

Regulation as a means to ensuring CWIS in Zambia

Contributed by **Chola Kasoma Mbilima**, National Water Supply and Sanitation Council (NWASCO)



Figure 1 – Source: NWASCO

Summary

Zambia like many other countries is making efforts to accelerate the provision of adequate sanitation to its people. Until recently, the focus for sanitation service provision and regulation was placed on a sewer system that could only serve the minority of the population. This was despite the clear mandate provided in the Law for both the service providers and the regulator, the National Water Supply and Sanitation Council (NWASCO), to deal with both onsite and offsite disposal of human excreta, including collection and treatment. Realizing this gap, NWASCO had to embark on a journey to institute regulation of On-Site Sanitation (OSS) and faecal sludge management (FSM). This journey began in 2016 with the development of regulations which culminated in the publishing of a framework for urban OSS and FSM regulation and service provision. The development of this framework was in the full realization that regulation of OSS services is multifaceted hence required multi-stakeholder coordination and collaboration.

It therefore became imperative for NWASCO to depart from the traditional 'unilateral command & control and incentive' method of regulating to a delegated and participative method that encouraged stakeholder partnerships and relationships. This shift called for innovation and creativity on the parts of both the regulator and service providers.

Overview

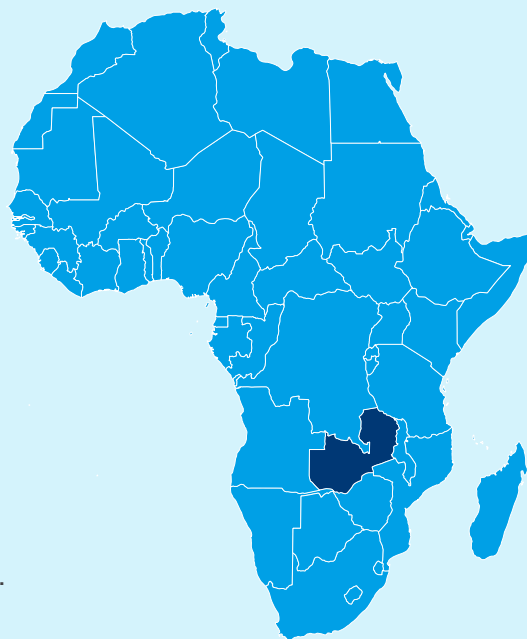
Geographical information

Country: Zambia

City population: 7,810,000

Problem

- Poor sanitation service delivery, particularly for the urban poor.
- Lack of coordination.
- Lack of data on the status of On-Site Sanitation (OSS) and faecal sludge management (FSM).
- Indiscriminate pricing of OSS and FSM services.
- Unsafe handling of sludge.
- Lack of standards and regulations.
- Limited capacity and experience for OSS and FSM service delivery and regulation.



Solution

- Regulation of non-sewered sanitation that embraces the CWIS principles.

Problem

In Zambia, the prevailing situation on OSS and FSM was due to inadequate coordination and agreement on the roles and responsibilities of various players across the sanitation service chain. There was no consensus on the state of OSS and FSM services as data was generally unavailable. The availability of accurate and reliable data is mandatory for effective regulation and service provision. Embarking on a transformation of OSS regulation and service provision required baseline data collection which is an expensive undertaking. Further, there were inadequate laws and standards for OSS and FSM. Handling and disposal of the waste was done indiscriminately with no regard to issues of health and safety for both humans and the environment. Similarly, pricing of the services was done indiscriminately with no regard for affordability and willingness to pay for services.

An enabling environment is integral to allow for impactful regulation and sustainable service provision. Several gaps and overlaps in legislation were identified that would make the regulation of OSS and FSM impractical. Gaps and overlaps in roles and responsibilities were then identified which hampered effective and inclusive sanitation service delivery.

The sewer network coverage was only 39.4% of the served population with less than 5% from the low-income settlements (Urban and Peri-urban Water Supply and Sanitation Sector Report, 2021). Looking at the challenges that were inherent especially for the low-income settlements, it was impractical to get everyone connected to sewer systems; hence NWASCO had to get involved in issues to do with non-sewered sanitation. This required thinking through how to come up with a regulatory mechanism. However, both NWASCO and the service providers lacked capacity to embark on non-sewered regulation.

Solution

New institutional arrangement with clear roles and responsibilities

NWASCO developed the urban OSS and FSM service delivery and regulatory framework premised on CWIS principles, which stipulated new institutional arrangements with clear roles and responsibilities, as shown in Figure 3. Policy direction was inevitable to complement the regulatory framework hence NWASCO supported the government in policy review that culminated into the 2020 National Water Supply and Sanitation Policy. NWASCO amended the

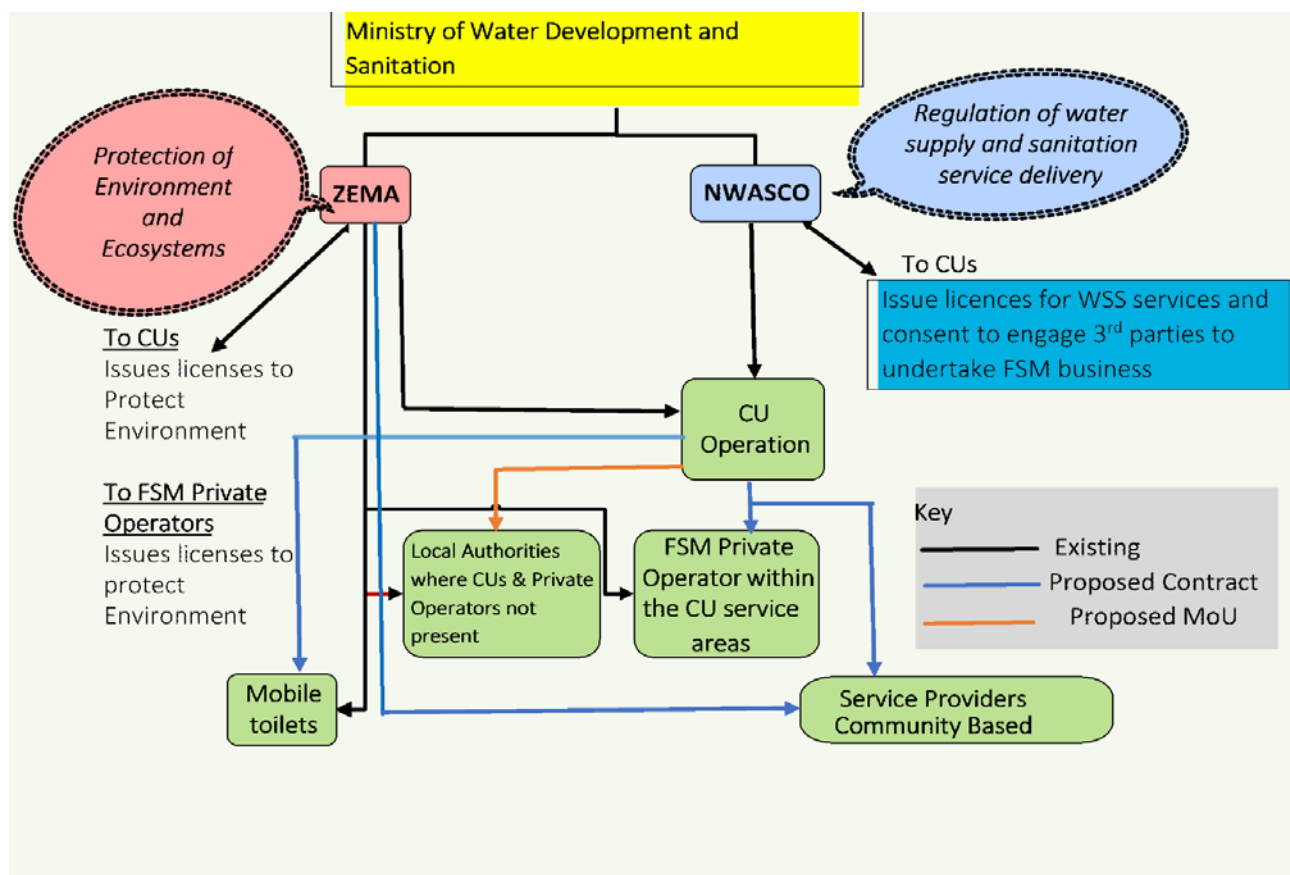


Figure 3 – Institutional arrangement for urban onsite sanitation in Zambia

licenses and requisite documents from 'Sewerage' to 'Sanitation' Companies to emphasize the need to focus on both onsite and offsite sanitation services. As commercial utility companies could not handle all aspects of service delivery across the sanitation service chain, an option for delegated service delivery partnerships with the private sector or community organizations was provided. The service providers had to ensure that the delegated providers adhered to regulatory requirements. Permitting requirements for delegated service delivery were developed that saw formalization of illegal pit-emptiers. The permitting requirements have introduced regulation touching on health and safety of pit-emptiers considering that the emptying methods currently being used are predominately semi mechanized or manual.

Laws, standards and enforcement

NWASCO, working with the Zambia Bureau of Standards and Zambia Environmental Management Authority embarked on the development of a Code of Practice standard for OSS and FSM which focused on sanitation facilities and service delivery across the entire service chain. This was coupled with the development of a Statutory Instrument for OSS and by-laws for Lusaka City for enforcement of non-sewered sanitation service provision. These would see aspects of construction of toilets according to standard mandatory scheduled emptying and standard operating procedures for sanitary workers introduced, to guarantee public health and environmental protection. The local authorities were identified to perform delegated regulatory functions because by law, they have an enforcement mandate on OSS and FSM.

Financing

The tariff-setting guideline was reviewed to incorporate pricing for OSS and FSM with consideration of affordability through price discrimination and subsidization. A sanitation surcharge, which is an addition of up to 5% of one's water bill, will be used to contribute to the efforts of the government in funding non-sewered sanitation initiatives. The sanitation surcharge was introduced in 2007 with an exclusive focus on funding sewerage rehabilitation and expansion initiatives. However, after embracing CWIS, the sanitation surcharge concept was extended in 2022, to support OSS and FSM initiatives such as construction of containment facilities and toilets and strengthening capacity of sanitary workers (i.e. pit-emptiers). As of December 2021, about \$6million was realized.

The average water tariff which is US\$0.12 accounts for about 0.1% of the average monthly household income, which is estimated at US\$113 (Living Conditions Monitoring Survey, 2015). Even with the introduction of the sanitation surcharge, the drinking water and sanitation costs will still be within the recommended 5% of income threshold.

Data and information management

Both service delivery and regulation of OSS and FSM require data, although the responsibility to collect data rests with the service providers. However, NWASCO provides professional skill-building opportunities and, to the extent possible, financial support to establish a baseline for sanitation service provision through Geographical Information System (GIS mapping). NWASCO uses its role as regulator to lobby partners to support data collection and integrated information management systems for OSS to ensure evidence-based decision making that will result in improved inclusive service delivery.

Incorporation of CWIS principles

Table 1 below highlights the status in terms of incorporation of the CWIS principles in regulation.

Table 1: How CWIS principles are incorporate in Zambia's regulatory framework

#	CWIS Principle	Status of incorporation in regulation	Measure
1	Everyone in the urban area, including the urban poor, benefits from equitable safe sanitation services	In progress	<ul style="list-style-type: none"> • Price regulation • Extension of mandate of service providers to include OSS and FSM • Draft National Standards on Onsite Sanitation Systems and Faecal Sludge Management – Code of Practice
2	Gender and scioal equity are designed into planning, management, monitoring	Complete	Permitting Requirements for engaging of Third Party Service Providers in Rural Water Supply and Sanitation and Urban onsite sanitation and Feacal Sludge Management by Commercial Utilities
3	Human waste is safely managed along sanitation service chain, starting with containment	In progress	Draft National Standards on Onsite Sanitation Systems and Faecal Sludge Management – Code of Practice
4	Authorities operate with a clear, inclusive mandate, performance targets, resources and accountability	Complete	Institutional arrangement for urban OSS and FSM
5	Authorities deploy a range of funding, business, and hardware approaches—sewered and non - sewerred to meet goals	In progress	CWIS planning and service delivery guidelines
6	Comprehensive long-term planning fosters demand for innovation and is informed by analysis of needs/resources	In progress	CWIS planning and service delivery guidelines
7	Political will and accountability system, incentivise service improvements in planning, capacity, and leadership	Complete	Water supply and sanitation policy 2020

Lessons learned

- **Regulation is not a ‘one size fits all’:** in the 20 years’ experience, NWASCO has learned that regulation is not a ‘one size fits all’. The regulator must take into consideration the dynamic environment by ensuring that it adapts, innovates and is creative to remain relevant. Experiences of others can be used to set up and develop tailored regulation. The regulator needs to invest in continuous capacity building, documenting and sharing of experiences.
- **Traditional method of regulation may not be applicable:** there are different stakeholders involved in OSS hence the traditional regulation methods are not feasible. In most countries the different aspects of OSS and FSM regulation is by law assigned to different stakeholders, hence regulation requires building of working partnerships with key stakeholders.
- **Regulators need to coordinate data collection and information management:** without data, no form of regulation can take place. The regulator needs to take up the role of coordinating data management. This includes data collection, resource mobilization, execution of data collection processes, capacity building and creating integrated information management systems for evidence-based decision making.

Useful links

<http://www.nwasco.org.zm/index.php/media-center/publications/booklets/send/7-booklets/71-national-water-policy-2020>

<http://www.nwasco.org.zm/index.php/media-center/publications/urban-and-peri-urban-wss-sector-reports/send/12-urban-and-peri-urban-wss-sector-reports/81-urban-and-peri-urban-water-supply-and-sanitation-sector-report-2021>

Further reading and references

- Guidelines for Tariff Setting on Water Supply and Sanitation, NWASCO, 2020.
- Permitting Requirements for Engaging of Third-Party Service Providers in Rural Water Supply and Sanitation and Urban Onsite Sanitation and Faecal Sludge Management by Commercial Utilities, NWASCO, 2020.
- Urban and Peri-urban Water Supply and Sanitation Sector Report, NWASCO, 2018.
- Urban Onsite Sanitation and Faecal Sludge Management – Framework for Provision and Regulation in Zambia, NWASCO, 2018.

About the author

Chola Kasoma Mbilima has over 15 years' experience in water supply and sanitation regulation working with NWASCO. She specializes in governance, economic, technical and incentive regulation, skills development, integrity management and gender mainstreaming. She has been instrumental in spearheading regulatory transformation to embrace CWIS through developing and implementing CWIS regulatory approaches.

About the institution / organisation

NWASCO is the regulator for water supply and sanitation service delivery in Zambia with 21 years' experience. It regulates 11 commercial utility companies responsible for water and sanitation service provision in the country. NWASCO is anchored on strong regulatory governance that is premised on credibility, legitimacy, transparency and accountability.



www.nwasco.org.zm

About the IWA Inclusive Urban Sanitation Initiative

IWA's Inclusive Urban Sanitation initiative responds to a huge and growing public need - safe sanitation in combination with access to safe drinking water and hygiene underpins good health. The aim of this initiative is reshaping the global urban sanitation agenda by focusing on inclusive sanitation service goals--and the service systems required to achieve them - rather than the traditional singular focus on expanding sewer networks and treatment works. This forms part of IWA's larger agenda to promote inclusive, resilient, water-wise, and sanitation-secure cities.

About the Inclusive Urban Sanitation Stories

The Inclusive Urban Sanitation stories are documenting some of the policies, practices, and approaches that demonstrate how stakeholders especially those in urban areas (e.g., public sector, operators, academics, regulators, and other key actors) are taking part or contributing to Sustainable Development Goal 6 which require water and sanitation concepts and norms to look beyond technology and the usual focus on building infrastructure. Increased focus is on safety, inclusion, environment, public health, and multiple technology solutions tailored to different geographies and socio-economic contexts for building climate-resilient cities. The stories aim to inspire urban stakeholders to discuss ways for advancing inclusive urban sanitation, especially in low- and middle-income countries.

inspiring change

iwa-network.org
iwa-connect.org

IWA
the international
water association