage (%) (JMP)	Sanitation coverage (%) (Country Reported)	Non-Revenue Water	Cost Coverage of WSS Service Providers
Comoros ¹¹	LMIC	\$3,130	0.869	70.62	0.554	47	151	80.2% (2019)	92.9% Improved Water Source (2013)	35.9% (2019)	55.4% Improved Sanitation (2013)	No data	No data
Djibouti ¹²	LMIC	\$ 5,610	0.99	21.94	0.524	48	124	76%	92.9% Improved Water Source (2017)	66.7%	75.7% Improved Sanitation (2017)	No data	No data
Eritrea ¹³	LIC	\$1,610	3.21 (2011)	0.642 (2011)	0.459	17	180	51.85% (2016)	68.4% Improved Water Source (2010)	11.94% (2016)	20.2% Improved Sanitation (2010)	No data	No data
Ethiopia ¹⁴	LIC	2,410	114.96	78.3	0.485	11	157	49.6%	71.8% Urban = 96.8%; Rural 62.8% (2019)	8.9%	28.3% Improved Sanitation (2019)	No data	No data
Kenya ¹⁵	LMIC	\$4,500	53.77	72.00	0.601	32	148	61.6%	57% Service Coverage of Licensed Service Providers	32.7%	88% Service Coverage of Licensed Service Providers	47%	103%
Madagascar ¹⁶	LIC	\$3,420	27.69	61.74	0.528	58	166	53.4%	43% Improved Water Source (2018)	12.3%	16.7% Improved Sanitation (2018)	No data	No data
Mauritius	UMIC	\$5,320	1.27	59.25	0.804	156	49	99.9%	No data	No data	No data	No data	No data

¹⁰

Indicator	Income Classification	GNI per Capita, PPP (US\$)	Population	Rural Population	Human Development Index	Climate Vulnerability and Readiness Index	At Least 'Basic' Water coverage (%)	At Least 'Basic' Sanitation Coverage (%)
Source	World Bank Open Data. Available at: https://data.worldbank.org/				Human Development Data Centre. Available at: https://hdr.undp.org/en/data	Notre Dame Global Adaptation Initiative. Available at: https://gain.nd.edu/our-work/country-index/	Joint Monitoring Programme. Available at: https://washdata.org/	

¹¹ Country reported data for WSS coverage is based on the 2013: Enquête sur l'emploi et le secteur survey.

¹² Country reported data for WSS coverage is based on the 2017: l'Enquête Djiboutienne Auprès des Ménages survey.

¹³ Country reported data for WSS coverage is based on the National Statistics Office – Population and Health Survey, 2010.

¹⁴ Country reported data for WSS coverage is based on the Ethiopia Socio-Economic Survey, 2019.

¹⁵ Country reported data for WSS coverage is based on WASREB's IMPACT Reports.

¹⁶ Country reported data for WSS coverage is based on a 2018 Multiple Indicator Cluster Survey.

Rwanda¹⁷	LIC	\$2,160	12.62	86.57	0.543	39	124	60.4%	87%	68.8%	86.2%	42.3% (2020 RURA report)	120% (2018)
Seychelles¹⁸	HIC	\$24,140	0.098	42.45	0.796	124	75	97% (2019)	95%	100%	100%	Mahe: 25% Praslin: 20% La Digue: 32%	No data
Somalia¹⁹	LIC		15.89	53.9	No data	2	174	56.5%	83% Improved Water Source	39.3%	76.7% Improved Sanitation	No data	No data
South Sudan	LIC	\$1,080	11.06	78.8	0.433	4	No data	41.0%	41%	15.8%	10%	No data	No data
Sudan	LIC	\$3,860	43.85	64.75	0.51	8	176	60.4%	No data	36.9%	No data	No data	No data
Tanzania²⁰	LMIC	\$2761	59.73	64.77	0.529	61	145	60.7%	District and township centres: 43%. Regional centres: 82%	31.8%	32%	33.1%	107 (2020)
Uganda²¹	LIC	\$2,220	45.74	75.05	0.544	24	167	55.9%	70.5% (urban) / 68% (rural)	19.8	45% (urban) / 18% (rural)	27.6%	125% (NWSC) / 36% (UAs)

¹⁷ Country reported data for water and sanitation coverage is based on the Integrated Household Living Conditions Survey 5. Cost coverage is taken from the ESAWAS Benchmarking report.

¹⁸ Country reported data for water and sanitation coverage and non-revenue water was provided by the Public Utilities Corporation.

¹⁹ Country reported data for water and sanitation coverage is based on a 2019 Ministry of Health and Human Services survey.

²⁰ Information taken from the performance reports by EWURA

²¹ WSS coverage information taken from the performance reports by the Ministry of Water and the Environment

3

POLICY AND LEGAL FRAMEWORKS FOR WATER AND SANITATION REGULATION

3. POLICY AND LEGAL FRAMEWORKS FOR WATER AND SANITATION REGULATION

The policy and legal framework provide an enabling environment for regulation. The political, institutional, and legal setup of the market to be regulated are the foundations for effective regulation of the water supply and sanitation services sector. It is critical that the context, powers and boundaries of regulation are clearly and objectively defined, ensuring proper segregation of functions, and avoiding gaps or overlapping of functions among the various sector players. Under this section, policies, strategies and plans, laws and decrees were reviewed.

3.1. POLICIES AND FRAMEWORKS

National WASH policy documents have been developed for most of the countries in Eastern Africa, however, some of these policies do not have provisions specifically for WSS regulation. Rwanda, Ethiopia, Kenya, Madagascar, and South Sudan have developed impressive policy documents that detail actions for the different subsectors for WSS regulation. Conversely, Comoros, Djibouti and Sudan have not approved national policy documents and as such lack specifics or detailed actions for WSS regulation. Across Eastern Africa, policy documents have been developed more for water supply than sanitation, illustrating a common bias towards water supply. However, the existence and quality of WSS policy documents do not guarantee a well-performing regulatory arrangement. This is exemplified by the fact that countries like Seychelles and Tanzania do not have an updated sanitation policy but are two of the few countries in Eastern Africa regulating sanitation at scale.

3.2. LEGAL INSTRUMENTS

Legal instruments have been developed for WSS in most East African countries; however, the extent to which these address aspects of WSS regulation varies. Sudan, Comoros and Somalia are the only countries that do not have a legal instrument to back the WSS regulatory activity. A law defining the regulatory frameworks for the countries has been drafted but not yet adopted in Somalia and Comoros. Legal instruments and bylaws are supposed to be developed at the state level in the federal countries of Sudan and South Sudan. Nonetheless, comprehensive legislation outlining clear regulatory roles has yet to be developed at this level. Finally, it is important to recognise that, even when adequate legal instruments are in place to support regulatory activities, what is on paper does not always correspond to what is happening in reality. For example, Madagascar passed a Water Law in 1999 that established an independent regulator, but it has yet to begin operations, and the Ministry retains regulatory authority. The case study of Kenya is further developed in Box 1 where a Water Act was enacted that clearly defined regulatory roles and responsibilities for water supply and sewerage but omits onsite sanitation.

Box 1: Kenya – Detailed Water Act that Nevertheless Excludes Onsite Sanitation

Kenya's Water Act, 2016 provides a consolidated, explicit and comprehensive legal backing for regulating WSS services. Key relevant sections of the Act specify regulatory mandates and functions for water resources and water services. The Act established the Water Services Regulatory Board (WASREB) with the principal objective of protecting the interests and rights of consumers in the provision of water services. The Water Act also explicitly specifies a comparatively expansive set of powers and functions for WASREB, which include:

- I. Determining and prescribing standards for providing water services and asset development.
- II. Evaluating, recommending and approving the imposition of water and sewerage tariffs to county water services providers.
- III. Setting licence conditions and accrediting water services providers.
- IV. Monitoring and regulating licence conditions and accrediting water service providers.
- V. Advising the Government of Kenya.
- VI. Monitoring progress in the implementation of the Water Strategy.

- VII. Maintaining a national database and information system on water services.
- VIII. Establishing complaints mechanisms.
- IX. Developing guidelines on consumer group establishment and facilitating the establishment of these groups.
- X. Inspecting waterworks and water services to ensure they meet prescribed standards.
- XI. Reporting annually on issues of water supply and sewerage services and the performance of relevant sectors.
- XII. Maintaining a register of all licensed water services providers.
- XIII. Revoking and transferring the licence of a water services provider.
- XIV. Issuing fines to non-compliant licenced water services providers.
- XV. Imposing a special regulatory regime on a license that persistently contravenes the conditions of a licence or the requirements of the Water Act.

Beyond these aspects, the Water Act provides pertinent information on various aspects that help to strengthen the regulatory environment. These include safeguarding WASREB's autonomy (i.e., through its staffing and financing) and promoting mechanisms to increase participation and transparency. Nevertheless, the Water Act insufficiently addresses the regulation of sanitation services. Onsite sanitation is excluded entirely, limiting WASREB's ability to conduct regulatory activities in this area. This is a common challenge found across Eastern Africa. Importantly, steps have been – and continue to be – taken to address this. WASREB has published guidelines for inclusive urban sanitation service provision for utilities that encompass non-sewered sanitation. A soon to be enacted policy document places greater emphasis on onsite sanitation.

In most countries, legal instruments provide a more explicitly defined legal backing for regulating water supply services than for sanitation services. Figures 7 and 8 use a simple colour-coded traffic light system to show the extent to which legal instruments provide the required legal backing for WSS regulation.

0 = No Legal Backing. Legal instruments either do not exist or make no mention of regulatory mandates or functions for water supply or sanitation.

1 = Limited Legal Backing. Legal instruments support the regulation of water supply or sanitation services but do not provide sufficient legal backing. This usually occurs where legal instruments exist and specify regulatory mandates and responsibilities but fail to detail the specific regulatory functions and powers or consider the sub-sectors and types of service providers to be regulated.

2 = Strong Legal Backing. Legal instruments address water supply or sanitation regulation, setting out regulatory mandates and functions.

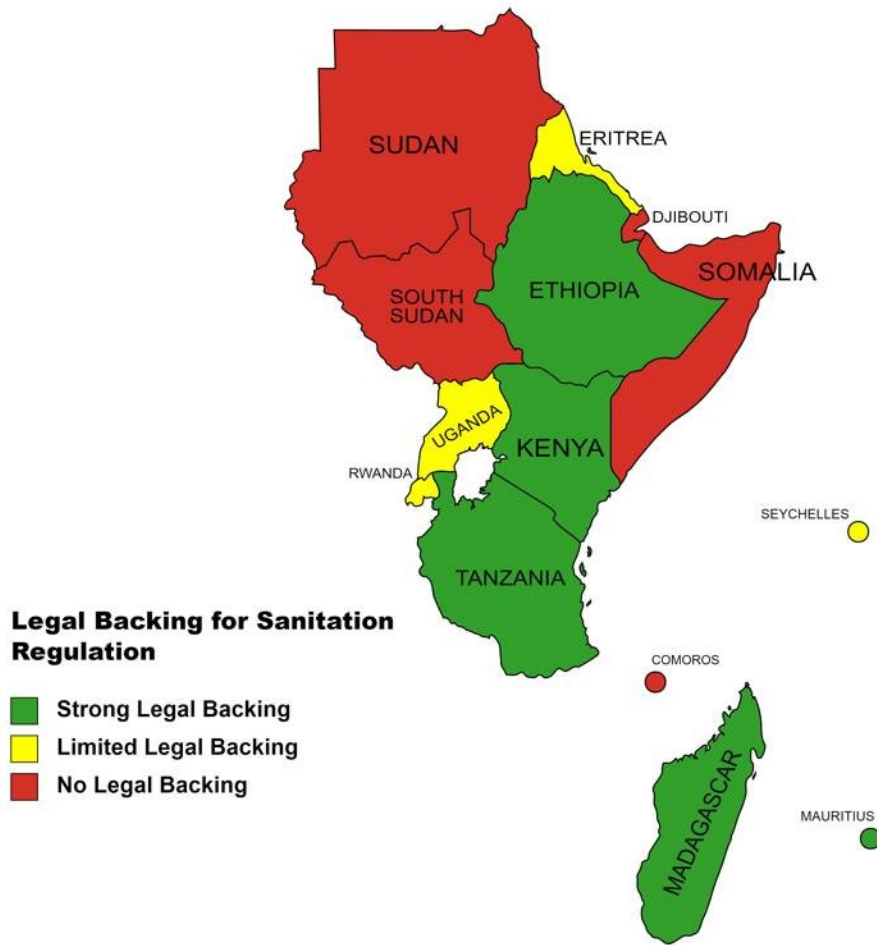
On the water supply side, Figure 7 highlights a moderately positive picture, with nine out of fourteen East African countries having an appropriate legal backing for regulating water supply services. This is not to say that these acts or other legal instruments could not be updated or strengthened. However, for the most part, legal instruments explicitly define regulatory actors' mandates at the national level and specify their powers and functions, providing the necessary legal backing to perform key regulatory activities for water supply service delivery.

Figure 7: Legal Instruments for Regulating Water Supply Services



Figure 8 depicts the disparity in progress on legal instruments for regulating sanitation services when compared to water supply. Three countries do not have a legal instrument to back regulatory activities for sanitation and four countries have legal instruments, but these do not provide sufficient detail on mandates or functions of the different WSS subsectors (urban sanitation, rural sanitation). This can be explained by the limited priority given to sanitation services as compared to water supply.

Figure 8: Legal Instruments for Regulating Sanitation Services



4

REGULATORY ARRANGEMENTS

4. REGULATORY ARRANGEMENTS

Any regulatory model must be fit-for-purpose and custom designed for a specific country's institutional context and political economy. Regulation tends to be incremental, with a focus on what is possible to be regulated. To ensure the effectiveness of its regulatory actions, the regulator may adopt a variety of regulatory strategies to suit the sector context. There are four main models by which regulation is instituted. These are:

- I. **Regulation by Agency.** A regulatory body (semi-) autonomous from the government has discretionary powers to regulate WSS or aspects of WSS. This regulatory agency can be mandated to perform a specific set of functions (i.e., economic regulation) or hold a more comprehensive set of powers for regulating WSS service delivery.
- II. **Regulation by Contract.** An approach whereby a public entity (other than an autonomous regulatory agency) and a service provider agree on contractual clauses that determine 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.
- III. **Ministerial Regulation.** A ministry is tasked with performing some or all regulatory responsibilities for WSS. For example, where a ministry is responsible for developing standards and guidelines, as well as overseeing some WSS service providers and applying regulatory tools (i.e., standard enforcement, monitoring, performance reporting).
- IV. **Self-Regulation.** 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.











Across Eastern Africa, various regulatory models are applied to WSS service provision. Table 3 details the main regulatory models applied to each country and in total across the Eastern Africa Region with the predominant²² ones marked as . It does not consider regulatory responsibilities for water resources or environmental protection (see Table 4). It highlights that most countries have mixed regulatory frameworks based on multiple regulatory models applied across the four WSS sub-sectors (urban water supply, rural water supply, urban sanitation, rural sanitation) and for different service providers. However, it is noteworthy that even if all countries are classified in a regulatory model, some have only developed and apply a very limited set of regulatory mechanisms and are not meaningfully regulating WSS services (i.e., Sudan, South Sudan, and Somalia).

Table 3: Regulatory models Applied for Water Supply and Sanitation Service Provision

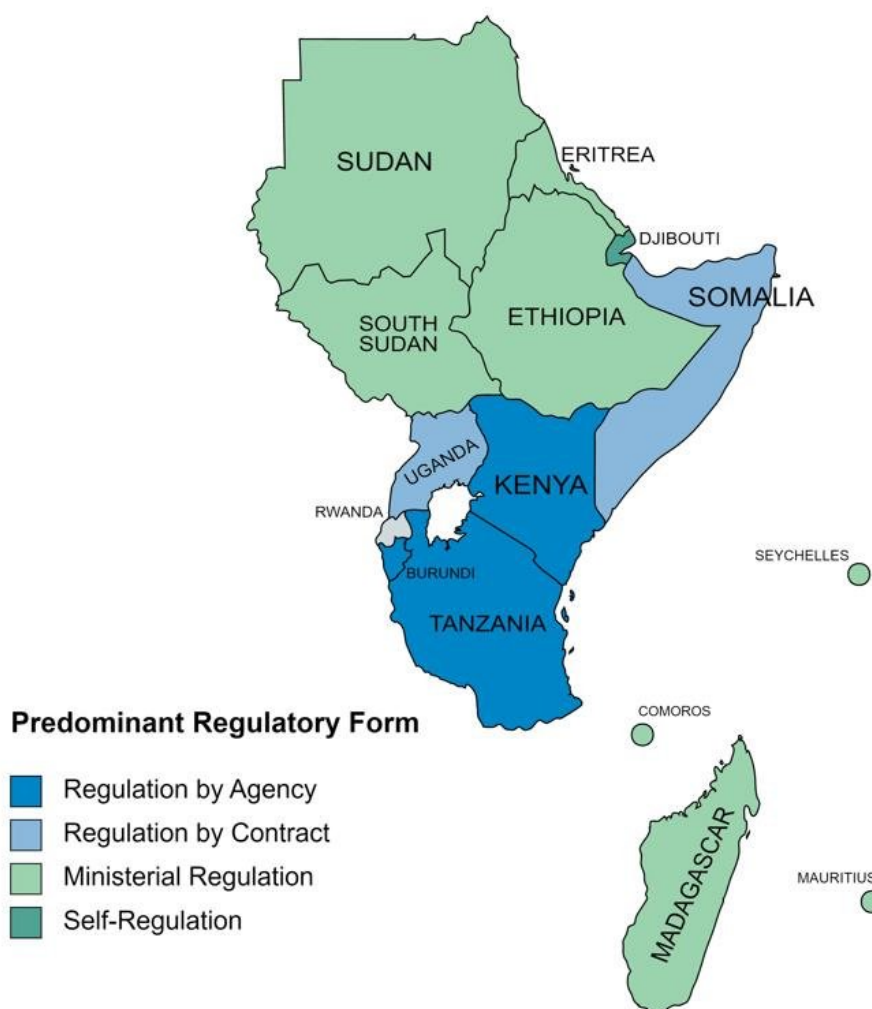
Country	Regulatory model			
	Regulation by Agency	Ministerial Regulation	Regulation by Contract	Self-Regulation
Comoros	✗		✗	✗
Djibouti	✗	✓	✗	
Eritrea	✗		✗	✗
Ethiopia	✗		✗	✗
Kenya		✗	✗	✗
Madagascar	✗		✓	✗
Mauritius	✗		✗	✗
Rwanda		✗	✗	✗
Seychelles	✓		✗	✗

²² The predominant regulatory form refers to the regulatory form under which the primary service provider in each country is regulated. In most cases, this refers to how a national or regional utility is regulated.

Somalia	✗	✓	✓	✗
South Sudan	✗	✓	✗	✗
Sudan	✗	✓	✗	✗
Tanzania	✓	✓	✗	✗
Uganda	✗	✗	✓	✓
Total regulatory model applied	4	11	3	2
Total predominant regulatory model applied	3 (21%)	8 (57%)	2 (14%)	1 (7%)

Figure 9 presents the main regulatory models applied across Eastern Africa for WSS service provision. It does not consider regulatory responsibilities for water resources or environmental protection (see Table 4).

Figure 9: Regulatory models Applied for Water Supply and Sanitation Service Provision



Many countries have hybrid regulatory frameworks, applying different regulatory models across WSS sub-sectors and service providers. Table 4 details the main regulatory actors and regulatory models applied for each East African country across several WSS sub-sectors. It shows that most countries have hybrid regulatory frameworks based on **multiple regulatory models** and that several actors typically hold regulatory responsibilities.²³ In many countries, this reflects how different regulatory frameworks have been developed to account for the wide range of WSS service providers (see Sub-Section 5.1.) or the application of different regulatory models to the water resources management and environmental protection sub-sectors. Kenya is an

²³ In most countries, some regulatory functions are performed at the sub-national level (i.e., by local government); however, this is typically done under the broad scope of requirements set by a regulatory agency or a ministry performing regulatory functions. These actors are only included in Table 3 where they can develop and enforce their own by-laws or other regulatory mechanisms for WSS service delivery independently from reverting to the national level

example of a clear, well-organised regulatory context where responsibilities are explicitly defined among three regulatory agencies (see Box 1).

Table 4. Regulatory model

Key						
Regulation by Agency		Ministerial Regulation		Regulation by Contract		Self-Regulation
Country	Urban Water	Rural Water	Urban Sanitation	Rural Sanitation	Water Resources Management	Environmental Protection
Comoros	Ministry of Energy and Water Resources					
Djibouti	The National Office of Water and Sanitation	The Ministry of Agriculture, Water, Fisheries and Livestock	The National Office of Water and Sanitation	The Ministry of Agriculture, Water, Fisheries and Livestock		Ministry of the Environment
	Ministry of Health					
Eritrea	Water Resources Department of the Ministry of Lands, Water and Environment				Department of the Environment	
	Sub Zoba Water Resources Committees		Ministry of Health		Zoba Water Resources Committees	Zoba Environmental Branch Offices
Ethiopia	Ministry of Water and Energy					Environment, Forest and Climate Change Commission
	Water Boards	Woredas	Ministry of Health			
			Water Boards	Woredas		
Ministry of Water and Energy						
Kenya	Water Services Regulatory Board (WASREB)				Water Resources Area	National Environment Management Authority
Madagascar	Ministry of Water, Sanitation and Hygiene				National Water and Sanitation Authority	
Mauritius	Ministry of Energy and Public Utilities (MEPU)					Ministry of Environment, Solid Waste Management, and Climate Change
	Central Water Authority		Wastewater Management Authority			
			Local Governments			
Ministry of Health						
Rwanda	Rwanda Utilities Regulatory Authority				Rwandan Water Resources Board	Rwandan Environmental Management Authority
	Districts					
Seychelles	Ministry of Agriculture, Environment and Climate Change					
	Public Health Authority					
Somalia	Ministry of Energy and Water Resources					Ministry of the Environment
	Ministry of Health					
State Ministries						
South Sudan	Local Government councils					
	Ministry of Health		Ministry of Lands, Housing and Urban Development of South Sudan			
	Ministry of Water Resources and Irrigation					
Sudan	States					
	Mahalias/Locality				High Council for Environmental and Natural Resources	
Tanzania	Energy and Water Utilities Regulatory Authority				Basin Water Boards	
	Rural Water Supply and Sanitation Agency (RUWASA)		Local Governments		National Environmental Management Council	
			RUWASA			

Uganda	Water Utilities Regulation Department	Local Governments			Water Resources Planning and Regulation Department	National Environmental Management Authority
		Rural Water Supply and Sanitation Department	Water Utilities Regulation Department	Ministry of Health		

Ministerial Regulation is the predominant regulatory model, but the specifics of how it is applied varies among countries. Ministerial regulation is applied at least to some degree in eleven countries and it is the main regulatory model in six countries. Uganda is particularly interesting as the Ministry has a designated department that focuses only on regulating public utilities through performance contracts as described in Box 2.

Box 2: Uganda’s Application of Regulation by Contract

Regulation by contract is the predominant regulatory model in Uganda. The 1997 Water Act empowers the Ministry of Water and Environment (MWE) to regulate WSS service provision, but regulatory responsibilities within MWE have evolved considerably over time. A regulatory unit was created within MWE in 2009, and in 2016 the Water Utilities Regulatory Department (WURD) was established as a dedicated department focused on several key aspects of WSS regulation:

- I. Service provider licensing and contracting.
- II. Tariff review and approval.
- III. Technical regulation of service quality.
- IV. Standard and guideline development.
- V. Competition management and service area designation.
- VI. Customer protection.

The major urban WSS providers are the National Water and Sewerage Corporation, which serves cities and large towns, and six regional Umbrellas of Water and Sanitation, which serve small towns and rural growth centres. Each of these service providers are regulated by contract. WURD is responsible for developing the contracts, including determining key performance indicators and targets and monitoring service providers’ performance during the contract period. Providers who meet or exceed their contracts’ targets are eligible for bonuses and conditional grants. The contracts currently only cover piped water supply (and sewerage in the case of the National Water and Sewerage Corporation). The inclusion of indicators on point source water quality and onsite sanitation are under consideration.

In Uganda, the use of contracts has been valuable in establishing clear expectations and incentives for service providers. Furthermore, the existence of a dedicated department within MWE focused on regulation has helped ensure that there are sufficient resources and expertise available to effectively design and monitor the contracts – particularly as their use has been expanded from only the National Water and Sewerage Corporation to the six Umbrellas in recent years.

Ministerial regulation is also applied in four federal countries in Eastern Africa but combined with other regulatory frameworks. For instance, in Sudan, regulatory responsibilities for WSS are assumed exclusively by the central state-level ministry. In more comprehensive arrangements such as Ethiopia’s (see Box 3), the Federal level dictates general regulations that all regions must follow, with performance monitoring and tariff setting being decentralised to the state level.

Box 3: Ethiopia – Ministerial Regulation in Federal Countries

Ethiopia has a highly decentralised regulatory arrangement that reflects its federalised nature. It practices **ministerial regulation** for both water supply and sanitation services. Although Ethiopia’s decentralised regulatory frameworks are relatively clear and well-structured, the capacity to apply regulations is often limited. At the local level, a lack of staff, specialised skills, and budgets often prevent woredas (local government) and small-town water boards from actively engaging in regulatory activities.

Under the counties’ One WASH National Programme, precise regulatory frameworks exist at each governmental level for water supply services. At the federal level, the Ministry of Water and Energy (MoWE) is mandated to establish regulations and standards, develop financing mechanisms, and build the capacity of other levels of government. Regional bureaus are mandated to formulate region-specific regulations and guidelines, ensure compliance with federal regulations, and conduct regular monitoring of – and provide technical assistance to – service providers. In larger regions, some functions such as monitoring and technical support are decentralised to the zonal level. Performance

monitoring, customer protection, and tariff setting are further decentralised to the local level. In large cities and small towns, utilities formally referred to as Water Supply and Sanitation Services Enterprises (WSSSEs) are overseen by independent Boards typically composed of representatives of the regional, zonal, woreda and/or town administration, consumers, and other stakeholders such as the business community. In rural areas, community-based committees operate water facilities and set and collect fees from users, with woredas mandated to oversee their operations.

While the roles of each level of government are similar for sanitation, regulatory responsibilities are much more fragmented. MoWE, the Ministry of Health, the Environment, Forest and Climate Change Commission, and the Ministry of Urbanisation and Infrastructure all have mandates to regulate aspects of sanitation. Similarly, there are often multiple bureaus, such as health and urban development, involved in sanitation at the regional level. Local oversight by WSSSE Boards or woreda governments is limited, as WSSSEs and community-based committees typically play little role in sanitation service delivery.

Self-regulation is applied in Djibouti where the publicly owned water utility is legally mandated to regulate itself. Self-regulation often ends up being applied for aspects of WSS service delivery because of the low capacity of regulatory actors to oversee all aspects of service delivery. For example, it is often the case that regulatory mechanisms are not applied to water committees or private vacuum tanker operators despite responsibilities being detailed on paper. However, Djibouti is the only country in Eastern Africa where there is a legal disposition for self-regulation, with legal instruments specifying key responsibilities for the service provider to regulate itself in several areas (see Box 4).

Box 4: Djibouti – Africa’s Most Comprehensive Example of Self-Regulation

Djibouti is the only African country where service providers are mandated with the most comprehensive set of functions related to regulating their own performance. The National Office of Water and Sanitation (ONEAD) is a financially autonomous public enterprise that is Djibouti’s primary WSS public utility. It provides piped water supply and sewerage services in the urban and semi-urban areas that most of Djibouti’s population reside in. [Law No. 145/AN/06/5L](#) establishing ONEAD in 2006 and its subsequent decrees explicitly specify a broad set of regulatory functions for ONEAD, with only limited supervision from relevant ministries (Ministry of Agriculture, Water, Fisheries, Livestock and Fish Resources, Ministry of Health, Ministry of Environment).

Of note, ONEAD has the authority to adjust tariffs at the end of each year in accordance with the evolution of cost-of-production indices. The General Management of ONEAD presents proposed tariff updates to the Board of Directors for consideration and then to the State’s highest authority for approval by decree. For drinking water services, ONEAD is supposed to conduct as many tests as necessary to determine the quality of the water supplied and shall comply with all applicable regulatory requirements. ONEAD is also responsible for adapting drinking water infrastructures’ capacities to growing urban demand. For sanitation services, ONEAD is required to test effluent at least once every six months and to include the following information:

- The volume of effluent received in twenty-four hours (m^3/day).
- Effluents concentrations in Biological Oxygen Demand, Chemical Oxygen Demand and Suspended Solids.
- Daily flows over twenty-four hours at the outlet.

5

SPHERES OF REGULATION

5. SPHERES OF REGULATION

WSS service delivery is mainly comprised of network infrastructures which create natural monopolies that need to be regulated. The extent and diversity of the scope of the regulator's mandate and the specificities of the country's political-administrative governance model may require adoption of different regulatory regimes for different service providers. In this section, who and what is regulated was examined.

5.1. REGULATED SERVICE PROVIDERS

Different forms of regulation are applied to different types of WSS service providers. Section 4 highlighted how, in most countries, several actors hold regulatory responsibilities for WSS and that multiple regulatory models are applied. For the Eastern African region, this variation is largely explained by the existence of multiple types of WSS service providers in each country and that varying regulatory arrangements have often been developed for each of these. This is not surprising considering the markedly different challenges in – and requirements for – regulating national or regional utilities, private operators of varying sizes and formality, and community-based organisations (i.e., water committees).

Table 5 details the main WSS service providers for all the East African countries, the services they provide, the primary actors responsible for their regulation and the regulatory model applied. It is important to note that even if on paper there are regulatory arrangements in place, in practice, in some countries, some service providers are not being regulated, or they are being regulated on a limited basis.

Table 5: Regulatory Responsibilities – Water Supply and Sanitation Service Providers

Country	Service Provider	Service Provider Type	Services Provided	Regulatory Actor	Regulatory model
Comoros	National Water Company	National Public Utility	Urban and Rural Piped and Point Water Sources	Ministry of Energy and Water Resources	Ministerial Regulation
	Local Governments	Local Government Entity	Urban and Rural Sanitation	Ministry of Energy and Water Resources	
Djibouti	The National Office of Water and Sanitation (ONEAD)	National Public Utility	Urban Piped Water Supply and Sewerage	ONEAD	Self-Regulation
	Private Water Supply Operators	Privately Owned	Urban Point Water Sources	ONEAD	Ad-hoc Regulation
	Department of Rural Water	Ministry	Rural Water Supply and Sanitation	Department of Rural Water	Self-Regulation
	Private Water Supply Operators	Privately Owned	Rural Point Water Sources	Department of Rural Water	Ministerial Regulation
	Private Septic Tanks Emptiers		Urban Faecal Sludge Emptying and Transportation	ONEAD	Ad-hoc Regulation
	Private Septic Tanks Emptiers		Rural Faecal Sludge Emptying and Transportation	Department of Rural Water	Ministerial Regulation

Country	Service Provider	Service Provider Type	Services Provided	Regulatory Actor	Regulatory model
Eritrea	Sub-Zoba Water Supply Units	Sub-National Publicly Owned Utility	Rural and Urban Piped Water Supply	Sub-Zoba Administration	Ministerial Regulation
	Asmara Water Supply and Sewerage Department		Piped Water Supply and Sanitation in Asmara	Maekel Zoba Administration	
	Private Water Tanker	Privately Owned	Urban Water Supply	Sub-Zoba Administration	
	Town Municipalities	Sub-National Publicly Owned Utility	Urban Sanitation		
	Water Committees	Community-Based Organisations	Rural Water		
Ethiopia	Water Supply and Sanitation Services Enterprises	Sub-National Publicly Owned utility	Urban Piped Water Supply and Sewered Sanitation	Water Boards, RWB	Ministerial Regulation
	Vacuum Tanker Operators	Privately Owned	Urban and Rural Faecal Sludge Emptying and Transportation	Addis Ababa Water and Sewerage Authority (Addis Ababa only)	Ad-Hoc regulation
	Manual Pit Emptiers			No regulatory frameworks specified	
	Water, Sanitation and Hygiene Committees	Community-based organisation	Rural Water Supply	Woreda (Local Government)	Ministerial Regulation
	Self-provision	Household	Rural sanitation services	Woreda (Local Government)	Ministerial Regulation
Kenya	90 Licensed Service Providers	Sub-National Publicly Owned Utility	Rural and Urban Piped Water Supply and Sanitation	Water Services Regulatory Board	Regulation by Agency
	Informal Service Providers	Private Operators	Water Trucks and Point Water Sources	Water Services Regulatory Board via County Governments	
	Vacuum Tanker Operators	Publicly and Privately Owned	Urban and Rural Faecal Sludge Emptying and Transportation		
	Manual Pit emptiers	Privately owned	Urban Faecal Sludge Emptying and Transportation		
	Water Management Committees	Community-Based Organisations	Rural Water Supply		
Madagascar	<i>Jiro sy Rano Malagasy</i> – Electric and Water Services Company (JIRAMA)	National Publicly Owned Utility	Urban Water Supply	Ministry of Water, Sanitation and Hygiene	Ministerial Regulation
	Private Operators	Privately Owned	Urban and Rural Water Supply	Communes	Regulation by Contract

Country	Service Provider	Service Provider Type	Services Provided	Regulatory Actor	Regulatory model
	Water Point Committees	Community-Based Organisations	Rural Water Supply		Ministerial Regulation
	Local Communes	Local Government Entity	Faecal Sludge Transportation	Ministry of Water, Sanitation and Hygiene	
	Vacuum Tanker Operators	Privately Owned	Urban and Rural Faecal Sludge Emptying and Transportation	Communes	
	Manual Pit Emptiers			Communes	
Mauritius	Central Water Authority	National Publicly Owned Utility	Water supply in urban and rural areas	Ministry of Energy and Public Utilities	Ministerial Regulation
	Wastewater Management Authority	National Publicly Owned Utility	Urban and Rural Sewered Sanitation		
	Private Vacuum Tankers	Privately owned	Urban and Rural Faecal Sludge Emptying and Transportation	Wastewater Management Authority	Utility Regulation
Rwanda	Water and Sanitation Corporation	National Publicly Owned Utility	Urban and Rural Water Supply and Sanitation	Rwanda Utilities Regulatory Authority (RURA)	Regulation by Agency
	Private Operators	Privately Owned	Rural Water Supply		Regulation by Agency through Performance Contracts
	Water Committees	Community-Based Organisation	Rural Water Supply	RURA via Service Providers	Regulation by Agency
	Private Vacuum Tankers	Privately Owned	Urban and Rural Faecal Sludge Emptying and Transportation		
Seychelles	Public Utilities Commission	National Publicly Owned Utility	Urban and Rural Water Supply	Ministry of Agriculture, Environment and Climate Change; Public Health Authority	Ministerial Regulation; Regulation by Agency
	Bottled Water Suppliers	Privately Owned	Bottled Water	Public Health Authority	Regulation by Agency
	Private Boreholes		Rural Water Supply	Public Utilities Commission	Ad-hoc Regulation
	Private Vacuum Tankers		Urban and Rural Faecal Sludge Emptying and Transportation	Public Health Authority	Regulation by Agency

Country	Service Provider	Service Provider Type	Services Provided	Regulatory Actor	Regulatory model
Somalia	Private service providers	Privately Owned	Urban Water Supply	State Ministry of Energy and Water Resources	Regulation by Contract
	Community-Based Water Supply Organisations	Community-Based Organisations	Rural -and to a lesser extent - Urban Water Supply	No regulatory frameworks specified	
	Private Vacuum Tankers	Privately Owned	Urban and Rural Faecal Sludge Emptying and Transportation		
	Manual Pit Latrine emptiers		Urban and Rural Faecal Sludge Emptying and Transportation		
South Sudan	South Sudan Urban Water Corporation	National Publicly Owned Utility	Piped water supply in urban areas	Ministry of Water Resources and Irrigation	Ministerial Regulation
	Private Water Vendors	Privately Owned	Urban and Rural Water Tankers	Local Government Councils	Ministerial Regulation
	Private Vacuum Tankers		Urban Faecal Sludge Emptying and Transportation		
	Water Management Committees	Community-Based Organisation	Rural Water Supply		
	Private Manual Pit Emptiers	Privately Owned	Urban and Rural Faecal Sludge Emptying and Transportation		
Sudan	State Water and Sanitation Corporations	Regional Publicly Owned Utility	Urban Piped Water Supply and Sewered Sanitation	State Ministry of Planning and Public Utilities	Ministerial Regulation
	Private Water Operators	Privately Owned	Urban Water Supply	Mahalias (Local Government)	
	Private Donkey Cart Operators		Urban Water Tankers		
	Private Water Vendors	Community-Based Organisations	Rural Water Supply	Water and Environmental Sanitation Unit at locality level	
	Water Committees		Privately Owned	Urban and Rural Faecal Sludge Emptying and Transportation	No regulatory frameworks specified
	Private Vacuum Tankers	Privately Owned	Urban and Rural Faecal Sludge Emptying and Transportation		No regulatory frameworks specified
	Manual Pit Latrine Emptiers	Privately Owned			No regulatory frameworks specified

Country	Service Provider	Service Provider Type	Services Provided	Regulatory Actor	Regulatory model
Tanzania	Water Supply and Sanitation Authorities (WSSAs)	Sub-National Publicly Owned Utility	Urban Piped Water Supply and Sewered Sanitation	Energy and Water Utilities Regulatory Authority (EWURA)	Regulation by Agency
	Water Tankers	Privately Owned	Water in urban and rural areas not covered by WSSAs	EWURA through WSSAs	
	Vacuum Tankers	Sub-National Publicly Owned Utility	Faecal sludge emptying and transportation in urban and rural areas	EWURA through WSSAs	
		Privately Owned	Faecal sludge emptying and transportation in urban and rural areas	EWURA through WSSAs	
	Water Committees	Community-Based Organisation	Water supply in rural areas	Rural Water and Sanitation Agency	Ministerial regulation
Uganda	National Water and Sewerage Corporation	National Publicly Owned Utility	Urban Piped Water and Sewered Sanitation	Water Utilities Regulation Department of Ministry of Water and Environment	Regulation by Contract
	6 Umbrella Authorities	Regional Publicly Owned Utility	Piped Water Supply in Small Towns and Rural Growth Centres		
	Kalangala Infrastructure Services	Privately Owned	Water Supply in Small Urban Centres		
	Buikwe District Local Government	Local Government Entity	Water Supply in Buikwe		
	Water User Groups	Community-Based Organisation	Management of rural point water sources	Local government	Ministerial Regulation
	Vacuum Truck Operators	Privately Owned	Urban Faecal Sludge Emptying and Transportation		
	Manual Pit Emptyers		Urban and Rural Faecal Sludge Emptying and Transportation		

Regulatory activities primarily focus on the main WSS service providers in each country. In all East African countries, the primary regulatory actors (i.e., a ministry or regulatory agency) largely focus on the main WSS service providers (i.e., a national utility or large private operators) that predominantly serve urban and peri-urban areas. These service providers have been the focus of the various regulatory mechanisms applied, while limited attention is generally given to smaller, deconcentrated service providers. For example, water committees are typically supposed to be regulated by local government, which often lack the necessary guidance, tools and capacity to perform their regulatory functions in this area. In the countries where regulatory actors at the national level have retained some responsibility for overseeing a wide range of service providers (i.e., a national utility and smaller private operators), differentiated approaches to WSS regulation have usually been key to enabling this. Rwanda and Tanzania are examples of this, both having national regulatory agencies with outreach to rural areas and small service providers. The case of Rwanda is further expanded in Box 5.

Box 5: Reaching rural communities in Rwanda

As part of the [Poverty Reduction Strategy published in 2008](#), to reach the rural communities with water services, the Rwandan government has set up a public-private partnership (PPP) scheme where service provision is delegated to private companies by the Districts, the infrastructure asset holders. The Ministry of Infrastructure and the Rwanda Utilities Regulatory Authority (RURA) have released a series of [guidelines](#), [manuals](#) and standards specific to the rural water supply sub-sector, that have a differentiated approach depending on the size of the population served and the complexity of the system.

To regulate these service providers, [performance contracts](#) are signed between private operators and Districts that state quality, performance, and monitoring parameters. RURA is also responsible for monitoring performance indicators and arbitration if there is a conflict between the signatory parties. For private service providers to be eligible to operate they must also have a license issued by RURA. In terms of monitoring, private operators [report](#) to RURA, the Districts and Water and Sanitation Corporation (WASAC) on key performance indicators as well as water quality standards. While WASAC has a role of providing technical assistance, both RURA and the Districts have responsibility for enforcing regulations by private operators.

Regulatory frameworks for rural water provision in Rwanda have been recognised as good practice that has allowed the professionalisation of rural water supply provision with improved results (WSP 2010), (Lockwood and Le Gouais 2015). However, some challenges remain in its implementation, such as the static tariff guidelines that vary depending on the pumping type, that only allow for full cost recovery for gravity systems.

Source:

Lockwood, Harold, and Anna Le Gouais. 2015. Tripple-S Professionalising Community-Based Management for Rural Water Services. . Briefing note, IRC.

WSP. 2010. "A review of progress in seven African countries: Public-Private Partnerships for Small Piped Water Schemes." Field Note.

5.2. REGULATED SERVICE DELIVERY TYPES

The regulation of WSS services predominantly focuses on piped water supply services and – to a somewhat lesser extent – sewerage sanitation. Table 6 uses a simple colour-coded traffic light system to present an overview of the extent to which regulations have been developed for six core WSS service delivery types and whether these are regulated at scale²⁴ This represents a simplification of the situation within individual countries; however, it highlights how regulatory activities are largely centred on networked piped water supply services and sewerage sanitation. These services are mainly provided by the large, formalised service providers (i.e., national or regional utilities, large private operators) that are also the primary focus of regulatory activities in most countries.

Table 6: Extent of Regulation of Different Service Delivery Types

Country	Water Supply			Sanitation		
	Networked Piped Water Supply	Point Water Sources	Household Water Supply Sources	Sewered Sanitation	On-Site Sanitation	Communal Sanitation
Comoros	0	0	0	0	0	0
Djibouti	1	0	0	1	0	0
Eritrea	1	1	0	1	0	0
Ethiopia	1	1	0	2	0	0
Kenya	2	1	1	2	1	1
Madagascar	1	0	0	0	0	0
Mauritius	2	0	0	2	2	2
Rwanda	2	2	0	0	2	0
Seychelles	2	1	1	2	2	0
Somalia	1	0	0	0	0	0
South Sudan	1	0	0	0	0	0
Sudan	1	0	0	1	0	0
Tanzania	2	2	1	2	2	1
Uganda	2	0	1	2	1	1

²⁴ Scoring: 0 = There are no regulations for this type of service provision; 1 = Regulations developed but rarely applied or only applied on a limited basis; 2 = Regulations developed and applied at scale.

The regulation of water supply services remains largely focused on networked piped water supply services, despite a number of countries having developed regulations for point water sources. Table 6 shows moderate performance across the Eastern African region, reflecting how most East African countries have developed regulations for networked piped water supply services and are regulating point water sources at a limited scale. In particular, Tanzania has made important progress regulating different WSS service delivery types (see Box 6).

Box 6. Tanzania regulatory frameworks for non-conventional water sources

Although significant challenges persist (i.e., in regulating small informal providers in peri-urban areas), Tanzania is one of the few African countries that has taken several steps to regulate water supply sources other than networked piped water supply. Informal water supply providers, such as water tankers and private boreholes, exist in areas where the water utility has not been able to reach. Even if these are not directly regulated by the Energy and Water Utilities Regulatory Authority, the main regulatory actor, they must be registered under the Water Authority, which is in charge of monitoring the water quality standards. In this regard, in 2013, the Energy and Water Utilities Regulatory Authority issued Guidelines for Regulation of Water Tanker Services and Guidelines for Regulation of Private Boreholes Services. Following implementation of the Guidelines in selected service areas, the Guidelines have been reviewed and Rules have been prepared for application in service areas of all water utilities. With regard to water kiosks, they are required to operate in accordance with Guidelines for Operation and Management of Water Kiosks issued by the Energy and Water Utilities Regulatory Authority.

Less progress has been made in regulating sanitation services compared to water supply, with activities mainly focussed on sewered sanitation. From Table 6 is also evident that less progress has been made in developing regulations for sanitation services and ensuring these are applied at scale relative to water supply services. Rwanda, Tanzania, Kenya, Seychelles and Mauritius have made important progress in developing regulations and regulatory mechanisms for onsite sanitation services; however, significant challenges remain in all cases to ensure their implementation across the whole territory. Rwanda is an especially interesting case study because rural service provision is done by private operators that are licenced and regulated by RURA through performance contracts. The case of Rwanda is expanded in Box 7.

Box 7. Rwanda’s Inclusive Regulatory frameworks for Different Sanitation Solutions

Rwanda far outperforms most African countries in sanitation provision (69% of the population access at least ‘basic’ sanitation), especially considering its relative level of economic development. This success is reflected in Rwanda’s approach of reaching all with onsite sanitation services. As a result, Rwanda has nearly eliminated open defecation, and the vast majority of the population (96%) utilises on-site facilities of varying levels of quality. This pragmatic approach is reflected in Rwanda’s regulation of sanitation services.

Unlike many African countries that place greater emphasis on sewered sanitation, Rwanda has focused on regulating the onsite sanitation solutions used by an overwhelming majority of its population. Although some gaps exist, the following comparatively comprehensive arrangements have been developed across the service chain:

- **Containment.** Districts act as regulators, providing standards for on-site sanitation facilities and septic tanks. To enforce such regulations, households are required to get construction permits.
- **Emptying and Transportation.** Service providers can be municipalities or the private sector through contracts with the districts. The Rwanda Utilities Regulatory Authority regulates emptying and transportation, and several key performance indicators are included in the contracts signed by the district with private service providers. Some gaps exist, including the absence of manual or portable pump emptying services in regulations and that tariffs for emptying are unregulated.
- **Treatment.** Districts are the service providers. Dedicated faecal sludge treatment plants do not exist. Nevertheless, the Rwanda Environmental Management Authority monitors the treatment process and effluent quality and pre-treatment effluent quality. The main regulatory instruments used include licences issued by the Rwanda Environmental Management Authority that govern decentralised wastewater treatment. Standard operating procedures for faecal sludge treatment are missing.
- **Re-Use.** A Ministry of Agriculture permit is required to re-use sludge or treated wastewater. However, treated sludge or wastewater re-use is not currently practised.

Rwanda has also developed a [draft policy document](#) that includes the principles of City-Wide Inclusive Sanitation to tackle urban sanitation comprehensively, considering all the stages of the sanitation service chain and further regulatory developments to improve sanitation service delivery.

6

REGULATORY MECHANISMS

6. REGULATORY MECHANISMS

A regulatory mechanism is an intervention or process used by a regulatory actor to guide and influence the behaviour and performance of key stakeholders within the WSS sector, particularly service providers. The existence of four sets of regulatory mechanisms was examined:

- **Standards and Guidelines.** Whether standards and guidelines have been developed for quality of service, tariff setting, planning and reporting, citizen involvement, and environmental protection, and whether developed standards and guidelines adequately consider pro-poor aspects.
- **Monitoring and Performance Reporting.** Whether there is adequate monitoring and reporting by service providers and the regulatory authority, and whether an appropriate set of service quality, economic efficiency and operational sustainability indicators are tracked.
- **Incentives.** Whether regulatory authorities are applying financial and reputational incentives to WSS service providers.
- **Sanctions.** Whether regulatory authorities can suspend or remove the license of WSS service providers and apply fines to WSS service providers for breaching regulations.

Table 7 details the 16 regulatory mechanisms investigated across these four areas. For each of these, a simple Yes or No grading was utilised to enable the aggregation of country findings to the regional and continent-wide levels. Consequently, noteworthy variations do exist in the performance against each of these aspects for countries that have received the same score. It is critical to note that this assessment principally focused on the existence of these regulatory mechanisms in relation to the primary regulated WSS service providers in each country (i.e., national utilities, large private operators) rather than for smaller, deconcentrated and sometimes informal service providers such as water committees or private vacuum tanker operators and pit emptiers. As is highlighted throughout this section, a considerably less developed set of regulatory mechanisms have been developed for these types of service providers and the services they provide.

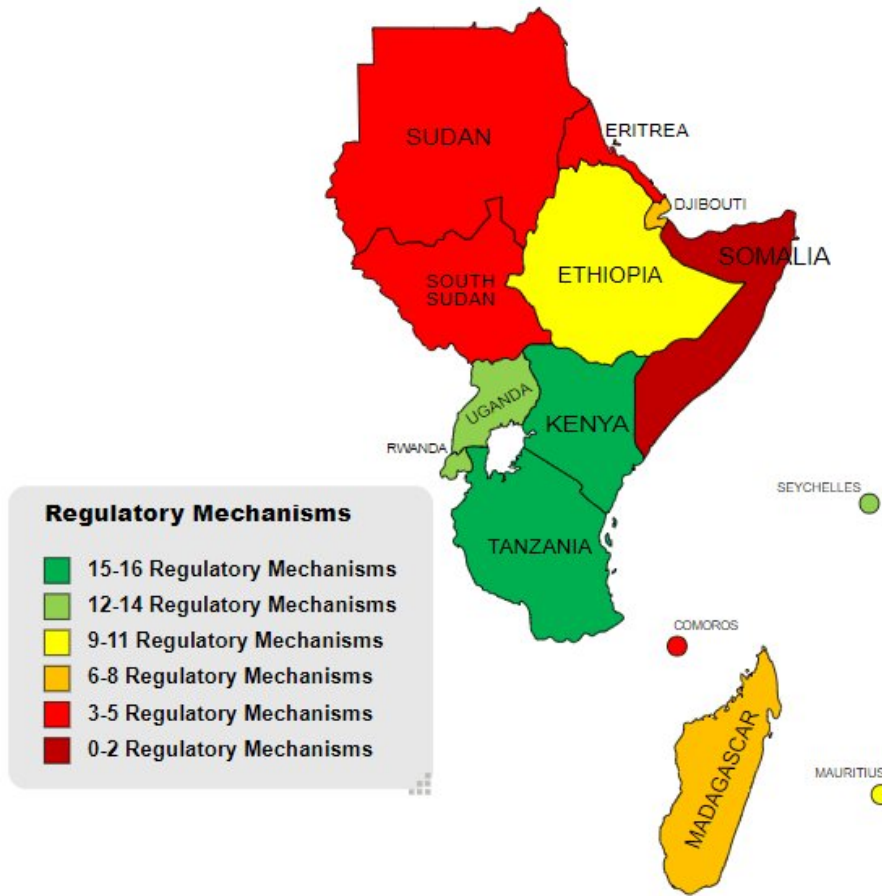
Table 7: Regulatory Mechanisms Examined

Regulatory Mechanism	Aspect
Standards and Guidelines	Whether standards and guidelines exist for service levels and water quality .
	Whether standards and guidelines exist for tariff rates , tariff setting and tariff adjustments .
	Whether standards and guidelines exist for the planning activities of WSS service providers (i.e., business planning, financial projections, accounting, annual reporting).
	Whether standards and guidelines exist for citizen involvement and complaints mechanisms .
	Whether standards and guidelines are designed to help ensure poorer and potentially marginalised populations receive affordable services.
	Whether standards and / or guidelines exist for environmental protection .
Monitoring and Performance Reporting	Whether appropriate quality of service indicators are periodically tracked by the regulator.
	Whether appropriate economic efficiency indicators are periodically tracked by the regulator.
	Whether appropriate operational sustainability indicators are periodically tracked by the regulator.
	Whether regulated service providers regularly (i.e., annually) submit reports and data to regulatory actors.
	Whether regulatory actors annually inspect , and audit regulated service providers.
Incentives	Whether annual reports are produced on sector and regulated service provider performance .
	Whether regulatory actors use financial incentives to promote improved service provider performance.
Sanctioning	Whether regulatory actors use reputational incentives to promote improved service provider performance.
	Whether regulatory actors have the ability to issue fines to service providers.
	Whether regulatory actors have the ability to suspend , remove , or transfer service provider licenses.

Variable progress has been made across Eastern Africa in developing and applying regulatory mechanisms for WSS service provision. Figure 10 provides an overview of each country's performance concerning the development of 16 regulatory mechanisms, presented in Table 7, across these four areas. It highlights a high degree of variance in the performance across the Eastern African region. Kenya, Tanzania, Uganda, Ethiopia, Mauritius and Seychelles have developed at least 9 of the 16 regulatory mechanisms investigated. South Sudan, Eritrea, Comoros, Somalia, and Madagascar each have developed a limited set of

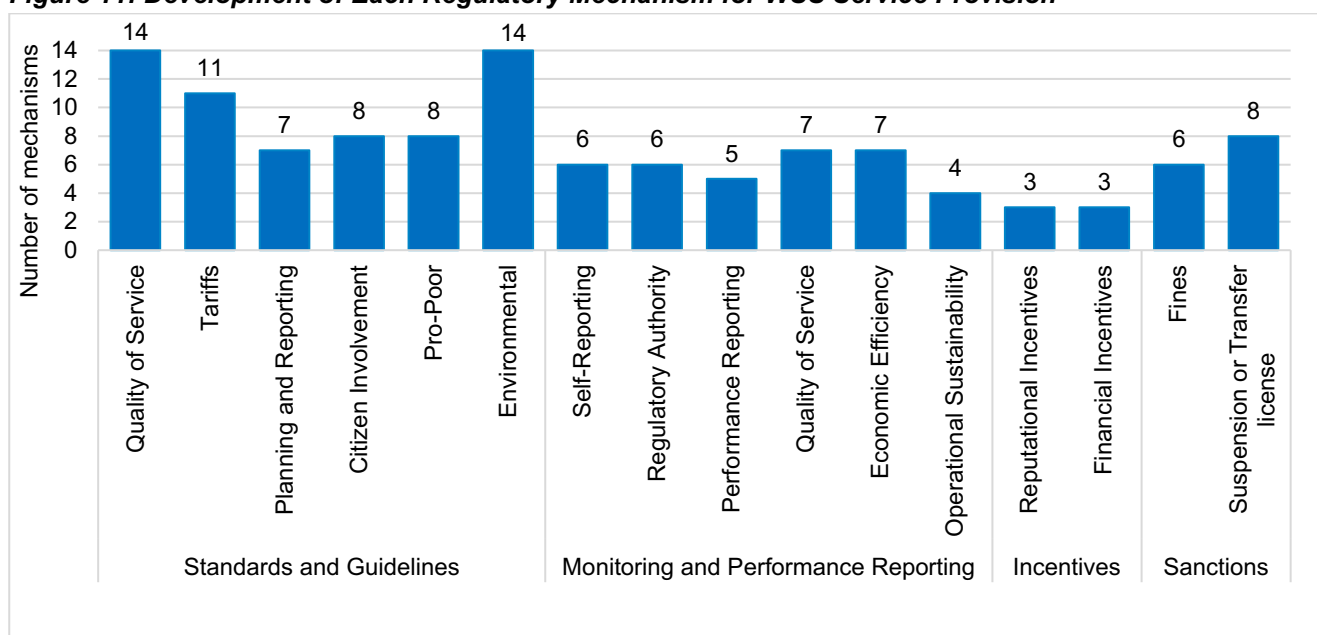
regulatory mechanisms to ensure service providers' performance. In all East African countries, a significantly less developed set of regulatory mechanisms is in place for other smaller, deconcentrated service providers.

Figure 10: Top-Level Overview of Regulatory Mechanisms for WSS Service Provision



The most progress has been made in developing standards and guidelines. Figure 11 details the number of the fourteen East African countries that have developed each of the 16 regulatory mechanisms investigated. It highlights that across the 14 countries, the greatest progress has been made in developing standards and guidelines. Conversely, the least progress has been made in performance reporting and in developing and applying incentives and sanctions.

Figure 11: Development of Each Regulatory Mechanism for WSS Service Provision



6.1. STANDARDS AND GUIDELINES

Standards and guideline development is an area of generally strong performance. Table 8 details which East African countries have developed standards and guidelines for quality of service, tariff setting, planning and reporting, citizen involvement, and environmental protection, and whether standards consider pro-poor aspects. It highlights that the greatest progress has been made regarding the development of quality of service and environmental protection standards, with considerable effort still required to develop standards and guidelines for citizen involvement and complaints, planning and reporting, and to ensure pro-poor aspects are considered across guidelines or addressed in their own right. Ethiopia, Kenya, Rwanda, Seychelles, Tanzania, Mauritius and Uganda have made the greatest progress in developing standards and guidelines.

Table 8: Standards and Guidelines

Country	Quality of Service	Tariffs	Planning and Reporting	Citizen Involvement	Pro-Poor	Environmental
Comoros	✓	✓	✗	✗	✗	✓
Djibouti	✓	✓	✓	✓	✓	✓
Eritrea	✓	✓	✗	✗	✗	✓
Ethiopia	✓	✓	✗	✓	✗	✓
Kenya	✓	✓	✓	✓	✓	✓
Madagascar	✓	✓	✗	✗	✓	✓
Mauritius	✓	✓	✓	✓	✓	✓
Rwanda	✓	✓	✓	✓	✓	✓
Seychelles	✓	✓	✓	✓	✓	✓
Somalia	✓	✗	✗	✗	✗	✓
South Sudan	✓	✗	✗	✗	✗	✓
Sudan	✓	✗	✗	✗	✗	✓
Tanzania	✓	✓	✓	✓	✓	✓
Uganda	✓	✓	✓	✓	✓	✓
Total	14	11	7	8	8	14

6.2. MONITORING AND PERFORMANCE REPORTING

Monitoring and performance reporting of countries' primary WSS service providers represents an area of moderate progress across Eastern Africa. Table 9 presents information relating to the self-reporting by WSS service providers to regulatory actors, inspections and audits of service providers conducted by

regulatory actors, and the performance reporting (i.e., publishing of annual reports) conducted by regulatory actors and WSS service providers. This information focuses on the primary WSS services providers (i.e., national or regional utilities, large private operators) within each country rather than smaller service providers (i.e., informal pit emptiers or water committees). Table 9 highlights the fact that most of the countries in Eastern Africa still lack adequate mechanisms of monitoring and performance reporting. Kenya, Rwanda, Seychelles, Mauritius and Tanzania are the only countries systematically collecting and publishing performance reports. Other countries, such as Djibouti, Ethiopia, Madagascar, South Sudan, Somalia, and Sudan, are not consistently publishing performance reports, even where legislation mandates that such monitoring and reporting should be done.

Table 9: Monitoring and Performance Reporting

Country	Service Provider Sharing of Performance Data	Regulatory Authority Monitoring / Data Validation	Production of Reports on Service Provider Performance
Comoros	National Water Company	Ministry of Energy and Water Resources	Ministry of Energy and Water Resources
	No regular or structured self-reporting by the National Water Company to the Ministry of Energy and Water Resources and no regular monitoring and audits or performance reporting of the National Water Company by the Ministry of Energy and Water Resources because the National Water Company has only recently been established.		
Djibouti	National Office of Water and Sanitation		
	Legislation and decrees mandate internal monitoring and reporting; however, there is no evidence that this is performed on a regular or structured basis.		
Eritrea	Service Providers	Sub Zoba Administration	Ministry of Lands, Water and Environment
	No regular or structured self-reporting by WSS service providers to the Sub-Zoba administrations.	No regular or structured monitoring, audits and inspections of WSS service providers.	Performance reports on the state of the sector and WSS service providers are only produced irregularly.
Ethiopia	Water Supply and Sanitation Services Enterprises	Water Boards and Regional Bureaus	Ministry of Water and Energy
	Reporting requirements vary by region, but Water Supply and Sanitation Services Enterprises are generally expected to submit reports and data. Adherence to these requirements varies widely.	The decentralised system is not designed around inspections and audits. Regulatory actors may conduct monitoring visits (most likely for larger Water Supply and Sanitation Services Enterprises), but do not inspect every service provider on an annual basis.	Annual performance reports are not produced at the federal level, and this is not done in a structured or consistent manner at the sub-national level.
Kenya	Water Service Providers	Water Services Regulatory Board	Water Services Regulatory Board
	Required to submit audits of books and accounts and details of their performance against a wide range of service quality, economic efficiency, and operational sustainability indicators to the Water Services Regulatory Board.	Validates performance information through inspections. Large number of licensed service providers (nearly) creates challenges, and the Water Services Regulatory Board assessed just under half the licensed service providers in 2021.	Comprehensive annual reports are produced presenting key information on the sector and benchmarking the performance of licensed service providers
Madagascar	JIRAMA and Private Water Supply Operators	Ministry of Water Resources	Ministry of Water Resources
	Required to report semi-annually to the Ministry of WASH on a relatively limited set of key indicators covering	No structured and consistent monitoring of JIRAMA's activities and no monitoring and reporting of important service quality, economic	Performance reports are not produced.

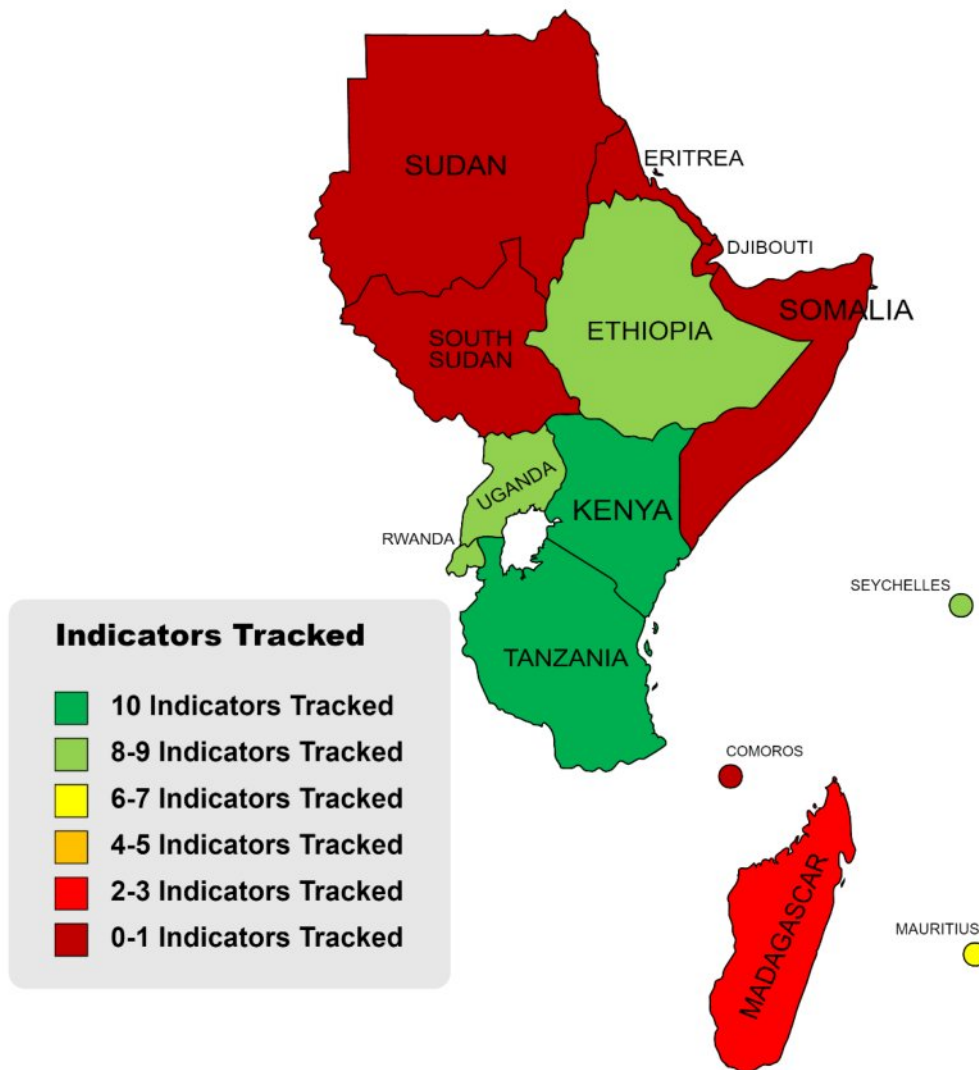
Country	Service Provider Sharing of Performance Data	Regulatory Authority Monitoring / Data Validation	Production of Reports on Service Provider Performance
	aspects of service quality and economic efficiency.	efficiency, and operational sustainability indicators.	
Mauritius	Central Water Authority and Wastewater Management Authority	Ministry of Electricity and Public Utilities	Central Water Authority and Wastewater Management Authority
	Performance Indicators are reported through annual reports that are submitted to the Ministry of Electricity and Public Utilities.	Does not inspect the Central Water Authority and Wastewater Management Authority on an annual basis.	Performance reports are published online annually. Statistics Mauritius also publishes data of the water and supply and wastewater annually.
Rwanda	Water and Sanitation Corporation	Rwanda Utilities Regulatory Authority	Rwanda Utilities Regulatory Authority
	Submit monthly data to the Rwanda Utilities Regulatory Authority on a wide range of service quality, economic efficiency, and operational sustainability indicators that primarily relate to the delivery of water supply services.	Typically undertakes an annual in-depth inspection and audit of each of the major service providers (i.e., Water and Sanitation Corporation, large private operators).	Publishes information on its website twice a year. This includes data from the Water and Sanitation Corporation, but only covers water production, water supplied to the network and water billed. Other key performance indicators and benchmarking among service providers are not included.
Seychelles	Public Utilities Commission	Public Health Authority	Public Utilities Commission
	Submits financial and operational performance data to the Ministry of Agriculture, Environment and Climate Change in its annual report. Also meet quarterly with the Ministry.	Conducts independent audits of the Public Utilities Commission and other services providers. The Ministry of Agriculture, Environment and Climate Change also conducts light-touch monitoring of the Public Utilities Commission's performance.	Produces an annual report of its performance. There are no sectoral reports produced by any other governmental institutions.
Somalia	Private Operators and Water Committees	State Ministries	State Ministries
	No regular or structured self-reporting to the State Ministries	No regular or structured monitoring, audits and inspections of WSS service providers.	Performance reports are not produced.
South Sudan	South Sudan Urban Water Corporation	Ministry of Water Resources and Irrigation	Ministry of Water Resources and Irrigation
	Required to provide the Ministry of Water Resources and Irrigation with annual reports covering financial performance, and activities performed. However, these reports cannot be accessed online, and the Ministry of Water Resources and Irrigation has not received an annual report from the South Sudan Urban Water Corporation since 2016.	The South Sudan Urban Water Corporation must have its accounts audited annually, and the Minister of Water Resources and Irrigation sits on the South Sudan Urban Water Corporation's Board and reviews its performance on a quarterly basis.	Does not produce its own dedicated reports on the South Sudan Urban Water Corporation or other service providers. The South Sudan Urban Water Corporation is supposed to produce reports on its performance, but none of these has been shared with the Ministry of Water Resources and Irrigation since 2016.

Country	Service Provider Sharing of Performance Data	Regulatory Authority Monitoring / Data Validation	Production of Reports on Service Provider Performance
Sudan	State Water and Sanitation Corporations	States	Water and Environmental Sanitation Unit of the Ministry of Irrigation and Water Resources
	Must report to the State Ministry of Housing and Urban Planning if there is an incident. However, they are not required to report periodically.	Regulatory actors at the state level occasionally conduct audits to ensure that projects are being undertaken and that service providers comply with standards. This is the case in Khartoum.	In charge of collecting periodic and annual reports from the states, analysing them, and drafting the national report that clarifies the general position to facilitate the taking of sound decisions at the national level. However, these reports are mainly based on WASH interventions and not on WSS service providers' performance.
Tanzania	Water Supply and Sanitation Authorities	Energy and Water Utilities Regulatory Authority	Energy and Water Utilities Regulatory Authority
	Required to submit performance data monthly through the water utility information system on a wide range of service quality, economic efficiency, and operational sustainability indicators for WSS. Must also submit financial performance reports at the end of the fiscal year.	Frequently conducts independent audits of water supply and sanitation authorities.	Compiles the information reported by service providers and publishes performance data on its website twice a year.
Uganda	National Water and Sewerage Company; Umbrella Authorities	Water Utilities Regulation Department of the Ministry of Water and Environment	Water Utilities Regulation Department of the Ministry of Water and Environment
	Under their performance contracts, they must submit annual financial and operational performance data to the Water Utilities Regulation Department.	Does not have the resources to conduct comprehensive inspections and audits to validate the information reported by service providers. Inspections are conducted quarterly but only cover a sample from areas served by each utility.	Compiles the information reported by the National Water and Sewerage Company and Umbrella Authorities into detailed annual sector performance reports.

Regulatory actors who are monitoring service delivery performance are largely tracking a wide range of quality of service, economic efficiency and, to a lesser extent, operational sustainability indicators.

Figure 12 provides an overview of how many of the ten investigated indicators are tracked and reported on an ongoing basis (i.e., annually) by country. This again focuses on the main regulated service providers for each country. It highlights that a comparatively broad set of indicators are being tracked and reported against by the main WSS service providers in just over half the East African countries, albeit with several East African countries not currently tracking any WSS indicators of service provider performance on a regular basis.

Figure 12: Tracked and Reported WSS Indicators



Box 8: Kenya Benchmarking reports

Kenya's nearly 90 licensed service providers are required to submit audits of books and accounts and details of their performance against a wide range of service quality, economic efficiency, and operational sustainability indicators to WASREB (see Table 9). WASREB validates this information through inspections and the tariff application process. However, the large number of licensed service providers creates challenges. In 2021, WASREB assessed just under half of the licensed service providers. Nevertheless, WASREB generates impressive and very comprehensive annual [IMPACT](#) reports outlining the performance of Kenya's WSS sector and WSS service providers. Key aspects detailed in these reports include:

- I. Sector developments.
- II. Detailed performance overviews of WSS service providers.
- III. A breakdown of WSS services in each of Kenya's 47 counties.
- IV. An overview of pertinent issues to the sector such as COVID-19 or the debates around the clustering of service providers.

These reports are publicly available, easily accessible, and widely disseminated. The reports create a lot of impetus on the performance of utilities and have become vital reference points for a number of stakeholders. A recent liquidity support by the World Bank to cushion utilities against impacts of Covid-19 relied on the data from the sector performance report. Using this report, the Bank has also selected well performing utilities for support on financial recovery. Further, the annual creditworthiness assessment has been used to leverage for alternative financing to the sector.

Table 10 details which indicators are tracked for the main WSS service providers. This includes indicators tracked and reported by WSS service providers themselves and indicators validated and occasionally reported by a regulatory authority. It highlights how the greatest progress has been made in monitoring water quality, non-revenue water and O&M cost coverage indicators, while indicators for sanitation coverage and staff per 1,000 connections are not collected in several countries. The least progress has been made in tracking key operational sustainability indicators. Tanzania and Kenya are tracking the most advanced set of indicators (see Box 8), while Comoros, Djibouti, Eritrea, Somalia, and South Sudan have made the least progress.

Table 10: Indicators Tracked / Reported

Country	Quality of Service				Economic Efficiency				Operational Sustainability	
	Water Coverage	Sanitation Coverage	Hours of Supply	Water Quality	Metering Ratio	Non-Revenue Water	O&M Cost Coverage by Revenue	Revenue Collection Efficiency	Staff cost as Proportion of O&M	Staff per 1000 Connections
Comoros	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Djibouti	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Eritrea	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Ethiopia	✓	✗	✓	✓	✓	✓	✓	✓	✗	✓
Kenya	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Madagascar	✓	✗	✗	✓	✗	✗	✓	✗	✗	✗
Mauritius	✓	✓	✓	✓	✗	✓	✓	✗	✗	✓
Rwanda	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓
Seychelles	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
Somalia	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
South Sudan	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Sudan	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Tanzania	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Uganda	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
Total	8	5	7	8	6	7	8	6	3	5

6.3. INCENTIVES

Most regulatory actors lack incentives, including reputational or financial incentives, to apply to WSS service providers as a means to stimulate improved performance. Table 11 presents summary information on the financial and reputational incentives applied by regulatory actors. Seychelles, Tanzania, Mauritius and Uganda are applying financial incentives to improve service provision. Reputational incentives on the other hand are only being applied by regulatory actors in Tanzania, Kenya and Seychelles in the form of negative media coverage in case of inadequate service providers' performance or public recognition based on the benchmarking rankings developed by the regulators. The case of Tanzania is further expanded in Box 9.

Table 11: Financial and Reputational Incentives

Country	Financial Incentives Applied	Note	Reputational Incentives Applied	Note
Comoros	✗	Ministry of Energy and Water Resources	✗	Ministry of Energy and Water Resources
		No financial incentives applied to National Water Company.		No reputational incentives applied to National Water Company.
Djibouti	✗	National Office of Water and Sanitation	✗	National Office of Water and Sanitation
		No financial incentives applied to the National Office of Water and Sanitation.		No reputational incentives applied to the National Office of Water and Sanitation.

Country	Financial Incentives Applied	Note	Reputational Incentives Applied	Note
Eritrea	✗	Ministry of Lands, Water and Environment	✗	Ministry of Lands, Water and Environment
		Legal instruments encourage application of financial incentives and disincentives; however, these have not been developed or applied to service providers.		Reputational incentives are not applied to any WSS service providers.
Ethiopia	✗	Ministry of Water and Energy	✗	Ministry of Water and Energy
		No formal financial incentives are available to – or applied by – the different regulatory actors.		No formal reputational incentives are available to – or applied by – the different regulatory actors.
Kenya	✗	Water Services Regulatory Board	✓	Water Services Regulatory Board
		Does not have formal financial incentives that it can apply to service providers to reward good performance. Nevertheless, good performance has translated to the Water Services Regulatory Board allowing service providers to have tariffs for longer periods and for these to include indexation.		Annual reports benchmark the performance of licensed water service providers against each other and over time. Awards are also given to licensed water service providers for a range of categories.
Madagascar	✗	Ministry of Water, Sanitation and Hygiene	✗	Ministry of Water, Sanitation and Hygiene
		Does not apply formal financial incentives to WSS service providers to reward good performance. Nevertheless, good performance has translated to service providers having a contract renewal without the opening of a tender.		Reputational incentives are not applied.
Mauritius	✗	Ministry of Electricity and Public Utilities	✗	Ministry of Electricity and Public Utilities
		Does not apply any formal financial incentives to WSS service providers.		Reputational incentives are not applied.
Rwanda	✗	Rwanda Utilities Regulatory Agency	✗	Rwanda Utilities Regulatory Agency
		Financial incentives are not applied to improve the performance of the Water and Sanitation Corporation or private operators.		Reports are produced on the Water and Sanitation Corporation's performance, but these do not benchmark performance against other service providers or over time. Awards are also not issued to recognise good performance.
Seychelles	✓	Ministry of Agriculture, Environment and Climate Change	✓	Ministry of Agriculture, Environment and Climate Change
		Annual performance-based bonuses are proposed by the Public Utilities Commission CEO and board and the Ministry has the power to approve or deny them based on the utility's performance.		Reputational incentives are informal but powerful, with poor WSS service performance attracting substantial public and media criticism.

Country	Financial Incentives Applied	Note	Reputational Incentives Applied	Note
Somalia	✗	State's Ministries	✗	State's Ministries
		No financial incentives have been developed to promote improved service providers performance.		No reputational incentives have been developed to promote improved service providers performance.
South Sudan	✗	Ministry of Water Resources & Irrigation; Local Governments	✗	Ministry of Water Resources & Irrigation; Local Governments
		Do not apply financial incentives to service providers to reward good performance.		Reputational incentives are not applied
Sudan	✗	State's Ministries	✗	State's Ministries
		Financial incentives are not applied.		Reputational incentives are not applied.
Tanzania	✓	Energy and Water Utilities Regulatory Authority	✓	Energy and Water Utilities Regulatory Authority
		Monetary awards for specific tasks have been used as financial incentives for those utilities that rank amongst the first positions in the benchmarking reports.		Reputational incentives are used by ranking Water Supply and Sanitation Authorities according to key performance indicators. The rankings are published yearly on the Energy and Water Utilities Regulatory Authority's website.
Uganda	✓	Water Utilities Regulation Department	✗	Water Utilities Regulation Department
		Approval of conditional grants for high-performing service providers and performance-based bonuses for service provider staff.		Performance data for all regulated service providers is publicly available; however, no separate system exists for recognising top performers.

Box 9: Incentives in Tanzania

In Tanzania, both financial and reputational incentives are applied to service providers to promote good performance. Tanzania annually publishes [benchmarking reports](#) in which service providers are ranked. As a measure of transparency and accountability, the [methodology](#) to generate the benchmarking reports is publicly available on the Energy and Water Utilities Regulatory Authority's website. As soon as the reports are published, the winners are announced in a [public statement](#) to recognise their good performance.

Apart from the recognition of being in the first positions, monetary awards for specific tasks have been used as financial incentives for those utilities that rank amongst the first positions. For example, in 2021, the three best performing utilities were given resources to spend on water meters and improve non-revenue water.

6.4. SANCTIONS

A mixed picture exists regarding the ability of regulatory actors to apply sanctions such as fining service providers and suspending or removing their licenses. Table 12 presents an overview of the East African countries where regulatory authorities are empowered to issue fines to service providers and suspend or remove licenses. It highlights how varying progress has been made in developing such sanctions. Regulatory actors in only five of the fourteen countries can fine service providers for breaching WSS regulations for aspects related to service provision.²⁵ Regulatory actors in half of the countries have the authority to suspend or revoke a service provider's licence or terminate their contract. Regulatory actors with the authority to fine service providers, suspend or transfer their licences, rarely exercise this authority. Several

²⁵ In several further countries, fines can be issued to WSS service providers by regulatory authorities with responsibilities touching on WSS service provision for acts such as breaching environmental protection regulations, or the terms of water abstraction permits.

reasons were cited for this, including there being no alternative WSS service providers and a preference for supporting service providers in improving their performance rather than only taking a sanctioning role, which can reportedly cause more harm to the communities. In the absence of fining or suspending or transferring service providers' licences, regulatory actors often rely on more informal or light-touch measures. Following a similar trend across the regulatory mechanisms investigated for this study, a less developed set of sanctions exists for smaller, decentralised, or informal service providers. For the most part, these actors are not penalised for violating regulations.

Table 12: Sanctions

Country	Ability to Fine Service Providers	Note	Ability to Suspend / Remove Service Provider License	Note
Comoros	✗	Ministry of Energy and Water Resources	✗	Ministry of Energy and Water Resources
		Do not have the ability to fine service providers.		Do not have the ability to suspend/remove service providers' licences.
Djibouti	✗	National Office of Water and Sanitation	✗	National Office of Water and Sanitation (ONEAD)
		Fines are not applied to WSS service providers as the National Office of Water and Sanitation regulates its own performance.		Non applicable
Eritrea	✓	Ministry of Lands, Water and Environment	✓	Ministry of Lands, Water and Environment
		Can issue fines to WSS service providers for various reasons; however, no WSS service providers have been fined for sub-standard performance or breaching regulations		Can suspend the license of WSS service providers.
Ethiopia	✓	Ministry of Water and Energy	✓	Ministry of Water and Energy
		Fines can be issued for certain infractions, for instance, violating regulations on wastewater discharge, but these do not appear to be applied to WSS service providers.		The legal framework empowers the Ministry of Water and Energy and other "supervisory bodies" to suspend or terminate a license for water use if the holder violates the terms of the license or existing regulations. However, this does not appear to be applied to service providers.
Kenya	✓	Water Services Regulatory Board	✓	Water Services Regulatory Board
		Frequently fines licensed water service providers when non-compliance is identified		Has a clear preference for removing the board or senior management of water service providers instead of suspending their license. However, they have been close to removing licenses and would do so if required.

Country	Ability to Fine Service Providers	Note	Ability to Suspend / Remove Service Provider License	Note
Madagascar	✗	Ministry of Water Sanitation and Hygiene	✓	Ministry of Water Sanitation and Hygiene
		Sanctions such as issuing fines and producing written orders to service providers are not applied.		Is mandated to suspend or remove the service provider under the “affermage” contract. However, the level of application of this mechanism is unknown.
Mauritius	✗	Central Authority and Wastewater Management Authority	✗	Central Authority and Wastewater Management Authority
		Mandated to issue fines for violations of the water and wastewater laws to private service providers. However, there is no mechanism to sanction the Central Authority and Wastewater Management Authority which are the two major service providers.		Mandated to remove / suspend licenses for violations of the water and wastewater laws to private service providers. However, there is no mechanism to sanction the Central Authority and Wastewater Management Authority which are the two major service providers.
Rwanda	✓	Rwanda Utilities Regulatory Agency	✓	Rwanda Utilities Regulatory Agency
		Fines can be applied when operators do not respect the approved tariffs, alter permits to avoid accurate measurement or fail to submit reports on time.		If licensed service providers are not complying with the conditions established in the licenses, these can be suspended, transferred or revoked. It is done whenever needed, however, only one license has been revoked so far.
Seychelles	✓	Public Health Authority	✓	Public Health Authority
		Has the power to issue fines to service providers for regulatory violations, which are enforced through court orders		Has the ability to suspend or revoke the licenses of service providers that do not comply with health-related laws and regulations.
Somalia	✗	State Ministries	✗	State Ministries
		No evidence of fines was identified for WSS service provision.		No evidence of sanctions was identified for WSS service provision.
South Sudan	✗	Ministry of Water Resources & Irrigation	✗	Ministry of Water Resources & Irrigation
		Do not have the legal authority to issue fines to the Sudan Urban Water Corporation.		The Ministry cannot suspend the license of the Sudan Urban Water Corporation. However, it can remove or suspend the Managing Director and the Minister has the power to issue directives to the company’s Board that the Board must act in accordance with.
Sudan	✗	State Ministries	✗	State Ministries
		Do not have the legal authority to issue fines to the State Water and Sanitation Corporations.		Cannot remove or suspend the licenses of State Water and Sanitation Corporation. Can however sanction officials of the State Water and Sanitation

Country	Ability to Fine Service Providers	Note	Ability to Suspend / Remove Service Provider License	Note
				Corporations and the State Ministry of Housing if they are not providing an adequate service.
Tanzania	✓	Energy and Water Utilities Regulatory Authority	✓	Energy and Water Utilities Regulatory Authority
		Fines are applied when there is repetitive malicious compliance. These fines can even single out individuals within the utilities. Before punitive measures are used, the utilities receive warning letters, issuance directives and compliance orders.		Mandated to issue, renew and cancel licenses of service providers in the regulated sectors. However, licenses have not been revoked, and other punitive mechanisms are preferred.
Uganda	✗	Water Utilities Regulation Department	✓	Water Utilities Regulation Department
		Does not have the ability to issue fines.		Can recommend that a provider's contract be terminated or not renewed, or part of a poorly performing provider's service area can be de-gazetted and transferred to another provider. However, these mechanisms have not been used.

Box 10: Kenya's Consistent use of Sanctions

Kenya's Water Services Regulatory Board (WASREB) has made significant progress since its establishment in 2003 in developing and applying a comparatively advanced set of regulatory mechanisms (see Figure 10). Kenya's Water Act, 2016 empowers WASREB to issue fines to water services providers for breaching or contravening regulations made under this act. Moreover, the Water Act enables WASREB to revoke the license of a water services provider or place a water service provider under a 'special regulatory regime' for a series of reasons, including failure to meet the criteria for licensing, refusing, failing or neglecting to provide services for which they were licensed, and failing to comply with any conditions for licensing.

Crucially, unlike many other regulatory actors across Africa, WASREB has proven willing to use the sanctioning powers at its disposal to penalise non-compliant service providers and, in turn, improve WSS service delivery. Of note, WASREB frequently fines licensed water service providers when non-compliance is identified; fines for non-compliance were levied on four water service providers in 2021 and another nine were denied financial support as a result of non-compliance. In 2021, WASREB came close to revoking two service providers' licenses; however, it has a clear preference for replacing the board or senior management of water service providers instead of utilising its power to suspend their license completely.

The application of sanctions and punitive measures has altered the behaviour of service providers. Utilities that were denied financial support as a result of the non-compliance, have subsequently fixed the identified non-compliances and are now in good standing. Furthermore, those that were sanctioned on non-compliance with the approved tariff and were required to rebate customers have complied and even adjusted their billing systems to forestall any likely challenges in the future. Nevertheless, challenges in conducting the required in-depth monitoring and inspections of Kenya's large number of licensed service providers (nearly 90) impede the further application of sanctions by WASREB

7

REGULATORY ENVIRONMENT

7. REGULATORY ENVIRONMENT

The regulator's legitimacy is more related with the regulator's decision-making process in terms of regulatory independence and accountability. The financial independence and economic sustainability of the regulator are a determining factor in its independence and legitimacy. To this end, the regulator must have access to adequate financing for the exercise of its regulatory mandate. Regulatory accountability requires that the regulator be accountable to the Parliament, the Government, regulated entities and to the public. Disclosure of information about the regulatory processes and public reporting of compliance and performance, as well as implementation of participatory models in decision-making processes are characteristics of good governance by regulators.

Despite some examples of good practice, there are several pressing limitations in the regulatory environment for WSS regulation across most East African countries. Table 13 presents the status of different aspects related to three dimensions of the regulatory environment: (i) autonomy; (ii) participation; and (iii) transparency. It highlights generally limited performance across these areas, with several common challenges evident. In the first instance, it is worth noting that in several countries key regulatory actors are part of – or closely associated with – a Ministry with WSS responsibilities and rely on wider government budgeting processes to fund their regulatory activities. This constrains their independence and heightens the risk of political interference in the development and application of regulations and regulatory tools. In several countries, inadequate funding for regulatory activities based on these budgeting processes is a common challenge. Additionally, the limited development and utilisation of mechanisms to ensure public participation in the development and application of regulations and regulatory mechanisms is another pressing challenge. Finally, regulatory actors only produce reports on the performance of WSS service providers that are made publicly available in five of the fourteen East African countries.

Despite these important challenges, Tanzania, Kenya and Rwanda have taken important steps in ensuring the autonomy and sustainable financing of lead regulatory actors, increasing public participation in the development and application of WSS regulations, and ensuring key regulatory documents are made publicly available and easy to access (i.e., annual reports, tariff reviews, service level agreements). Box 11 provides an overview of steps taken in Tanzania to increase public participation in the development and application of regulations.

Box 11. Tanzania's public participation mechanisms

Tanzania has a comprehensive public participation mechanism in place both to develop regulatory mechanisms and ensure their enforcement. Participation is ensured at various stages of the regulatory activity:

- **Before issuing a license**, the licensing process is publicised in the media and is open for public consultation. All the comments received must be addressed before the issuance of the license.
- **Tariff review process**, before utilities submit a tariff application, they must consult with the customers and relevant stakeholders. A representative from the Energy and Water Utilities Regulatory Authority (EWURA) must be present to collect the comments, and these are analysed and addressed if pertinent.
- **While developing regulatory instruments**, all the relevant stakeholders (i.e. service providers, governmental actors, local authorities, consumers) are consulted and their comments must be considered before instruments are formally issued.

Utilities are obliged to prepare the *customer service charter*, which is a document that must have previously been approved by EWURA, setting minimum service standards including a clear and transparent procedure for receiving and settling complaints from customers. Utilities must ensure that the contents of this document are well disseminated so customers are aware of their rights. Finally, the [EWURA Consumer Consultation Council](#) is a board that collects consumers' interests and provides their inputs in various stages of the regulatory process. The council can comment on service provision performance and raise issues that have been identified by users to EWURA.

Table 13: Regulatory Environment

Country	Autonomy			Participation	Transparency
	Whether Regulator(s) can Adjust Tariffs without Government Approval	Whether the Regulator(s) are Financially Independent of Government	Regulator's Funding Mechanism	Public Participation in Development and Application of WSS Regulations	Whether Regulatory Reports are Publicly Available
Comoros	✗	✗	Funding for the limited regulatory activities performed by the Ministry of Energy and Water Resources is linked to wider governmental budgetary procedures and is not self-sufficient.	Procedures for involving users in the development and application of regulations are not defined in laws and policies.	✗
Djibouti	✗	Non applicable	Does not apply as the service providers is the regulator	Procedures for involving users in the development and application of regulations are not defined in laws and policies.	✗
Eritrea	✗	✗	Regulatory actors are dependent on wider government-driven budgeting processes to fund their limited regulatory activities.	Measures are in place to promote user participation in the development of legislation and regulations. However, procedures to ensure participation of WSS service users and communities in planning programmes is a frequently cited challenge.	✗
Ethiopia	✓	✗	Regulatory actors are dependent on wider government-driven budgeting processes to fund their regulatory activities.	WSS regulation and service provision structures are designed to be participatory. WSSE Boards and WASHCOs, are mandated to include representatives of the community served.	✗
Kenya	✗	✓	WASREB is primarily financed by a 4% levy on the tariffs paid by consumers	Several mechanisms are in place to ensure public participation: (i) WASREB is required to go through a public consultation process when developing or modifying regulations; (ii) WASREB administers a customer survey every two years to obtain customer feedback on its regulatory activities; and (iii) licensed service providers are required to involve customers and the local community in decision-making through public participation in actions to be taken or biennial stakeholder engagement.	✓
Madagascar	✗	✗	The limited set of regulatory activities performed by Ministry of Water, Sanitation and Hygiene are dependent on larger Government of Madagascar budgeting processes.	There are no formal requirements regarding public participation in the development of regulations.	✗
Mauritius	✗	✗	Regulatory actors are currently dependent on wider government-driven budgeting processes to fund	The National Water Policy stresses participation, and service providers consult the public and experts on the development	✓

Mauritius	✗	✗	Regulatory actors are currently dependent on wider government-driven budgeting processes to fund regulatory activities. However, it is expected that the newly created Utility Regulatory Authority will eventually have operational and financial independence with funding coming from license fees, charges and levies on the regulated industries.	The National Water Policy stresses participation, and service providers consult the public and experts on the development and application of regulations. Moreover, both the Central Water Authority and the Wastewater Management Authority have customer service departments responsible for handling complaints and customer engagement.	✓
Rwanda	✓	✓	The Rwanda Utilities Regulatory Authority is financed through a 0.3% levy on the annual turnover of service providers and monies collected from licensees and fines. In case there is a surplus from the Rwanda Utilities Regulatory Authority budget each year, it shall be transferred to the public treasury.	While regulatory instruments are prepared, they are placed under consideration by different stakeholders to ensure that the points of view of all relevant parties are included. Before Rwanda Utilities Regulatory Authority board approves regulatory instruments, there is a consultation process in which citizens can raise concerns and suggest modifications. All of the solicitudes from the consultation period have to be addressed with a solid justification before approval. The Rwanda Consumers' Rights Protection Organization is a civil-society organisation with legal personhood since 2009 that is mandated to ensure consumers' voices are accounted for.	✓
Seychelles	✗	✗	The Ministry of Agriculture, Environment and Climate Change is part of the central government and therefore dependent on the wider government budget. Similarly, although the Public Health Authority is semi-autonomous, it is funded through the central government budget.	All policies and regulations are required to go through a process of public consultation before being sent to the Cabinet for approval.	✗
Somalia	✗	✗	Key regulatory actors are usually state Ministries, which are dependent on transfers from the federal and state governments to perform regulatory activities.	Procedures for involving users in the development and application of regulations are not defined.	✗
South Sudan	✗	✗	The Ministry of Water Resources and Irrigation and local government councils are dependent on wider government-led budgeting processes to fund their comparatively limited regulatory activities.	Regulations for WSS service provision are rarely developed or modified, so participation is not currently assured in their development on an ongoing basis. Regulations are only applied on a limited basis, and explicit steps are not taken at scale to promote and ensure public participation in the application of regulations.	✗

Sudan	✗	✗	Key regulatory actors are usually state Ministries, which are dependent on transfers from the federal and state governments.	Insufficient mechanisms are in place to ensure public participation in the crafting or enforcement of WSS regulations. Tariffs are approved and determined by the state assembly, which is chosen democratically by the community, allowing a small degree of participation. Citizens are obliged by law to actively participate in environmental regulation enforcement by reporting any activity that is endangering the environment and violating provisions stipulated by law.	✗
Tanzania	✓	✓	The Energy and Water Utilities Regulatory Authority's operations are mainly financed through levies collected from regulated service providers (98.1%) and a minimal percentage from licence fees, application fees and penalties (2.9%)	The EWURA Consumer Consultative Council represents consumers' issues and perspectives and provides their inputs and comments on various stages of regulatory activities, including service provision performance. Participation is ensured at several stages of the regulatory activity: before issuing a license, for the tariff review and while developing regulatory instruments.	✓
Uganda	✗	✗	As a department of the Ministry, the Water Utilities Regulation Department is not an autonomous entity. Its budget is part of the Ministry budget allocation, and political considerations have some influence on the application of regulatory mechanisms.	There are no formal requirements regarding public participation in the development of regulations, but participation takes place and is seen as good practice. Public participation exists in the application of regulations. Regulated service providers are required to maintain channels for customers to lodge complaints and are required to conduct regular satisfaction surveys. The Water Utilities Regulation Department engages with customer care teams to identify common issues and help develop strategies to address them. It also engages with Water User Committees for feedback on how systems are being run.	✓