



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

SOUTHERN 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 Southern African region in ten countries: Angola, Botswana, Eswatini, Lesotho, Malawi, Mozambique, Namibia, South Africa, Zambia, Zimbabwe.

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: Significant progress has been made in enhancing water supply and sanitation (WSS) services across Southern Africa; however, considerable improvements are still required. Across Southern Africa's ten countries, average coverage rates for at least 'basic' water supply and sanitation services are 73% and 49%, respectively (JMP, 2020).¹ These are above the equivalent coverage rates for Sub-Saharan Africa. Nevertheless, improvements have not occurred at the rate desired, and most Southern African countries may miss the Sustainable Development Goal (SDG) Six targets of universal safe and reliable WASH services by a considerable margin. Various systemic weaknesses have impeded progress towards universal WSS.

Policy and legal backing: All Southern African countries have developed national policy documents for WSS, specifying core objectives for their WSS sectors. However, the extent to which these documents detail practical steps towards improving WSS regulation varies significantly. In terms of the legal framework, all Southern African countries have legislative instruments dedicated to WSS. However, seven of the ten Southern African countries do not have sufficiently detailed legal instruments for regulating sanitation services

Regulatory models: A diversity of regulatory arrangements exist for WSS service delivery. 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 main regulatory models applied per country and in total across the Southern African Region. It highlights that most countries have mixed regulatory arrangements 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. In many countries, this reflects how different regulatory arrangements have been developed to account for the wide range of WSS service providers. In some countries (i.e., Angola, Zimbabwe), however, it illustrates how regulatory arrangements are fragmented, with often overlapping responsibilities split among several institutions.

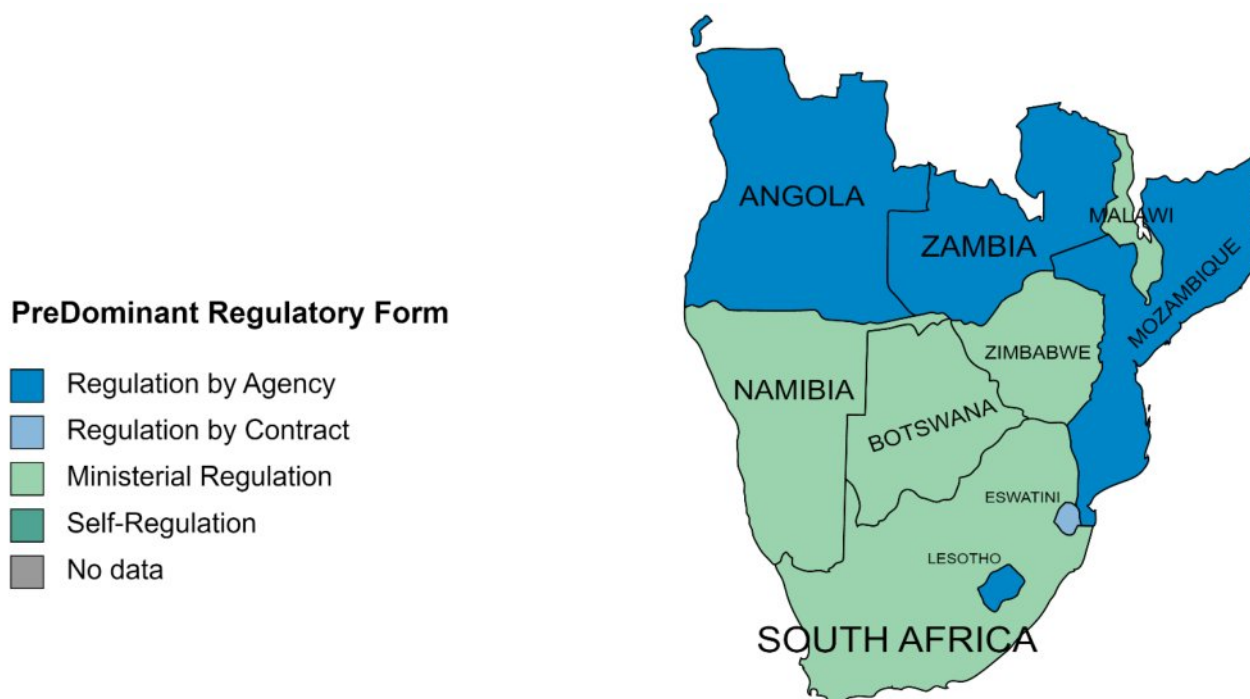
¹ A basic water supply services refers to drinking water from an improved source, provided collection time is not more than 30 minutes for a roundtrip including queuing. A basic sanitation service is the use of improved facilities which are not shared with other households.

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
Angola	✓	✓	✗	✗
Botswana	✗	✓	✗	✗
Eswatini	✗	✓	✓	✗
Lesotho	✓	✓	✗	✗
Malawi	✗	✓	✗	✓
Mozambique	✓	✓	✗	✗
Namibia	✗	✓	✗	✗
South Africa	✗	✓	✓	✗
Zambia	✓	✗	✗	✗
Zimbabwe	✗	✓	✗	✗
Total – Regulatory model Applied	4 (40%)	9 (90%)	2 (20%)	1 (40%)
Total – Predominant Regulatory model	4 (40%)	5 (50%)	1 (10%)	0 (0%)

The use of multiple regulatory models and the variations in their application makes it useful to note the primary regulatory model applied in each country.² Figure A presents this.

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



In several Southern African countries, WSS regulation is starting to receive concerted attention and reform. Over the last 20 years, WSS service delivery regulation has had varying degrees of advancement. In Zambia, there has been progress, while, in countries like Malawi and Zimbabwe, WSS regulation is limited. Nevertheless, this picture is improving, with several countries undertaking a series of measures to enhance the regulation of WSS service delivery. These include developing a series of new regulations (i.e., Angola), plans to establish a dedicated water supply service regulator (i.e., Malawi) and applying an enhanced set of regulatory mechanisms (i.e., South Africa). Moreover, in Zambia and Mozambique, there is a considerable focus on national regulatory agencies starting to regulate smaller, deconcentrated service providers (i.e., water

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.

committees, private vacuum tanker operators) and the services they provide (i.e., points water sources, onsite sanitation), which have largely been neglected to-date.

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. In most countries, the primary regulatory actors (i.e., a ministry or regulatory agency) focus on the large formal WSS service providers (i.e., national or regional utilities and 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. Linked to this, regulation of WSS services predominantly focuses on piped water supply services and – to a somewhat lesser extent – sewered sanitation. This is despite recent attention in some Southern African countries (i.e., South Africa, Zambia) to regulating onsite sanitation services.

Regulatory mechanisms: Varying levels of progress have been made in developing and applying 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 16 individual regulatory mechanisms were investigated across four areas: (i) standards and guidelines;³ (ii) monitoring and performance reporting;⁴ (iii) incentives;⁵ and (iv) sanctions.⁶ Figure 2 presents a summary of each country's performance developing and applying regulatory mechanisms across these four areas. It highlights moderate to good performance across the Southern African region. With the exception of Eswatini, all countries have developed at least nine of the 16 regulatory mechanisms investigated. Zambia performs particularly well, with the National Water Supply and Sanitation Council iteratively expanding the regulatory mechanisms at its disposal over the last 20 years. Of the four investigated areas, greater progress has been made across the Southern African region in developing standards and guidelines, as well as monitoring and performance reporting as compared to incentives and sanctions.

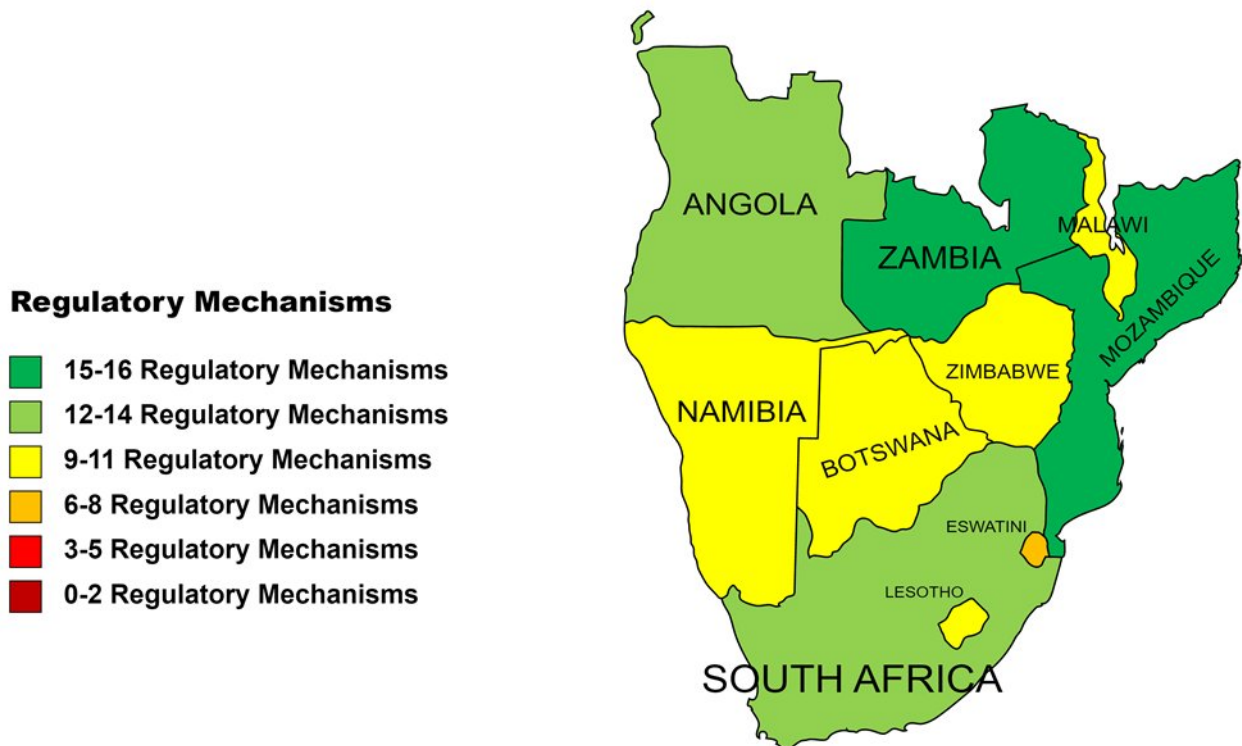
³ Six regulatory mechanisms were investigated in relation to standards and guidelines. These were: (i) Whether standards and guidelines exist for service levels and water quality; (ii) Whether standards and guidelines exist for tariff rates, tariff setting and tariff adjustments; (iii) Whether standards 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.

Figure 2: Top-Level Overview of Regulatory Mechanisms for WSS Service Provision



Regulatory environment: Although there are examples of good practice, pressing limitations exist in the regulatory environment for WSS service delivery in most Southern African countries concerning autonomy, participation, and transparency. Of note, regulatory actors are often part of – or closely connected to – a Ministry with WSS responsibilities and remain dependent on wider government budgeting processes to fund their regulatory activities. Additionally, regulatory actors produce reports on the performance of WSS service providers that are made publicly available in only half the Southern African countries. Despite this, Zambia and Mozambique have taken important steps in ensuring autonomy of lead regulatory actors, increasing public participation in the development and application of WSS regulations, and enhancing transparency through regular sharing of information and performance data.

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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 Southern Africa region in ten countries: Angola, Botswana, Eswatini, Lesotho, Malawi, Mozambique, Namibia, South Africa, Zambia, Zimbabwe. It includes a top-level summary of the regulatory arrangements for WSS in rural and urban areas, as well as 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.

STRUCTURE

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

- **Section Two** presents an overview of the socio-economic and WSS context of the region.
- **Section Three** details the legal and policy frameworks for WSS regulation, providing key information on whether legal instruments sufficiently support WSS regulation.
- **Section Four** outlines the different regulatory models and regulatory arrangements for WSS regulation.
- **Section Five** presents the extent to which different service providers and service delivery types are regulated.
- **Section Six** presents the regulatory mechanisms that have been developed – and applied – across four aspects: (i) standards and guidelines; (ii) monitoring and performance reporting; (iii) incentives; (iv) sanctions.
- **Section Seven** 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

Southern Africa represents a diverse context for WSS, both among and within countries. Figures 1 and 2 present coverage rates for at least ‘basic’ water supply and sanitation services and plot these against per capita gross national income.^{8 9} These figures highlight varying levels of coverage of at least ‘basic’ WSS services across the region, from South Africa and Botswana with very high coverage rates to countries such as Angola, Malawi, Zambia, and Zimbabwe with much lower performance. WSS coverage rates are largely linked to the level of economic development, with just a few notable outliers (i.e., water supply coverage in Lesotho, Angola and Eswatini; sanitation coverage in Namibia and Lesotho).

Figure 1: At Least ‘Basic’ Water Supply Coverage and GNI per Capita (PPP)

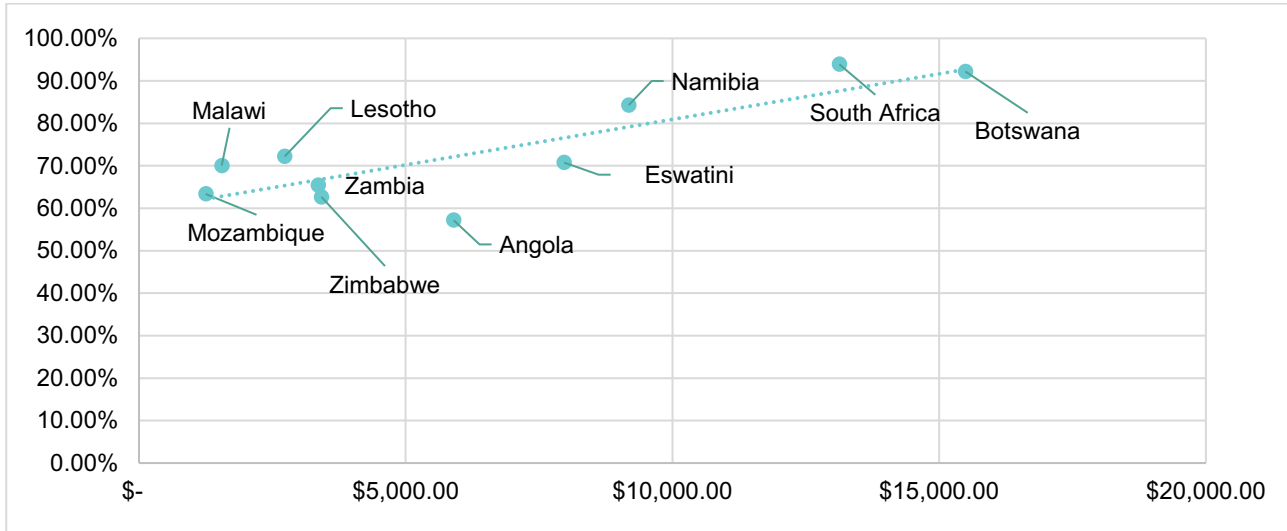
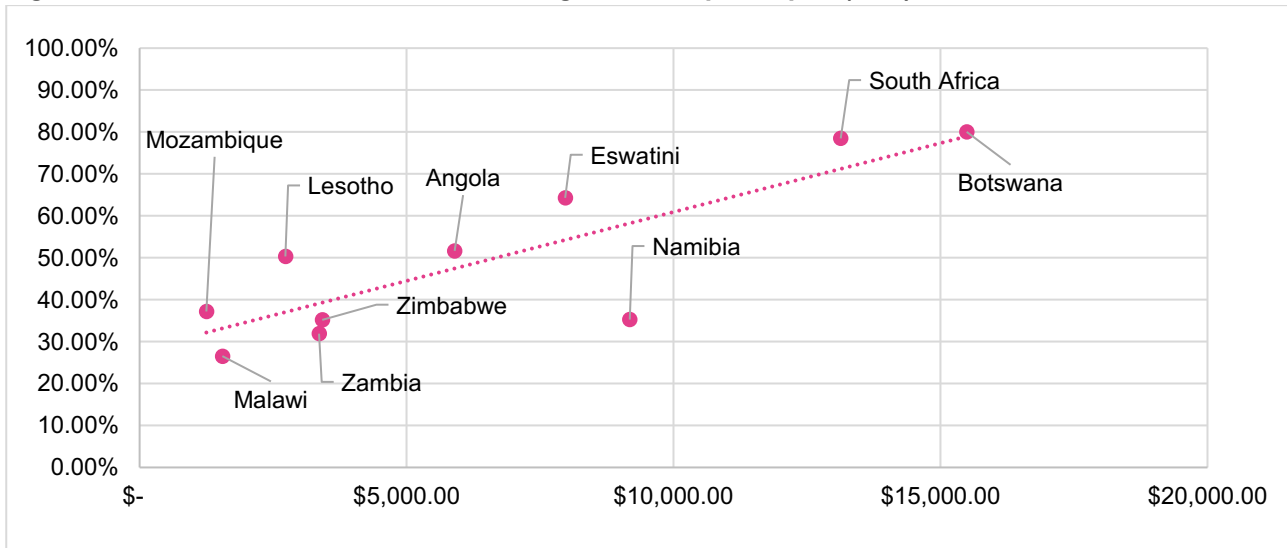


Figure 2: At Least ‘Basic’ Sanitation Coverage and GNI per Capita (PPP)



Southern African countries have largely made steady progress in improving WSS services. Figures 3 and 4 present how WSS coverage rates have changed over the last two decades. While considerable work remains, these figures highlight how important progress has been made in expanding access to WSS services. Except for Zimbabwe, where WSS coverage rates have deteriorated, each Southern African country has notably improved access to WSS services. Especially impressive improvements in water supply services are

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 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.

evident in Mozambique, while Lesotho has made the most considerable increase in coverage of at least ‘basic’ sanitation services.

Figure 3: At Least ‘Basic’ Water Supply Coverage (2000-2020) – Southern African Countries

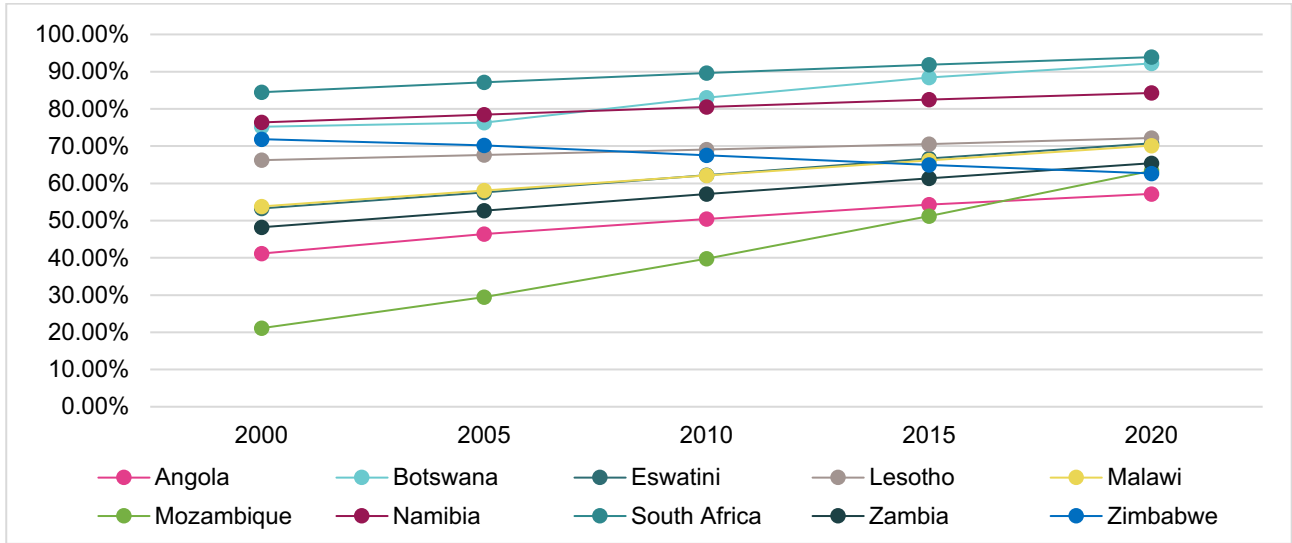
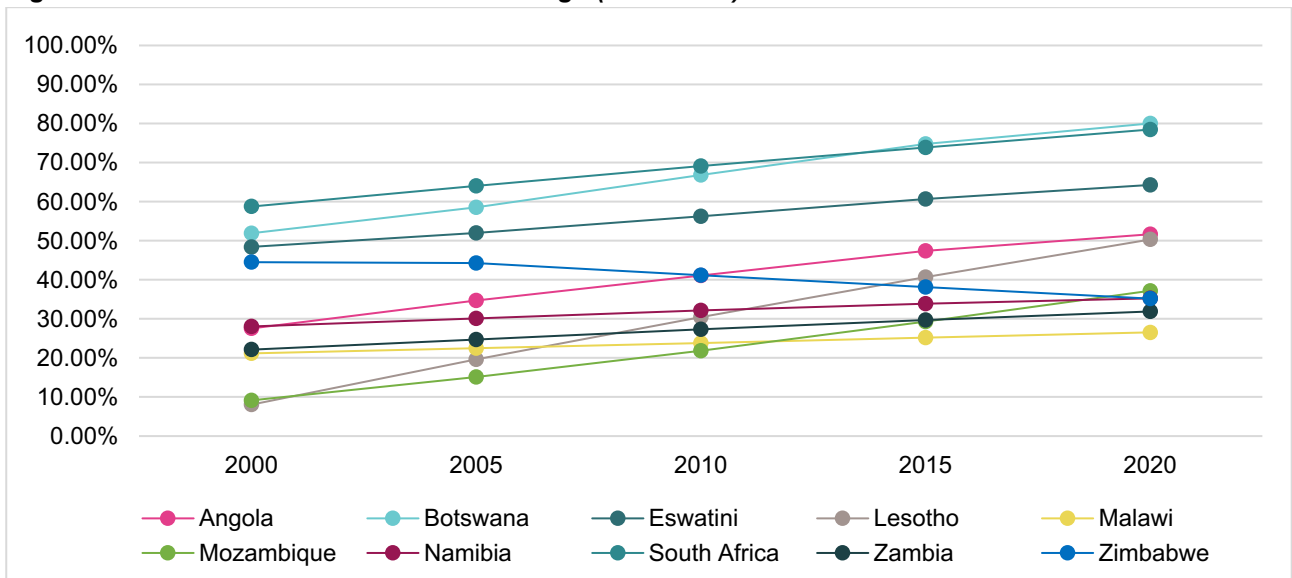


Figure 4: At Least ‘Basic’ Sanitation Coverage (2000-2020) – Southern African Countries



Southern Africa also represents a diverse context in terms of economic and developmental dimensions. Table 1 presents data for each of the ten Southern 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 1 highlights varying levels of performance or conditions for delivering WSS services and highlights how Southern Africa encompasses a broad spectrum of contexts.

Table 1: Southern Africa Socio-Economic and Water Supply and Sanitation Indicators

Country	Income Classification ¹⁰	GNI per Capita, PPP (US\$)	Population (Millions)	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 (Country Reported)	Cost Coverage of WSS Service Providers (Country Reported)
Angola ¹¹	LMIC	\$5,900	32.87	33.18%	148	34	160	57.17%	77.4%	51.66	68.9%	58%	Not Available
Botswana ¹²	UMIC	\$15,490	2.35	29.12%	100	122	88	92.21%	Not Reported	80.03	Not Reported	26% (Water Utilities Corporation, 2018/19)	95% (Water Utilities Corporation, 2018/19)
Eswatini ¹³	LMIC	\$7,980	1.16	75.83%	138	47	139	70.75%	77% (Central Statistics Office, 2019)	64.29	46% (Eswatini Water Services Corporation, 2019)	Not Reported	107% (Eswatini Water Services Corporation, 2019)
Lesotho ¹⁴	LMIC	\$2,730	2.14	70.97%	165	64	122	72.18%	Not Reported	50.32	83% (Water and Sanitation Corporation)	56% (Water and Sanitation Corporation)	Not Reported
Malawi ¹⁵	LIC	\$1,550	19.13	82.57%	174	46	163	70.05%	83% Service Coverage (Water Boards, 2019)	26.55	Not Reported	38% (Water Boards, 2019)	90% (Water Boards, 2019)

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 Angola is sourced from Inquérito de Indicadores Múltiplos e de Saúde as well as the quarterly report from the National Water Directorate of the Ministry of Energy and Water.

¹² Country reported data for Botswana is based on information provided in: Water Utility Corporation (2020) Annual Report, 2019/20

¹³ Country reported data for national WSS coverage is based on information provided by the Central Statistics Office (2019) and the Eswatini Water Services Corporation's Annual Report (2019) for cost coverage.

¹⁴ Country reported data for Lesotho is based on information provided in the Lesotho Electricity and Water Authority Annual Report 2020/21.

¹⁵ Country reported data for Malawi is based on information provided in the WASAMA (2019) Malawi Water Utilities Benchmarking Report.

Country	Income Classification ¹⁰	GNI per Capita, PPP (US\$)	Population (Millions)	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 (Country Reported)	Cost Coverage of WSS Service Providers (Country Reported)
Mozambique¹⁶	LIC	\$1,250	31.26	62.93%	181	22	155	63.37%	52%	37.20	38%	48% (2019)	0.88 (2019)
Namibia¹⁷	UMIC	\$9,190	2.54	47.97%	130	109	107	84.27%	88.4% (piped water coverage, 2015/16)	35.26	45% Flush toilet access (2015/16)	11.2% (NamWater, 2020/21)	123% (NamWater)
South Africa¹⁸	UMIC	\$13,140	59.31	32.65%	114	89	95	93.89%	88.2% (piped water coverage, 2019)	78.47	82.1% (improved sanitation, 2019)	36.8% (2019)	151% (2019)
Zambia¹⁹	LMIC	\$3,360	18.38	55.37%	146	42	134	65.41%	66% (at least basic, 2020)	31.90	33% (at least basic, 2020)	52.8% (Commercial Utilities, 2020)	95% (Commercial Utilities, 2020)
Zimbabwe²⁰	LMIC	\$3,420	14.86	67.76%	150	10	171	62.67%	81% property level coverage direct water supply (ULAs, 2018)	35.19	85.8% coverage of functional toilets (ULAs, 2018)	43% (ULAs, 2018)	163% (ULAs, 2018) 93% (ZINWA, 2020)

¹⁶ Country reported coverage rate data for Mozambique is sourced from the National Direction of Water Supply and Sanitation Information about non-revenue water and cost coverage was retrieved from the last performance report published by AURA in 2019.

¹⁷ Country reported data for Namibia was sourced from the Namibia Household Income and Expenditure Survey (NHIES) 2015/2016 Report for WSS coverage and the Namibia Water Corporation Ltd Integrated Annual Report 2019/20 for cost coverage.

¹⁸ Country reported data for South Africa was sourced from Statistics South Africa's General Household Survey, 2019.

¹⁹ Country reported data for Zambia was sourced from the National Water Supply and Sanitation Council's Annual Sector Performance Report (2020) for non-revenue water and cost coverage and the Ministry of Water Development and Sanitation's Annual Statistical Bulletin (2020) for national WSS coverage.

²⁰ Country reported data for Zimbabwe was sourced from the Government of Zimbabwe's Service Level Benchmarking Annual Report (2018) for ULAs and the Zimbabwe National Water Authority's 2020 Annual Integrated Performance Report for the Zimbabwe National Water Authority.

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 policy documents consistently state the need to strengthen WSS regulation but vary in the extent to which they detail tangible measures for improvement. All Southern African countries have developed national policy documents for WSS, specifying core objectives for their WSS sectors. These nearly always highlight the importance of improving WSS regulation. However, the extent to which these documents detail practical steps towards this end varies significantly. In some countries, policy documents simply state the desire to improve WSS regulation, while in others (i.e., Malawi), detailed measures are specified for improving WSS regulation. Most countries have not developed strategic frameworks or documents to strengthen aspects of WSS regulation; however, Zambia has taken impressive steps in this area (see Box 1).

Box 1: Zambia – The Benefits of Strategic Frameworks for Regulating Onsite Sanitation and Rural Water Supply and Sanitation Services

Zambia benefits from well-established regulatory arrangements for WSS service delivery and applying a wide range of regulatory mechanisms to the piped water supply and sewerage services provided by its 11 commercial utilities in urban and peri-urban areas. However, until recently, regulatory activities were overwhelmingly focused on these 11 commercial utilities, with other service providers and service delivery types receiving little meaningful oversight. This began to change in 2018 when comprehensive strategy documents were developed detailing a series of steps and measures to improve the provision and regulation of [urban onsite sanitation and faecal sludge management](#) and [rural WSS services](#).

Several deep-rooted and systemic challenges make regulating these services – and the types of service providers that typically provide them (i.e., private vacuum tanker operators, water committees) – difficult, including their informal status and fragmentation across large numbers of providers. As a result limited progress has been made in regulating these services and service providers across Africa (see Section 5). These strategy documents specify objectives in these areas and are guiding the collective action required by setting out measures to be taken by a wide range of actors. This includes detailed action points across aspects such as institutional arrangements, licenses and permits, regulations, by-laws, monitoring and performance reporting, service level agreements and guarantees, standards and guidelines, and inspections. Critically, these documents also outline the budget required for their implementation and specify organisational responsibilities and timeframes for their implementation.

Further work is required to implement these frameworks. However, these documents are playing a crucial role, helping to ensure increased focus on the regulation of these services and pushing important measures to be taken in several areas. Of note, key action points from these documents that have been – or are being – implemented include:

- I. Modifying commercial utilities' licenses to cover onsite sanitation and rural water supply and sanitation.
- II. Developing permitting conditions to guide commercial utilities when they engage other service providers to provide WSS (i.e., onsite sanitation, rural water supply) on their behalf.
- III. Guidelines developed on minimum service levels, water quality monitoring, tariff setting (revised to include rural water supply and sanitation and onsite sanitation), and reporting for rural areas.
- IV. Ongoing data capturing through GIS mapping, including tool standardisation and sharing with stakeholders for utilisation.
- V. Supporting commercial utilities to develop strategies for delivering or expanding onsite sanitation and rural water supply services.
- VI. standard operating procedures developed for onsite sanitation and faecal sludge management.
- VII. Key performance indicators identified and a benchmarking framework developed.

- VIII. Generic organisational structures developed for delivering onsite sanitation and faecal sludge management services as well as rural water supply and sanitation.
- IX. Training of private pit emptiers to be engaged by commercial utilities.
- X. web based NWASCO Information System (NIS) reviewed to incorporate onsite sanitation and rural water supply and sanitation.
- XI. Structures developed for rural water supply and sanitation data collection, validation, and reporting.

3.2. LEGAL INSTRUMENTS

Legislative instruments have been developed for WSS in all Southern African countries; however, the extent to which these address aspects of WSS regulation varies. All Southern African countries have legislative instruments dedicated to WSS. These are crucial in specifying the mandates of regulatory actors and empowering them with the required functions and authority. Legislative instruments vary in forms, including dedicated water and sanitation acts, acts establishing a regulatory authority, acts related to a national public enterprise (i.e., national utility), or a series of acts that address different aspects of WSS (i.e., water resources acts, public health acts, local government acts, environmental management acts).

Legislative instruments generally provide a much stronger and explicitly defined legal backing for regulating water supply services than for sanitation services. Figures 5 and 6 use a simple colour-coded traffic light system to show the extent to which legal instruments provide the required legal backing for WSS regulation.

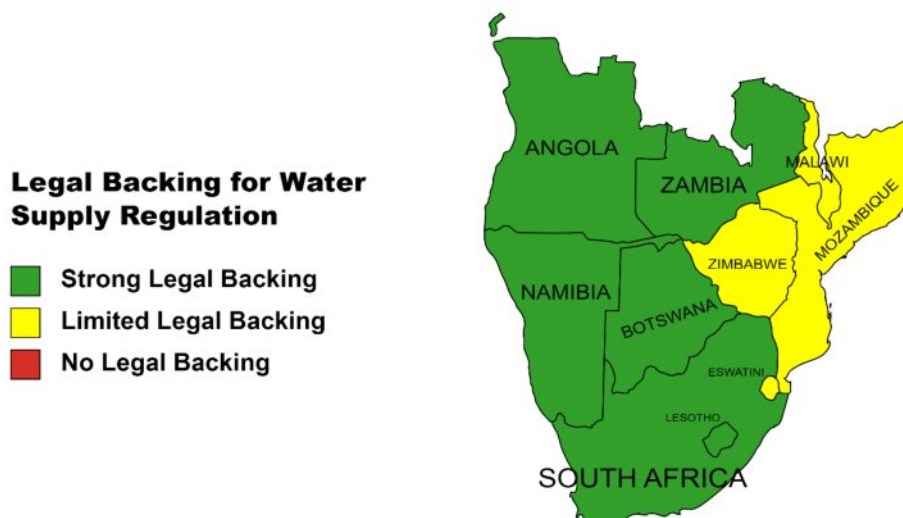
0 = No Legal Backing. Legal instruments either do not exist or make no mention of regulatory mandates or functions for water supply or sanitation.

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 5 highlights a generally positive picture, with most Southern African countries having an appropriate legal backing for regulating water supply services. This is not to say that these acts or other legal instruments would not benefit from updating or strengthening. However, for the most part, legal instruments explicitly define the mandates of regulatory actors at the national level and specify their powers and functions, thereby providing the necessary legal backing to perform key regulatory activities for water supply service delivery.

Figure 5: Legal Instruments for Regulating Water Supply Services



As Figure 6 indicates, seven of the ten Southern African countries do not have sufficiently detailed legal instruments for regulating sanitation services; notable challenges in this area include:

- I. **Sewerage Bias.** In some countries, legal instruments focus on sewered sanitation services but do not address onsite sanitation and onsite sanitation service providers comprehensively.
- II. **Poorly Defined Mandates and Functions.** Responsibilities for regulating sanitation services are often included in local government, public health, and environmental management acts. In these instances, regulatory mandates for sanitation are often not explicitly defined and regulatory powers and functions may be absent.

Figure 6: 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 responsible for WSS – or an aspect of WSS – 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.

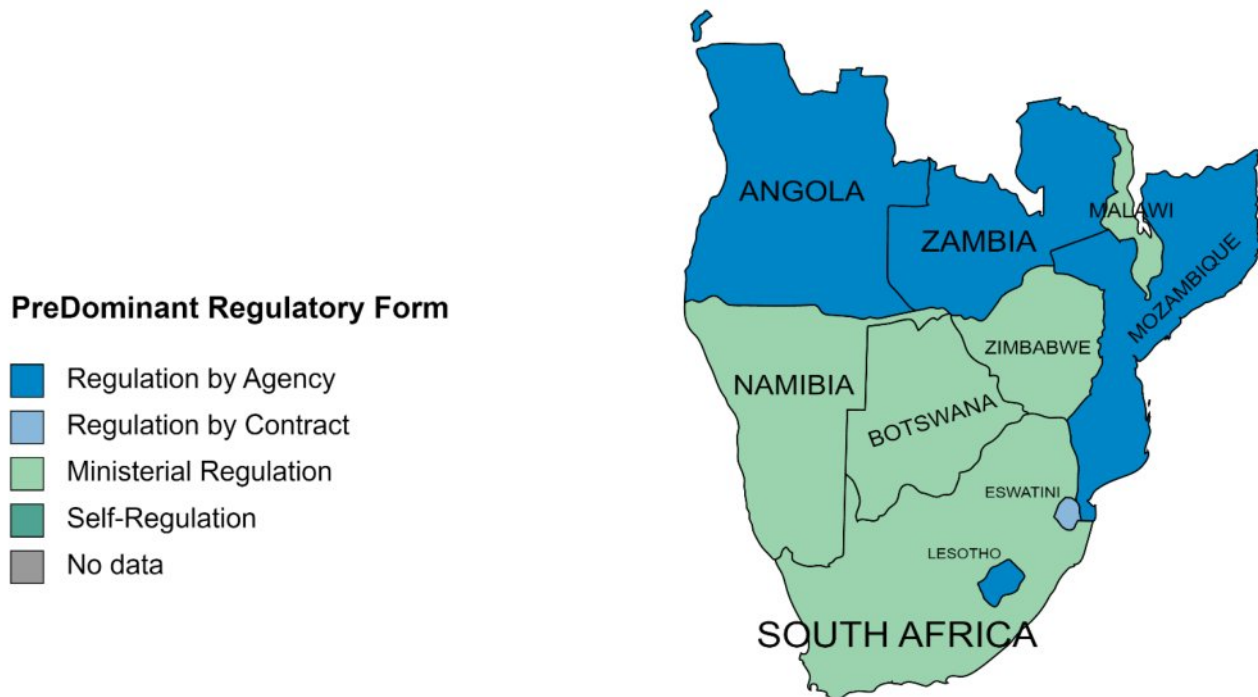
Across Southern Africa, various regulatory models are applied to WSS service provision. Table 2 details the main regulatory models applied per country and in total across the Southern Africa Region. It does not consider regulatory responsibilities for water resources or environmental protection (see Table 3). It highlights how most countries have mixed regulatory arrangements 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. In many countries, this reflects how different regulatory arrangements have been developed to account for the wide range of WSS service providers. In some countries (i.e., Angola, Zimbabwe), however, it illustrates how regulatory arrangements are fragmented, with often overlapping responsibilities split among several institutions.

Table 2: Regulatory models Applied for Water Supply and Sanitation Service Provision

Country	Regulatory model			
	Regulation by Agency	Ministerial Regulation	Regulation by Contract	Self-Regulation
Angola	☑	✓	✗	✗
Botswana	✗	☑	✗	✗
Eswatini	✗	✓	☑	✗
Lesotho	☑	✓	✗	✗
Malawi	✗	☑	✗	✓
Mozambique	☑	✓	✗	✗
Namibia	✗	☑	✗	✗
South Africa	✗	☑	✓	✗
Zambia	☑	✗	✗	✗
Zimbabwe	✗	☑	✗	✗
Total – Regulatory model Applied	4 (40%)	9 (90%)	2 (20%)	1 (40%)
Total – Predominant Regulatory model	4 (40%)	5 (50%)	1 (10%)	0 (0%)

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.²¹ Figure 7 presents this.

Figure 7: Predominant Regulatory Model Applied for Water Supply and Sanitation Service Provision



Many countries have hybrid regulatory arrangements, applying different regulatory models across WSS sub-sectors and for different service providers. Table 3 details the main regulatory actors and regulatory models applied for each Southern African country across several WSS sub-sectors.²² It illustrates the fact that most countries have hybrid regulatory arrangements based on **multiple regulatory models** and that several actors typically hold regulatory responsibilities. In many countries, this reflects how different regulatory arrangements 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. However, in countries like Zimbabwe, it illustrates how regulatory arrangements are fragmented, with often overlapping responsibilities split among several institutions. Zambia is an example of a clear, well-organised regulatory context where responsibilities are explicitly defined among three regulatory agencies (see Box 2).

²¹ 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.

²² 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.

Table 3: Regulatory model

Key						
Regulation by Agency		Ministerial Regulation		Regulation by Contract		Self-Regulation
Country	Urban Water	Rural Water	Urban Sanitation	Rural Sanitation	Water Resources	Environmental Protection
Angola	National Water Directorate of the Ministry of Energy and Water				National Institute of Water Resources	Ministry of Culture, Tourism and Environment
	Regulatory Institute for Electricity Services and Water Supply					
Botswana	Ministry of Land Management, Water and Sanitation Services					Ministry of Environment, Natural Resources Conservation and Tourism
			Ministry of Environment, Natural Resources Conservation and Tourism			
	Water Appointment Board					
Eswatini	Ministry of Natural Resources and Energy (MoNRE)				National Water Authority	Eswatini Environmental Authority
	Performance Contract between MoNRE and Ministry of Finance and National Utility (EWSC)		Ministry of Health			
Lesotho	Ministry of Water					
	Lesotho Electricity and Water Authority		Lesotho Electricity and Water Authority		Lesotho Highlands Water Commission	
Malawi	Ministry of Water and Sanitation				National Water Resources Authority	Environmental Protection Agency
	Water Services Association of Malawi		Ministry of Health			
	Local Government Authorities					
Mozambique	Water Regulatory Authority (AURA)				Regional Water Administrations	
	Ministry of Health – National Health Direction		Municipalities			
Namibia	Ministry of Agriculture, Water and Land Reform					Ministry of Environment, Forestry and Tourism
	Water Regulator of Namibia		Ministry of Urban and Rural Development			
	Ministry of Health and Social Services					
South Africa	Department of Water and Sanitation					
	Water Services Authorities					Department of Forestry, Fisheries and Environment
	Contracts between Water Services Authorities and Water Services Providers					
Zambia	National Water Supply and Sanitation Council				Water Resources Management Agency	Zambia Environmental Management Agency
Zimbabwe	Ministry of Lands, Agriculture, Fisheries, Water and Rural Development (MoLAFWRD)				Zimbabwe National Water Authority	Environmental Management Agency
	Ministry of Health and Child Care					
	Ministry of Local Government and Public Works				MoLAFWRD	
	Urban Local Authorities and Rural District Councils					

Box 2: Zambia's Regulatory Arrangements for WSS

Zambia has a well-developed regulatory arrangement for WSS service provision, based on **regulation by agency**. The National Water Supply and Sanitation Council (NWASCO) is an autonomous regulator solely responsible for WSS regulation. The Zambia Environmental Management Agency and the Water Resources Management Agency are other regulatory agencies. These regulatory agencies' mandates and functions are explicitly established in separate legislative instruments, ensuring clearly defined roles and responsibilities and reducing duplication of efforts or gaps.

The existence of NWASCO as a dedicated regulatory actor solely focused on WSS has helped to ensure that WSS regulation receives the required attention to facilitate its effective application. Whereas regulatory responsibilities and functions can often be diluted within Ministries with wide-ranging mandates, NWASCO has developed and applies an impressive set of regulatory mechanisms that span standards and guidelines, monitoring and performance reporting, regulation by incentives, and sanctions and enforcement. NWASCO's performance of its regulatory responsibilities for WSS service provision has evolved over the last two decades, with increasing capacity, a growing range of regulatory mechanisms and the focus of activities being refined over time. Key milestones in this process include:

- I. 2002 – Development of guidelines for 11 aspects of commercial utility performance (i.e., service levels, business planning, annual reporting).
- II. 2004 – Introduction of measures to ensure consumer involvement in the tariff setting process.
- III. 2005 – Utilisation of part-time inspectors to enhance the monitoring of commercial utilities.
- IV. 2008 – Introduction of regulation by incentives.
- V. 2011 – Establishment of NWASCO Resources and Knowledge Centre.
- VI. 2017 – Launch of the MyWatSan Quickfix complaints resolution platform.
- VII. 2018 – Development of frameworks for the provision and regulation of rural WSS and urban onsite sanitation.

In several Southern African countries, concerted efforts are underway to reform and improve regulatory arrangements. Malawi is illustrative of a regulatory arrangement where mandates and functions are currently fragmented and somewhat overlapping, and WSS regulation is not yet advanced. However, Malawi is initiating reforms to update its regulatory arrangements, with the planned establishment of a dedicated water supply services regulator (see Box 3). Similar concerted efforts are also being taken in Zimbabwe to reform the regulation of WSS services, with plans to centralise regulatory mandates and functions and reduce the current fragmentation of institutional mandates (see Box 4).

Box 3: Malawi's Weak but Evolving Regulatory Arrangements for WSS

Malawi currently has a relatively fragmented and poorly defined regulatory arrangement for WSS services, with responsibilities split across several actors and ministerial regulation, regulation by agency, and self-regulation all applied. The Ministry of Water and Sanitation is the lead regulatory actor for WSS service provision; however, its regulatory mandate is only explicitly defined for Malawi's five parastatal water boards that provide piped water supply and sewerage sanitation services in urban and peri-urban areas. Other actors with regulatory responsibilities include the Ministry of Health, Ministry of Local Government, local government authorities, the National Water Resources Authority, the Environmental Protection Agency, and the Water Services Association of Malawi.

The regulatory mechanisms developed for – and applied to – these water boards are also relatively light-touch, and several weaknesses exist across various areas: standards and guideline development, monitoring and performance reporting, regulation by incentives, and sanctions and enforcement. These weaknesses in the current regulatory arrangement and mechanisms are recognised by the government and steps are beginning to be taken to resolve these challenges. Significantly, Malawi's new **National Water Policy** explicitly specifies the objective of establishing a dedicated water supply service regulator and details an expansive set of core functions for the desired agency. These include:

- I. Tariff setting.
- II. Monitoring and enforcing tariff limits.
- III. Setting service standards (drinking water, effluent discharge).
- IV. Monitoring and enforcing service standards.
- V. Dispute resolution.
- VI. Consumer complaints.

There is now a pressing need to develop the necessary legal instruments to establish this dedicated agency and empower it to improve WSS regulation.

Box 4: Zimbabwe – A Fragmented Regulatory Arrangement Principally Based on Ministerial Regulation

Zimbabwe has a fragmented regulatory arrangement for WSS service provision based on **ministerial regulation**. At the national level, regulatory responsibilities for WSS service provision are split among three ministries. The Ministry of Lands, Agriculture, Fisheries, Water and Rural Development (MoLAFWRD) regulates water supply to consumers, the Ministry of Health and Child Care has regulatory responsibilities centred on sanitation and water quality, and the Ministry of Local Government and Public Works oversees Zimbabwe's 32 Urban Local Authorities and 60 Rural District Councils that are the main WSS service providers. The arrangement illustrates four common challenges with ministerial regulation:

- I. Each ministry with regulatory responsibilities for WSS is dependent on wider government-led budgeting processes to fund its regulatory activities. This creates **financial autonomy** challenges and contributes to the **insufficient funding** for regulatory activities, with financial resource constraints representing a key barrier to regulatory actors' performance of their responsibilities.
- II. Ministries are responsible for overseeing the performance of other arms of government (urban local authorities, rural district councils) that they are closely connected to, creating challenges related to **independence** and **conflicts of interest**.
- III. Regulatory responsibilities are **fragmented** among several ministries, with ministries often holding overlapping responsibilities for some areas, and coordination among ministries representing an ongoing challenge.
- IV. Ministries hold wide-ranging functions, causing regulatory responsibilities to sometimes be **'lost'** and **not receive the prioritisation** required for their effective performance.

Zimbabwe's WSS sector acknowledges the need to improve the regulatory arrangement, and reforms are underway. Notably, the President recently approved the process of centralising regulatory mandates and functions more closely around the Department of National Water, Sanitation and Hygiene Coordination of MoLAFWRD to reduce the fragmentation and ensure regulatory aspects receive the attention required.

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 Four highlighted how, in most countries, several actors hold regulatory responsibilities for WSS and that multiple regulatory models are applied. For the Southern Africa 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 4 details the main WSS service providers for each Southern African country, the services they provide, the primary actors responsible for their regulation and the regulatory model applied.

Regulatory activities primarily focus on the main WSS service providers in each country. In most 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 responsibilities 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. Mozambique provides an interesting case-study in this area, as the Water Regulatory Authority regulates through four broad arrangements tailored to different types and sizes of WSS service providers (see Box 5). Another strategy involves the regulatory authority creating 'layers' of regulatory oversight, in which entities that the regulator already effectively regulates are assigned responsibilities for monitoring smaller providers they engage with, and ensuring their compliance with regulations. This helps relatively small, centralised regulatory institutions extend their reach. For example, in Zambia, incipient efforts are underway to improve the regulation of smaller, deconcentrated service providers such as vacuum tanker operators and water committees by expanding the role of commercial utilities.

Table 4: Regulatory Responsibilities – Water Supply and Sanitation Service Providers

Country	Service Provider	Service Provider Type	Services Provided	Primary Regulatory Actor	Primary Regulatory model
Angola	17 Public Water and Sanitation Companies	Regional Publicly Owned Utilities	Piped Water Supply; Sewered Sanitation; Onsite Sanitation	Regulatory Institute for Electricity Services and Water Supply; National Water Directorate of the Ministry of Energy and Water	Regulation by Agency; Ministerial Regulation
	Small-Scale Independent Providers (i.e., Water Tankers)	Privately Owned	Water Delivery	No Arrangement in Place for Their Regulation	
	Water Committees	Community-Based Organisations	Piped Water Supply; Point Water Sources		

Botswana	Water Utilities Corporation	National Publicly Owned Utility	Piped Water Supply	Department of Water and Sanitation	Ministerial Regulation
			Sewered Sanitation; Onsite Sanitation	Department of Water Management and Pollution Control	
	Vacuum Tanker Operators	Privately Owned	Onsite Sanitation (Emptying and Transport)	No Regulatory Arrangement Specified	
Eswatini	Eswatini Water Services Corporation	National Publicly Owned Utility	Piped Water Supply; Sewered Sanitation	Ministry of Natural Resources and Energy (MoNRE)	Regulation by Contract
	Water Committees	Community-Based Organisations	Piped Water Supply; Point Water Sources	MoNRE via Regional Department of Water Affairs	Ministerial Regulation
	Vacuum Tanker Operators	Private Operators	Onsite Sanitation	Ministry of Health; Eswatini Environmental Authority	Ministerial Regulation; Regulation by Agency
	Municipalities	Local Government		Ministry of Housing and Urban Development	Ministerial Regulation
Lesotho	Water and Sewerage Company	National Publicly Owned Utility	Piped Water Supply; Sewered Sanitation; Onsite Sanitation	Lesotho Electricity and Water Authority	Regulation by Agency
	Regional Councils	Regional Government	Sanitation	Ministry of Water	Ministerial Regulation
	Local Authorities	Local Government	Piped Water Supply; Point Water Sources; Onsite Sanitation		
Malawi	5 Parastatal Water Boards	Regional Publicly Owned Utilities	Piped Water Supply; Sewered Sanitation	Ministry of Water and Sanitation	Ministerial Regulation
	Water User Associations	Community-Based Organisations	Piped Water Supply; Point Water Sources	Local Government Authorities	Ministerial Regulation
	Water Point Committees				
	Vacuum Tanker Operators	Private Operators	Onsite Sanitation (Emptying and Transport)	Ministry of Health and Ministry of Local Government	Ministerial Regulation
	Manual Pit Emptiers				
Local Government Authorities	Local Government				
Mozambique	Water Supply Investment and Heritage Fund (FIPAG) Delegated Private Operators	Private Operators	Piped Water Supply; Sewered Sanitation	Water Regulatory Authority (AURA) via Local Agents	Regulation by Agency
	Water and Sanitation Infrastructure		Piped Water Supply; Onsite Sanitation	AURA) via Water and Sanitation	

	Board (AIAS) Delegated Private Operators			Infrastructure Board (AIAS)	
	FIPAG	National Publicly Owned Asset Holders	Piped Water Supply; Sewered Sanitation	AURA via Local Agents	
	AIAS		Piped Water Supply; Onsite Sanitation	AURA via Local Regulatory Commissions	
	Municipalities	Local Government	Piped Water Supply; Onsite Sanitation	AURA	
	Water Committees	Community- Based Organisations	Piped Water Supply; Point Water Sources	AURA via Local Agents	
	Private Operators (Delegated by Municipalities)	Private Operators	Onsite Sanitation	Municipalities	Ministerial Regulation
Namibia	NamWater	Water Supply	Publicly Owned	Water Regulator	Ministerial Regulation
	Local Authorities	Water Supply and Sanitation		Water Regulator (Water); Regulatory departments within their structures (Sanitation)	Ministerial Regulation
	Regional Councils				
South Africa	Municipality	Local Government	Piped Water Supply; Point Water Sources; Sewered Sanitation; Onsite Sanitation	Department of Water and Sanitation	Ministerial Regulation
	9 Water Boards	Regional Publicly Owned Utilities	Piped Water Supply; Sewered Sanitation		
	Private Water Service Providers	Private Operators	Piped Water Supply; Point Water Sources; Onsite Sanitation	Water Services Authorities	Regulation by Contract
Zambia	11 Commercial Utilities	Regional Publicly Owned Utilities	Piped Water Supply; Sewered Sanitation; Onsite Sanitation	National Water Supply and Sanitation Council	Regulation by Agency
	Water Committees	Community- Based Organisations	Piped Water Supply; Point Water Sources	National Water Supply and Sanitation Council via Commercial Utilities	Regulation by Agency
	Vacuum Tanker Operators	Privately Owned	Onsite Sanitation (Emptying and Transport)		
	Manual Pit Emptiers				
Zimbabwe	Urban Local Authorities	Local Government	Piped Water Supply; Sewered Sanitation	Ministry of Local Government and Public Works (MoLGPW); Ministry of Health and Childcare (MoHCC); Environmental	Ministerial Regulation; Regulation by Agency
	Rural District Councils		Piped Water Supply; Sewered Sanitation		

				Management Agency (EMA)	
	Zimbabwe National Water Authority	National Publicly Owned Utility	Piped Water Supply	MoLGPW; MoHCC; EMA; Ministry of Lands, Agriculture, Fisheries, Water and Rural Development, Urban Local Authorities; Rural District Councils	Ministerial Regulation; Regulation by Agency
	Water Committees	Community-Based Organisations	Piped Water Supply; Point Water Sources	Urban Local Authorities and Rural District Councils	Ministerial Regulation
	Private Vacuum Tanker Operators	Privately Owned	Onsite Sanitation (Emptying and Transport)		
	Private Manual Pit Emptiers				

Box 5: Mozambique – Multi-Tiered Approach to Regulating Service Providers

To reach the whole country, the Water Regulatory Authority (AURA) – Mozambique’s regulatory agency – applies a two-tiered approach, with three regimes for WSS regulation: direct, indirect and consultative.

- I. AURA *directly* regulates 19 primary systems in the urban capitals owned by the Water Supply Investment and Heritage Fund (FIPAG), a public WSS asset holder. AURA sets the standards for these service providers, gathers reports, and directly audits service delivery performance. To achieve decentralisation of regulation enforcement, the direct regulation is carried out by AURA local agents, known as ALC.
- II. *Indirect regulation* is applied in 130 secondary systems, where the Water Supply and Sanitation Infrastructure Board AIAS is the asset holder. In this regime, AURA sets the standards and guidelines for service provision, but Local Regulatory Commissions (CORAL) enforce regulations. CORAL were established as an instrument of decentralisation to promote an effective partnership between AURA and the local authorities.
- III. *Consultative regulation* is applied for systems where local governments are the asset holders, but they delegate service provision to private operators. In this case, the elaboration of regulatory instruments is the municipality’s responsibility, with AURA intervening only if requested.

This overall model has improved decentralisation and allowed AURA to get closer to consumers. It has been categorised as *promising* and *adequate* to ensure WSS regulations enforcement in countries with large extensions of territory, such as Mozambique.

5.2. REGULATED SERVICE DELIVERY TYPES

The regulation of WSS services predominantly focuses on piped water supply services and – to a somewhat lesser extent – sewered sanitation. Table 5 uses a simple colour-coded traffic light system to present an overview of the extent to which regulations and regulatory mechanisms have been developed for six core WSS service delivery types and whether these are regulated at scale.²³ This represents a simplification of the situation within individual countries. However, at the top level, Table 5 highlights that regulatory activities are largely centred on networked piped water supply services and sewered 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.

²³ 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.

Table 5: 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
Angola	2	0	0	0	0	0
Botswana	2	2	1	2	1	0
Eswatini	2	0	0	2	0	0
Lesotho	2	0	0	1	0	0
Malawi	2	0	0	2	0	0
Mozambique	2	1	0	2	0	0
Namibia	1	1	1	1	0	0
South Africa	2	1	1	2	1	1
Zambia	2	1	0	2	1	1
Zimbabwe	2	1	0	1	0	0

The regulation of water supply services remains largely focused on networked piped water supply services, despite several countries having developed regulations for point water sources. Table 5 shows moderate performance across the Southern Africa region in relation to the regulation of water supply services, reflecting how most Southern African countries are regulating networked piped water supply services at scale and many have developed regulations for point water sources. Botswana stands out for having made important progress regulating different WSS service delivery types. Nevertheless, pressing challenges exist in developing and applying regulations for household water supply sources and, to a slightly lesser extent, point water sources.

Less progress has been made regulating sanitation services compared to water supply, and activities mainly focus on sewered sanitation. Table 5 also highlights that less progress has been made developing regulations for sanitation services and ensuring these are applied at scale relative to water supply services. Botswana, South Africa, and Zambia have made important progress developing regulations and regulatory mechanisms for onsite sanitation services; however, significant challenges remain in ensuring their implementation at scale.

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 16 individual regulatory mechanisms were examined across four areas:

- I. **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.
- II. **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.
- III. **Incentives.** Whether regulatory authorities are applying financial and reputational incentives to WSS service providers.
- IV. **Sanctions.** Whether regulatory authorities can suspend or remove the license of WSS service providers and apply fines to WSS service providers for breaching regulations.

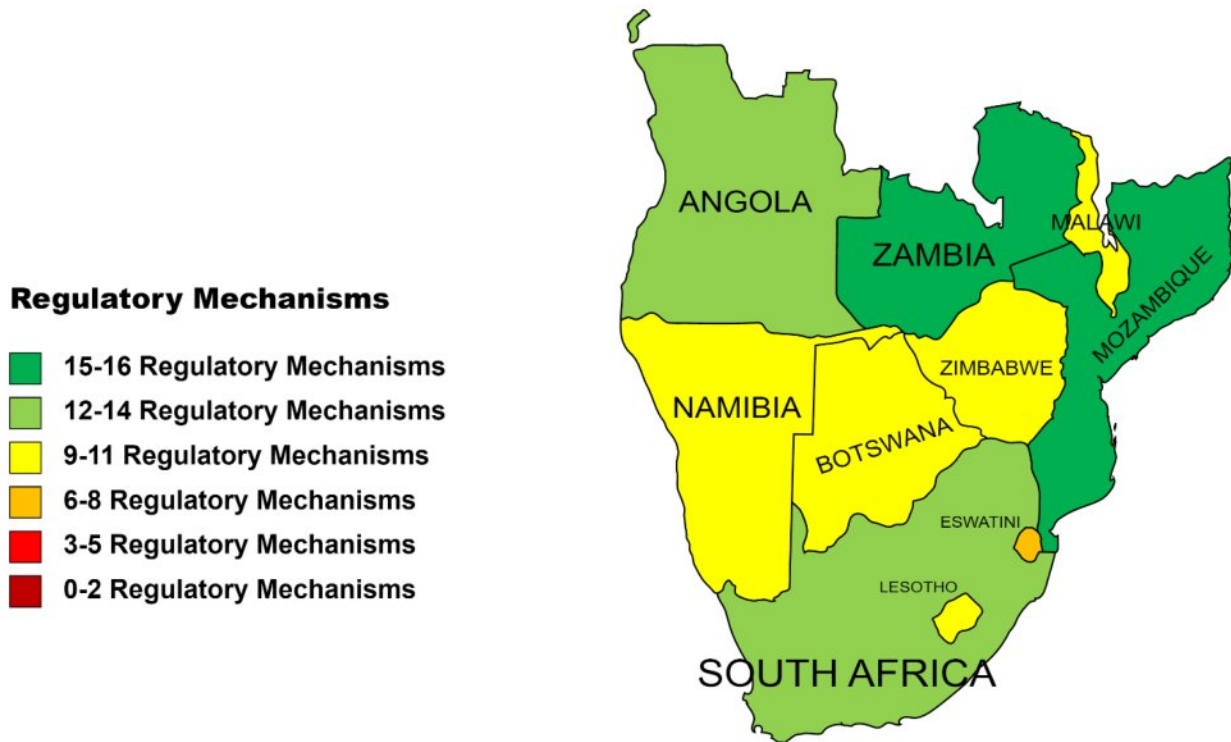
Table 6 details the 16 regulatory mechanisms investigated across these four areas. For each of these, a simple Yes or No grading was utilised to enable the aggregation of country findings to the regional and continent-wide levels. Consequently, noteworthy variations do exist in the performance against 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 6: 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.
Monitoring and Performance Reporting	Whether standards and / or guidelines exist for environmental protection .
	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.

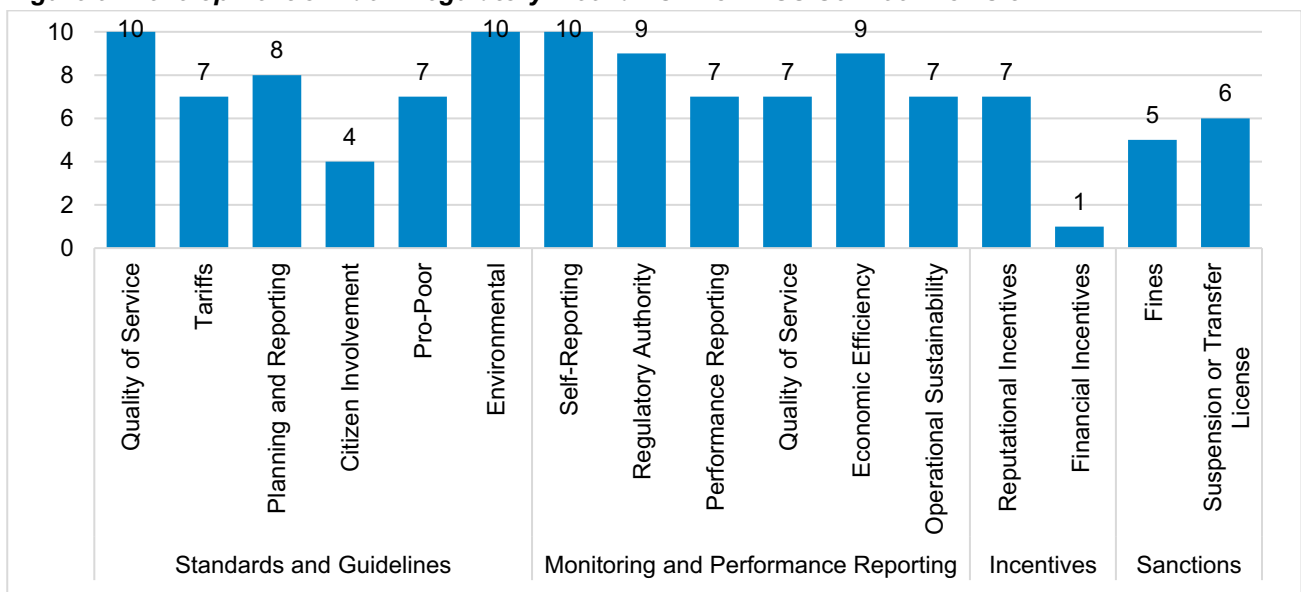
Varying levels of progress have been made across Southern Africa in developing and applying regulatory mechanisms for WSS service provision. Figure 8 provides a top-level overview of each country's performance concerning the development of these 16 regulatory mechanisms. It highlights moderate to good performance across the Southern Africa region. Except for Eswatini, all countries have developed at least nine of the 16 regulatory mechanisms investigated.

Figure 8: Top-Level Overview of Regulatory Mechanisms for WSS Service Provision



The most progress has been made in developing standards and guidelines and monitoring and performance reporting. Figure 9 details the number of the ten Southern African countries that have developed each of the 16 regulatory mechanisms investigated. It highlights that across the ten countries, greater progress has been made developing standards and guidelines and in monitoring and performance reporting; conversely progress has been slowest in developing incentives and sanctions, as well as in citizen involvement.

Figure 9: Development of Each Regulatory Mechanism for WSS Service Provision



6.1. STANDARDS AND GUIDELINES

Standards and guidelines development is an area of good or moderate performance, with a few notable exceptions. Table 6 details which Southern 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. The greatest progress has been made developing standards and guidelines in Mozambique, South Africa and Zambia, while pressing challenges exist in Malawi and Eswatini. Box 6 provides an overview of the wide range of standards and guidelines Mozambique has developed for WSS service provision and the positive impacts this is having of WSS regulation and service provision.

Table 6: Standards and Guidelines

Country	Quality of Service	Tariffs	Planning and Reporting	Citizen Involvement	Pro-Poor	Environmental
Angola	✓	✓	✓	✗	✓	✓
Botswana	✓	✓	✓	✗	✓	✓
Eswatini	✓	✗	✗	✗	✗	✓
Lesotho	✓	✓	✓	✓	✗	✓
Malawi	✓	✗	✗	✗	✓	✓
Mozambique	✓	✓	✓	✓	✓	✓
Namibia	✓	✓	✓	✗	✓	✓
South Africa	✓	✗	✓	✓	✓	✓
Zambia	✓	✓	✓	✓	✓	✓
Zimbabwe	✓	✓	✓	✗	✗	✓
Total	10	7	8	4	7	10

Box 6: Mozambique – Standards and Guidelines Development

In Mozambique, the Water Regulatory Authority and other regulatory actors have a well-developed set of standards and guidelines at their disposal to ensure service quality; environmental protection and citizen involvement; set tariffs, and standardise planning and reporting. Progressive pro-poor strategies applied through regulations to subsidise services for the most vulnerable populations are particularly noteworthy. Lifeline water tariffs ensure customers receive a given volume of water for free (enabling a minimum threshold of consumption by the poorest communities) and this is effectively cross subsidised by the more expensive surcharges applied for higher consumption levels in the rising block tariff. The lifeline tariff only applies to the users of point water sources (and not to individual connections) as piped water schemes have relatively high fixed charges, affecting the final price consumers pay.

6.2. MONITORING AND PERFORMANCE REPORTING

Monitoring and performance reporting of primary WSS service providers represents an area of generally good performance. Table 7 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 7: Monitoring and Performance Reporting

Country	Service Provider Sharing of Performance Data	Regulatory Authority Monitoring / Data Validation	Production of Reports on Service Provider Performance
Angola	Public Water and Sanitation Companies	Ministry of Energy and Water, Auditor General	Water National Directorate of the Ministry of Energy and Water
	Report regularly (i.e., monthly) to the Water National Directorate of the Ministry of Energy and Water.	Mandated to inspect the financial performance of public water companies and the services delivered. Frequency at which inspections and audits are undertaken is unclear.	Produces quarterly newsletters outlining performance of 17 public water companies across several KPIs. Annual reports benchmarking WSS service providers performance over time are not produced.

Botswana	Water Utilities Corporation	Ministry of Land Management, Water and Sanitation Services	Water Utilities Corporation
	Required to periodically share key information and data with Ministry of Land Management, Water and Sanitation Services' Department across a range of indicators.	Mandated to inspect and audit reports, documents and information within the Water Utilities Corporation. Confirms data received by the Water Utilities Corporation through Statistics Botswana.	Produces comprehensive annual reports. These are validated by regulatory actors before dissemination, but regulatory actors do not regularly produce performance reports on WSS service providers.
Eswatini	Eswatini Water Services Corporation	Auditor General	Eswatini Water Services Corporation
	Provides monthly reports to Ministry of Natural Resources and Energy and is legally mandated to produce detailed annual reports and annual audited financial accounts.	Limited inspections conducted by Ministry of Natural Resources and Energy. Eswatini Water Services Corporation uses private auditors and shares report with the Ministry. In turn, the Auditor General audits the Ministry's Department of Water Affairs.	Produces comprehensive annual reports that cover wide-ranging indicators and present audited financial accounts. These are validated before dissemination, but regulatory actors do not produce their own reports detailing the performance of the Eswatini Water Services Corporation.
Lesotho	Water and Sewerage Company	Lesotho Electricity and Water Authority	Lesotho Electricity and Water Authority
	Shares data concerning its quality of service, economic efficiency, and operational sustainability. However, it does not provide data on water supply or sanitation coverage.	Conducts inspections to assess performance and compliance. Undertook eight inspections of the Water and Sewerage Company in 2020.	Produces annual reports based on data from the Water and Sewerage Company and its own inspections. These are readily available on its website.
Malawi	Parastatal Water Boards	Ministry of Water and Sanitation and Water Services Association of Malawi	Water Services Association of Malawi
	Required to regularly share key information with the Ministry of Water and Sanitation and the Water Services Association of Malawi on an expansive set of water supply indicators.	Mandated to inspect and audit the five-parastatal water boards and conduct annual inspections and audits to validate information provided by the water boards.	Produces annual reports benchmarking water boards' performance and feed into broader sector reports. Reports cover a range of key topics but largely neglect sanitation service provision.
Mozambique	Private Water Supply Operators	Water Regulatory Authority	Water Regulatory Authority
	Required to submit monthly to the Water 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.	Conducts audits and inspections on water quality, water losses, and billing, visiting larger private operators at least once a year.	Produces annual benchmarking reports that rank the performance of private operators against each other.
Namibia	NamWater	Independent Auditor	NamWater
	Collects and reports performance data against some important indicators but the extent of data collection is not expansive as for other countries in Southern Africa.	Audits NamWater's financial statements. Limited inspections performed by regulatory actors for WSS.	Produces annual reports detailing their financial performance and water quality. Several key service quality and operational sustainability indicators are not included. Regulatory actors do not periodically produce reports on NamWater's performance.
South Africa	Water Service Authorities; Water Boards	Department of Water and Sanitation	Department of Water and Sanitation
	Required to submit annual reports to the Department of Water and Sanitation covering an expansive set of indicators.	Performs Blue Drop (drinking-water) and Green Drop (wastewater) certification audits in alternating years.	Comprehensive performance reports are produced annually; however, these do not contain data from all water service authorities.
Zambia	Commercial Utilities	National Water Supply and Sanitation Council	National Water Supply and Sanitation Council
	Required to submit data annually on a wide range of service quality, economic efficiency, and operational sustainability indicators.	Undertakes an annual in-depth inspection and audit of each commercial utility.	Produces very detailed annual sector performance reports that benchmark commercial utilities' performance against each other and over time against an expansive set of indicators.

	Zimbabwe National Water Authority, Urban Local Authorities, Rural District Councils	Auditor General	Zimbabwe National Water Authority, Government of Zimbabwe
Zimbabwe	Zimbabwe National Water Authority provides the Ministry with quarterly and annual reports that cover several service quality and economic efficiency indicators. An annual service level benchmarking report compels reporting by Urban Local Authorities, while Rural District Councils are supposed to utilise the Rural WASH Information Management System for reporting purposes.	Conducts inspections and audits of Zimbabwe National Water Authority, Urban Local Authorities, and Rural District Councils, and various forms of validation are built into service providers' reporting requirements	Zimbabwe National Water Authority produces detailed annual performance reports. These are validated by regulatory actors, but regulatory actors do not produce reports on Zimbabwe National Water Authority's performance. Government of Zimbabwe produces comprehensive benchmarking report on urban local authorities covering several aspects of WSS service provision.

Regulatory actors are largely monitoring and tracking a wide range of indicators for quality of service, economic efficiency and, to a lesser extent, operational sustainability. Figure 10 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 expansive set of indicators are being tracked and reported against the main WSS service providers in most Southern African countries.

Figure 10: Tracked and Reported WSS Indicators

Indicators Tracked

- 10-11 Indicators Tracked
- 8-9 Indicators Tracked
- 6-7 Indicators Tracked
- 4-5 Indicators Tracked
- 2-3 Indicators Tracked
- 0-1 Indicators Tracked

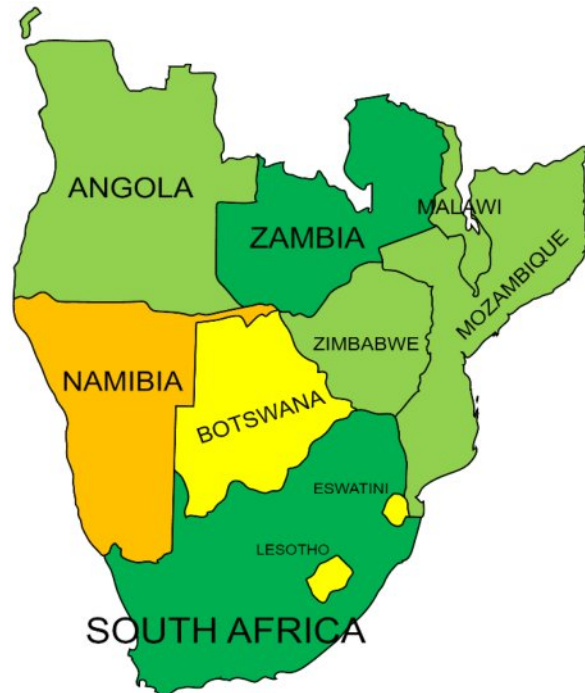


Table 8 details which indicators are tracked for the main WSS service providers. This includes indicators tracked and reported by WSS service providers themselves and indicators validated and sometimes reported by a regulatory authority. It highlights how the greatest progress has been made in monitoring 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 tracking key operational sustainability indicators. Zambia and South Africa are tracking the most advanced set of indicators, while Namibia has made the least progress.

Table 8: Indicators Tracked

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 1,000 Connections
Angola	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓
Botswana	✗	✗	✓	✓	✓	✓	✓	✓	✓	✗
Eswatini	✓	✓	✗	✓	✗	✓	✓	✗	✓	✓
Lesotho	✗	✗	✓	✓	✓	✓	✓	✓	✓	✗
Malawi	✓	✗	✓	✓	✗	✓	✓	✓	✓	✓
Mozambique	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Namibia	✗	✗	✗	✓	✓	✓	✓	✓	✗	✗
South Africa	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Zambia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Zimbabwe	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
Total	7	6	8	10	8	10	10	9	7	6

There is limited monitoring and performance reporting of smaller, deconcentrated service providers. To varying extents, there is limited – or no – consistent monitoring of services provided by water committees, private vacuum tanker operators and manual pit emptiers in all Southern African countries. Linked to this, these providers are not meaningfully included in performance reporting. Box 7 details the expansive monitoring and reporting conducted for Zambia's 11 commercial utilities and illustrates the challenge of monitoring and reporting on water committees and private vacuum tanker operators' performance.

Box 7: Zambia – Detailed Annual Performance Reporting, but Challenges Monitoring Small and Informal Service Providers

Zambia's 11 commercial utilities are required to submit annual data to the National Water Supply and Sanitation Council (NWASCO) on a comprehensive range of service quality, economic efficiency and operational sustainability indicators primarily relating to piped water supply and sanitation services. NWASCO validates this data and compiles detailed [annual sector performance reports](#) along with more qualitative assessments of commercial utility performance and developments in the WSS sector. These reports benchmark the performance of commercial utilities against each other, their past performance, and sector benchmarks, aiding comparison of commercial utility performance and understanding of progress over time.

While NWASCO's monitoring and performance reporting activities for commercial utilities are impressive, there is a shortage of data on other service providers (i.e., vacuum tanker operators, water committees) and the services they provide. This prevents NWASCO from including these types of service providers in the performance benchmarking presented in its annual reports. This is illustrative of a broader challenge across Southern Africa, whereby none of the regulatory actors are conducting consistent and structured monitoring and reporting activities at scale for smaller, deconcentrated service providers such as these.

6.3. INCENTIVES

Most regulatory actors apply reputational or financial incentives to WSS service providers as a means to stimulate improved performance; however, there is considerable room for improving the application of such incentives. Table 9 presents summary information on the financial and reputational incentives applied by regulatory actors. It highlights that regulatory actors in most countries have developed some form of incentives for promoting good performance by WSS service providers. These are normally reputational incentives and are typically comparatively light touch (i.e., publishing annual reports documenting service provider performance). More substantive incentives such as financial rewards or issuing awards for exemplary performance are only found in Zambia and Mozambique. Regulatory incentives are only applied to larger and more formalised service providers, with no examples found of reputational or financial incentives being applied to smaller, deconcentrated service providers such as water committees or manual pit emptiers. Box 8 details the reputational and informal financial incentives in South Africa, while Box 9 provides an overview of Zambia's National Water Supply and Sanitation Council's regulation by incentives measures.

Box 8: South Africa – Recently Re-Established Reputational Incentives

In South Africa, the Department of Water and Sanitation developed Blue Drop (drinking water services) and Green Drop (wastewater) certification programmes. These assess and measure an organisation's ability to provide acceptable drinking water and wastewater services by auditing and benchmarking the performance of participating water services institutions against a set of audit criteria. The results of these audits were published in annual Blue Drop and Green Drop reports and linked to an annual awards ceremony. This served as an important reputational incentive for water services institutions, and the process has been linked to [improved performance](#). By way of example, municipal provider performance in drinking water services management consistently improved in the years following the initiation of the Blue Drop audits, and a sharp increase occurred in the municipal water systems scoring over 95% (and therefore being awarded the prestigious Blue Drop). The Green Drop programme was suspended in 2014 and the Blue Drop programme was suspended in 2015.

These programmes, however, have recently recommenced with [Green Drop](#) audits taking place in 2021 and the [Blue Drop](#) audits recommencing in 2022. Significantly, the recent Green Drop audits have compared the performance of local government and privately-run wastewater systems against a series of aspects grouped into five areas:

- I. Capacity Management.
- II. Environmental Management.
- III. Financial Management.
- IV. Technical Management.
- V. Effluent and Sludge Compliance.

These results are presented in highly visual and comparative manner, benchmarking the performance of participating actors against each other as well as the results from past Green Drop audits. Ultimately, however, the latest Green Drop report highlights that since the suspension of the previous Green Drop audit for performance in 2013, there has been a decline in performance, with average Green Drop scores decreasing in all but one province.

Table 9: Financial and Reputational Incentives

Country	Financial Incentives Applied	Note	Reputational Incentives Applied	Note
Angola	✗	Regulatory Institute for Electricity Services and Water Supply; Ministry of Energy and Water	✓	Ministry of Energy and Water
		Financial incentives are not applied to WSS service providers to promote good performance.		Quarterly newsletters represent light-touch reputational incentives as they present performance of public water companies against KPIs.
Botswana	✗	Ministry of Land Management, Water and Sanitation Services	✓	Ministry of Land Management, Water and Sanitation Services
		No financial incentives are applied to WSS service providers.		Minister issues a Certificate of Excellence to loyal and effective operators within the WSS sector.
Eswatini	✗	Ministry of Natural Resources and Energy	✗	Eswatini Water Services Corporation
		Financial incentives are not applied to Eswatini Water Services Corporation or other service providers.		Eswatini Water Services Corporation's annual performance report is the main reputational incentive in the WSS sector. However, it does not benchmark performance over time or against internal or international standards.
Lesotho	✗	Lesotho Electricity and Water Authority	✗	Lesotho Electricity and Water Authority
		Financial incentives are not applied to WSS service providers to promote good performance.		Annual performance report is produced; however, this includes only very limited reporting of trends

				over time or benchmarking of performance against objectives or best practice standards.
Malawi	✗	Ministry of Water and Sanitation	✓	Water Services Association of Malawi
		Financial incentives are not applied to the five parastatal water boards or other WSS service providers.		Produces annual benchmarking reports for Malawi's five parastatal water boards that represent a relatively light-touch reputational incentive.
Mozambique	✗	Water Regulatory Authority	✓	Water Regulatory Authority
		Formal financial incentives are not applied to WSS service providers to promote good performance.		Awards are granted to regulated entities with the best performance and annual reports benchmark the performance of different WSS service providers.
Namibia	✗	Water Regulator	✗	Water Regulator
		Financial incentives are not developed or applied to WSS service providers to promote good performance.		NamWater's annual performance report is the main reputational incentive in the WSS sector. No regulatory actors regularly produce reports or issue awards that constitute structured reputational incentives.
South Africa	✗	Department of Water and Sanitation	✓	Department of Water and Sanitation
		Financial incentives are not available to WSS service providers. However, grants are more likely to be obtained if municipalities are addressing issues of concern in the sector.		Awards are provided as part of the Blue and Green Drop audits and handed out in ceremonies. Blue and Green drop reporting is a further reputational incentive.
Zambia	✓	National Water Supply and Sanitation Council	✓	National Water Supply and Sanitation Council
		Sanitation surcharge is a 2.5-5% levy on customers' monthly water bills granted to commercial utilities with O&M cost coverage of above 100%.		Annual sector reports benchmarking commercial utilities and detail areas of exemplary performance. Awards are given for most improved, best performers in a KPI, top ranked performers, water stewardship and CEO performance.
Zimbabwe	✗	Various Ministries	✓	Various Ministries
		Formal financial incentives have not been developed and are not applied to WSS service providers to promote good performance.		Annual awards are given to Urban Local Authorities and Rural District Councils based on good performance. Urban Local Authority service level benchmarking report is a further reputational incentive.

Box 9: Zambia – Substantive and Long-Standing Financial Incentive through a Sanitation Surcharge

Since its commencement in 2000, Zambia’s National Water Supply and Sanitation Council (NWASCO) has employed a variety of regulatory mechanisms. While these helped to improve sector performance, improvements in service delivery were slower than anticipated or desired. In 2008, NWASCO advanced its regulatory regime by introducing financial incentives to stimulate better performance and innovation amongst Zambia’s 11 commercial utilities and to induce efficiency gains. The sanitation surcharge is the formal financial incentive utilised by NWASCO. It is a levy of up to 5% on all a commercial utility customers’ monthly water bill. Commercial utilities apply for the right to utilise the sanitation surcharge on a case-by-case basis, and this is generally approved if they have achieved at least 100% O&M cost coverage. To date, six of Zambia’s 11 commercial utilities are applying the surcharge as part of their tariff structure. As of 2020, over ZMW 87 million (equivalent to roughly US\$5 million) has been collected through the sanitation surcharge, providing commercial utilities with a significant source of additional revenue specifically dedicated for sanitation extension projects.

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 10 presents an overview of the Southern African countries where regulatory authorities are mandated 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 just five of the ten countries can fine service providers for breaching WSS regulations for aspects related to service provision.²⁴ In six of the countries, regulatory actors can suspend or remove a service provider’s license or terminate their contract. Moreover, regulatory actors with the ability to fine service providers or suspend or transfer their license are largely not using this power. In the absence of fining service providers or suspending or transferring their licenses, regulatory actors largely depend on more informal or light-touch measures. Similarly to many of the regulatory mechanisms investigated, a less developed set of sanctions generally exist for smaller, deconcentrated or informal service providers. These actors are largely not sanctioned for breaching regulations.²⁵

Table 10: Sanctions

Country	Ability to Fine Service Providers	Note	Ability to Suspend / Remove Service Provider License	Note
Angola	✓	Regulatory Institute for Electricity Services and Water Supply	✓	Ministry of Energy and Water
		Mandated to fine public water companies; however, there is no evidence of this power being applied.		Has the ability to remove, suspend or transfer licenses based on advice from the Regulatory Institute for Electricity Services and Water Supply.
Botswana	✓	Ministry of Land Management, Water and Sanitation Services	✗	Ministry of Land Management, Water and Sanitation Services
		Water Management Act and Public Health Act empower WSS service providers to be fined for breaching for polluting the environment.		Cannot suspend the activities of the Water Utilities Corporation. Is mandated to remove staff of the Water Utilities Corporation.

²⁴ 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.

²⁵ A notable exception here is that in most Southern African countries, a more expansive set of sanctions can usually be applied to private vacuum tanker operators that provide emptying and transport services for onsite sanitation in most Southern African countries. These sanctions often include the ability of entities with environmental protection responsibilities (i.e., environmental management agency, ministry of environment) to issue fines or remove a license for actions such as illegal dumping.

Eswatini	✗	Ministry of Natural Resources and Energy	✗	Ministry of Natural Resources and Energy
		Cannot issue fines to the Eswatini Water Services Corporation. Eswatini Environmental Authority and National Water Authority can fine service providers.		Cannot suspend or transfer the Eswatini Water Services Corporation's license. Can terminate the appointment of the Chairman or any other Director for misconduct. Eswatini Environmental Authority can remove or suspend vacuum tanker operators' license.
Lesotho	✗	Lesotho Electricity and Water Authority	✗	Lesotho Electricity and Water Authority
		Cannot issue fines. The Department of the Environment can issue fines based on the 'polluter pays'; however, there is limited enforcement.		The licenses of the Water Utilities Corporation and the Department of Rural Water Services cannot be removed.
Malawi	✗	Ministry of Water and Sanitation	✓	Ministry of Water and Sanitation
		Cannot issue fines to Malawi's five parastatal water boards. The Environmental Protection Agency can issue fines.		Can suspend water boards' ability to exercise any of their functions if they fail to comply with a written order. This power has never been utilised.
Mozambique	✓	Water Regulatory Authority	✓	Water Regulatory Authority
		Is mandated to issue fines; however, have not yet developed regulatory instrument specifying parameters of this. Non-approval of proposed tariffs is an informal financial sanction that is applied.		Can recommend the suspension of service providers' contracts to the asset owners (Water Supply Investment and Heritage Fund, the Water and Sanitation Infrastructure Board), where they have been established to have breached their contract. However, detailed penalties for non-compliant service providers are still in the development process and have not been formally enacted.
Namibia	✓	Water Regulator of Namibia	✓	Water Regulator of Namibia
		Has the power to issue fines to WSS service providers; however, this is only applied on a limited basis.		Licenses can be suspended or transferred if the water services provider fails to take the measures specified in a directive.
South Africa	✓	Department of Water and Sanitation	✓	Water Services Authority
		Can issue fines; however, this is predominantly done for aspects relating to environmental protection rather than WSS service provision directly.		The removal of a private service provider by the Water Services Authority can occur based on non-performance or not meeting contractual requirements.
Zambia	✗	National Water Supply and Sanitation Council	✓	National Water Supply and Sanitation Council
		Cannot issue fines but has powerful economic levers (i.e., tariff setting) to influence commercial utilities' behaviour. Zambia Environmental Management Agency can issue fines.		Can suspend the license of a commercial utility. This measure has not been applied preferring instead to appoint a Statutory Manager when the Board and CEO have been removed for deteriorating utility performance. Can issue directives and enforcement notices to commercial

				utilities that do not comply with directives.
Zimbabwe	X	Various Ministries	X	Various Ministries
		Not mandated to fine the Zimbabwe National Water Authority, Urban Local Authorities, Rural District Councils or other service providers. Environmental Management Agency can issue fines for breaching environmental protection regulations.		Urban local authorities and rural district councils are not licensed but mandated by statutory instruments to deliver WSS services. Accordingly, regulatory actors cannot suspend, remove or transfer their licenses.

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 Southern African countries. Table 11 presents the status of different aspects related to three dimensions of the regulatory environment: (i) autonomy; (ii) participation; (iii) transparency. It highlights generally poor performance in this area, with several common challenges evident. Of note, regulators are often part of – or closely connected to – a Ministry with WSS responsibilities and therefore do not have the autonomy to adjust tariffs without governmental approval and are dependent on wider government budgeting processes to fund their regulatory activities. In several countries, inadequate funding for regulatory activities based on these budgeting processes is a common challenge. Additionally, regulatory actors produce reports on the performance of WSS service providers that are made publicly available in only five countries. Despite this, Zambia and Mozambique 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 publicly available and easy to access .

Table 11: 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
Angola	✗	✓	The revenue of the Regulatory Institute for Electricity Services and Water Supply is based on the regulatory fees paid by the Public Water and Sanitation Companies (cost of regulatory function). The regulatory fee to be paid is to be recalculated on a yearly basis. ²⁶	No specific measures exist to enhance public participation in the development and application of regulations.	✓
Botswana	✗	✗	The Ministry Land Management, Water and Sanitation Services sources some revenue from licensing, levies and fines, but is largely dependent on wider governmental budgeting processes to perform regulatory activities.	Public participation in decision marking in water sector is advocated in Integrated Water Resources Management Plan. Citizen participation programs for national policies are typically only initiated in response to public reaction to proposed action.	✗
Eswatini	✗	✗	The Ministry of Natural Resources and Energy is dependent on wider government-driven budgeting	Stakeholder consultations are utilised when developing regulatory documents. Insufficient	✗

²⁶ The calculation for determining this levy is: The Net Regulatory Remuneration at the End of the Year X = The Net Regulatory Remuneration at the End of the Year X-1 PLUS Investments made based on the Management Entity's Investment Plan in Year X PLUS Change in Working Capital in Year X MINUS Technical Depreciation for Year X.

			activities to finance its regulatory activities. The Eswatini Environmental Authority and the National Water Authority are largely dependent on funding from the Ministry of Finance, with income generating activities accounting for a relatively small proportion of their funds.	measures are in place to ensure ongoing public participation in the application of regulations. Accountability is largely dependent on requirements imposed by international organisations or measures the Eswatini Water Services Corporation itself chooses to apply.	
Lesotho	✓	✓	The Lesotho Electricity and Water Authority (LEWA) is funded via licenses from electricity and water supply and sewerage operators, and a levy paid by customers. From January to May 2022, levies accounted for 82.2% of funds, compared to 17.8% from licenses. 90% of funds were from licenses or levies linked to electricity, while 10% came from licenses or levies linked to water supply.	Several objectives have been developed in national policy documents regarding the implementation of measures to promote public participation in the development and application of regulations.	✓
Malawi	✗	✗	The Ministry of Water and Sanitation is naturally dependent on broader governmental budgeting processes. The Water Services Association of Malawi generates much of its own funds; however, some of its financing comes from the parastatal water boards that it benchmarks.	Several rounds of consultations and workshops are held with key non-governmental stakeholders and users to comment and review drafts of key documents. Insufficient measures are in place to ensure public participation in the application of regulations.	✗
Mozambique	✓	✓	The Water Regulatory Authority is predominantly financed through a regulatory levy of 3% of the gross annual revenue of formalised service providers. 40% of this fee is remitted to the Ministry of Finance, with the remaining 60% left to finance the Water Regulatory Authority.	Participatory mechanisms are stated in Decree 18/2019. Regulated entities, consumers and interested stakeholders should be consulted in decision-making on critical aspects of regulation and prior assessment of its impact.	✓
Namibia	✗	✗	Water Regulator of Namibia is funded by the Ministry of Agriculture, Water and Land Reform.	Public participation is promoted by various institutions, which invite the public to participate and give input.	✗
South Africa	✗	✗	The budget for the regulation of WSS services by the Department of Water and Sanitation is put through to the National Government as part of the larger Department of Water and Sanitation budget.	During regulation development, regulations are open for public comment (30 days). Civil society organisations are invited to – and regularly participate in – the development and implementation of regulations.	✓
Zambia	✓	✓	The National Water Supply and Sanitation Council is predominantly (approx. 85-90%) financed through a 2% levy on commercial utilities' turnover and application fees from licenses issued.	Measures exist to ensure public participation in developing regulations. Various channels exist for customers to lodge complaints and the National Water Supply and Sanitation Council has supported the formulation and operation of Water Watch Groups and engages part-time inspectors to assist in monitoring service delivery.	✓
Zimbabwe	✗	✗	The Ministry of Land Affairs, Fisheries, Water, and Rural Development and Urban Local Authorities and Rural District Councils are dependent on wider government-led budgeting processes to fund their comparatively limited regulatory activities.	Measures and protocols exist to ensure the inputs of a broad range of stakeholders and the wider public in the development of regulations. Resident trusts and resident associations exist and seek to influence service delivery and are included in the	✗

				Joint Sector Review process and involved in tariff setting.	
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