

TANZANIA, MOSHI



POPULATION
221,733
Inhabitants (2022 Census)

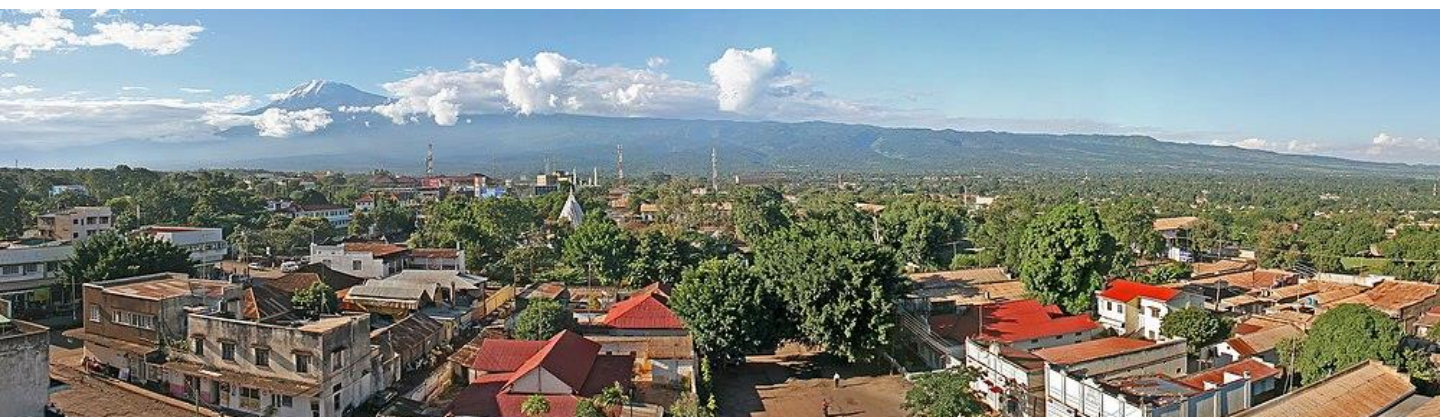
Decentralized SWM System at the Ward Level

Moshi, a small municipality in northeast Tanzania on the slopes of Mt. Kilimanjaro, is a key hub for tourism and commerce in the region. In the early 2000s, the municipality struggled with waste management due to rapid urbanization and increasing waste generation. At the time, Moshi relied on a centralized solid waste management (SWM) system, which had limited capacity and resources. This resulted in low waste collection rates, insufficient infrastructure for waste storage, and widespread open dumping, burning, and littering. The municipal council was solely responsible for waste services, and residents did not view waste management or environmental protection as their responsibility.

To address these challenges, Moshi implemented the Sustainable Cities program between 2001 and 2006, leading to significant improvements in its SWM system. The council enhanced its capacity to collect and treat municipal waste, beginning with the introduction of an environmental and cleanliness bylaw in 2000. Intensive public awareness campaigns were launched to educate residents on keeping the environment clean, complemented by the installation of waste bins, drop-off zones, and collection vehicles. Littering penalties were enforced to ensure compliance.

Despite these improvements, waste management remained a challenge, prompting the council to pursue a more decentralized approach. In 2006, Moshi Municipal Council adopted a formal environmental bylaw decentralizing the SWM system to the ward level. This decision followed extensive consultations with stakeholders, including the public. By decentralizing waste management, the city empowered local communities, wards, and neighborhoods to take responsibility for waste collection and disposal, allowing for more tailored solutions that addressed the unique needs of both densely populated urban areas and rural outskirts. The municipality used a combination of rewards, accountability measures, and penalties to encourage compliance with the new bylaw. Residents were even given the authority to report littering, fostering a sense of collective responsibility. The decentralization led to increased collaboration between community-based organizations (CBOs), ward authorities, and the municipality, building trust and improving cleanliness. By 2016, waste collection rates had risen to approximately 90%, and the recovery rate of waste fees increased to 85% as residents became more willing to pay for waste services.

This participatory approach fostered a greater sense of ownership among residents, who became more active in maintaining both residential and public areas. The decentralized system eased the burden on the municipal council and significantly improved waste management efficiency. As a result of these sustained efforts, Moshi has earned Tanzania's "cleanest city" title in the National Health and Environmental Sanitation competition on 12 occasions.





IMPACTS TO ACHIEVE SDG 11.6.1

- In 2006, waste generation rate was approximately 0.7 kg/cap/day.
- Improved waste management infrastructure through the provision of skip buckets for solid waste collection and storage in strategic areas throughout town such as markets and bus terminals.
- Introduction of a monthly clean-up campaign, which was reportedly well attended, with the community participating by cleaning their surrounds.
- The city council has invested in waste management infrastructure, increasing the waste collection fleet and constructing a sanitary landfill.
- Waste collection rate increased to 90% (2016).
- 85% of residents were paying for waste collection services (2016).
- The tariffs for waste collection are regulated by the by-law and is customised for different categories of users, including residents, hotels, and commercial entities to reflect affordability.
- Moshi has been Tanzania's leading Council in the Health and Environmental Sanitation competition in past years, being considered the cleanest city in Tanzania.
- The Municipal Council introduced a competition at the ward-level to promote good performance in waste collection and cleanliness, offering a money prize to the winner. Some wards also run the competition at the sub-ward (mtaa) level.



Source: ICLEI – Local Governments for Sustainability

INSTITUTIONAL SUSTAINABILITY



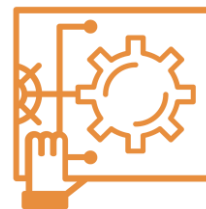
The institutional sustainability of Moshi's decentralized SWM system was built on strong local governance and community involvement. By shifting waste management responsibilities to the ward level, the municipal council empowered local authorities and communities to oversee waste collection and enforcement. Ward environmental committees, composed of political figures, health officers, and community members, played a key role in service delivery and monitoring. Regular oversight by the municipal waste department ensured accountability and quick responses to issues. Public participation further strengthened the system, fostering cooperation and trust between citizens and authorities, creating a sustainable, adaptable model for long-term success.

PLANNING & MONITORING



Planning and monitoring of Moshi's decentralized SWM system involved daily oversight by members of the municipal waste management department, who closely monitored the activities at the ward level. These observations were reported to a centralized committee, ensuring coordinated action and accountability across the municipality. Ward-level authorities also established a mechanism to address citizen grievances, creating a responsive feedback loop that further strengthened the system. This level of responsiveness not only improved service delivery but also increased residents' trust in the system, encouraging more households to willingly pay for waste management services.

APPROPRIATE TECHNOLOGY



- At the policy level, in 2000, the Moshi Municipal Council initiated a citywide cleaning campaign by introducing an environment and cleanliness by-law. By 2006, the Council had further strengthened waste management by passing a formal environmental by-law that decentralized the solid waste management (SWM) system to the ward level.
- Wards were given the authority to provide waste collection services, collect service fees, and allocate the revenue toward operational needs such as labor, administration, equipment maintenance, and truck fuel.
- To enhance waste management infrastructure, the Moshi Council provided strategically placed skip buckets in key locations like markets and bus terminals, expanded its truck fleet for waste collection, and constructed a sanitary landfill.
- Public education campaigns were also a priority, focusing on health and environmental awareness, with the goal of fostering a community culture that values cleanliness and encourages active participation in waste management efforts.



Waste collection using handcarts

Source: Semantic scholar

FINANCIAL SUSTAINABILITY



The financial sustainability of Moshi's decentralized SWM system was achieved through a structured fee system, clearly defining the responsibilities of waste generators. Households contributed up to TZS 1,000 (around USD 0.47) monthly, while businesses, hotels, and markets paid between TZS 3,000 and 65,000, depending on their size and waste generation. Ward environmental committees were responsible for collecting fees and enforcing penalties for littering. The decentralized nature of the system allowed wards to retain most of the revenue for local initiatives, such as cleanups and the provision of services like equipment, fuel, and labor. A small portion (3-5%) was transferred to the municipality for vehicle maintenance. Revenues also covered landfilling costs, providing further financial stability. This system gave wards autonomy over their resources, making it more transparent and fostering greater community engagement, as residents could see the direct impact of their contributions on local waste management services.

STAKEHOLDER INVOLVEMENT



Stakeholder involvement was central to the success of Moshi's decentralized SWM system. The approach actively engaged a wide range of stakeholders, including local authorities, community-based organizations (CBOs), businesses, and residents. Ward environmental committees played a pivotal role in overseeing waste collection, monitoring compliance, and enforcing regulations. Local residents were also directly involved through awareness raising and education campaigns, regular community clean-ups, waste segregation initiatives, and by reporting violations. Businesses and institutions contributed by paying waste collection fees, while partnerships with CBOs helped enhance service delivery and public outreach. This multi-stakeholder engagement fostered a shared responsibility for waste management, which not only improved collection rates but also strengthened community ownership of the system.



SOURCES

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