MANAGING KAMPALA'S SOLID WASTE CRISIS: TURNING A GROWING CHALLENGE INTO AN OPPORTUNITY

Atuhaire Baseka Patience

PROFILE Atuhaire Baseka Patience is a dedicated SDG advocate passionate about sustainable development, community empowerment, and strong leadership. She currently serving as Head of Finance and Resource Mobilization, Bricks Environment and Climate Hub Initiative (a youth-led, gender-balanced advocacy group focused on community-driven environmental sustainability and socio-economic transformation). She also serves as a Programs Officer of the Guild Presidents Leadership Academy (leadership development program nurturing current and outgoing university guild leaders into strategic national leadership positions). She holds BA in Public Administration and Resource Governance, Kyambogo University. She has actively participated in various SDG and sustainability forums and collaborated with local and international organizations. She generally aims at driving transformative change through sustainable development, community empowerment, and strategic strong leadership.

Executive Summary

Kampala is facing a deepening solid waste management crisis driven by rapid urban growth, inadequate infrastructure, and weak enforcement of existing policies. The city produces more than 3,000 tonnes of waste every day, yet only about half is collected, leaving large amounts to accumulate in drains, open spaces, and illegal dumpsites (Mugambe et al., 2022). This contributes to floods, environmental degradation, public health risks, and greenhouse gas emissions. Although Uganda has established frameworks such as the Constitution, the National Environment Act,2019 and the KCCA Solid Waste Management Ordinance, enforcement and community participation remain limited. Waste collection is still centralized and excludes informal actors who play an essential role in recycling and waste recovery.

This policy brief highlights the urgent need for a more inclusive and decentralized model of solid waste management. Lessons from other African cities such as Kigali, Nairobi, and Dar es Salaam show that success is possible through stronger regulation, community involvement, and public–private partnerships. Kampala should adopt similar approaches by formalizing the role of informal waste collectors, promoting household-level waste sorting and recycling, and investing in safer landfill and waste-to-energy options.

Introduction

Solid waste management has become one of Kampala's most urgent urban challenges. The city, with a resident population of more than two million people that swells to nearly four million during the day, generates between 1,500 and 3,000 tonnes of solid waste every day (Mugambe et al., 2022).

Yet only 40 to 60 percent of this waste is collected formally. The rest is discarded in drains, dumped illegally, or openly burned, particularly in informal settlements where access to municipal services is most limited (Ssemugabo et al., 2020). The Kiteezi landfill, Kampala's only designated disposal site, has been operating far beyond capacity for years and lacks basic environmental safeguards such as leachate control and gas capture systems (Komakech et al., 2013). Its partial collapse in 2024, which killed and displaced residents, revealed the scale of the risks that inadequate waste management poses to human life (Kyambadde, Sewante & Namatovu, 2025).

Uncollected waste blocks drainage channels, triggering floods during heavy rains and intensifying seasonal outbreaks of cholera and diarrhoeal diseases. Open burning and informal dumpsites contribute to air and water pollution, exposing residents especially those in low-income areas to respiratory infections and other health hazards (Ssemugabo et al., 2020). Beyond health risks, poorly managed waste also contributes significantly to greenhouse gas emissions, undermining Uganda's commitments to climate resilience and sustainable development (Muheirwe et al., 2023).

Uganda has adopted a range of policies intended to address this problem. The NationalEnvironment Act (2019), the National Environment

(Waste Management) Regulations (2020), and the Kampala Capital City Authority (KCCA) Solid Waste Management Ordinance set clear standards for collection, recycling, and disposal. These are complemented by broader legal instruments such as the Constitution and the Public Health (Ammendment) Act 2023, which commit the state to safeguard the environment and public health (Republic of Uganda, 1995; Republic of Uganda, 2019). On paper, these instruments provide a comprehensive framework for integrated waste management.

In practice, however, enforcement is weak, infrastructure is outdated, and community participation remains minimal. Many households, particularly in informal settlements, do not pay for waste collection and often view the responsibility as belonging solely to the Government (Ssemugabo et al., 2020). Informal waste collectors and recyclers, who play a vital role in recovering plastics, organics, and other materials, are excluded from the formal system and operate without recognition or support (Komakech et al., 2013).

The persistence of these challenges highlights a growing disconnect between Kampala's policy frameworks and the realities of urban waste management. Without urgent action to bridge this gap, the city faces worsening floods, public health crises, and environmental degradation threatening both the resilience of its residents and the sustainability of its development.

Policy Options

- Uganda has developed a comprehensive set of policies and laws to guide solid waste management. The Constitution of 1995 commits the state to promoting sustainable development and environmental protection (Republic of Uganda, 1995). Building on this, the National Environment Act of 2019 and the National Environment (Waste Management) Regulations of 2020 establish the legal framework for waste prevention, reduction, reuse, recycling, and safe disposal (Republic of Uganda, 2019; Republic of Uganda, 2020). These instruments prohibit unsafe dumping and burning, regulate the use of plastics, and provide for licensing of waste handlers. At the city level, the Kampala Capital City Authority (KCCA) Solid Waste Management Ordinance sets out the duties of the city administration in ensuring proper waste collection and disposal (Republic of Uganda, 2000).
- On paper, these frameworks provide a strong platform for sustainable waste management. They set standards for recycling, composting, and disposal, and extend responsibility to waste producers and handlers. They also allow partnerships between government, the private sector, and communities in managing waste (Muheirwe et al., 2023). However, a closer analysis reveals gaps in implementation, financing, and inclusivity that continue to undermine their effectiveness.
- Enforcement remains weak. While laws clearly prohibit open dumping and unsafe handling of waste, penalties are rarely enforced (Ssemugabo et al., 2020). In many neighborhoods, especially informal settlements, residents continue to dispose of waste in drains or burn it openly without consequence. Weak enforcement undermines compliance and signals that waste management laws lack credibility (Ojok et al., 2013).
- The system is centralized and underfunded. KCCA still relies on a limited fleet of trucks and a single overstretched landfill at Kiteezi, which is operating far beyond its intended capacity (Komakech et al., 2013). As a result, underserved communities, particularly in slums and peri-urban areas, remain outside the formal collection system (Mugambe et al., 2022). While policies emphasize safe disposal, they have not been backed by adequate financing mechanisms or decentralized models to extend services equitably (Muheirwe et al., 2023).
- Opportunities for recycling and composting are missed. Over 70 percent of Kampala's waste is organic and suitable for composting or biogas production (Komakech et al., 2013). However, the absence of systematic source segregation and the lack of material recovery facilities result in valuable resources being wasted (Mugambe et al., 2022). Although policies call for reduction and recycling, implementation remains limited (Republic of Uganda, 2019).
- Informal actors are excluded. Informal waste collectors and recyclers handle a significant portion of waste recovery but remain outside formal frameworks (Muheirwe et al., 2023). They work without licenses, protective equipment, or access to structured markets, despite their vital contribution to collection and recycling (Ssemugabo et al., 2020). Their exclusion undermines the potential for building an inclusive circular economy.

- Infrastructure development is lagging. The Kiteezi landfill lacks essential safeguards such as leachate control and gas capture systems, and it has already exceeded capacity (Komakech et al., 2013). Plans for a new landfill have been delayed, and investment in alternatives such as waste-to-energy plants or decentralized composting centres has been minimal (Kyambadde, Sewante & Namatovu, 2025). Policies recognize the need for safe disposal facilities, but progress remains slow.
- Uganda has not suffered from a lack of policy instruments, but rather from poor enforcement, insufficient financing, weak infrastructure, and limited community engagement. This disconnection between strong frameworks on paper and weak outcomes in practice justifies the urgent need for reforms that emphasize decentralization, inclusion of informal actors, and stronger enforcement supported by adequate investment.

Policy Recommendations

- To address Kampala's solid waste challenges, Kampala City Council Authority (KCCA) should expand and decentralize collection services to reach underserved areas, particularly informal settlements. This requires increasing the municipal fleet, introducing free communal collection points, and strategically locating transfer stations to reduce transport distances and collection times.
- Informal waste collectors, who play an important role in waste recovery, need to be formally recognized and supported by the City Council authorities. Providing them with licenses, training, protective equipment, and access to markets would improve both their livelihoods and the efficiency of waste management. Creating cooperatives or platforms that connect these actors with recyclers and buyers would also strengthen the recycling value chain.
- Government investment in infrastructure is essential. KCCA should ensure that Kiteezi landfill is urgently upgraded with liners, gas capture systems, and facilities for recycling and incineration. Planning and constructing a new landfill that meets international sanitary standards is critical for long-term sustainability. Exploring waste-to-energy options and decentralized material recovery facilities, as seen in Dar es Salaam, can provide practical and affordable models for Kampala.

Kampala Capital City Authority (KCCA), in collaboration with Ministry of Water and Environment (MWE), should promote recycling and composting at both household and community levels. Mandatory segregation of waste at source, supported by durable bins and regular collection, would make recycling more efficient. Incentives such as tax breaks and grants could be provided by Ministry of Finance, Planning and Economic Development (MoFPED) to encourage private firms to invest in recycling, while scaling up composting centres would link organic waste to agricultural productivity.

KCCA, together with National Environment Management Authority (NEMA), should strengthen public awareness and enforcement. City-wide campaigns can shift perceptions and emphasize that waste management is a shared responsibility. Linking compliance to business licenses and construction permits, alongside visible enforcement of environmental bylaws, would reinforce accountability.

Conclusion

Kampala's solid waste crisis demands urgent attention. Without decisive reforms, the city risks worsening health outcomes, recurring floods, and further environmental degradation. However, with inclusive policies, stronger infrastructure, and community-driven solutions, Kampala can turn waste into an opportunity promoting a circular economy, creating jobs, and building a cleaner, more resilient city for the future.

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