

CITYWIDE INCLUSIVE SANITATION (CWIS) REGULATORY JOURNEYS IN SIX COUNTRIES

Eastern and Southern Africa



Acknowledgements

This work has been undertaken as a joint collaboration between ESAWAS and UNICEF in recognition that harnessing knowledge of regulatory practices in CWIS would aid in strengthening the capacity of regulators and other implementing agencies (government, utilities, private etc) across Africa and globally to effectively discharge their mandates and improve service delivery.

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This report is based on research and key informant interviews coordinated by ESAWAS member focal persons at the country level, namely: Eng. Jacques Nzitonda-RURA, Rwanda; Mr Lloyd Beensi-NWASCO, Zambia; Mr Abdu Maliki Muyinda-WURD, Uganda; Mr Titus Safari-EWURA, Tanzania; Mr Lawrence Miano-WASREB, Kenya; and Mr Dieudonné Sibomana-AREEN, Burundi. The overall coordination was led by Mr Arnold Cole-UNICEF ESARO and Ms Elisabeth Nahimana-ESAWAS.

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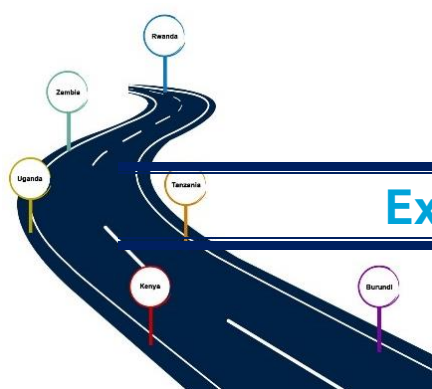
List of Abbreviations and Acronyms

Abbreviation/Acronym	Definition
AHAMR	Agence Burundaise de l'Hydraulique et de l'Assainissement en Milieu Rural
AREEN	Autorité de Régulation des secteurs de l'Eau potable et de l'Energie
BMGF	Bill & Melinda Gates Foundation
CBOs	Community-Based Organizations
CIDPs	County Integrated Development Plans
CWIS	Citywide Inclusive Sanitation
CPs	Cooperating Partners
CUs	Commercial Utilities
DCOM	Design, Construction, Supervision, Operation, and Maintenance
DEWATS	Decentralized Wastewater Treatment Systems
ESAWAS	Eastern and Southern Africa Water and Sanitation Regulators Association
EWURA	Energy and Water Utilities Regulatory Authority
FSM	Faecal Sludge Management
GIS	Geographic Information System
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
HLM	High-Level Meetings
IRC	International Rescue Committee
ISH	Improved Sanitation and Hygiene Strategy
JMP	Joint Monitoring Programme
KCCA	Kampala Capital City Authority
KIIs	Key Informant Interview
KPI	Key Performance Indicator
LCC	Lusaka City Council
LGAs	Local Government Authorities
LWSC	Lusaka Water and Sanitation Company
MDB	Multilateral Development Bank
MLGRD	Ministry of Local Government and Rural Development
MoH	Ministry of Health
MoU	Memorandum of understanding
MoW	Ministry of Water
MWDS	Ministry of Water Development and Sanitation
NGOs	Non-Governmental organizations
NWASCO	National Water Supply and Sanitation Council
NWSC	National Water and Sewerage Corporation
OBUHA	Office Burundais de l'Urbanisme, de l'Habitat et de la Construction
OD	Open Defecation
OSS	Onsite Sanitation Systems
PHI	Public Health Inspection
PPE	Personal Protective Equipment
RURA	Rwanda Utilities Regulatory Authority
RWSS	Rural Water Supply and Sanitation



SDGs	Sustainable Development Goals
SETAG	Service Technique d'Assainissement de Gitega
SWA	Sanitation and Water for All
SWM	Solid Waste Management
TWG	Technical Working Group
UN	United Nations
UNICEF	United Nations Children's Fund
WASAC	Water and Sanitation Corporation
WASH	Water, Sanitation, and Hygiene
WASREB	Water Services Regulatory Board
WHO	World Health Organisation
WRM	Water Resources Management
WSS	Water Supply and Sewerage
WSSAs	Water Supply and Sanitation Authorities
WSUP	Water & Sanitation for the Urban Poor
ZEMA	Zambia Environmental Management Agency
ZSA	Zambia Statistics Agency





Executive Summary

Citywide Inclusive Sanitation (CWIS) emerges as a strategic response to the sanitation crisis in urban areas aiming to provide equitable and sustainable sanitation services to all residents. To achieve the SDGs and to support safe, healthy urban living environments, sanitation services must be organized into public service systems. CWIS systems are expected to advance the outcomes of safe, equitable, and sustainable services for all users in a city, including marginalized and vulnerable groups. To achieve these outcomes at scale, the inherent failures associated with sanitation service markets must be corrected by publicly organized sanitation service systems that combine both sewered and non-sewered sanitation approaches.

This report documents the progress of early-adopters of CWIS regulation, drawing upon the experiences of six countries within the Eastern and Southern Africa region - Kenya, Tanzania, Uganda, Burundi, Rwanda, and Zambia. By detailing the regulatory frameworks, policy enactments, stakeholder engagement processes, and the challenges and achievements encountered along the way, the report seeks to fill the knowledge gap and serve as a valuable resource for policymakers, regulators, service providers, service authorities and their development partners involved in urban sanitation. The goal is to catalyse further progress in CWIS by providing actionable insights, outlining pathways for implementation, fostering regional collaboration, and encouraging the adoption of good practices that can lead to the realization of inclusive, safe and sustainable urban sanitation frameworks across the Eastern and Southern Africa region, the continent and globally. The report further demonstrates the value of regional and global cooperation to accelerate uptake and support implementation of workable approaches to drive improvements in sanitation service provision.

The documentation employed a mixed approach to data collection, encompassing both primary and secondary sources. A total of 37 Key Informant Interviews (KIIs) targeting a diverse set of stakeholders involved in the sanitation sector were conducted in Kenya, Tanzania, Uganda, Rwanda, Burundi and Zambia between November 2023 and January 2024. The informants included policy-makers, utilities, private sector players, development partners, regulators, and regional actors' representatives. The interview data was complemented by a desk study to review specific legislative and regulatory documents discussed during the interview. This component of the research was crucial in understanding the existing legal frameworks, identifying gaps, and highlighting areas of progress and innovation in sanitation regulation.

This report is structured around the essential building block elements necessary for the sanitation sector to provide sustainable services and to systematically reduce disparities in access. These elements include Sector Policy & Strategy, Institutional Arrangements, Sector Financing, Planning, Monitoring and Review, and Capacity Development. Furthermore, this report aligns with the newly developed WHO 'Roadmap for Advancing Sanitation Regulation', ensuring the approach is both comprehensive and forward-looking.

This report showcases both the tangible impacts and the key lessons learned, notably the use of GIS mapping in Zambia that is enabling precise targeting of interventions and an evidence-based approach to sanitation service provision. Additionally, the formalisation of manual pit-emptiers,



such as in Rwanda, has not only improved sanitation workers' safety but has also provided stable employment opportunities, contributing to the economic well-being of communities involved in these essential services. From these experiences, a few critical lessons have emerged: the existence of enabling policy that provides for clear sector mandates (including service provision) among institutions; the importance of regulatory frameworks that can adapt to the evolving needs of rapidly urbanizing cities; the necessity of inclusive stakeholder engagement; and the benefits of robust public authority data systems that guide service delivery decisions and inform national policy and finance considerations. These elements are vital for those planning to embark on or enhance their CWIS regulation, providing a foundation for successful sanitation management that can significantly improve public health and urban living conditions.

The ESAWAS Regulation framework and strategy for Inclusive Urban Sanitation Service Provision developed in 2019 has been instrumental in informing and assisting several countries to institute or strengthen their sanitation regulation approaches. The framework offers a structured pathway that comprehensively addresses sector and regulatory requirements, enabling countries to tailor guidance to the unique challenges and opportunities within their contexts. The adoption and adaptation of the ESAWAS sanitation regulatory framework and strategy have catalysed significant improvements in sanitation governance and service management evidenced in the six countries, ensuring that sector actors foster inclusive and sustainable sanitation that combines both sewered and non-sewered sanitation solutions. Through ESAWAS' guidance and support, countries have been able to enhance their regulatory capacity and effectiveness, which in turn has facilitated more structured and impactful implementation of CWIS. The framework's role in shaping the region's regulatory landscape underscores its importance as a cornerstone of effective sanitation service management and its contribution to the broader goals of public health and environmental sustainability.

The report further delves into the pivotal roles played by UNICEF and the Bill & Melinda Gates Foundation (BMGF) in contributing to and supporting CWIS and its regulatory advancements across the region. It outlines the collaborative efforts, technical support and

COUNTRY SUMMARY PROFILE

Rwanda's CWIS regulatory history is marked by a gradual transition towards a more professionalised sanitation management approach, catalysed by RURA's initiative to directly license private operators for sludge emptying and transportation services and the condominium law that necessitated effective sanitation management in shared living spaces.

Zambia's approach to CWIS showcases a proactive regulatory framework aimed at enhancing urban sanitation services. NWASCO has been instrumental in driving CWIS initiatives within national services regulation and development of supporting regulatory mechanisms. Key milestones include the development of sanitation surcharge and promotion of public-private collaboration.

Uganda's regulatory approach to CWIS has seen strategic adaptations to address urban sanitation needs, with the Urban Water Supply and Sewerage Services Department and the Improved Sanitation and Hygiene Strategy marking pivotal developments. The emphasis by WURD on faecal sludge management regulations and strengthening stakeholder coordination underscore the country's commitment to inclusive sanitation.

Tanzania's CWIS regulation evolution is notable for EWURA's role in promoting decentralized wastewater treatment systems (DEWATS) and non-sewered sanitation solutions. Through consumer protection efforts and service quality enhancement, Tanzania has made significant strides in improving urban sanitation, with a notable emphasis on engaging private sector players in faecal sludge management.

Kenya's journey in CWIS regulation has been characterized by a shift from rural sanitation focus to embracing urban sanitation challenges. The transition of sanitation responsibilities to the Ministry of Water, Sanitation, and Irrigation marked significant milestones in creating an inclusive regulatory framework under WASREB that encompasses both sewered and onsite sanitation services.

Burundi's CWIS framework has benefited from the collaborative efforts of national entities. The adoption of a national implementation roadmap for urban sanitation services by the regulatory body AREEN highlights a significant step toward enhancing regulatory oversight and ensuring quality sanitation services across the nation.



advocacy among regional and global partners, which have been crucial in scaling up CWIS initiatives. This examination underscores the importance of international collaboration in enhancing sanitation services and regulatory frameworks.

Across the countries studied, several common themes and challenges emerge in the journey towards effective CWIS regulation. Key among these is the need for robust regulatory frameworks that incorporate both sewerage and non-sewerage sanitation services, the importance of stakeholder coordination across various sectors, and the challenge of securing necessary investments for infrastructure development. Innovative practices, such as the promotion of DEWATS in Tanzania and the operationalization of County Integrated Development Plans in Kenya, provide valuable lessons for other countries in the region. The findings from each country underscore the importance of clear mandates, enabling environment, adaptable regulatory frameworks, collaborative governance, and innovations in addressing the complex challenges of urban sanitation. These insights not only highlight the achievements and lessons learned but also point to the efforts required to ensure equitable and sustainable sanitation for all urban residents in the Eastern and Southern Africa region.

Several key recommendations

emerged from the regulatory journeys and findings across Kenya, Tanzania, Uganda, Burundi, Rwanda, and Zambia. These recommendations are designed to address the common challenges identified, capitalize on innovative practices, and leverage the achievements to-date for broader continental and global impact. Implementing these recommendations requires a concerted effort from all stakeholders involved in urban sanitation. By addressing these key areas, countries can make significant strides toward achieving inclusive, sustainable, and equitable sanitation for all urban residents.

The path towards achieving CWIS is complex and requires sustained commitment, innovation, and collaboration. Yet, the benefits of such an endeavour—improved public health, environmental sustainability, and enhanced quality of life for urban populations—are immeasurable and well worth the collective effort. By continuing to share knowledge, learn from each other's experiences, and adopt good practices, the countries within the Eastern and Southern Africa region and globally can make significant strides toward realizing the goal of inclusive, sustainable, and equitable sanitation for all urban residents. The journey ahead is challenging, but with concerted effort and shared vision, achieving CWIS is within reach, promising a healthier and more dignified future for urban communities across the region.

Strategic Recommendations for Countries Initiating Inclusive Sanitation Regulation:

- 1. Implement strong regulatory frameworks and systems*
- 2. Establish inter-ministerial sector coordination mechanisms and goals*
- 3. Promote private sector engagement within a public sector approach*
- 4. Tie investment and financing to accountability for results and equity*
- 5. Strengthen system integration and use of WASH data for evidence-based decisions*
- 6. Build capacity of service providers to execute mandates*
- 7. Leverage regional cooperation and knowledge exchange*



The Sustainable Development Goal (SDG) 6 targets and national visions for universal access to safely managed water and sanitation have galvanised country, regional, continental and global WASH communities towards their attainment. In East and Southern Africa, achieving safely managed sanitation services in particular, has become even more pressing with the recognition that the majority of population rely on non-sewered sanitation, often with installation and servicing run by informal or retail providers outside public purview.

Reaching these communities with safely managed sanitation services requires a paradigm shift and pragmatic approaches for public systems to incorporate the sanitation service needs, that combines both sewerred and non-sewerred approaches, purposefully incorporating the extensive service needs of low-income households in informal areas. The Citywide Inclusive Sanitation (CWIS) is a framework for this ambitious but fundamental goal. It is against this backdrop that the Eastern and Southern Africa Water and Sanitation Regulators Association (ESAWAS) and United Nations Children's Fund (UNICEF) have individually been undertaking interventions in the region to enhance access to inclusive safely managed sanitation.

Accelerating and sustaining access to quality and affordable sanitation services requires a strong regulatory framework, to correct for inherent market failures associated with provision of services, particularly for underserved populations in low-income areas. The major challenge to improving inclusive sanitation services in the East and Southern African countries was the absence of a regulatory framework to address the full service chain incorporating both sewerred and non-sewerred sanitation. There were no regulatory tools or instruments (guidelines, regulations or national standards) and in some cases no legal framework, to specifically address non-sewerred sanitation.

ESAWAS - a network of WSS regulators - has crafted a Sanitation Regulatory Framework and Strategy aimed at providing guidance on how to implement regulation for inclusive urban sanitation services that incorporates non-sewerred sanitation services. Since 2019, this Framework and supporting key guidelines and tools that have been developed, is being adopted and adapted across countries to fit their unique contexts. This report delves into the regulatory journeys of ESAWAS and six of its members' countries that were early adopters of inclusive sanitation regulation. The report highlights the transformative power of well-structured regulatory frameworks to catalyse sustainable sanitation solutions across rapidly urbanizing landscapes.





The report details the country specific CWIS regulatory journeys of Rwanda, Zambia, Uganda Tanzania, Kenya, and Burundi.

The journey explores the local context, the initiation and evolution of non-sewered sanitation regulation, and specific challenges and successes encountered. These narratives are built around the regulatory frameworks established, adaptations made to the enabling environment (policy and legal), and the practical implementation of CWIS strategies within each country, providing detailed case studies that illustrate the diverse approaches and outcomes experienced by different regulators.

Country	Total Urban Population [2022]	Sanitation Coverage [2022]	Service Coverage by Sewer Network [2022]
Rwanda	3,701,245	72%	0%
Zambia	8,034,361	73.2%	38.3%
Uganda	12,360,019	90.6%	23%
Tanzania	21,544,623	32%	10.7%
Kenya	15,669,052	93%	16%
Burundi	1,858,290	33%	7%

The country journeys are further analyzed along core recommendations that can be followed to achieve high-performing sanitation regulation as outlined in a WHO-led publication ‘A Roadmap for Advancing Sanitation Regulation’. These are addressed as follows:

- ❖ Policy and Legal basis for services regulation – *outlines provisions for the enabling environment*
- ❖ Institutional and regulatory framework – *describes the mandates of sector institutions*
- ❖ Accountability mechanisms – *tools and instruments used for answerability of mandate*
- ❖ Sector monitoring and reporting – *public data management systems to inform regulation and service improvements*
- ❖ Strengthen regulatory and services providers capacity and incentives – *efforts to develop capacity of sector actors to execute mandates*

Following the country-specific analyses, the report examines the individual and combined roles of ESAWAS, UNICEF and BMGF in facilitating and supporting sanitation regulation advancements across the region. It details the regional collaborative efforts, including how the ESAWAS Regulatory Framework and Strategy, guidelines tools have been adapted and implemented across members. Additionally, it explores the support from global partners such as UNICEF and the contributions of international funding and technical assistance such as BMGF that have been pivotal in scaling-up CWIS initiatives.

The report concludes with a synthesis of key findings and lessons learned from the detailed analysis of country-specific regulatory journeys and the overarching regional support mechanisms. Strategic recommendations for both current and future regulatory practices are offered to enhance the effectiveness of CWIS. These recommendations are aimed at policymakers, regulators, and development partners, suggesting ways to strengthen regulatory frameworks, enhance stakeholder engagement, and secure sustainable financing for sanitation improvements.

In essence, this report is a testament to the collaborative efforts and collective experiences of the ESAWAS Regulators Association’s members’ to drive sanitation service improvements. By documenting these journeys, the report aims to provide a robust knowledge base that can support and inspire other regions and countries planning to embark on or enhance their sanitation regulation, ensuring that growth in urban settings is matched with equitable and sustainable sanitation advancements. It serves as a valuable resource for those committed to advancing the cause of inclusive sanitation, offering pathways for regulatory enhancement and effective service delivery in the quest for universal sanitation access.



Countries Regulatory Journeys in CWIS Regulation

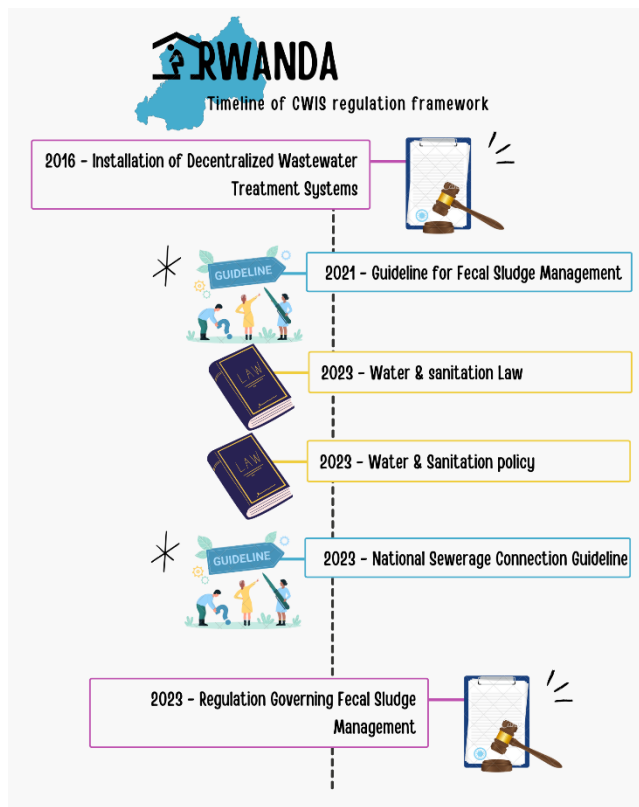
1. Rwanda

a. CWIS regulatory history

In Rwanda, the CWIS regulatory history reflects a gradual shift towards a more comprehensive and inclusive approach to sanitation management. Over the past 15 years, there has been a significant evolution from a limited focus on water supply and solid waste management to a broader, more integrated perspective on sanitation.

Initially, the regulatory focus was primarily on water supply, with sanitation being somehow overlooked. Urban areas, like Kigali City, rely only on septic tanks and other non-sewered sanitation solutions/types, as there is no central sewage system. The City of Kigali's (local government) main activity in the sanitation sector was to ensure commercial buildings and residential complexes had functional decentralised wastewater treatment facilities installed by operators licensed by the regulator

Figure 1 : Rwanda's Policy and Guideline timeline



The shift towards more inclusive sanitation began around 2016 when the Local Government started issuing permits for construction/upgrading of sanitation facilities and the Regulator started issuing licenses for private companies to perform sludge emptying services. This move was partly triggered by the realization of the challenges posed by the scarcity of land in urban areas and the inefficiencies of the existing sanitation systems. The condominium law enacted around 2017/18 further highlighted the need for more effective sanitation management in shared land scenarios.

The Rwanda Utilities Regulatory Authority (RURA) in collaboration with the City of Kigali began to address technical standards for sanitation services, ensuring that private companies used safe, well-maintained equipment and adhered to environmental and health safety standards. This included disallowing manual pit-emptying and introducing requirements for protective equipment for workers.

Concurrently, in removing manual pit-emptying, the government realized that the existing FSM system was not serving the needs of the urban poor population. The high costs associated with mechanical emptying services and the challenges of negotiating prices for urgent sanitation led to a need for further regulatory changes. This led to the decision to regulate the entire CWIS chain,

from emptying to treatment, and to enforce the mandate of the utility responsible for water services - Water and Sanitation Corporation (WASAC), in managing sanitation services.

An essential aspect of the CWIS regulation in Rwanda is the active participation of local authorities and community members in sanitation management. For instance, local authorities grant construction permits contingent upon the inclusion of easily emptiable sanitation facilities in the plans. Furthermore, the compulsory national community service, known as Umuganda, fosters a robust community-driven and pro-poor approach. This approach guarantees that vulnerable individuals are identified by both the authorities and the community, ensuring they receive tailored support. Such support encompasses assistance in building suitable sanitation facilities tailored to their needs.

The most recent contribution to the CWIS regulation was the decision to make sanitation services more affordable and accessible. From 2024 water utility customers will see the integration of a surcharge for sanitation into their monthly utility bills. This decision is to avoid the burden of large and unplanned payments and making it easier for consumers to access services. The implementation of this approach requires the utility (WASAC) to have a baseline on the existing onsite sanitation facilities and develop a workplan for scheduled emptying services. This change also aims to strengthen the private sector by providing them with a more consistent workflow all year round.

b. Policy and legal basis for services regulation

Rwanda's journey in developing the policy and legal basis for CWIS services regulation has been marked by a series of progressive steps aimed at establishing a comprehensive and sustainable framework for water and sanitation management. This journey begins in 2008 with the Water Law No. 62/2008, which laid the initial legal groundwork for water resource management in the country but did not specifically emphasize sanitation as a distinct sector for regulation. This law set the stage for subsequent policies and guidelines, emphasizing the importance of managing water resources efficiently and sustainably.

In 2015, the Rwanda National Water Resources Master Plan was developed by the Ministry of Infrastructure. This strategic document outlined a vision for water resource management up to 2040, incorporating a Management Information System to support decision-making processes. While its primary focus is on the broader aspects of water resource management, it also includes treatment and disposal of wastewater. The plan integrates sanitation as a crucial component of the water policy.

Building upon this foundation, the standalone National Policy for Sanitation was introduced in 2016, replacing its 2004 and 2008 predecessors which combined water and sanitation services. This policy marked a significant shift by integrating contemporary principles of sustainable water resource management and emphasizing the human right to water, which inherently includes aspects of sanitation.

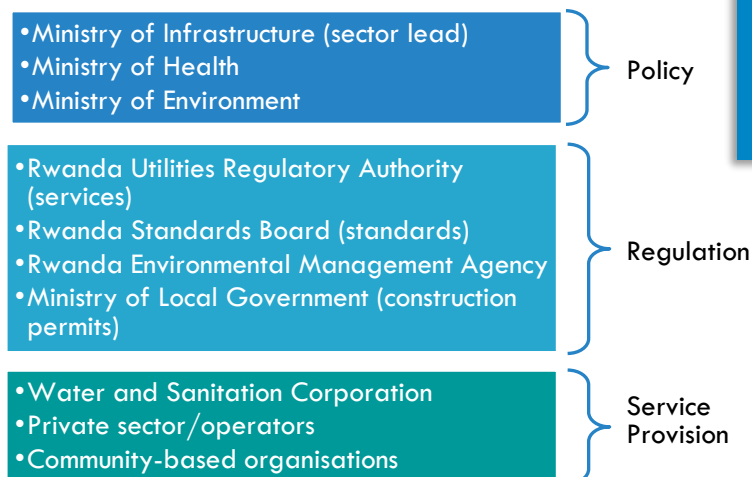
The Water Policy and Sanitation Policy formulated by the Ministry of Infrastructure were again updated as a single Water and Sanitation Policy in 2023. One of the key provisions of this policy is the extension of WASAC mandate to cover both urban and rural areas across the country. This update also reflects the current strategies and guidelines for managing water and sanitation, focusing on sustainable and inclusive practices. It highlights Rwanda's commitment to ensuring equitable access to sanitation services, particularly in urban areas, and underscores the importance of an integrated approach to water and sanitation management.

c. Institutional and regulatory framework

Rwanda's approach to CWIS is shaped by a complex and collaborative institutional and regulatory framework, involving a diverse array of stakeholders from government bodies, the private sector, international organizations, to local communities and NGOs. This intricate web of relationships and influences significantly contributes to shaping the country's sanitation landscape.

Central to Rwanda's CWIS framework are key government entities and regulatory bodies. The Ministry of Infrastructure sets the overarching direction and policies for urban sanitation. Collaborating closely with the Ministry of Health and the Ministry of Environment, it ensures that sanitation policies align with broader health, environmental protection and water resource management goals. This partnership underscores the multi-sectoral nature of sanitation, linking it with public health and urban development.

Figure 2 : Rwanda major CWIS stakeholders



The utility, Water and Sanitation Corporation (WASAC) is undergoing an evolving role and reforms that indicate a heightened focus on sanitation. The utility is tasked with overseeing service delivery, implementing standards (Quality of Service standards established by RURA and effluent standards set by the Rwanda Standards Board), and spearheading infrastructure projects like sewerage networks and treatment plants.

The Rwanda Utilities Regulatory Authority (RURA), which reports directly to the office of the Prime Minister plays a pivotal role in the regulation of public utilities, including sanitation services. RURA's duties include the development of regulations and guidelines, licensing, tariff setting or review and approval, monitoring and enforcement to ensure compliance to service quality standards and regulation as well as consumer education and protection. Notably, RURA ensures the private sector employs well-maintained trucks for waste management, enforces the use of personal protective equipment (PPE) for employees, and oversees the installation of wastewater treatment systems. This regulatory focus on operational practices, appropriate technology and infrastructural compliance demonstrates the multi-faceted approach of regulation to improving sanitation, safeguarding environmental health, and promoting public well-being.

The private sector's involvement, particularly as service providers in faecal sludge management, is a significant aspect of Rwanda's CWIS framework. Private companies and associations are engaged in activities like emptying and transportation of faecal sludge. Policies promoting public-private partnerships aim to harness the efficiency and innovation of the private sector in service delivery. Other institutions also support the Faecal Sludge Management sector such as the Rwanda Standards Board (RSB) which sets quality standards/effluent discharge limits from treatment facilities while Rwanda Environmental Management Authority (REMA) ensures compliance with quality standards of effluent discharged into the environment. Additionally, local authorities under the Ministry of Local Government issue the permits for the construction of sanitation facilities and ensure compliance with construction standards.

International organizations and development partners are integral, offering technical and financial support for increasing access to inclusive sanitation. Entities like UNICEF and the African Development Bank contribute through funding, capacity building, and advocacy, bringing international best practices and resources crucial for sustainable sanitation solutions.

Local community engagement and the role of NGOs contribute in raising awareness, promoting behavioural change, and ensuring that sanitation solutions are inclusive and community driven. Their grassroots-level involvement ensures that solutions are tailored to local needs and are sustainable.

d. Accountability mechanisms including for onsite sanitation

In Rwanda's CWIS approach, accountability mechanisms are realized through a variety of instruments, fostering a system where various entities are held responsible for their roles in sanitation services. The accountability primarily revolves around ensuring that sanitation facilities are not only available but also adequately maintained and serviced, meet health and safety requirements, effectively manage waste, and are accessible for regular maintenance and faecal sludge removal.

The Regulation for Installation of Decentralized Wastewater Treatment Systems established in 2016 addressed the requirements and standards for the installation of decentralized systems which offered innovative alternative solution for wastewater treatment and management. At the same time, regulation on liquid waste collection and transportation was introduced to govern the collection and transportation of faecal sludge.

Further and recent development in the regulatory framework, is the National Sewerage Connection Guideline introduced in 2023, providing clear standards and procedures for connecting to the national sewerage system. This guideline ensures that both new developments and existing structures adhere to national standards for wastewater management, thus safeguarding public health and environmental integrity. This is in line with the anticipated project of construction of a centralised sewerage system to serve the central business district of Kigali. Additionally, in 2023, RURA issued Regulation Governing Faecal Sludge Management, repealing the 2016 regulation on liquid waste collection and transportation. The 2023 regulation laid out a detailed legal framework for the safe and effective management of faecal sludge, covering all aspects from collection and transport to treatment and disposal or reuse.

A critical regulatory tool for enforcing these standards is the Converged Licensing Management System (CLMS) administered by the RURA. The system allows for application, issuance and management of licenses for sanitation service provision as well as quarterly and annual reporting on service providers' operations. The licensing system serves as a quality control mechanism, ensuring that only qualified and capable service providers operate within the sector. It also provides a framework for monitoring and evaluating the performance of these providers, thereby holding them accountable for adhering to regulatory standards and fulfilling service agreements.

Another key element of the CWIS accountability framework in Rwanda is the tariff system. Starting from 2024, all water users will incur a sanitation surcharge as a percentage of water bill to cater for emptying services. The tariffs will be determined/approved by RURA, with the operational coordination managed by WASAC, in collaboration with private operator. The Utility (WASAC), licensed by RURA, will establish service contracts with these private operators for delegated sanitation services, ensuring robust accountability and clearly defined responsibilities for each party. This system is designed to incentivize maintaining high service standards, while also

ensuring that sanitation services remain financially attainable for the entire population, including those in vulnerable groups. WASAC responsibilities of overseeing the overall FSM process will require regular inspections, audits of onsite sanitation facilities, transportation equipment and process.

Community involvement and public awareness are also a vital component of the accountability framework in Rwanda. Through the mandatory national community service, Umuganda, local communities play an active role in managing public services. Additionally, under RURA's guidance, a sanitation-focused baseline survey will be conducted in 2024. This survey aims to collect data on sanitation infrastructure/facilities, the community's capacity and willingness to pay, as well as their satisfaction with the sanitation services. The insights gained from this survey will facilitate the transition to a monthly paid service model, ensuring that the shift aligns with the needs and capabilities of the community.

Robust enforcement mechanisms are established to tackle issues of non-compliance. These include the denial of construction permits, imposition of fines, suspension or revocation of licenses for service providers who recurrently do not adhere to the set standards, and implementation of corrective measures for poorly maintained sanitation facilities. Additionally, fines may be issued on landowners who fail to provide adequate and emptiable sanitation structures. These enforcement actions play a critical role in upholding the integrity of the system and fostering public satisfaction and trust in the sanitation service provision.

e. Sector monitoring and reporting

In Rwanda's CWIS framework, sector monitoring and reporting encompasses data collection at various levels, with coordination mechanisms among stakeholders, and the development of Key Performance Indicators (KPIs).

The journey to monitoring sanitation data started with the tracking of the volume of sludge being delivered and the number of trucks that offload sludge at the disposal facilities. This aspect of monitoring is particularly emphasized in the city of Kigali. The record of these metrics has been, first, essential for operational reasons, in managing the capacity of these treatment facilities and ensuring they can adequately handle the volume of sludge they receive. Secondly, this information has been used for evaluating the efficiency of these facilities in processing the sludge. Finally, this data has been instrumental in the planning and development of future sanitation infrastructure, ensuring that the evolving needs of the city's sanitation system can be met effectively.

To increase the granularity of the information collected, RURA is planning to undertake a detailed mapping of sanitation infrastructure at household level. Using the water utility client database, information will be collected regarding the usage, efficiency, and reach of sanitation services across different areas. This data will also serve in monitoring the compliance of household containment structures and identifying areas that require improvement or additional resources and also plan for scheduled desludging. At the end, RURA is hoping to develop a set of KPIs that cover the entire FSM process from containment to treatment. However, it is important to note that systematic monitoring of data is in its initial stages, with the current focus on extending data collection to thoroughly understand the types of sanitation facilities available in every urban household.

f. Strengthen regulatory and services providers capacity and incentives

The capacities of sanitation sector actors in Rwanda, are being supported and enhanced at various levels. The capacity of the utility responsible for sanitation, WASAC, is being reinforced following the development of an integrated water and wastewater master plan. To improve the efficiency of WASAC, it is undergoing a reform process that has split commercial business and projects. There is now WASAC Group Ltd comprising WASAC Utility Ltd and WASAC Development Ltd. WASAC's Water and Sanitation directorate under WASAC Utilities has also been restructured into two separate wings, one focusing on water and the other on sanitation.

Notably, efforts to strengthen the capacity of private service suppliers have been undertaken with support from humanitarian partners. This initiative aims to enhance the capabilities of private sector players in providing effective and safe sanitation services. It also includes collaborations with banks to introduce commercial financing products specifically for sanitation, representing a significant step in enabling the private sector to invest and contribute more actively in the sanitation service provision.

Furthermore, capacity building at the local government level is progressing. Initiatives such as UNICEF's support for sanitation interventions through material, or cash contributions, and district-level support through community-based programs like the Community Based Environmental Hygiene Promotion Program, are underway. These efforts involve community participation and labour provision, bolstering local capacity in sanitation infrastructure development.

The CWIS framework in Rwanda, while comprehensive, faces several challenges that affect both regulatory bodies and service providers. A primary challenge is the initiation of systematic data monitoring. The process of gathering comprehensive data, especially at the household level and in terms of sludge management, is still in its initial stage and presents a significant hurdle in fully understanding the current state of sanitation infrastructure and services.

g. Summary

In summary, Rwanda's journey towards a comprehensive CWIS framework has been marked by a gradual but significant shift in regulatory focus, from a narrow emphasis on water supply and solid waste management to an inclusive approach that encompasses the entire faecal sludge management chain. This evolution reflects a growing understanding of the complex challenges of urban sanitation and a commitment to developing practical, sustainable solutions that serve the entire population- both urban and rural.

Rwanda's journey reflects progress to sustainable, equitable water resource management and sanitation practices. From establishing basic legal frameworks to addressing the nuances of urban sanitation and faecal sludge management. The CWIS institutional and regulatory framework represents a collaborative network involving various stakeholders with distinct yet interconnected roles. The accountability mechanisms combine regulatory oversight, licensing and tariff systems, the Utility's implementation and monitoring roles, and community engagement.

Sector monitoring and reporting within Rwanda's CWIS framework aims to develop a robust data collection at both the household level and treatment facilities level. This system will collectively contribute to a dynamic understanding of the sanitation sector, enabling timely modifications and targeted interventions for improved service delivery.

The efforts to enhance the regulatory capacities includes a focus on capacity building for the private sector, utility reinforcement, and empowerment at the local government level, all of which are pivotal in improving the effectiveness and sustainability of sanitation services in Rwanda.



2. Zambia

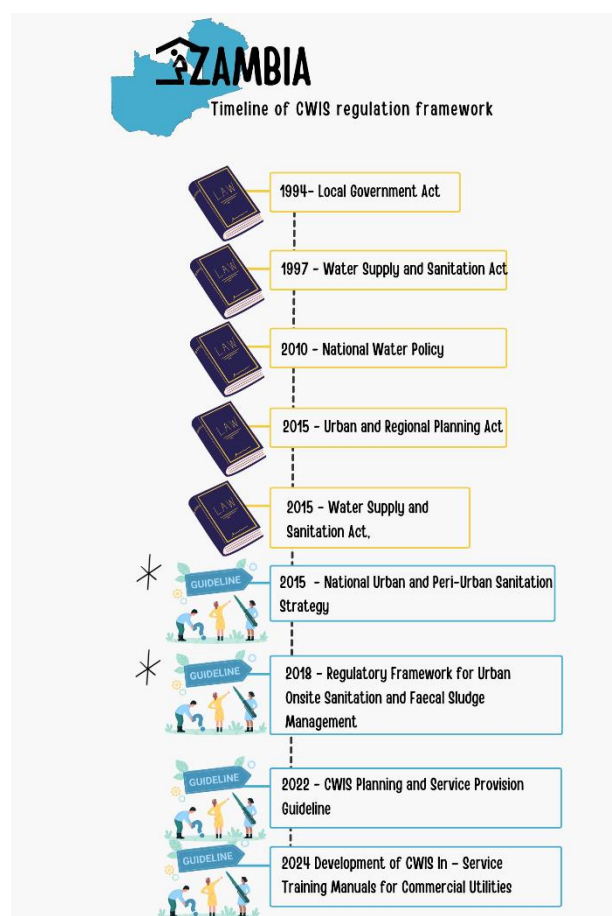
a. CWIS regulatory history

The evolution of Citywide Inclusive Sanitation (CWIS) in Zambia is a story of progressive adaptation and strategic regulatory development. This can be traced back from the year 1997 when the country's parliament passed the Water Supply and Sanitation Act No. 28 that provided for the establishment of Commercial Utilities (CUs) responsible for the provision of water supply and sanitation services and the regulator, the National Water Supply and Sanitation Council (NWASCO). However, regulation started in 2000 and was mainly skewed towards water supply and sewerage service provision. Overtime, this biasness to networked systems in both service provision and regulation created gaps in water supply and sanitation coverages in urban and peri-urban areas. Most of the urban population relied on Onsite Sanitation Systems (OSS) such as septic tanks and pit latrines, yet only a minority of the urban population that used offsite or centralised sewerage systems benefitted from government investments, regulation, and service provision. This was despite the Act defining sanitation as *'the disposal of onsite or off-site, of human excreta that includes collection, treatment, and end use'*. As a result of this imbalance in service provision and regulation, national sanitation coverage continued to be low and manifested in form of outbreaks of waterborne diseases such as Typhoid and Cholera.

The journey towards inclusive sanitation began to take shape around 2015 when stakeholders identified critical gaps in onsite sanitation, rural water supply, and solid waste management. This clarion call for a more inclusive approach coincided with substantial funding initiatives for Lusaka's water and sanitation, prompting a detailed review of the legal and regulatory frameworks. A gap analysis conducted in 2015 laid the groundwork for a series of reforms aimed at addressing these gaps.

In 2016 the then Minister of Water Development and Sanitation and the Minister of Local Government issued directives for NWASCO to start regulating onsite sanitation and Faecal Sludge Management (FSM) services. Based on this, NWASCO during the development of its fourth Strategic Plan (SP) 2016 to 2020, incorporated OSS and FSM including Rural Water Supply and Sanitation (RWSS) into the regulatory scope. In order to operationalise this, NWASCO further launched two key regulatory frameworks in April 2018, the Urban Onsite Sanitation and Faecal Sludge Management Framework, and Rural Water Supply and Sanitation Frameworks - for Provision and Regulation in Zambia. These frameworks marked pivotal steps as they clearly outlined roles, responsibilities and mandates of various institutions involved in OSS and FSM. The

Figure 3 : Zambia Policy and Guideline timeline



implementation of the frameworks was done through provincial Joint Implementation Teams, through which reporting channels for actors involved in OSS/FSM/RWSS, Minimum Service Level monitoring, roles and responsibilities, data collection tools, collection of baseline data for OSS and FSM, was done.

Within this CWIS regulatory framework, NWASCO's autonomy from the line ministry, the Ministry of Water Development and Sanitation (MWDS), allowed unbiased decision-making and enforcement function, facilitating a comprehensive approach to inclusive and sustainable sanitation services nationwide. NWASCO was key in leading and collaborating with various stakeholders, including government entities, NGOs, and CPs, to uphold sanitation service standards. In its effort to kick-start the implementation of the frameworks for urban OSS and FSM services, NWASCO amended operating licence conditions of CUs to include OSS and FSM services in November 2019. As part of the new licence conditions, NWASCO directed CUs to rebrand by amending their company names from "water and sewerage" to "water and sanitation" to signal the uptake of OSS and FSM services. The new frameworks also brought private sanitation operators under regulation through a delegated management framework to the Utilities, using permitting conditions.

The implementation of the CWIS regulation framework by NWASCO involved a number of key steps between 2020 and 2022 that included establishing critical skills listing and training needs assessment for the provision of urban OSS and FSM services by Utilities, supporting selected CUs to undertake sanitation baseline mapping in their respective service areas to inform decision-making, instituting use of GIS in sanitation service monitoring and extending the benchmarking system and information system to capture sanitation KPIs.

Zambia's commitment towards providing inclusive sanitation services was further propagated by the launch of the NWASCO Citywide Inclusive Sanitation Planning and Service Provision Guidelines in November 2022. The launch of this guideline was a milestone to equitable, sustainable, and comprehensive approach to sanitation service provision by the CUs and other service providers. NWASCO further developed guidance for CUs to implement inclusive sanitation services whereby CUS are required to produce quarterly reports on their efforts to achieving provision of inclusive sanitation services and submit annual plans, including the number of improved pit latrines and septic tanks emptied.

b. Policy and legal basis for services regulation

Zambia's journey towards enhancing its sanitation services through policy and legal reforms has been progressive, spanning from the mid-1990s to the present day. This evolution reflects the government's steadfast commitment to improving Water, Sanitation, and Hygiene (WASH) services nationwide, marking a significant shift from the pre-reform era. Before the sector reforms initiated in the 1990s, Zambia's WASH sector was plagued by a myriad of challenges, with no legislation in place to guide WASH service provision or comprehensive water resource management.

The turning point came in 1994 when the government enacted a National Water Policy, that outlined seven key principles aimed at restructuring the sector, among which was separating regulation from executive functions. The National Water Supply and Sanitation Council (NWASCO) was thus established as an autonomous regulator to oversee efficient and sustainable WSS service provision under the Water Supply and Sanitation Act No. 28 of 1997. The Act also allowed Local Authorities to create Commercial Utilities (CUs) for the provision of water supply and sanitation

services on their behalf. The legislation introduced during this period laid the groundwork for more strategic planning and investment in sanitation services.

Subsequent strategic documents and plans have further defined and supported Zambia's vision for its WASH sector. Notably, Vision 2030 envisions Zambia as a prosperous middle-income nation with a focus on sustainable socio-economic development, which includes improving WASH service regulation, supervision, and enforcement. The 8th National Development Plan, National Policy on Environment, National Water Policy, and various other strategies and programs developed over the years have all contributed to shaping a robust framework for improving water supply and sanitation services across urban, peri-urban, and rural settings.

These strategic efforts are complemented by a comprehensive legal framework that includes the Constitution of Zambia, which underscores the importance of maintaining a clean, safe, and healthy environment, the Local Government Act, the Environmental Management Act No. 12 of 2011 establishing ZEMA, the Public Health Act, and the Water Resources Management Act No. 21 of 2011 which establishes WARMA, each playing a critical role in regulating WSS services, environmental protection, and public health standards.

c. Institutional and regulatory framework

Zambia's commitment to implement the CWIS approach to urban sanitation is manifested through a robust institutional and regulatory framework that orchestrates a diverse array of stakeholders towards achieving comprehensive and sustainable sanitation solutions. This institutional framework is characterized by the dynamic interplay between various entities such as government ministries, CUs, Private Sector, NGOs, Community-Based Organizations (CBOs), consumers and Cooperating Partners (CPs). Each stakeholder brings unique strengths and resources to the table, contributing to the multi-faceted approach required for effective CWIS implementation.

The MWDS is the lead government institution for sanitation at the national level and is responsible for sector oversight, coordination, policy development and mobilization of resources. As part of coordinating the sector, it leads the Water Sector Advisory Group, which is a collaboration and coordination forum comprised of line ministries, academic institutions, development partners and other relevant stakeholders. The MWDS works with regulatory bodies, Local Authorities (LAs), and other entities to ensure the successful implementation and sustainability of CWIS initiatives.

Figure 4 : Zambia major CWIS stakeholders



At the heart of Zambia's WSS regulatory landscape is NWASCO, mandated under the Water Supply and Sanitation Act No. 28 of 1997 to regulate CUs and other Service Providers for the provision WSS services. NWASCO ensures that these essential services are inclusive and delivered in a manner that is efficient, equitable, sustainable and safe. NWASCO regulates sanitation services providers in both urban and rural contexts (mainly CUs) through the

implementation of regulatory tools such as licensing, performance management and inspections and reports to Parliament through the MWDS. This autonomy empowers NWASCO to regulate the sector effectively, fostering an environment where regulatory decisions and actions are made in the best interest of the public and the sustainability of WSS services.

The Ministry of Health is another critical institution that oversees the protection of public health and suppresses diseases through enforcing sanitary standards.

The regulation of OSS services is a multifaced area. The regulation of the final quality of treated faecal sludge and its possible re-use is done by Zambia Environmental Management Agency (ZEMA). While the regulation of the siting and building of OSS facilities is meant to be done by the LAs, this is not done in informal settlements including some planned settlements; LAs approve construction drawings but there is no adequate follow up on the actual construction.

Commercial Utilities such as Lusaka Water and Sanitation Company (LWSC), play a pivotal role in extending sanitation services to peri-urban and informal settlements, demonstrating the practical application of CWIS principles. These efforts are supported by regulatory reforms that have extended the CUs scope of service provision and jurisdiction to include OSS and FSM in addition to the offsite systems that have been regulated from the onset in the entire service area. This shift in service provision and regulation aligns itself well with the first principle of CWIS that advocates for inclusive sanitation service provision where everyone in an urban area, including the urban poor benefits from equitable safe sanitation services.

The Ministry of Local Government and Rural Development (MLGRD) through the LAs are an integral part of the regulatory framework for OSS and FSM. Under this framework, LAs are tasked to develop bye-laws that facilitate the implementation of CWIS service delivery, enforcement of the Public Health Act CAP 295, issuance of Business and Health Permit for Private Operators (POs) and enforcement of building standards for OSS facilities. Their close proximity to the communities they serve enables them to identify and respond to local sanitation needs effectively, ensuring that CWIS initiatives are founded in the realities of urban and peri-urban living conditions.

The emptying services of OSS facilities provided by POs in a City are facilitated through management contracts signed between the PO and the Utility. This partnership allows POs to operate under the NWASCO license issued to the Utility to provide FSM services using permitting requirements for CUs to engage third parties in OSS and FSM service provision, thereby ensuring compliance with regulatory standards and guidelines.

In Zambia, aside from the MWDS, NWASCO and CPs, NGOs have also been pivotal in shifting narratives around sanitation solutions, away from sole reliance on sewer systems to include OSS and FSM. NGOs and CBOs also offer sensitization and mobilization activities, crucial for fostering community engagement and participation in sanitation projects and support the evolution of the sectors. Their approach aims to increase awareness and support capacity-building activities that empower communities to take an active role in sanitation governance. On the other hand, CPs provide essential financial and technical support, facilitating the adoption of good practices and innovative solutions from global contexts. This external support is vital for scaling up CWIS initiatives, enhancing the capacity of local institutions, and ensuring the sustainability of sanitation improvements.

d. Accountability mechanisms for onsite sanitation and faecal sludge management

Zambia's approach to ensuring accountability in OSS and FSM services involves the rigorous implementation of regulatory tools and instruments for compliance enforcement. Regulatory tools such as the Minimum Service Levels for OSS and FSM services, Permitting Requirements for CUs to engage third parties in OSS and FSM Service Provision, NWASCO license conditions including inspections undertaken by NWASCO on the CUs and private sanitation operators ensure that the interests of the policy-makers, customer and service providers and those of the environment are safeguarded.

On the ground, the Smart Public Health Inspection System (Smart PHI), piloted by the Department of Health at the Lusaka City Council (LCC), is a groundbreaking digital tool that bolsters the efficiency of health inspections. Through this system, Health inspectors can instantaneously document observations on tablets, transitioning away from paper reports. This ensures a lasting, accessible database of compliance and enforcement actions, allowing for the immediate reporting of environmental health issues to relevant bodies. For example, Health Inspectors can record issues such as leaking sewers, overflowing garbage, or unsanitary conditions directly in the field that could be reported to the responsible institution. This digital leap in regulatory practices underscores a commitment to enhancing public health accountability and modernizing oversight mechanisms.

Feedback mechanisms and community engagement are also piloted by LWSC. Customers, after receiving emptying services of OSS facilities from a private pit emptier, have multiple channels for feedback, including direct input via a job card or through follow-up contacts. This feedback of customer experiences is systematically incorporated into quarterly reports and influence service evaluation. Moreover, LWSC enhances feedback opportunities through a call centre, customer survey indexes, and a complaint redress charter, facilitating a structured approach for receiving and acting on community feedback and complaints.

Further strengthening the accountability framework, the LCC is developing ordinances specifically addressing OSS and FSM services along the entire sanitation service chain. These legal instruments are critical for protecting groundwater sources and general public health by requiring households to construct fully lined pit latrines in areas with very high-water tables. These kinds of ordinances are crucial in the regulation of FSM services that aim at preventing environmental contamination and public health crises through the safe evacuation of faecal sludge.

e. Sector monitoring and reporting

The sector monitoring and reporting mechanism in Zambia is significantly enhanced by the integration of sophisticated data management systems. A prime example of this advancement is the implementation of the Smart Public Health Inspection System which has revolutionized the efficiency and reliability of data collection, ensuring immediate action and maintaining a durable archive of health inspection records.

Complementing this digital transformation, was the adoption of GIS mapping of OSS facilities by NWASCO as a commitment to data-driven sanitation management. In 2021, NWASCO undertook an assessment to establish how CUs and NWASCO were utilizing GIS in sanitation service provision. Technical assessments on GIS hardware and software requirements were undertaken including staff competencies to manage GIS. The results from this assessment were used by

NWASCO to modernize its GIS hub from the hardware and software refurbishments to the recruitment of staff to focus on GIS operations for both internal and external needs.

The operationalisation of the regulatory framework and service provision of OSS and FSM, required baseline data on the status of existing OSS facilities and FSM services in the CUs as envisaged under the fourth NWASCO SP (2021-2025). To achieve this, NWASCO supported selected CUs to undertake sanitation mapping in their respective service areas using a standard questionnaire adapted from the 2017 WHO/UNICEF Joint Monitoring Programme (JMP) core questions for household sanitation surveys. The data collection process, initially utilised the Kobo Toolbox and later transitioned to the mWater platform, to standardize data gathering of sanitation data at the household level across the country. Collected data fed the production of diverse layers of maps which can be used to inform decision making, OSS and FSM investments, development of FSM service delivery and business models and regulation.

This requirement for all CUs to map their service areas is a strategic move towards creating a comprehensive spatial database of sanitation infrastructure. The GIS mapping initiative is instrumental in identifying service gaps, enabling precise targeting of interventions to enhance access to sanitation services. Furthermore, the development and utilization of a centralized information repository alongside GIS mapping facilitates an evidence-based approach to sanitation service provision and regulation. This approach allows for a nuanced understanding of the sanitation landscape, ensuring that planning and resource allocation are informed by accurate, up-to-date data.

Acknowledging the critical need for accurate and detailed data, NWASCO upgraded its regulatory information system for service reporting to increase the scope of data collected from CUs by not only requiring them to include KPIs on sanitation coverage but also report on GIS mapping of sanitation facilities undertaken in their service areas. This expansive and financially demanding requirement is essential for identifying service disparities and ensuring equitable access to sanitation services across Zambia.

To navigate these challenges, a structured approach to data collection was adopted, that ensures the collection of precise data at the household level, thereby offering a granular understanding of the sanitation landscape. The involvement of CPs and the GIZ in funding mapping projects across various CUs and development of a national integrated IMS led by the Ministry, underscores the collaborative effort towards achieving comprehensive nationwide sanitation service coverage. Additionally, the Zambia Statistics Agency (ZSA) was engaged and key questions on sanitation data in accordance with the UN/WHO JMP were incorporated into the 2022 national census, affirming a commitment to a comprehensive overview of sanitation facilities.

f. Strengthening regulation and services providers capacity and incentives

The advancement of CWIS in Zambia has been significantly bolstered by efforts to strengthen the regulatory framework and enhance the capacity of service providers. The uptake of OSS and FSM services by CUs required them to have appropriate human resources, institutional arrangements and skills capacities. As such, in 2020 NWASCO conducted an institutional and capacity assessment on each of the CUs to establish critical skills listing and training needs assessment for the provision of urban OSS and FSM services. This assessment was done to help NWASCO establish the levels of preparedness of CUs to undertake OSS and FSM services including the steps to be taken to ensure that the CUs were ready to take up those responsibilities.

Further, as part of the outputs of the assessment, a generic structure for the implementation of FSM services in the CU was proposed.

Further, in order to enhance knowledge and skills for staff in commercial utilities on CWIS, NWASCO developed an In-Service Training manual on CWIS, riding on LWSC experiences in implementing CWIS in Lusaka City's low-income areas under the LWSC –Lusaka Sanitation Programme.

In addition to data collection and analysis challenges, coordination issues, substantial investment requirements, and budgeting constraints at higher levels have been identified as significant hurdles. Specific capacity-building initiatives, such as the collaboration with Water & Sanitation for the Urban Poor (WSUP) and the Lusaka Sanitation Programme, have been pivotal in addressing these challenges. These initiatives focus on training and equipping private operators for improved FSM, demonstrating a strategic approach to overcoming operational hurdles and ensuring sustainable sanitation solutions.

Moreover, capacity building in technical areas like resource optimization within LAs and service providers have been acknowledged. It is the intention of CUs and regulators to improve operational efficiency and service delivery outcomes through enhanced coordination and capacity reinforcement especially for the private sector.

g. Summary

As Zambia continues to evolve its approach to CWIS, it stands at a pivotal juncture characterized by significant achievements and the identification of gaps that offer opportunities for further enhancement. The successful implementation of holistic policies for OSS and FSM, which garnered recognition and awards, underscores the effectiveness of the strategies deployed thus far. The critical emphasis on data underscores the regulatory framework's backbone, enabling a comprehensive understanding of the sanitation landscape.

CWIS accountability mechanisms are characterized by a strategic blend of regulatory rigor, technological innovation, legal enforcement, and community participation. The establishment of a central repository system for all mapped information facilitates a unified view of the sanitation infrastructure, enabling targeted and effective interventions.

The CWIS regulatory framework in Zambia is a testament to the power of collaboration and integration across sectors and disciplines. This inclusive approach, involving LGAs, CUs, and other key stakeholders, is vital for sustaining momentum and achieving comprehensive sanitation coverage.

The collaborative efforts led to the development of detailed regulations on OSS and FSM and the adoption of a code of practice, encapsulating the entire sanitation service chain. These instruments, designed to have the force of law immediately upon promulgation, represent a significant stride towards standardizing sanitation services across Zambia. Furthermore, the engagement with ZSA to utilize a standardized questions on sanitation data reflects a unified approach to monitoring and evaluation, ensuring that data-driven decisions can enhance sanitation service delivery nationwide.

By mapping and harnessing the relationships and influence of these diverse stakeholders, Zambia is making significant strides towards achieving its vision of inclusive, sustainable, and safe sanitation for all its citizens. This approach not only addresses the immediate needs of urban and peri-urban populations but also lays the groundwork for resilient and adaptable sanitation systems that can meet the present and future challenges.



3. Uganda

a. CWIS regulatory history

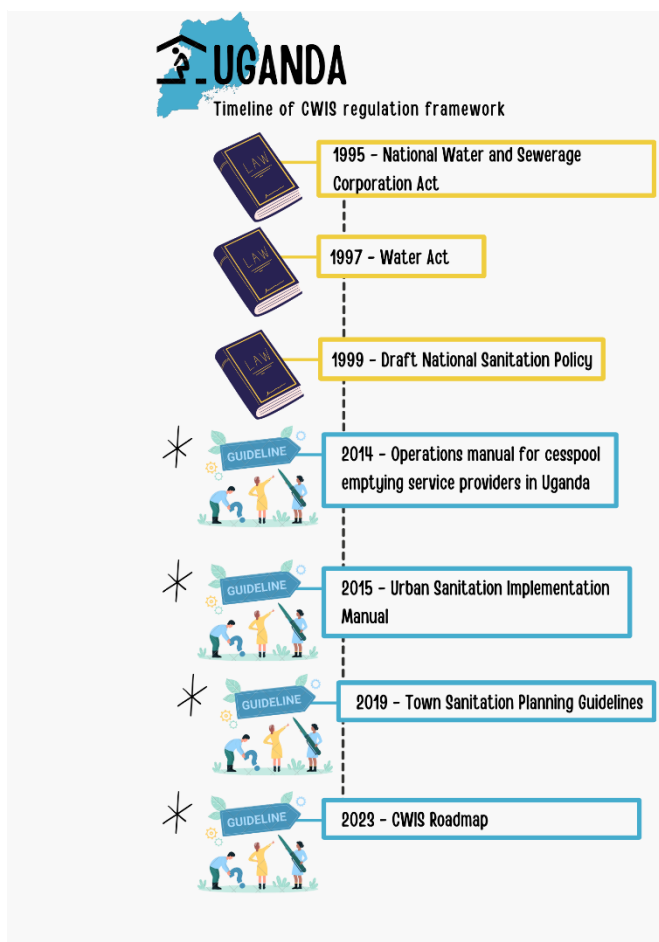
The regulatory history of Citywide Inclusive Sanitation (CWIS) in Uganda is marked by a series of strategic adaptations to the growing urban sanitation needs. The journey began with a fragmented regulatory approach. Recognizing the limitations of a disjointed system, Uganda embarked on a path towards a more integrated approach to sanitation. This shift was driven by factors such as the escalating pace of urbanization, heightened public health concerns, and the visible environmental impacts of inadequate sanitation facilities. In 1997, the Ministry of Water and Environment initiated the development of comprehensive policy and technical guidelines aiming to shift the focus beyond traditional sewerage systems and include onsite sanitation methods suitable for diverse urban contexts.

A pivotal moment in this journey was the establishment of the Urban Water Supply and Sewerage Services Department in 2001 to enhance the performance and cost-effectiveness of water supply and sewerage service operations in urban areas. The focus was on commercializing these services, promoting private sector participation, and devolving service delivery to Water and/or Sewerage Authorities.

Additionally, the Ministry of Water and Environment established a separate Regulation department within the Directorate of Water Development to focus on executing regulatory functions in the urban water and sanitation sub-sector. This move was part of the efforts to address challenges in regulating the sub-sector and improving service delivery. The establishment of this department and its subsequent reforms indicate a significant step in the development and management of water and sewerage services in Uganda, aligning with the broader goals of improved sanitation and water management in urban areas.

Following this, the formulation of the 2010 Improved Sanitation and Hygiene Strategy provided a clear direction for the sector. This strategy emphasized the need for sustainable and inclusive sanitation, acknowledging the diversity of urban communities and their varying sanitation needs. Another significant milestone was the introduction of specific regulations for faecal sludge management in response to the growing need of effective management of faecal sludge in urban areas. They provided practical guidance and standards for the safe and efficient handling,

Figure 5 : Uganda Policy and Guideline timeline



treatment, and disposal of faecal sludge, thereby addressing a critical gap in the existing sanitation framework.

b. Policy and legal basis for services regulation

Uganda's journey to develop the policy and legal basis for CWIS services regulation is a progressive narrative of policy formulation, adaptation, and implementation. In 1997, Uganda initiated this journey with the "Draft National Sanitation Policy". This policy recognized the diverse socio-economic and cultural contexts across communities and set the stage for a broader, more inclusive sanitation approach. In the same year, the development of Local Governments Act led to the decentralisation of responsibilities for water and sanitation services. The Act empowers local authorities to regulate, develop, and manage sanitation, thereby enhancing community involvement and ensuring effective delivery of water and sanitation services in line with national standards and regulations.

In 1999, the "National Water Policy" was established to provide guidance on sustainable water resource management and equitable access to water and sanitation services. It advocated for integrated approaches in managing water and sanitation services to ensure access by all population segments.

In 2010, the Ministry of Water and Environment developed a 10-year Improved Sanitation and Hygiene Strategy (ISH) with the aim of scaling up household, public and institutional sanitation access in urban areas. Based on experience gained while implementing the ISH strategy, it was noted that there is need for developing a practical manual to simplify the applicability of the strategy and guide stakeholders' investments in small towns and rural growth centres.

In 2015, the "Urban Sanitation Implementation Manual" was introduced by the Ministry of Water and Environment, to provide detailed guidance for implementing urban sanitation systems. It complemented the ISH strategy, emphasizing the creation of enabling environments for sanitation and promoting access to sanitation facilities. This manual marked a significant step in operationalizing the principles laid out in earlier policies, offering a structured approach to improve urban sanitation in line with CWIS goals.

In 2015, the "Town Sanitation Planning" approach was introduced, advocating for sustainable sanitation solutions across the service chain in small towns. It focuses on changing mindsets for better sanitation behaviours, creating inclusive facilities for all, including girls and those with disabilities, and emphasizes the importance of legal and institutional frameworks. This approach, piloted in Northern Uganda, underscores the need for integrated, participatory planning and stakeholders' involvement. It complements Uganda's existing sanitation policies by focusing on operational maintenance and capacity strengthening, representing a critical evolution in the country's commitment to improving urban sanitation in a comprehensive and inclusive manner.

Finally in 2023, a national roadmap for CWIS regulation was developed, outlining strategic steps for integrating CWIS within the country regulatory framework. The roadmap highlights seven key areas, such as strengthening the enabling environment, setting up regulations, service provision, capacity development, stakeholder coordination, software considerations, and sector monitoring and reporting. This document emphasizes the need for harmonized standards, regulatory tools, and the establishment of financing mechanisms for CWIS regulation, underpinning a phased approach to nationwide implementation.

c. Institutional and regulatory framework

The institutional and regulatory framework for CWIS is characterized by multiple stakeholders, each playing a distinct role in shaping the sanitation landscape. The key entities involved in this framework include government ministries, local authorities, service providers, and development partners, each influencing the sector in different ways.

The Ministry of Water and Environment in Uganda through its Water Utility Regulation Department (WURD) plays a central role in overseeing urban water and sanitation services. This ministry supervises the utility, the National Water and Sewerage Corporation (NWSC), which is responsible for the management of urban sewered sanitation. The NWSC's primary focus lies in regions equipped with sewerage infrastructure and is responsible for the implementation and regulation of the treatment processes. While the Ministry of Water and Environment holds significant

Figure 6 : Uganda major CWIS stakeholders



responsibilities in the sanitation sector, its dual role as both a supervisor of the NWSC and a regulatory body presents a potential conflict of interest. This dual capacity could potentially hinder its effectiveness as a regulator, given the potential for reduced independence in decision-making.

In 2016, Uganda established six regional Umbrella Utilities to enhance rural water and sanitation services, alongside the National Water and Sewerage Corporation's urban focus. This initiative aims to bring safely managed water services to smaller communities and aligns with Uganda's strategy to ensure every village has at least one improved water source. It represents a comprehensive approach to achieving nationwide water safety. Recently, the focus has expanded beyond water services, with Umbrella Utilities venturing into the Faecal Sludge Management (FSM) sector, marking a significant step towards improved sanitation. Local governments, notably Kampala Capital City Authority (KCCA), play a crucial role in coordinating the private operators providing the non-sewered sanitation services including emptying and transportation of faecal sludge. This involvement is critical given that a large portion of the urban population relies on onsite sanitation facilities. KCCA is also engaged in communication and operational initiatives, such as sanitation campaigns and the development of sanitation facilities, which demonstrate its proactive approach to improving urban sanitation.

Private sector participation, particularly in the form of small-scale service providers, is also very present in the sanitation value chain. These entities primarily engage in the emptying and transport of faecal sludge. While their activities are critical for managing onsite sanitation, the regulatory oversight of these services appears less defined, pointing to a potential area for strengthening institutional governance.

Development partners also influence the CWIS landscape. Their role centres around providing financial and technical assistance for sanitation projects where local funding might be insufficient to meet the extensive needs of urban sanitation, especially for the vulnerable population.

d. Accountability mechanisms including for onsite sanitation

In Uganda's urban sanitation landscape, a robust accountability framework underpins the CWIS initiative. This framework integrates the roles of various entities, including government bodies and private operators, to ensure effective sanitation service delivery and regulatory compliance.

At the heart of this system is the Kampala Capital City Authority (KCCA), responsible for coordinating private sector operators engaged in faecal sludge management in the five divisions of the capital city. KCCA's mandate includes registering and licensing these operators and enforcing regulations on the condition and operation of sludge transportation vehicles, and the use of protective equipment, to safeguard public health.

Another critical component of KCCA's approach to sanitation management is the establishment of feedback mechanisms. This approach allows the public to directly engage with the authority through toll-free numbers, providing a platform for reporting issues or concerns related to sanitation services. This mechanism allows KCCA to quickly address any problems, thus enhancing service delivery and upholding high sanitation standards within the city. However, it is important to acknowledge that a coordination gap between KCCA and the National Water and Sewerage Corporation (NWSC) was recognised in the way that the feedback mechanism often serves more as a tool for reporting faults rather than a proactive instrument for resolving operational issues. This shortfall highlights an area for improvement in the overall management of urban sanitation, where enhancing inter-agency communication could lead to more effective and timely resolution of sanitation-related challenges.

Furthermore, the Ministry of Water and Environment's direct supervision and regulation of the utility play a crucial role in enhancing an efficient reporting approach and ensuring high health and environmental safety standards. Enhancing this inter-agency collaboration will be pivotal in advancing the efficiency and responsiveness of Uganda's urban sanitation systems.

e. Sector monitoring and reporting

In Uganda's CWIS strategy, monitoring and reporting systems play a crucial role in ensuring effective sanitation management. These systems facilitate data collection, coordination among stakeholders, and regular reporting on sanitation services.

NWSC's monitoring strategy involves keeping a detailed log of private sector-operated trucks that dispose of sludge at its facilities. This process includes verifying the volume and quality of the sludge to ensure adherence to set standards. The data gathered from this monitoring is crucial for operational purposes, such as determining the cost of treating the sludge and managing the overall functionality of treatment plants.

Moreover, NWSC's monitoring extends to the environmental impact of sanitation services. This includes inspecting wastewater and faecal sludge treatment facilities and ensuring compliance with effluent standards. NWSC's reporting mechanism is structured to provide detailed insights into its operations to the Ministry of Water and Environment. This data is integral to reviewing progress, identifying areas for improvement, and making data-driven decisions for future sanitation initiatives.

Within the Kampala Capital City Authority (KCCA), the Weyonje digital system also has been deployed to enhance sanitation service management and monitoring. This system streamlines operations for providers, boosts service delivery, and ensures environmental compliance, leveraging digital tools to tackle sanitation sector challenges more efficiently and sustainably for

CWIS. Over the next years, a more robust version of Weyonje called SaniTracker will be rolled-out to all Umbrella utilities, extending its innovative solutions to a broader network.

Coordination among various stakeholders is another vital component of Uganda's CWIS. This involves collaborations between governmental entities like NWSC, local authorities, development partners and private operators. Such collaborations enable a unified approach to managing sanitation services, ensuring consistency and efficiency across different regions and services.

Reporting processes within the CWIS framework are designed to be transparent and informative. Regular reports are submitted by the service providers to the Ministry of Water and Environment, providing updates on key performance indicators, challenges faced, and progress towards achieving sanitation goals. These reports play a critical role in shaping national sanitation policies and strategies, enabling the government to make informed decisions regarding resource allocation, policy amendments, and future planning.

In line with forward-thinking strategies, plans are underway to establish a sanitation baseline to comprehensively assess the current state of sanitation infrastructure and practices across the nine utilities in Uganda. The goal of this baseline assessment is to provide critical data that will inform policy and strategic planning, enabling the setting of measurable targets for sanitation coverage. By identifying service gaps, the assessment will guide the prioritization of interventions and facilitate the monitoring of progress toward enhanced sanitation coverage and sustainability. This proactive approach is designed to ensure that efforts are strategically aligned and effectively contribute to the broader objectives of improving sanitation services across the country.

In pursuit of assessing the impact of subsidies on the sanitation service system comprehensively, the Ministry of Water and Environment's policy and planning department intends to use EquiServe tool, in planning for inclusive sanitation. EquiServe is an advanced analytical tool designed to offer valuable insights that will aid public sector leaders and development actors in identifying strategies to enhance safe access to sanitation services. Additionally, WURD has also initiated the development of a regulatory information management system (REMIS) to support improved processes for sector monitoring and reporting.

f. Strengthen regulatory and services providers capacity and incentives

The journey to strengthen regulatory frameworks and service providers' capacity in Uganda's CWIS initiative has encountered a blend of marked impacts. The engagement of sector players such as private sanitation partners has been essential. However, the challenge has been to ensure effective coordination, streamlining reporting and addressing operational issues. A notable barrier in the engagement of the private sector has been the resistance to formalizing sanitation businesses, largely due to the perceived lack of incentives and the burden of taxation. This has led some private operators to revert to informal operations, highlighting the need for formalization calls to demonstrate tangible benefits and growth opportunities for the private sector.

Furthermore, regulatory impact assessments by the regulator, have underlined the need for better data collection and resource allocation. An integrated approach, between Ministry of Water and Environment and Ministry of Health is required to bridge gaps in sanitation services, particularly in areas beyond the scope of household hygiene and sanitation, and cover the overall FSM process and impact of sanitation contamination risk.

To address this, WURD has facilitated capacity building and technical knowledge exchange for regulatory staff and key stakeholders, leading to a broader appreciation of sanitation regulation.

The development of a sanitation regulation framework across various levels, from high-level policies to specific guidelines, has been a critical step in effectively regulating CWIS. Continuous efforts are underway to align with regional frameworks and monitor progress at the country level.

In Uganda, deliberations continue regarding compliance, infrastructure development, and the potential for subsidies. A key aspect of these discussions involves assessing the cost of sanitation services and determining the level of subsidization that might be provided by the government or development partners. Such subsidization is considered vital to reduce the overall cost of services. Additionally, there is a recognized need for ongoing refinement and adaptation of regulatory frameworks. This need stems from the ever-evolving nature of urban landscapes and management practices in the sanitation sector, presenting a continual challenge to ensure that regulations remain relevant and effective.

g. Summary

In summary, Uganda's approach to sanitation services regulation is marked by a comprehensive and evolving legal and policy landscape. Throughout this journey, Uganda has demonstrated a commitment to adapting its regulatory approach to meet the evolving sanitation challenges. The progression from a disjointed to a more cohesive regulatory framework reflects a broader shift in perspective – one that recognizes the complexity of urban sanitation and the importance of inclusive and sustainable solutions. This evolution in regulatory strategy underscores Uganda's dedication to improving sanitation in alignment with both global standards and local needs, ensuring a healthier and cleaner environment for its urban population.

Overall, the institutional and regulatory framework for CWIS in Uganda is characterized by a collaborative approach involving multiple stakeholders. Each entity brings unique capabilities and resources, contributing to a comprehensive strategy for addressing urban sanitation challenges. However, the framework also implies areas for improvement, particularly in terms of clarifying roles, enhancing regulatory oversight of non-sewered sanitation, data collection systems and strengthening coordination among all players.

Uganda's efforts in strengthening the regulatory and service providers' capacity in CWIS reflect a commitment to evolving and adapting to the complex demands of urban sanitation management. The focus is now on enhancing coordination, incentivizing compliance, filling data gaps, and ensuring that regulatory frameworks are inclusive, comprehensive, and aligned with both local needs and regional guidance from ESAWAS.



4. Tanzania

a. CWIS regulatory history

The history of CWIS regulation in Tanzania has undergone significant transformations over the past decade. The journey began with a policy landscape that was heavily focused on water supply. In response to global commitments, and growing interest in a more inclusive approach, the Tanzanian government introduced a number of initiatives to shift from a predominantly water-centric approach to a more balanced perspective that recognized the interdependence of water supply and sanitation.

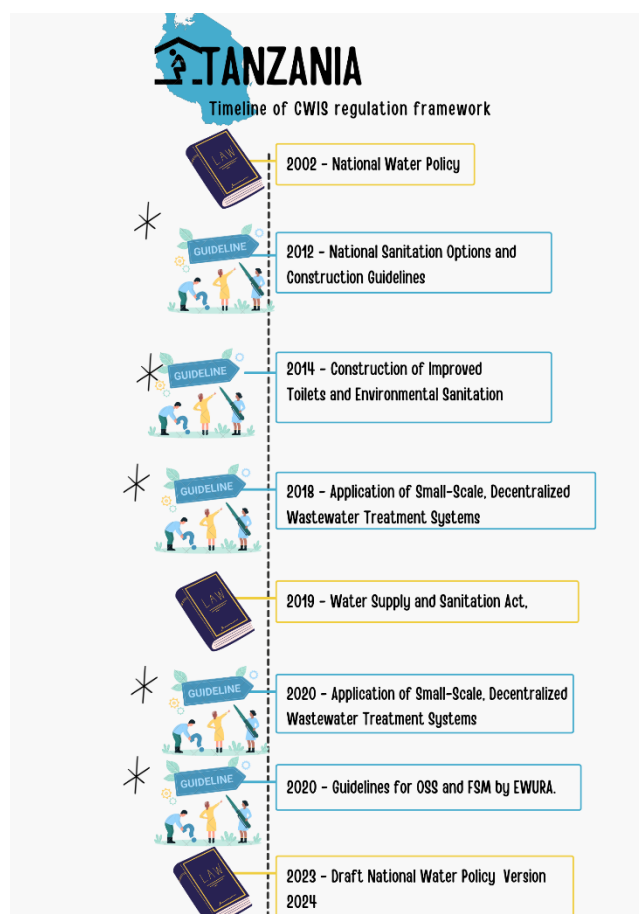
The Energy and Water Utilities Regulatory Authority (EWURA) in Tanzania, has played a significant role in this transition. With an initial mandate to regulate the water and energy sectors, the regulator has been instrumental in applying its experience in setting and enforcing sanitation standards, tariffs, and service guidelines. By establishing clear guidelines and regulatory frameworks, EWURA has structured sanitation management, ensuring that service providers adhere to set standards. Moreover, EWURA has established a tariff policy for private sanitation operators to discharge at the wastewater treatment plant. However, it has to be noted that the cost for a private operator to service individual households is not yet considered by this tariff. It is instead subject to negotiation between the customer and the private operator.

Recognizing the limitations of traditional sewerage systems, especially in rapidly urbanizing areas, EWURA has promoted the adoption of decentralized wastewater treatment systems (DEWATS) and other innovative sanitation technologies. Furthermore, EWURA's emphasis on consumer protection and service quality has led to improvements in the CWIS sector. By setting service standards and handling consumer complaints, EWURA has ensured that sanitation service providers remain accountable to the communities they serve. This focus on consumer rights and service quality has helped build public trust in sanitation services, which is essential for improving sanitation coverage and hygiene practices.

b. Policy and legal basis for services regulation

To address the progressive interest and growing needs for comprehensive sanitation services, over the last decade, the policy and legal framework in Tanzania has evolved considerably. This evolution is anchored in the strategic shift of policies and laws, which have progressively integrated sanitation concerns alongside water supply management.

Figure 7: Tanzania Policy and Guideline timeline



Historically, the Tanzanian policy framework for water and sanitation was guided by the 2002 Water Policy. This policy laid the groundwork for water supply management but did not extensively cover sanitation services. Recognizing the need for a more inclusive and comprehensive approach, the enactment of the Water Supply and Sanitation Act of 2009 marked a pivotal change in the regulatory landscape by explicitly mandating water supply and sanitation utilities to include sanitation services. This additional mandate was significantly reinforced by the 2019 Water Supply and Sanitation Act in Tanzania.

The transition in nomenclature from 'Sewerage' to 'Sanitation' for utilities signifies a pivotal shift in the sector's focus and priorities. This change marks a move away from a narrow concentration on sewerage systems, to embracing an inclusive understanding of sanitation. Further, augmenting this legislative framework, the ongoing revision of the Water Policy, as of 2024, aimed to encapsulate sanitation more robustly. This policy revision is reflective of the government's commitment to elevating sanitation on the national agenda, aligning with global sanitation standards and practices. The revised policy is expected to provide a more detailed and comprehensive regulatory framework for sanitation, addressing gaps identified in the previous policy.

The involvement of Local Government Authorities (LGAs) has also been instrumental in the policy and legal framework for sanitation regulation. Tasked with the responsibility of enforcing local bylaws and regulations, these authorities play a key role in complementing national policies and legislative acts. This multi-tiered governance approach is designed to enable the tailored application of sanitation policies, addressing the unique requirements of various regions and communities across the nation. However, the level of engagement and prioritization of sanitation issues varies significantly among different LGAs. Despite some advancements, there remains a need for concerted efforts to elevate the importance of sanitation on the local government agenda.

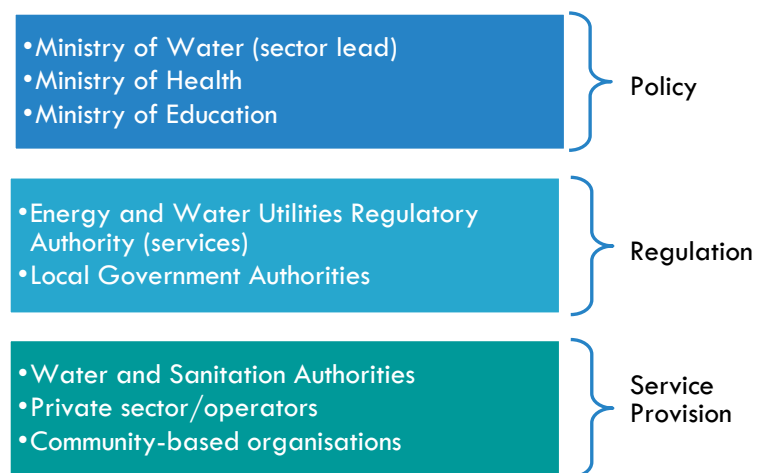
c. Institutional and regulatory framework

In Tanzania's CWIS landscape, the institutional and regulatory framework is characterized by an intricate web of stakeholders, each playing a pivotal role in shaping the sector's direction. The dynamics of this framework are underscored by the interactions and influences exerted by various entities, including government ministries, local government authorities, water utilities, private sector players, and development partners

Central to this framework is the Ministry of Water, which shoulders the primary responsibility for policy-making and strategic direction in the sanitation sector. It works in collaboration with other ministries, such as the Ministry of Health and the Ministry of Education, to ensure a holistic approach to sanitation. This collaborative approach is vital for crafting policies that are comprehensive and sensitive to the diverse needs of the population.

The Energy and Water Utilities Regulatory Authority (EWURA) plays a central role in Tanzania's CWIS regulatory framework, primarily focusing on coordinating the overarching sanitation efforts, enhancing the capacities of utilities, and reinforcing regulation. As a regulatory

Figure 8 : Tanzania major CWIS stakeholders



body, EWURA ensures that sanitation services across the country meet established standards and are delivered efficiently and equitably. To achieve these objectives, EWURA has recently embarked on a strategic move to decentralize its operations to the zonal office level. This initiative is designed to engage more closely with key stakeholders including LGAs, strengthening their capacity to advocate for and implement inclusive sanitation approaches.

Local Government Authorities (LGAs) are key stakeholders, responsible for implementing the policies and regulations at the local level. They are tasked with enforcing local bylaws and ensuring compliance with national policies, thereby bridging the gap between high-level policy directives and on-the-ground implementation. Their role is particularly significant in adapting national guidelines to fit the local context, ensuring that sanitation solutions are tailored to the specific needs and challenges of their respective jurisdictions.

The role of private sector is gaining recognition for their contributions, especially in expanding faecal sludge collection and transportation services and the treatment capacities, under the guidance of utility companies. This collaborative effort is directed towards amplifying service capabilities to cater to the surging demand for sanitation solutions. Currently, small-scale treatment facilities, conceived and constructed by NGOs, now have the capacity to treat approximately 4 cubic meters of sludge daily. This process not only mitigates environmental hazards but also converts the sludge into valuable fertilizer, illustrating a sustainable approach to waste management.

Development partners and international organizations play a supportive role, providing technical and financial assistance to bolster the country's sanitation efforts. Their contributions are pivotal in filling technical and financial resource gaps and facilitating the implementation of sanitation projects, often in collaboration with government entities and other stakeholders.

d. Accountability mechanisms including for onsite sanitation.

In Tanzania, the accountability mechanisms for onsite sanitation are shaped by the roles and responsibilities of various stakeholders as outlined in the regulatory framework. This framework emphasizes the importance of compliance and enforcement of standards to ensure effective sanitation management.

The Tanzanian government has developed several technical documents to strengthen City-Wide Inclusive Sanitation (CWIS). These include the Guidelines for the Application of Small-Scale, Decentralized Wastewater Treatment Systems (DEWATS) and the Design, Construction, Supervision, Operation, and Maintenance (DCOM) Manual. Both emphasize the role of DEWATS in improving sanitation in areas without centralized sewerage System. They aim to create a regulatory and supportive environment for these systems, addressing urbanization challenges and existing infrastructure limits.

Additionally, the EWURA Guidelines for Onsite Sanitation and Faecal Sludge Management for Water Supply and Sanitation Authorities (2020) focus on managing non-sewered systems and guiding Water Supply and Sanitation Authorities (WSSAs) towards sustainable sanitation aligned with national and global goals. The 2020 EWURA Water and Wastewater Quality Monitoring Guidelines standardize water quality practices for utilities, significantly impacting urban sanitation regulation. Lastly, the 2022 EWURA Performance Benchmarking Guidelines for WSSAs support enhanced service delivery and compliance within the CWIS framework.

LGAs are instrumental in the enforcement of sanitation regulations through the implementation of local bylaws and regulations that are in harmony with national policies. The LGAs' role is particularly significant in ensuring adherence to sanitation standards within communities and the issuance of licenses and permits for sanitation services providers. By mandating sanitation service providers to obtain licenses and permits, LGA ensures that these entities meet the necessary operational and safety standards set forth by EWURA.

Utilities are also integral to the accountability mechanisms within Tanzania's sanitation sector. Their role includes aspects of collection and transportation of fecal waste, complementing the efforts of the private sector but they primarily focus on the treatment of sludge, where they are expected to uphold high standards of service quality, particularly concerning the effluent quality and treatment processes. Additionally, utilities coordinate with the private sector to address service gaps, especially in low-income areas requiring emptying services for latrines. They also monitor the volume of sludge processed at treatment facilities, ensuring compliance with established protocols. EWURA, the regulatory authority, oversees these utility operations by ensuring that utilities meet the required sanitation standards, thereby maintaining the overall quality and efficiency of sanitation services across the country. The regulated entities have the right to appeal regulatory decisions and are involved in decision making processes.

While community engagement forms a crucial aspect of the broader accountability mechanism, comprehensive measures such as community census on sanitation, feedback mechanisms, and satisfaction surveys have not yet been implemented. These tools are vital for amplifying public voice and concerns about sanitation, yet their implementation remains limited. The development of these mechanisms would provide valuable insights into community perspectives and help tailor sanitation policies to better meet the needs and expectations of the public.

e. Sector monitoring and reporting

In Tanzania, the sector monitoring and reporting for CWIS involves the coordination of various stakeholders, including utilities, local government authorities, and regulatory bodies, to ensure effective service delivery and compliance with national standards. The Business Planning Guidelines and Performance Benchmarking Guidelines are the key guiding tools for sanitation sector monitoring and reporting by EWURA.

A key element in this framework is the upgrade of MajiS reporting system to capture sanitation data and integration of KPIs on sanitation into the annual Water Utilities performance review reports. From the financial year 2020/2021, sanitation indicators were included in the report for selected utilities. This marked the first time that such data was systematically collected and analysed for regulatory purposes. By reporting on these indicators, EWURA can also monitor performance in service quality, efficiency, and coverage which is essential for targeted improvements and accountability in service delivery. This data is also crucial for identifying areas that require attention and resources, thus enabling a more focused and effective implementation of sanitation policies and programs.

Additionally, the establishment of a thematic working group on sanitation and hygiene which is a ministerial task force on sanitation under the Water Sector Development Programme, plays a critical role in the coordination and oversight of the CWIS sector. This task force, comprising representatives from various ministries and departments, is responsible for formulating policies, setting strategic directions, and ensuring that sanitation initiatives align with the broader national

development goals. The task force ensures a cohesive approach to sanitation management, bridging gaps between different governmental levels and departments.

EWURA is responsible for monitoring the performance of sanitation service providers. The reporting process involves periodic reviews and assessments to gauge the progress of sanitation initiatives. To this end, regular reporting and data are provided by the utility for evaluating the effectiveness of sanitation services and for identifying areas needing improvement. EWURA produces an annual Water Sector Performance Review Report, benchmarking the performance of WSSAs on a number of KPIs. The sector also includes data and information on onsite sanitation which are not considered for performance benchmarking process. These reports are also instrumental in informing policymakers, donors, and other stakeholders about the effectiveness of implemented strategies and the areas where further efforts are needed.

f. Strengthen regulatory and services providers' capacity and incentives

In Tanzania, EWURA has made considerable efforts to strengthen the capacities of sector actors to execute their respective mandates. The regulatory impact and effects on the sanitation sector have been multifaceted, encompassing both advances and areas needing further improvement.

EWURA has mobilised resources to facilitate capacity development for regulatory staff, service providers and policymakers. This has included training in the Equiserve tool for sanitation service planning, learning visits to NWASCO on the implemented sanitation regulation framework, consultative meetings and training of WSSAs and other stakeholders by the regulator on sanitation guidelines developed for awareness raising and compliance.

One of the significant challenges in the sector has been the financial limitations faced by utilities. While capital investments for sanitation infrastructure have been supported by the government, the responsibility for maintenance and operational costs rests largely with the utilities. This financial burden often limits their ability to sustain high-quality services, especially in non-sewered sanitation settings. The reliance on government funding for major projects also means that utilities must navigate bureaucratic processes, which can delay project implementation.

Many stakeholders in the sanitation sector agree that increased public awareness and engagement are crucial for its improvement. While some initiatives have been undertaken to educate communities, often in collaboration with humanitarian and development organizations, there remains a substantial need for more thorough community engagement strategies. Issues highlighted by partners and the private sector include the disposal of debris in latrines, households' reluctance to hire sanitation workers, and illegal dumping in stormwater drains. Efforts to involve communities more actively aim to enhance participation, deepen understanding of proper sanitation practices, and ensure adherence to regulations.

Another barrier has been the coordination challenges among various stakeholders in the sanitation sector. While the establishment of the Ministerial Task Force on Sanitation has been a positive step towards improved coordination, there remains a need for stronger and more effective collaboration among government bodies, utilities, private sector players, and local communities. This is particularly important for ensuring that all areas, including low-income and hard-to-reach communities, receive adequate sanitation services.

The impact of the regulatory framework has been mixed. The inclusion of sanitation indicators in utilities' annual Performance Review reports and the integration of KPIs into their reporting systems

have brought about a greater focus on monitoring and accountability. Incentives are provided in the form of reputational incentives by recognising the best achievers as part of sector performance review and financial incentives where the good performance of a WSSAs is considered as a valid reason for utility to propose a new tariff. These incentives mainly applicable to WSSAs, but also LGAs where they act as service providers, they benefit from reputational incentives in the form of an award for “best performing in sanitation”.

g. Summary

Overall, while there have been advancements in the CWIS sector in Tanzania, particularly in terms of policy development and regulatory efforts, the journey towards a fully effective and inclusive sanitation system continues. The regulatory history of CWIS in Tanzania has been highly influenced by the regulatory body. Through its regulatory functions, tariff oversight, promotion of innovative solutions, and emphasis on consumer protection, EWURA has significantly contributed to the advancement of the sanitation sector, improving public health, and environmental conditions in Tanzania.

The evolution of Tanzania's policy and legal landscape for inclusive sanitation regulation has been a transformative journey from a framework that initially offered limited acknowledgement of sanitation services to one with a robust legislative foundation, explicitly encompassing non-sewered sanitation. This transformation is marked by strategic legislative reforms and technical and operative guidelines, reflecting a profound shift in the national perspective towards sanitation management.

The institutional and regulatory framework is a mixture of diverse yet interconnected stakeholders. The relationships and influences among these entities are critical in shaping the effectiveness and sustainability of sanitation services across the country.

Tanzania's accountability mechanisms include Local Government Authorities that enforce sanitation regulations and issue necessary licenses and permits, ensuring service providers adhere to operational and safety standards. Utilities complement this by managing faecal waste collection, transportation, and treatment, maintaining high service quality, and coordinating with the private sector to fill service gaps. EWURA plays a role of oversight involving monitoring and ensuring compliance with national sanitation standards. However, there is a gap in community engagement, with a need for more comprehensive tools to capture public feedback and concerns about sanitation.

The sector monitoring and reporting system employs tools like KPIs and ministerial task forces. This system ensures that sanitation services are delivered effectively and efficiently, contributing to the overall goal of improving public health and environmental conditions.



5. Kenya

a. CWIS regulatory history

The evolution of Citywide Inclusive Sanitation (CWIS) in Kenya presents a dynamic regulatory history. Initially, the country's sanitation efforts were predominantly skewed towards water supply, with specific emphasis on rural sanitation. This approach, however, left a critical gap in urban sanitation, particularly for populations not connected to sewer networks.

During this period, urban onsite sanitation practices were not only disregarded but also deemed illegal under public health laws. There was no ownership or proper regulatory framework for onsite sanitation, leading to a chaotic and often unregulated sanitation environment. Public sanitation facilities, suffered from neglect and lack of ownership, which adversely affected their usability and maintenance.

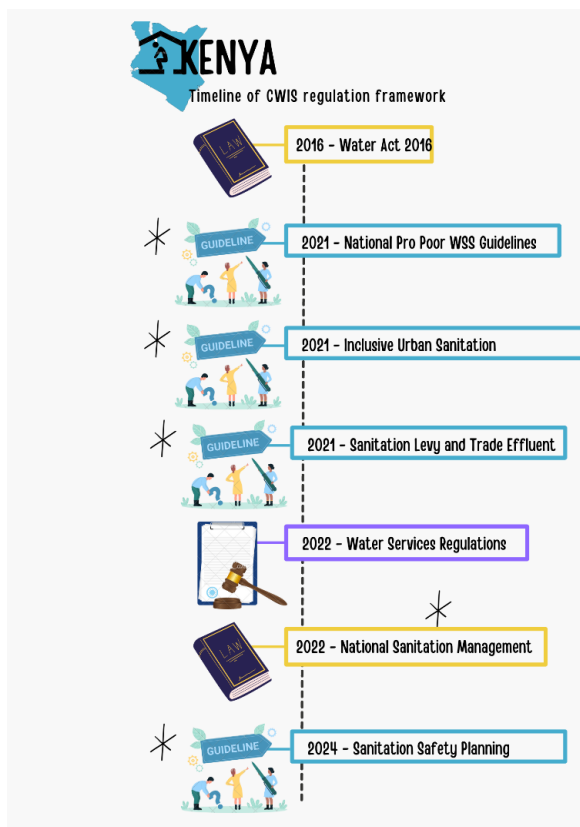
A major turning point in the regulatory landscape was marked by global commitments, such as the 2010 Sanitation and Water for All (SWA) initiatives and High-Level Meetings (HLM) agreements. HLMs are coordination platforms where ministers from different countries come together and discuss the achievement of the water, sanitation and hygiene related targets of the SDGs. These global discussions necessitated Kenya to reassess and reorient its sanitation strategies, placing a new emphasis on urban sanitation.

This reorientation was pivotal in acknowledging the need for comprehensive and inclusive sanitation services including non-sewered sanitation.

Before 2019, the Ministry of Health in Kenya laid out a framework to address sanitation and hygiene issues through the Kenya Environmental Sanitation and Hygiene Policy 2016-2030. This policy was developed to overcome the limitations of the National Environmental Sanitation and Hygiene Policy published in 2007 and aimed at ensuring universal access to improved sanitation and a clean and healthy environment for all Kenyans, as guaranteed by the Constitution of Kenya 2010. Following global commitments, the mandate for sanitation shifted from the Ministry of Health to the Ministry of Water, Sanitation, and Irrigation. This transition was a crucial step in integrating sanitation more holistically within the national water and sanitation governance and utilities. The Water Services Regulatory Board (WASREB) created under the 2002 Water Act, developed tools and guidelines to support this shift, emphasizing the need for inclusive sanitation that covers both sewerred and non-sewerred sanitation services.

Initially, WASREB's focus was on setting standards, developing tariffs, and licensing water service providers for water supply and sewerage services but slowly expanded its roles to cover the entire sanitation service chain. WASREB has been instrumental in steering policies and practices towards

Figure 9 : Kenya Policy and Guideline timeline



sustainable and inclusive sanitation solutions, adapting to the evolving needs of Kenya's urban and rural population.

Malindi and Nakuru Water Service Providers emerged as pioneers in operationalizing this approach, implementing the CWIS plan and demonstrating the feasibility and impact of a Citywide Inclusive Sanitation approach. The success stories have been a catalyst for other utilities and counties to embrace the CWIS approach, leading to a more integrated and comprehensive understanding of urban sanitation needs.

b. Policy and legal basis for services regulation

To enhance the new sanitation management approach, Kenya underwent pivotal policy and legal transformations. The initial framework, defined under the Kenya Environmental Health and Sanitation Policy, was primarily rural-centric and fell short in addressing urban sanitation. A landmark legislative development was the enactment of the revised 2016 Water Act from 2002, which laid the legislative groundwork in line with Kenya's Constitution. This Act signified a major shift, transitioning the responsibility for sanitation from the Ministry of Health to the Ministry of Water, Sanitation, and Irrigation. This transfer heralded a more holistic approach, embedding CWIS within the wider water and sanitation services and addressing the inadequacies of the previous legal framework.

Additionally, the realization of the need for citywide inclusive sanitation planning led to the integration of sanitation targets into County Integrated Development Plans (CIDPs). These plans, which empowered the county responsibility over sanitation, began to incorporate specific sanitation initiatives, ensuring that these crucial services were not overlooked in the broader developmental blueprint.

Further regulatory guidance, at national level, was also provided by the Water Services Regulatory Board (WASREB) through various ratified guidelines.

The drafting of a National Sanitation Management Policy in 2022, played a pivotal role in the expansion of sanitation services in urban settings. This draft policy, guided by the AMCOW Africa Sanitation Policy Guidelines (ASPG), aims to provide a holistic and inclusive framework, accommodating a variety of sanitation solutions suitable for different urban contexts. Concurrently in 2023, the National Water and Sanitation Investment Policy emerged, outlining the government's vision for sanitation investments. This policy is instrumental to guide and stimulate investments into urban sanitation, setting a clear direction for future initiatives and resource allocation.

c. Institutional and regulatory framework

The institutional and regulatory framework for Citywide Inclusive Sanitation (CWIS) in Kenya involves a complex and multi-layered system with a range of stakeholders. Key among these are the Ministry of Water, Sanitation, and Irrigation, county governments, and water service providers, each playing a crucial role in the sanitation sector.

The Ministry of Water, Sanitation, and Irrigation has responsibility for developing national strategy, policy, and guidance for sanitation management. The County governments are responsible for the implementation of sanitation policies and programs. The devolution of services to the Counties under the 2010 Kenya Constitution, has led to a need for localized strategies and implementation plans that align with national policies. This decentralization has necessitated closer coordination and collaboration between national and county-level entities.

The Water Services Regulatory Board (WASREB) plays an anchoring role in monitoring the performance of service providers, fostering capacity development, and innovating tools to enhance the efficiency of utilities. In its commitment to these objectives, WASREB actively participates in the Sanitation Technical Working Group (TWG), under the Ministry of Water, Sanitation and Irrigation. This group convenes on a quarterly basis and serves as a crucial platform for CWIS coordination. It enables stakeholders to connect, share insights, and bolster their collective capacity, thereby facilitating a collaborative approach to addressing the challenges and opportunities in the sanitation sector.

Figure 10 : Kenya's major CWIS stakeholders



Water service providers, often operating at the county level, have been increasingly tasked with integrating sanitation into their service delivery models. This integration has come with its challenges, including the need for capacity building and strategic planning to incorporate sanitation, particularly in urban settings.

Non-governmental organizations (NGOs) and international development partners are also instrumental in providing technical support, programme-based funding, and advocacy for sanitation issues. Their contributions have been vital in the advocacy for a transition to the CWIS approach and are now strongly engaged in the support to WASREB and the reinforcement of the utilities. In addition, through programme-based funding, they are supporting urban poor population to gain access to sanitation by supporting utilities to carry out social vulnerability surveys and subsidising the construction of **toilets** and emptying services for urban poor. NGOs are also supporting utilities to increase their gender lens by providing critical support for the construction of gender adapted toilets.

d. Accountability mechanisms including for onsite sanitation.

An essential element of the accountability framework in Kenya's sanitation sector is the **regulatory oversight provided by national bodies in enforcing compliance with established sanitation standards**. However, the development and implementation of specific regulatory tools and instruments for compliance enforcement are still in progress.

Guidelines developed by WASREB include the "Guidelines on Inclusive Urban Sanitation Services" (2020), offering comprehensive strategies for enhancing urban sanitation standards, focusing on inclusive and equitable service delivery; The "Guidelines on Sanitation Levy and Trade Effluent" (2021) aimed to establish sustainable sanitation financing, guiding Water Service Providers on managing sanitation levies and trade effluent surcharges.

The role of county governments within this framework is vital. They shoulder the responsibility for implementing sanitation policies and guidelines set at the national level. This decentralized strategy enables the creation of more customized approaches to meet the unique sanitation needs of local communities. Despite this, disparities exist among counties, highlighting the need for nationwide

and structured capacity reinforcement to ensure equitable distribution of resources and expertise across the country.

Service providers, predominantly water utilities, are a critical component of the accountability system. Their task is to integrate sanitation into their existing service models, while also identifying sustainable financial strategies. Through workshops and collaborative events, these providers are supported by regulators, NGOs, and humanitarian partners, to learn adapting strategy to incorporate sanitation services effectively. However, they face challenges in balancing this new integration with their existing responsibilities and resource limitations.

It has been noted that there has yet to be a national survey aimed at establishing a benchmark for population satisfaction with sanitation services or gauging the public's willingness to pay for such services. However, conducting such a survey is an activity that regulators are interested in pursuing in the future.

e. Sector monitoring and reporting

The methodologies and systems for data collection and monitoring specific to sanitation regulation in Kenya are still in the early stages of development. WASREB has initiated the process by upgrading its Water Regulation Information Systems (WARIS) to incorporate WSP reporting requirements for sanitation specific parameters, making a distinction between sewered and non-sewered services. This has been alongside the development of sanitation KPIs along the Fecal Sludge Management (FSM) process which was being piloted for collection in selected utilities. The introduction of these indicators marks a significant advancement in the accountability mechanisms of the sector.

A significant component of this system is the GIS sanitation baseline mapping underway at household level, which focuses on gathering accurate and comprehensive information about various aspects of sanitation services. This includes data on the construction and maintenance of sanitation facilities, usage patterns, and the impact on public health and the environment. The collected data will aid in making informed decisions and strategizing improvements in sanitation services.

Stakeholder coordination, led by WASREB, is essential for aligning the water sector's efforts with ministry goals and ensuring efficient resource use. This involves collaboration among government, private sector, NGOs, and communities, facilitated through regular meetings and workshops to collectively tackle challenges and share best practices. With the growing trend of regulated rural water companies, there's an opportunity for improved collaboration between WASREB and the Kenya Sanitation Alliance.

The reporting process in the CWIS framework is designed to provide transparency and accountability. IMPACT reports published by WASREB include the performance of utilities in sanitation coverage indicator. Regular reporting by utilities and other stakeholders keeps all parties informed about the progress and challenges in the sanitation sector. These reports also serve as a tool for the government and regulatory bodies to assess the effectiveness of policies and strategies and make necessary adjustments.

f. Strengthen regulatory and services providers capacity and incentives

The journey towards comprehensive CWIS in Kenya has been marked by significant strides in strengthening the capacity and incentives for both regulators and service providers. A pivotal development in this regard is the implementation of a 5% sanitation surcharge by the Kenyan government, as guided by the National Pro Poor Water & Sanitation Service Guidelines. Set to commence in 2024, this surcharge, applicable to all water customers, represents a crucial step towards sanitation tariffication. It provides a symbolic financial income for utilities to embark on managing sanitation services more effectively. While this surcharge is a significant move, it is seen as an initial step and not a complete solution for covering the comprehensive costs of sanitation services. It does, however, lay the groundwork for a more sustainable financial model in the sector.

Despite this progress, challenges persist, particularly in integrating sanitation into the existing service models of water utilities. Utilities are grappling with the need to balance their expanded sanitation responsibilities with their traditional focus on water provision. Financial constraints are a notable hurdle, as the additional burden of sanitation services demands resources beyond the current capacities of many utilities.

Moreover, regulatory frameworks and service models are undergoing continual evolution to accommodate the complexities of urban sanitation. WASREB has invested in close consultative approaches and holistic capacity-development initiatives. The adaptation process is not without its challenges, as it involves a paradigm shift in both operational and financial planning. Service providers need to develop innovative strategies to incorporate sanitation without compromising the quality and affordability of existing water services.

Another aspect where strengthening is needed is in data collection and management. Accurate and comprehensive data are vital for informed decision-making and effective monitoring of sanitation services. The introduction of KPIs for sanitation by WASREB is a positive step towards better data-driven governance in the sector. However, the full implementation and integration of these KPIs into the regular monitoring systems of service providers was still in progress.

There is a need for continued strong collaboration between national bodies, county governments, and service providers. A deliberate collaborative framework must focus on building capacities, sharing best practices, and mobilizing resources to support the CWIS agenda. Additionally, involving communities and stakeholders at the grassroots level is crucial to ensure that the services meet the actual needs and priorities of the population.

g. Summary

The journey towards a regulated and inclusive sanitation framework in Kenya reflects a transition from a fragmented and rural-focused approach to a more comprehensive and inclusive urban sanitation strategy. This shift was driven by global commitments, legislative changes, creation of WASREB and a growing recognition of the critical need to address the sanitation needs of all urban residents, including those not served by conventional sewer systems

The policy and legal advancements have been instrumental in creating a conducive environment for the regulation and implementation of CWIS. They have provided the necessary framework for a more systematic and coordinated approach to sanitation, ensuring that services are not only extended to urban areas but are also tailored to meet the diverse needs of these rapidly growing populations.

The institutional and regulatory framework for CWIS in Kenya, is characterized by its multi-sectoral approach involving various ministries, regulators, county governments, service providers and



development partners, each contributing to the overarching goal of improving sanitation services and coverage. The necessity of engaging a diverse range of stakeholders, including those from health, urban planning, and environmental sectors, has also been instrumental in the Kenyan regulatory journey.

While the accountability measures in Kenya's sanitation sector are in their nascent stages, the development of specific regulatory tools and instruments for compliance enforcement is underway. The sector monitoring and reporting system within Kenya's CWIS framework is an evolving process that involves the upgrading of a structured data collection system, coordinated efforts among various stakeholders, and a transparent reporting mechanism.

In summary, while the introduction of the sanitation surcharge is a commendable step towards financial sustainability in sanitation services, the journey towards fully operationalizing CWIS in Kenya requires continuous effort in capacity building, regulatory innovation, financial strategizing, and stakeholder collaboration.



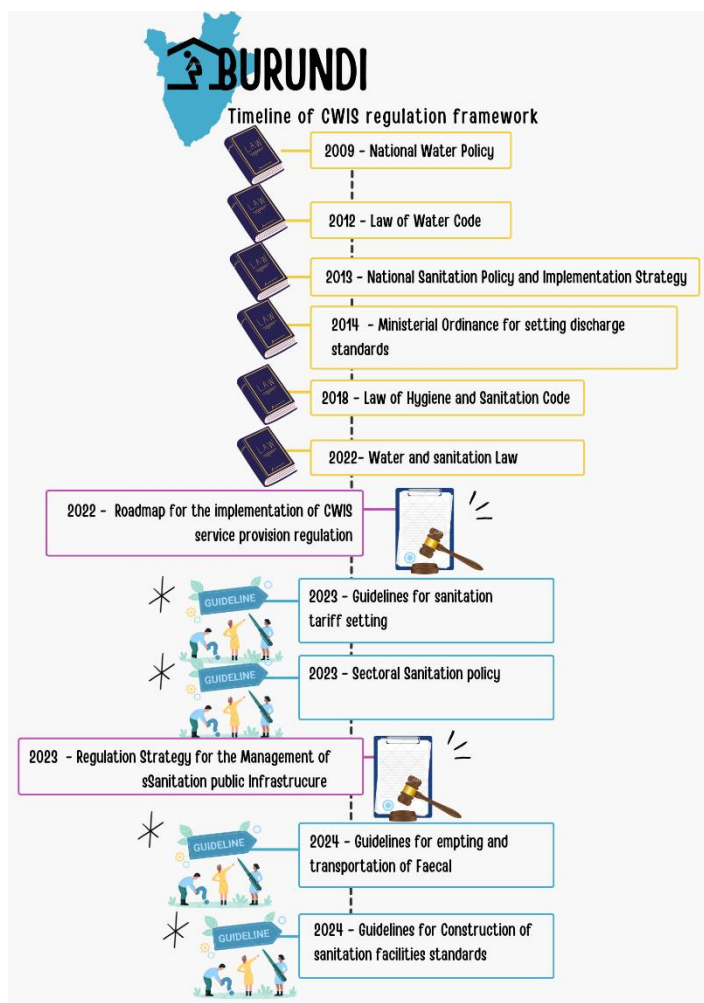
6. Burundi

a. CWIS regulatory history

The evolution of the regulatory framework for urban sanitation in Burundi has been marked by the collaborative efforts of national entities, regional and international organizations, focusing on improving sanitation services provision. The ESAWAS regulation framework and strategy for inclusive urban sanitation service provision, incorporating non-sewered sanitation services played a foundational role in Burundi, catalysing the formulation of a national implementation roadmap for urban sanitation services.

The implementation of this roadmap necessitated a comprehensive review and analysis of the existing regulatory framework governing the sanitation sector in Burundi. This examination revealed that, while a policy, legal, and regulatory foundation was in place, enhancements were needed to strengthen the regulatory authority's oversight across the sanitation value chain. This aimed to promote the quality and sustainability of sanitation services for all beneficiaries. In response to identified needs, Burundi embarked on a series of major reforms over the past eight years to enhance its sanitation sector. A pivotal step was the adoption of the National Sanitation Policy of 2013, alongside its implementation strategy upto 2025. This comprehensive policy framework clearly delineated the roles and responsibilities of key sector stakeholders and outlined the specific missions assigned to the regulatory authority, ensuring a clear direction for sanitation governance.

Figure 11 : Burundi Policy and Guideline timeline



Concurrently, the identification of the regulator in charge of sanitation, Autorité de Régulation des secteurs de l'Eau potable et de l'Energie (AREEN), marked a significant advancement in consolidating regulatory oversight and guaranteeing the delivery of quality sanitation services across the nation. Initially, AREEN was primarily focused on the regulation of electricity and potable water. In a strategic move to broaden its scope, AREEN's mandate was extended to include the mining sector, in 2015. A further review removed mining and included sanitation into the regulatory body's mandate. This revision, approved in 2018 signifies the recognition of sanitation as a critical component of urban infrastructure, essential for the health and well-being of the population. However, this broadening of responsibilities raises pertinent questions about the regulator's capacity and resources as it is now tasked with overseeing four major sectors which are water, sanitation, energy and petroleum.

b. Policy and legal basis for services regulation

Initially, Burundi's approach to sanitation was guided by the National Policy for Water and Sanitation which laid a foundational framework for managing water and sanitation services. However, it primarily focused on water, with limited specifics on sanitation, and lacked robust legal enforcement mechanisms, particularly concerning inclusive and sustainable sanitation practices. In 2013, a significant advancement occurred with the adoption of the National Sanitation Policy aiming to address various components of sanitation management comprehensively. Despite its progressive intent, the implementation of this policy has faced challenges, indicating a disconnect between policy formulation and practical application on the ground.

Another pivotal moment in the evolution of the legal framework for CWIS came in 2018 with the enactment of a Hygiene and Sanitation Code. This law was specifically designed to address the gaps and ambiguities in the existing legislative framework, particularly in the context of hygiene and sanitation. It aimed to provide a clear, structured legal approach to managing and regulating sanitation services, thereby reinforcing the National Policy for Sanitation. Following the introduction of the 2018 Hygiene and Sanitation Code, the focus shifted to developing specific regulations and guidelines to streamline sanitation practices in alignment with national development goals. This phase emphasized creating an enabling environment that accounted for the technical, social, economic, and environmental implications of urban sanitation systems.

In 2022, AREEN developed a comprehensive roadmap for the implementation of inclusive urban sanitation service provision regulation in Burundi. This document details the current state of sanitation, highlighting the challenges and opportunities within the sector, and proposes a methodological approach for improving sanitation infrastructures and services. It also emphasizes the importance of regulatory measures, strategic planning, and collaboration among stakeholders to enhance sanitation service delivery and regulatory oversight. Key actions include developing legal frameworks, financing strategies, and capacity-building initiatives to promote quality and sustainable sanitation services across urban and peri-urban areas.

c. Institutional and regulatory framework

In the CWIS framework of Burundi, a collaborative effort among various stakeholders is essential for governing and implementing effective sanitation policies. The Ministry of Hydraulics, Energy and Mines plays a leading role, while also coordinating with the Ministry of Environment. The latter significantly influences the shaping of national sanitation policy. However, this collaboration has encountered coordination challenges, primarily due to overlapping responsibilities between these two ministries. To address these issues, an Interministerial Working Group has been established to foster cross-sectoral collaboration and enhance policy coherence. The Group focuses on ensuring that sanitation policies are effectively discussed and integrated into the broader scope of urban planning and environmental strategies.

Sanitation service provision responsibilities lie in two distinct entities for urban and rural. The establishment of OBUHA (Office Burundais de l'Urbanisme, de l'Habitat et de la Construction) and AHAMR (Agence Burundaise de l'Hydraulique et de l'Assainissement en Milieu Rural) marks a significant commitment by the government to improve sanitation services in both urban and rural settings. While OBUHA focuses on urban sanitation, AHAMR caters for rural areas, although it currently limits its emptying services to institutions due to low demand in rural regions. This strategic division underscores a targeted approach to addressing sanitation challenges across diverse environments.

Another important player in this framework is the local government action such as the Service Technique d'Assainissement de Gitega (SETAG). Initially established through external funding, SETAG has been integrated progressively into the municipality of Gitega-political city. It is tasked with managing sanitation services in the area, including mechanized emptying services. The establishment of SETAG represents a localized approach to sanitation management, essential for addressing specific urban sanitation needs.

The private sector's is also playing an important role providing emptying and transport services.

National policies encourage both formal and informal private service and recognizing the private sector's viability as a business in sanitation services. This perspective indicates a broadening approach to sanitation management, integrating community-based methods with private sector participation but it still in a nascent stage.

Non-Governmental Organizations (NGOs) have been actively involved in the evolution of sanitation, particularly for vulnerable populations. Over the past decade, NGOs have undertaken various activities aimed at enhancing sanitation for these groups. Their role is crucial in complementing governmental efforts, bringing unique perspectives and solutions to sanitation challenges.

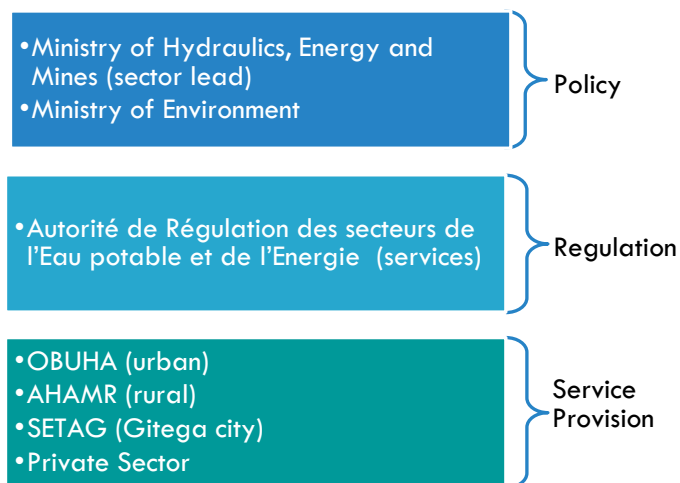
d. Accountability mechanisms including for onsite sanitation

In the CWIS framework of Burundi, an effective and comprehensive accountability mechanism is essential for the efficient management of sanitation services. Key ministries, including the Ministry of the Interior, the Ministry of Public Health, and the Ministry of Hydraulics, Ministry of Infrastructures, play critical roles in overseeing both basic and urban sanitation. A significant aspect of this framework is the decentralization of sanitation responsibilities, a policy approach initiated in 2013. This policy assigns the responsibility of local hygiene and sanitation management to municipalities, ensuring that sanitation services are tailored to meet the distinct needs of each community. The implementation of this policy is demonstrated by the success of the Service Technique d'Assainissement de Gitega (SETAG), demonstrating how decentralization can effectively facilitate the transition towards CWIS and strengthen the overall accountability mechanisms within the sanitation sector.

AREEN has launched several initiatives to improve sanitation regulation. AREEN has been instrumental in developing guidelines for the development and management of public sanitation infrastructure. These guidelines mark a crucial step toward ensuring that such infrastructure is not only constructed but also managed effectively and sustainably.

A major effort in 2023 involves conducting a GIS Mapping in all eighteen cities of Burundi to collect essential data on the population's satisfaction of the sanitation services provided. This survey is pivotal in evaluating the effectiveness of the current sanitation system from the users' perspective, gauging the performance of different entities, and setting a benchmark for public satisfaction. Moreover, the regulator is considering the addition of sanitation charges on the water utility bills to establish a financial source for sanitation services and underscores a commitment to ensuring

Figure 12 : Burundi major CWIS stakeholders



sustainable sanitation for all, including marginalized groups. However, it is critical to acknowledge that these initiatives are still in the developmental phase and encounter obstacles related to overlapping duties and jurisdictional conflicts among ministries. Addressing these challenges is essential for the successful implementation of these initiatives.

Burundi's sanitation sector is also experiencing a significant shift with the increasing involvement of the private sector. The national sanitation policy demonstrates a conducive environment for private operators to participate in the sanitation sector, complementing public service provisions. While specifics of licensing and regulation of private operators have not yet been undertaken, the encouragement of private sector participation indicates effort to support the entry and operation of private service providers in sanitation.

e. Sector monitoring and reporting

In the past decade, data collection and monitoring have been prioritized to enhance the understanding of Burundi's sanitation service sector. A significant milestone in this effort was the national inventory of water conducted in 2012, financed by international actors. This inventory was pivotal in providing an elementary understanding of the sanitation landscape at that time. Building upon this, a national survey was conducted in 2014 to collect data specifically on hygiene, and sanitation. These initiatives marked the beginning of an effort to create a comprehensive database for the sector. However, these efforts were hampered by a lack of coordinated follow-through, leading to a discontinuation in the systematic collection and updating of sanitation data.

Since the initiation of the CWIS approach in Burundi, there has been a growing awareness of the necessity for a dynamic information system. As a result, AREEN implemented a national GIS sanitation baseline mapping study of drinking water and basic sanitation services in all 18 urban centres covering many facets of service provision including technology and status of facilities. The primary objective of this system is to establish a centralized portal that prevents duplication of efforts and makes all relevant data easily accessible to stakeholders. This consolidated data repository is intended to inform and enhance planning and investment decisions, ultimately aiming to boost the sector's performance.

Effective data collection and utilization require a well-coordinated effort across the country, demanding strong collaboration at all levels. Gathering comprehensive, nationwide data is a complex task that necessitates a coordinated and collaborative approach. Additionally, effective utilization of these data calls for significant investment and expertise in data analysis. This involves not only the collection of data but also its careful interpretation to inform policy and operational decisions within the sanitation sector.

f. Strengthen regulatory and services providers capacity and incentives

Burundi's implementation of the CWIS approach presents a significant opportunity to advance the nation's sanitation services. This potential is clearly recognized, as evidenced by various initiatives aimed at service improvement including capacity development of regulatory staff and sector actors amidst limitations of resources and expertise.

To respond to the challenge in regulatory capacity, AREEN benefited from the mentorship program and regulatory exchanges facilitated by ESAWAS to learn from their peers' experiences in CWIS regulation. Using a training approach, NAWASCO has supported AREEN in the implementation of GIS mapping, Equiserve tool, tariff setting and other guidelines under development.

The regulatory body in Burundi is also focused on enhancing awareness in sanitation throughout various localities and sectors such as educational centres, schools, and communities. Through this initiative, the regulator aims to highlight the critical roles played by educational institutions, local administrations, and technical teams. The goal is to foster behaviour change towards improved sanitation practices within the community. However, this move requires specialized knowledge, comprehensive understanding of public health dynamics and environmental impact assessment. Collaboration with development partners, in a capacity assessment could offer valuable insights and might reveal areas where additional training or resources could further strengthen the regulator's ability to manage the complexities of sanitation regulation effectively.

An additional challenge within Burundi's CWIS framework is the development of service provider capacities. The CWIS regulation requires private sector involvement, acknowledging the potential benefits it brings in terms of investment and innovation for improved service quality and coverage. However, motivating private companies to invest in sanitation, especially in areas with lower profitability, is a substantial challenge. This adds on the pressing need to enhance the capabilities of current service providers. Many of these providers operate without formal contracts or definitive guidelines, which adversely affects the quality and reliability of the services they deliver. Addressing these issues is crucial for ensuring the efficiency and effectiveness of the sanitation services under the CWIS framework.

Enhanced effort and collaboration with international and regional entities are still crucial in supporting Burundi's journey to improve its sanitation services. Such partnerships offer opportunities to observe and learn from good practices implemented across the region. They could also support in the development of effective tariff models and the exploration of new technologies and methods in sanitation management. By leveraging external expertise and experience, Burundi can adopt innovative approaches and practices that are essential for advancing its sanitation infrastructure and service delivery.

g. Summary

AREEN has been able to begin shaping a regulatory framework to ensure inclusive urban sanitation in Burundi, aiming to refine regulatory oversight, promote sustainable sanitation solutions, and boost urban well-being. The inclusion of sanitation within AREEN's regulatory scope marks a critical advancement towards integrated urban management. However, this expansion introduces challenges related to capacity and resource distribution, necessitating strategic approaches to effectively manage these aspects and ensure the regulator's capacity to supervise and elevate service quality comprehensively across its jurisdiction.

The continuous progression of the policy and legal framework for CWIS in Burundi underscores the country's commitment to improving CWIS services. The collaboration of efforts from various governmental bodies, private sector entities, and non-governmental organizations, each offering unique expertise and resources is led by the Ministry of Hydraulics, Energy and Mines working in collaboration with the Ministry of Environment (through OBUHA). Despite facing coordination challenges due to overlapping roles and authority, these ministries, supported by the Interministerial Working Group, strive to ensure effective policy development and implementation.

Burundi's approach to accountability mechanisms in CWIS framework demonstrates a comprehensive and multi-faceted strategy for improving sanitation services across the country. With ongoing effort such as the GIS mapping of drinking water and basic sanitation services in 18 urban centres and the proposed integration of sanitation and water billing, AREEN is actively seeking innovative ways to enhance the efficiency and effectiveness of sanitation services.



1. Historical Involvement in CWIS

The historical involvement of the Eastern and Southern Africa Water and Sanitation (ESAWAS) Regulators Association, the United Nations Children's Fund (UNICEF) and Bill & Melinda Gates Foundation (BMGF) in the advancement of Citywide Inclusive Sanitation (CWIS) demonstrates a deep-rooted commitment to addressing the complex challenges of sanitation across diverse global contexts. Each organization has charted a distinctive path that collectively contributes to the broader narrative of progress in the sanitation sector.

The Eastern and Southern Africa Water and Sanitation (ESAWAS) Regulators Association has played a significant role in enhancing the regulatory landscape for water supply and sanitation (WSS) across Africa since its inception. Established from an informal regional meeting of five WSS regulators in 2007, ESAWAS has evolved into a reputable organization governed by a constitution ratified by its members since 2010. Over the years, ESAWAS has grown to include twelve member regulators, demonstrating the Association's gradual expansion and its commitment to improving water and sanitation services across Eastern and Southern Africa. These members are institutions with regulatory responsibility from Mozambique, Kenya, Rwanda, Tanzania, Zambia, Lesotho, Zanzibar, Malawi, Burundi, Uganda, South Africa, and Angola.

UNICEF is a key player in the WASH sector both at the global and regional level in Eastern and Southern Africa (ESA). UNICEF's WASH Strategy 2016-2030 emphasises the need to reach children everywhere and in all situations with WASH service including humanitarian as well as urban contexts. Furthermore, the UNICEF Sanitation Game Plan 2.0 aims to work with governments and partners to define localized pathways to achieving safely managed sanitation (SMS) service. In ESAR, UNICEF is implementing urban WASH programmes in countries, including direct implementation of CWIS in Ethiopia.

The Bill & Melinda Gates Foundation (BMGF) embarked on its journey to revolutionize sanitation as a critically overlooked service sector that was holding countries back from realizing important health gains from successful nutrition and immunization interventions. In 2009, the Foundation began investing in evidence and system strengthening to help partners test and demonstrate public sector-enabled approaches to improving sanitation service outcomes. The focus was to improving reach and safety of services among consistently unserved population segments in Africa and South Asia. The Reinvent the Toilet Challenge in 2011, introduced its parallel investment track focused on developing technologies that could overcome physical limitations of available conventional infrastructure options.

Collaborations with partners like BMGF, underscore ESAWAS and UNICEF's approaches to embedding the CWIS framework into broader programming efforts. ESAWAS' engagement with BMGF from 2017 facilitated the development of comprehensive sanitation regulatory frameworks, guidelines and tools as envisaged under the 2016-18 ESAWAS Strategic Plan to strengthen sanitation regulation. Its membership base allowed for a harmonised approach encompassing the exchange of knowledge and experiences, contributing to the overall improvement of inclusive sanitation regulation in the region. Under UNICEF, CWIS has been implemented in Ethiopia with



cross-learning in Kenya with UNHabitat and includes development of CWIS master plans, capacity building and integration of CWIS in national policies. Additionally, UNICEF is undertaking a mapping of CWIS activities in the ESA region

The collaborative efforts of BMGF, UNICEF, and ESAWAS in the sanitation sector have significantly shaped the landscape of CWIS. Their consolidated involvement reflects a shared commitment to system strengthening that translates into improved sanitation outcomes locally. It highlights the importance of collaboration across actors to achieve lasting impacts in the realm of public health and environmental sustainability.

2. Overall Approach

The concerted efforts of the BMGF, UNICEF, and ESAWAS, in enhancing sanitation regulations and practices, exhibit a strategic blend of innovation, capacity building, and regulatory enhancement.

At the forefront of funding innovation in the sanitation sector, BMGF collaborates with government leaders, the private sector, and technologists to advance promising new toilet and waste treatment technologies, service delivery models, and policies with the greatest potential to revolutionize sanitation standards and practices at the local and national levels. It has simultaneously leaned into strengthening CWIS service and finance systems that drive investment in improving sanitation outcomes and the innovations to achieve those outcomes. By investing in research, demonstrating, and de-risking innovative technologies, the Foundation seeks to lower barriers to private sector investment product development and commercialization. BMGF's strategy hinges on fostering partnerships that strengthen the public procurement and service delivery systems. Catalytic funding plays a critical role in BMGF's approach, providing the necessary financial resources for innovation and enabling partners to take the associated risks. The Foundation has also supported sanitation systems strengthening in several Sub-Saharan countries.

UNICEF developed a Global Framework for Urban WASH to guide its WASH programming in urban settings aiming to ensure children everywhere are reached with adequate WASH services. The approach includes strengthening the building blocks for the enabling environment (policy and strategy development, institutional arrangement and coordination, sector financing, capacity development and planning and monitoring), building sustainable markets, leveraging sustainable financial resources and empowering communities. UNICEF aims to contribute both directly and indirectly to results for sanitation access and work strategically with national and subnational governments, civil societies and private sector providing technical assistance, capacity development and evidence generation.

Complementing the innovative and holistic strategies of BMGF and UNICEF, ESAWAS directs its efforts towards strengthening the regulatory framework for sanitation. The Association has developed and disseminated a suite of tools and guidelines designed to support regulators in enhancing sanitation services. ESAWAS' approach is anchored on regional collaboration, aiming to harmonize development of sanitation regulations and practices that can be adopted and adapted across multiple countries. Through capacity building and technical support, ESAWAS empowers regulators to effectively utilize these tools, ensuring that uptake is accelerated and improvements in sanitation services are both impactful and sustainable. The Association's objectives emphasize the importance of enhancing the capacity of its members in WSS regulation and encouraging the adoption of best practices to improve the effectiveness of WSS regulation in the region.



The fusion of innovation, comprehensive public health strategies, and enhanced regulatory frameworks forms a robust foundation for improving global sanitation practices. This collaborative effort, underpinned by funding, partnerships, and the development of innovative solutions, underscores the multifaceted approach required to advance the sanitation agenda. Together, these organizations drive significant progress towards achieving improved sanitation outcomes and public health for communities and institutions in Africa.

3. Specific Support

To develop recommendations for an inclusive urban sanitation regulation framework that incorporates non-sewered sanitation services, ESAWAS first conducted a thorough gap analysis across eight countries, including Kenya, Tanzania, Zambia and Rwanda. This analysis laid the groundwork for the inclusive urban sanitation regulation framework under implementation and the creation of essential guidelines and tools. The work was backed by funding from the Bill & Melinda Gates Foundation (BMGF). The guidelines include the Sanitation Tariff Setting Guidelines, Citywide Inclusive Sanitation Planning Guidelines, and the Sanitation Service Provision Guidelines. The Sanitation Service Provision Guideline, in particular, was based heavily on WHO standards, specifying the minimum acceptable service levels for different geographical and situational contexts to ensure that the recommended technologies were practical and suitable for the specific needs of the regulated areas.

The implementation of these guidelines across member countries showcased a mix of achievements and challenges. Tanzania, for example, took this as an opportunity to pass new legislation in 2019 that expanded the scope of the regulator and utilities in the sanitation sector towards more inclusive sanitation service provision. Mozambique made similar strides by passing a decree to give the regulator oversight of Local Authorities' sanitation services, which did not exist prior. However, the application of these guidelines was not without its obstacles. The readiness of countries varied, with some already having supportive policies in place, while others lacked the necessary legal frameworks to proceed. This disparity necessitated ESAWAS's tailored support to ensure the smooth adoption of the new framework.

Additionally, the Association has organized various capacity-building events, such as the launch of the ESAWAS Training Centre for WSS Regulation in March 2024. These initiatives amplify ESAWAS' dedication to capacity development and the promotion of effective regulatory frameworks across Africa. Furthermore, as part of its strategy to strengthen public data systems, the organization's efforts extend to development of tools like Equiserve and SaniTracker Digital System, designed to address local data gaps. The SaniTracker system aims to streamline operations for providers, enhance service delivery and accountability for sanitation operators, and ensure environmental compliance, thereby addressing the challenges of the sanitation sector more efficiently and sustainably.

In addition to the support to ESAWAS, BMGF has contributed to a range of CWIS projects in Africa. Specifically, BMGF supported UNICEF for transforming sanitation in Ethiopia through the CWIS approach piloted in four towns: Sheno and Welenchiti in the Oromia region, Maksegnit in the Amhara region, and Kebridehar in the Somali Region. A key part of the initiative was conducting a diagnostic assessment to understand the current sanitation situation in these towns, which then led to the development of a costed CWIS master plan to be implemented until 2030. Through substantial investments in research and development, BMGF has championed in sanitation system strengthening approach to ensure a sustainable and accessible sector for all.



UNICEF has also contributed to facilitate south-to-south collaboration in the CWIS sector in Africa. For instance, UNICEF has been actively involved in a project for simplified condominium sanitation in the municipality of Viana, Luanda. This initiative, starting in April 2022, focuses on enhancing urban resilience, and promoting integrated recycling for a circular economy. In addition to the condominium sewerage development, the project also includes community training on selective waste collection and sanitation maintenance, aiming to improve environmental education and garbage separation practices as part of the National Sanitation Strategy. UNICEF has provided facilitation support in a South-to-South project between the governments of Brazil and Angola. Efforts in capacity building and policy advocacy have been instrumental in advancing sanitation objectives, particularly in contexts affecting children and vulnerable communities. In addition, through the development of guidelines for safe sanitation practices and a focus on emergency response and urban sanitation strategies, UNICEF has ensured that sanitation is integrated into broader public health and child welfare programs. The organization's commitment to partnership and knowledge sharing, particularly with entities like BMGF and ESAWAS, further amplifies its impact, creating synergies that enhance the overall effectiveness of sanitation interventions.

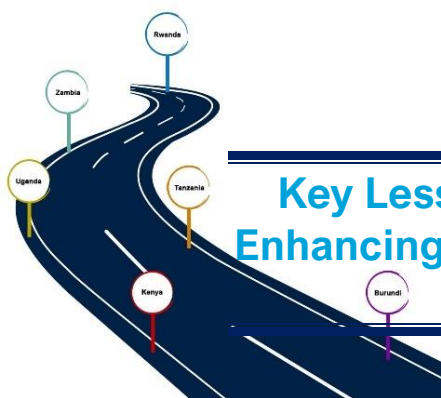
4. Way Forward

Following from BMGF, UNICEF, and ESAWAS experience in Africa, the pathway for the advancement of CWIS crystallizes around pivotal strategies for the future. This approach not only fosters sustainable solutions but also propels the sector towards more scalable and adaptable sanitation interventions worldwide. The BMGF also emphasizes the importance of moving beyond traditional capacity building to directly fund national institutions for sanitation improvements by having both the resources and the capabilities to implement and manage sanitation initiatives effectively. Direct funding supports the creation of a robust infrastructure, systems and practices that can spearhead comprehensive sanitation solutions, fostering a conducive environment for innovations and good practices in CWIS.

UNICEF's emphasis on strengthening multi-sectoral collaborations and urban sanitation challenges underscores the imperative for an integrated approach. By leveraging its global influence, UNICEF advocates for governmental leadership in sanitation initiatives, ensuring that policies are both evidence-based and inclusive. The organization's dedication to capacity development among stakeholders reflects a strategic effort to enhance the implementation and effectiveness of sanitation programs, in both urban and rural contexts, directing efforts where the challenges are most acute and impacts of success wide.

ESAWAS' approach raises focus on the cardinal role of properly designed regulatory frameworks in sustaining sanitation advancements. The Association's work in guiding regulatory approaches and practices through harmonisation across countries serves as a testament to the power of collaborative regulatory efforts to accelerate improvements in the sector. For regulators, the path forward involves not just setting standards, ensuring compliance, and facilitating capacity building among utilities but instead serve as a national coordinator for the sanitation sector, ensuring that policy-makers, service providers and partners in CWIS act toward sustainability, and inclusivity. This includes extending regulatory frameworks to encompass rural WSS, thereby adopting a more holistic stance towards sector governance.

Moving forward, the concerted efforts of these organizations, along with their partners, point towards a multi-faceted strategy for CWIS enhancement. The CWIS framework's foundational principles of equity, sustainability, and safety guide the collective efforts to ensure no one is left behind.



Key Lessons and Recommendations for Enhancing the CWIS Regulatory Framework in Africa

The insights gathered from the documenting the sanitation regulation journeys in the six countries provide useful lessons and recommendations to support actionable steps towards enhancing the effectiveness and sustainability of citywide inclusive sanitation as follows:

Policy and Legal basis for services regulation

- **Policy and Legal Framework Enhancement:** The existing policy and legal frameworks should be reviewed and enhanced to better support CWIS initiatives. This includes ensuring that policies are adaptable, relevant, and aligned with the current needs and future aspirations of the sanitation sector and reflect the inclusion of non-sewered sanitation solutions. Legal provisions should also be made to support and enforce these policies effectively.
- **Benchmarking Existing Approaches:** For countries beginning to incorporate non-sewered sanitation services, benchmarking from other successful models in other countries is recommended. This can inform the development of draft ordinances or policy guidelines before full implementation. It should be noted that the adoption of a model should be adapted to the context of the country to avoid possible failure in implementation. It is therefore necessary to carry out a contextual analysis before considering options for redress.
- **Stakeholder Engagement in Policy and Regulation Discussions:** Encouraging open discussions on regulations and policies among stakeholders, including private sector and other ministries is crucial. Such engagement allows for airing out challenges, influencing policy assessment, and suggesting improvements.

Institutional and regulatory framework

- **Streamlining Roles:** The roles and responsibilities of key sector actors must be clear and without undue overlap, to make governance and the management of sanitation more efficient. Having a lead sector Ministry and regulator play the most significant role in sector organisation and guidance.
- **Enhanced Regulatory Frameworks:** Development of robust regulatory environments that have autonomy in decision-making to not only ensure compliance but also promote efficiency, sustainability, and inclusivity in sanitation service provision. Ensuring these frameworks are comprehensive, clear, and enforceable is crucial for effective CWIS management.
- **Enhancing Utilities' Operational Independence:** Reducing bureaucratic hurdles for utilities and granting them greater autonomy can streamline their operations, leading to improved efficiency and effectiveness. Such a strategy aims to bolster the utilities' capabilities to deliver quality, affordable and sustainable services, benefiting the overall sanitation sector.
- **Involve private sector:** Local private sector involvement offers an opportunity to provide tailored solutions adapted to the specific needs of different areas, integrating non-sewered sanitation solutions to cover areas that cannot be served by sewer systems.



- *Inclusive Approaches to Sanitation*: Expansion of regulatory and implementation frameworks to include rural sanitation, ensuring that sanitation advancements reach all persons.

Accountability mechanisms including for onsite sanitation

- *Development of supporting Regulations and Guidelines*: The formulation of regulations and guidelines to support effective implementation of sanitation service provision should be prioritised. These provide the context for regulation and include minimum service levels, tariff-setting, appropriate sanitation technologies, such as adequate toilets and containment facilities. These guidelines should be designed to ensure compliance with sanitation standards and national aspirations for quality of service.
- *Financial Sustainability Models*: The path to lasting sanitation solutions hinges on financial strategies that extend beyond direct user charges. The sector needs to embrace a variety of revenue streams and funding mechanisms such as climate finance, project-based grant and Multilateral Development Bank (MDB) investment schemes. This includes exploring alternative funding sources, such as partnerships with private sectors and international donors, to reduce dependence on government funding. Innovative financial mechanisms, such as sanitation surcharges or taxes, could also be considered to create a sustainable financial model for sanitation services.
- *Advocacy and Awareness at the National Level*: There is a need for continuous advocacy and awareness-raising at the national level to keep sanitation high on the government's agenda. This includes sharing success stories, challenges, and lessons learned to maintain the momentum and political will for advancing sanitation.
- *Public Awareness and Involvement*: Increasing public awareness and involvement in sanitation issues is vital. Public education campaigns can help change perceptions and behaviours regarding sanitation, leading to increased demand for improved services. Involving communities in the planning and execution of sanitation initiatives can also ensure that the solutions are tailored to their specific needs and are more likely to be accepted and sustained. The implementation of community census, feedback mechanisms, and satisfaction surveys is crucial to gather public opinion and tailor services accordingly.

Sector Monitoring and Reporting

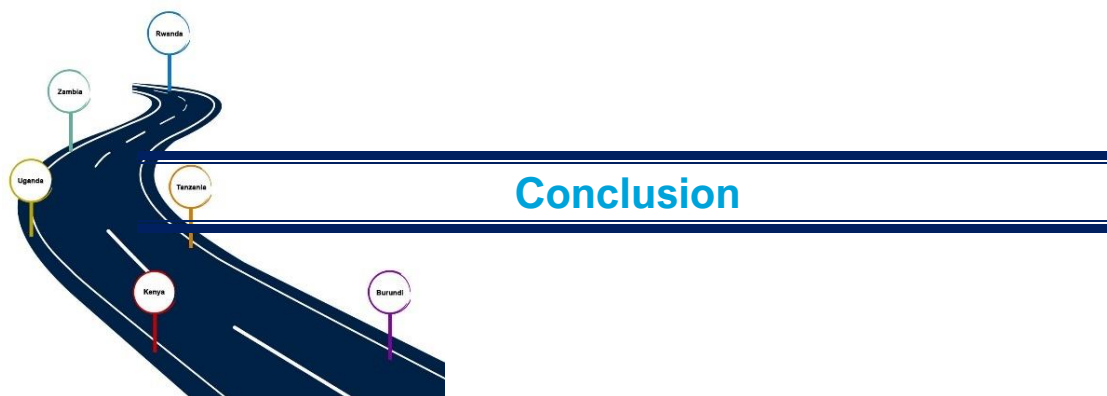
- *Monitoring and Reporting Enhancements*: The sector's monitoring and reporting systems should be strengthened by fully implementing and utilizing Key Performance Indicators (KPIs) that can assist in holistically tracking the performance of the sanitation sector. These KPIs should be regularly reviewed and updated to reflect the changing needs and challenges of the sanitation sector.
- *Improving Data Collection and Monitoring Systems*: Developing a centralized information system to track sanitation infrastructure, service delivery, and customer feedback can significantly aid in decision-making and resource allocation. This system should be designed to provide real-time data, facilitating responsive and informed management of the CWIS sector. Integration of GIS and IMS delivers multiple benefits in designing sanitation interventions.
- *Strengthen the Evidence Base*: Solidify the evidence base for the CWIS framework. This involves systematically gathering comprehensive data, particularly at the household level and in terms of fecal sludge management, to gain a thorough understanding of the current sanitation infrastructure and services. Well-designed sanitation service baselines are instrumental to informing required approaches.



- *Improve Coordination and Data Accuracy*: This involves a focused effort on streamlining data collection and sharing processes, improving the reliability of data sources, and refining data verification methods to support policy development, service delivery, and progress monitoring more effectively.
- *Continued Investment in Innovation*: Sustained support for research and development in sanitation technologies to ensure scalable and adaptable solutions are brought to underserved populations.

Strengthen regulatory and services providers capacity and incentives

- *Strengthened Multi-Sectoral Coordination and Collaboration*: Enhanced partnerships across all levels of governance and with various stakeholders to implement comprehensive and inclusive sanitation solutions. Regular meetings, clear communication channels, and joint action plans can facilitate better coordination among government bodies, utilities, private sector players, and communities.
- *Enhance Regulators role toward Coordinator*: Support regulators to serve as coordinators in the sanitation sector ensuring cohesive planning and implementation strategies that align with national sanitation goals and emphasizing collaboration to enhance sanitation accessibility and quality for all communities.
- *Direct Funding for National Institutions*: Emphasize the transition from conventional capacity building to directly funding national institutions. This strategic shift allows for more sustainable and impactful development within the sanitation sector, ensuring that institutions are well-equipped to implement comprehensive sanitation solutions effectively.
- *Capacity Building and Stakeholder Engagement*: Focus on empowering utilities, government bodies, and other sanitation stakeholders through training, support, and collaborative platforms to enhance their ability to effectively manage and deliver sanitation services, to improve service delivery and sector performance.
- *Promote Public Awareness and Engagement*: Enhance public awareness campaigns and community engagement initiatives to foster a culture of sanitation maintenance and investment among residents, particularly in peri-urban and rural areas.
- *Regional and Continental Collaboration*: Engaging in regional forums and continental networks for knowledge exchange can provide valuable insights and good practices adaptable to the country context.



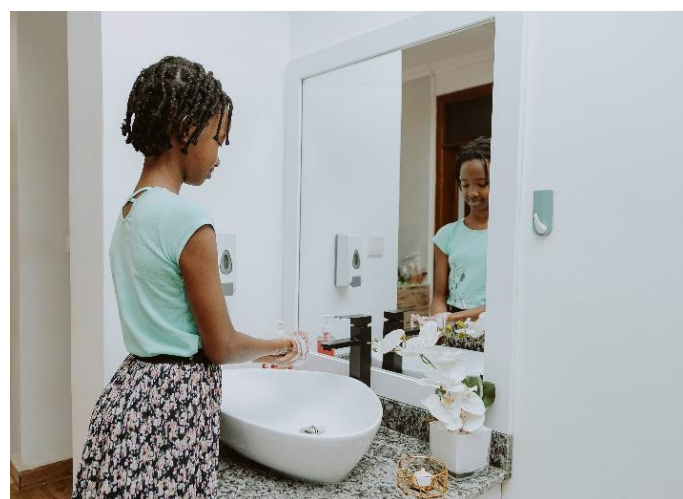
The journey towards Citywide Inclusive Sanitation (CWIS) in the Eastern and Southern Africa region represents a significant leap towards achieving equitable and sustainable urban sanitation services. This technical report, informed by the insights from regulators, policy makers, utility providers, private sector representatives, development partners, and crucial regional actors—offers a panoramic view of the strides taken and the challenges faced in the realm of CWIS regulation.

The inclusion of perspectives from the ESAWAS, UNICEF and BMGF has underscored the pivotal role of regional collaboration and support in advancing the CWIS agenda. The synergies created through these partnerships have facilitated a deeper understanding of the complexities involved in sanitation regulation and have paved the way for innovative solutions and frameworks that are responsive to the diverse needs of urban populations.

From this report, it is clear that the journey toward fully realized CWIS across the region is both challenging and ongoing. Despite the obstacles encountered, significant advancements have been made, demonstrating the resilience, commitment, and innovative spirit of all stakeholders involved. The regulatory frameworks and strategies adopted, as detailed in this report, serve as a testament to the concerted efforts to address the sanitation needs of urban populations, especially those most vulnerable. High-level policymakers play a crucial role in this context. Their commitment to CWIS principles can drive significant policy and regulatory reforms, catalyse financial investments, and mobilize a wide range of stakeholders towards common goals.

The recommendations outlined in the report offer pathways for advancing CWIS across countries. Enhancing regulatory frameworks, developing innovative financing models, strengthening stakeholder collaboration, and investing in capacity building are among the strategic actions proposed to address the challenges identified. Moreover, the report emphasizes the need for continued regional and global collaboration and knowledge sharing, leveraging the collective experiences and innovations within the region to accelerate progress towards CWIS goals.

In conclusion, the path toward achieving universal access to safely managed sanitation services is intricate and complex. Yet, the progress documented in this report offers hope and a clear direction for the future. It is through sustained effort, collective action, and a shared vision that the Eastern and Southern Africa region can continue to make strides toward inclusive and sustainable sanitation for all its urban dwellers. The regulatory journeys of the six countries studied, along with the regional efforts of ESAWAS, UNICEF and BMGF, serve as a beacon of what is possible when like-minded institutions come together in pursuit of a common goal: a world where every person has access to quality safe, reliable, sustainable, affordable and dignified sanitation services.



Annex – Key CWIS document

Table 1 : List of Key CWIS documents in Kenya

Name of the document	Date	Authors / Organisation	Status	Type
Water Act 2016	2016	The Legislature	Under Review	Law
National Sanitation Management Policy	2022	Ministry of Water and Sanitation	Draft	Policy
Water Services Regulations	2021	Ministry of Water and Sanitation	Under Review	Regulations
Guidelines on Inclusive Urban Sanitation Services	2020	Water Services Regulatory Board	Ratified	Guidelines
Guidelines on Sanitation Levy and Trade Effluent	2021	Water Services Regulatory Board	Ratified	Guidelines
National Pro Poor Water & Sanitation Service Guidelines	2020	Water Services Regulatory Board	Ratified	Guidelines
Guidelines on Sanitation Safety Planning	2024	Water Services Regulatory Board	Planned	Guidelines

Table 2 : List of Key CWIS document in Tanzania

Name of the document	Date	Authors / Organisation	Status (Planned, Under development, Draft, validated, ratified)	Type (Policy/Law, Regulation and Guidelines)
National Water Policy,	2023	Ministry of Water	Draft	Policy
National Water Policy	2002	Ministry of Water	In use	Policy
National Health Policy	2017	Ministry of Health	In use	Policy
National Environmental Policy	1997	NEMC	In use	Policy
Water Supply and Sanitation Act, Cap 272	2019	Ministry of Water	In use	Law
Energy and Water Utilities Regulatory Authority Act, Cap 414	2004	Energy and Water Utilities Regulatory Authority	In use	Law
Environmental Management Act Cap 191		NEMC	In use	Law
Public Health Act	2009	Ministry of Health	In use	Law
Water Resources Management Act, Cap 331	2009	Ministry of Water	In use	Law
The Local Government, Cap 288	1982	LGA	In use	Law
Guidelines for Onsite Sanitation (OSS) and Faecal Sludge Management (FSM) for Water Supply and Sanitation Authorities	2020	EWURA	In use	Guidelines
National Sanitation Options and Construction Guidelines ;	2012	Ministry of Health	In use	Guidelines



Name of the document	Date	Authors / Organisation	Status (Planned, Under development, Draft, validated, ratified)	Type (Policy/law, Regulation and Guidelines)
Guidelines for Construction of Improved Toilets and Environmental Sanitation	2014	Ministry of Health	In use	Guidelines
Design Manual for Water Supply and wastewater Disposal	2020	Ministry of Water	In use	Guidelines
Water and Wastewater Quality Monitoring Guidelines for Water Utilities	2020	EWURA	In use	Guidelines
Water Resources Monitoring and Pollution Control (WRM&PC) Guidelines (MoW-BWB)	2012	Ministry of Water	In use	Guidelines
EWURA Performance Benchmarking guideline	2022	EWURA	In use	Guidelines
The Guidelines for the Application of Small-Scale, Decentralized Wastewater Treatment Systems, A Code of Practice for Decision Makers, MOW.	2018	Ministry of Water	In use	Guidelines

Table 3 : List of Key CWIS document in Uganda

Name of the document	Date	Authors / Organisation	Status (Planned, Under development, Draft, validated, ratified)	Type (Policy/law, Regulation and Guidelines)
National Water Policy	1999		ratified	Policy
The Health Policy	1999		ratified	Policy
National Gender Policy	2007		ratified	Policy
Improved Sanitation and Hygiene (ISH) Strategy	2010		ratified	Strategy
The Constitution of Uganda	1995		ratified	Law
The Public Health Act Amended	2022		ratified	Law
The Water Act	1997		ratified	Law
Local Government Act	1997		ratified	Law
National Environment Management Act, Cap 153	1995		ratified	Law
Education Act	2008		ratified	Law



Draft National Sanitation Policy	1997	ratified	Policy
National Water and Sewerage Corporation Act, Cap 317	1995	ratified	Law
Town Sanitation Planning Guidelines	2019	ratified	Guidelines
Urban Sanitation Implementation Manual	2015	ratified	Manual
Operations manual for cesspool emptying service providers in Uganda	2014	ratified	Manual
Uganda National Urban Sanitation policy		Planned	Policy
Sanitation MoU, MWE, Education & MoH	2001		Operational document

Table 4 : List of Key CWIS document in Burundi

Name of the document	Date	Authors / Organisation	Status (Planned, Under development, Draft, validated, ratified)	Type (Policy/law, Regulation and Guidelines)
National Water Policy	2009	Ministry in charge of Environment	Ratified	Policy
National Sanitation Policy and its Implementation Strategy	2013	Ministry in charge of Environment	Ratified	Policy
Law of Hygiene and Sanitation Code	2018	Ministry in charge of Public Health	Ratified	Law
Law of Water Code	2012	Ministry in charge of Environment	Ratified	Law
Regulation Strategy for the Management of Sanitation Public infrastructures	2023	Regulator-AREEN	Validated	Regulation
Sectoral Sanitation policy	2023	Ministry of Hydraulics, Energy and Mines	Draft	Policy
Water and sanitation Law	2022	Ministry of Hydraulics, Energy and Mines This law has been reanalysed by the technical committee in January 2024 and we are awaiting that document will be sent to the council Ministers for adoption before being approved by the parliament and signed by the H.E the President of the Republic of Burundi.	Draft	Law



Guidelines for sanitation tariff setting	2023	Regulator –AREEN	Under development	Guidelines
Ministerial Ordinance foe setting discharge standards	2014	Ministry in charge of Environment	Validated	Guidelines
Guidelines for emptying and transportation of Faecal sludge	2024	Regulator –AREEN	Planned	Guidelines
Guidelines for Construction of sanitation facilities standards	2024	Regulator –AREEN	Planned	Guidelines

Table 5 : List of Key CWIS documents in Rwanda

Name of the document	Date	Authors / Organisation	Status (Planned, Under development, Draft, validated, ratified)	Type (Policy/law, Regulation and Guidelines)
Water & Sanitation policy	2023	Ministry of Infrastructure	Approved	Policy
Water & sanitation Law	2023	Ministry of Infrastructure	Draft	Law
National Sewerage Connection Guideline	2023	Ministry of Infrastructure	Approved	Guideline
Regulation for Installation of Decentralized Wastewater Treatment Systems	2016	RURA	Approved	Regulation
Regulation governing Liquid waste collection & transportation	2016	RURA	Approved	Regulation
Regulation Governing Fecal Sludge Management	2023	RURA	Approved	Regulation
Guideline for Fecal Sludge Management	2021	RURA	Approved	Guideline



Table 6 : List of Key CWIS document in Zambia

Name of the document	Date	Authors / Organisation	Status (Planned, Under development, Draft, validated, ratified)	Type (Policy/law, Regulation and Guidelines)
SI No. 63 of 2000 (Licensing of Utilities and Service Providers) Regulations under the Water Supply and Sanitation Act No. 28 of 1997	1997	Government	Ratified	Licensing of WSS Service Providers: Facilitates the licensing of CUs for provision of WSS in the specific areas of CU operations
Regulatory Framework for Urban Onsite Sanitation and Faecal Sludge Management	2018	National Water Supply and Sanitation Council	Ratified	Provides framework for regulation, service provision, institutional arrangements and reporting for urban onsite sanitation and faecal sludge management services
Zambia Water Investment Programme	2022	Government	Ratified	To transform and improve the investment outlook for water security and sustainable sanitation in Zambia
Vision 2030	2006	Government	Ratified	Reflects the collective understanding, aspirations and determination of the Zambian people to be a prosperous middle-income nation
National Water Policy	2010	Government	Ratified	Provides a comprehensive framework for sustainable development, management and utilisation of water resources
The 8th National Development Plan		Government	Ratified	For the period 2017 to 2021, is aimed at attaining the long-term objectives as outlined in the Vision 2030
The Urban and Regional Planning Act015	2015	Government	Ratified	Repealed the Town and Country Planning Act of 1962 and the Housing Act of 1975
The Public Health Act, Ch. 295, Vol. 17 of the Laws of Zambia	1995	Government	Ratified	Mandates local authorities to enforce public health protection
Local Government Ch. 281, Vol. 16 of the Laws of Zambia	1994	Government	Ratified	Mandates local authorities to provide water supply and sanitation services in the respective districts
Open Defaecation Free Zambia Strategy	2018	Government	Ratified	The government developed this strategy to successfully end Open Defecation (OD) by 2030
Environmental Management (EM) Act No. 12	2011	Government	Ratified	For protection of the environment



The SI No. 112 of 2013, of EM Act No. 12 of 2011, the EM (Licensing) Regulations of 2013	2013	Government	Ratified	Sets limits and standards for environmental protection
Statutory Instrument No. 100	2011	Government	Ratified	Provides for LGAs to undertake activities related to solid waste management (SWM)
National Urban and Peri-Urban Sanitation Strategy	2015	Government	Ratified	Provides a framework for the implementation of urban and peri-urban sanitation projects and activities by various stakeholders, including the end users
National Rural Water Supply and Sanitation Programme	2019	Government	Ratified	Guides implementation of water supply and sanitation activities in rural areas through the Local Authorities
National Urban Water Supply and Sanitation Programme	2011	Government		Guides provision of water supply and sanitation services in urban and peri-urban areas
Ministry of Water Development and Sanitation Strategic Plan	2023	Government	Ratified	
National Water Supply and Sanitation Council Strategic Plan	2021	National Water Supply and Sanitation Council	Ratified	NWASCO has outlined clear objectives and activities to enhance the regulatory framework: Develop new regulatory tools, improve regulation of sanitation service provision, enhance stakeholder engagement for enforcement and ensure efficiency and financial viability of CUs that are clearly linked to onsite sanitation and rural WSS.
National Cholera Elimination Plan	2019	Government	Ratified	Guidelines on multi-sectoral approach to end Cholera by 2020
Onsite Sanitation and Faecal Sludge Management Regulations	2024	Government	Draft	Protection of the environment and public health through regulation of the entire chain of onsite sanitation and faecal sludge management services across the entire service chain from containment to treatment/end use/reuse/disposal
Code of practice for Onsite Sanitation and Faecal Sludge management	2024	Government	Draft	Provides minimum specification for construction and service requirements in onsite sanitation and faecal sludge management services



Table 7 – Example of Key Performance Indicators for Faecal Sludge Management in Zambia

SN	Performance Indicator	Measurement	Data Requirements	Formula
1.	Desludged Septic tanks (%)	Percentage of septic tanks Desludged	i. Total number of septic tanks desludged; ii. Total planned number of septic tanks to be desludged in the area	i (Number of septic tanks desludged)/(Number of septic tanks planned for desludging in the area) ii (Number of septic tanks desludged)/(Total number of septic tanks in the area)
2.	Desludged Pit Latrines (%)	Percentage of Pit Latrines Desludged	i.Total number of Pit Latrines desludged; ii.Total planned number of Pit Latrines to be desludged in the area	i (Number of pit latrines desludged)/(Number of pit latrines planned for desludging in the area) ii (Number of pit latrines desludged)/(Total number of pit latrines in the area)

Table 8 : Example of Indicators Benchmarks for Performance review in Zambia

Benchmarks for number of desludged improved pit latrine and septic tank	Good	>100%
	Acceptable	85% - 95%
	Unacceptable	<85%

Pathway for CWIS Implementation Status in Commercial Utilities, Zambia

Table 9 : Pathway for CWIS Implementation Status in Commercial Utilities in Zambia

SN	ACTIVITY
1.	Revision of CU Strategic Plan to incorporate urban Onsite Sanitation and Faecal Sludge Management
2.	Identification/Engagement and signing of Management contracts with Community Based Organisations or Private Operators involved in Urban Onsite Sanitation and Faecal Sludge Management services
3.	Development of Standard Operating Procedures for Faecal Sludge Management operations
4.	Training of emptiers involved in emptying services of Onsite Sanitation
5.	Restructuring of CUs to create Urban Onsite Sanitation and Faecal Sludge Management Unit
6.	Re-branding and marketing of Urban Onsite Sanitation and Faecal Sludge Management mandate



7.	Develop Information, Education & Communication materials for Urban Onsite Sanitation and Fecal Sludge Management Service delivery
8.	Geographic information System mapping of sanitation facilities
9.	Availability of Shit Flow Diagram (s)
10.	Zoning of service areas for Urban Onsite Sanitation service emptying provision
11.	Maintain records of planned number of improved pit latrines and septic tanks to be desludged against executed
12.	Availability of Faecal Sludge Treatment Plant (s)
13.	Availability of adequate equipment and Infrastructure for emptying, transportation and treatment/reuse/recycling
14.	Availability of OSS/FSM Operational business model
15.	Sanitation service delivery strategy/policy document(on/offsite sanitation systems covering entire city)
16.	Availability of sanitation Investment plan

Table 10 : Institutions with sanitation responsibilities in Zambia

Ministry/Institution	Role
Ministry of Water Development and Sanitation	Responsible for sector oversight and policy development
Ministry of Local Government and Rural Development	Responsible for ensuring service provision and proper siting of infrastructure
Ministry of Health	Responsible for WASH infrastructure (including operations and maintenance) in health care facilities.
Ministry of Housing and Infrastructure Development	Ensures participation of women in infrastructure planning through Water, Sanitation and Hygiene Education Committees.
Ministry of Community Development and Social Services	Ensures access to sanitation for poor and vulnerable households through social assistance programmes.
Ministry of Lands and Natural Resources	Plays a role in sanitation, mainly with regard to wastewater and is responsible for advising local authorities on the development of sanitation master plans and also advising on appropriate technologies.
Ministry of General Education	Supporting the MWS in creating demand for sanitation in schools and assisting in planning for sanitation and hygiene promotion. Also responsible for the management of sanitation infrastructure in schools.
Zambia Environmental Management Agency	Provides regulatory framework for effluent discharge
Zambia Bureau of Standards	Defines the technical standards that must be utilized by the various actors in the sanitation sector to enable the installation of sanitation systems that provide affordable but good quality services.