

# Unveiling the Impact: The Intended and Unintended Consequences of Formalizing and Elevating Workforce Visibility for Sanitation Workers in Kampala city, Uganda



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### **Declaration**

The views and opinions expressed in this report are solely those of the authors and do not necessarily reflect the views or positions of Water Aid United Kingdom.

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## **List of Abbreviations**

BSL	Brilliant Sanitation Limited
CIDI	Community Integrated Development Initiative
CSOs	Civil Society Organizations
ECOSAN	Ecological Sanitation Systems
ESS	Environmental and Social Safeguards
FGDs	Focus Group Discussions
GAU	Gulpers Association of Uganda
GIZ	Gesellschaft für Internationale Zusammenarbeit
ILO	International Labour Organisation
ISO	International Organization for Standardization
KCCA	Kampala Capital City Authority
KGA	Kampala Gulpers Association
KGECS	Kampala Gulpers and Emptiers Cooperative Society
KII	Key Informant Interviews
KSP	Kampala Sanitation Program
MDAs	Ministries, Departments and Agencies
MoH	Ministry of Health
MoU	Memorandum of Understanding
MWE	Ministry of Water and Environment
NEMA	National Environment Management Authority
NGOs	Non –Governmental Organisations
NSSF	National Social Security Fund
NWSC	National Water and Sewerage Corporation
ODK	Open Data Kit
OPM	Office of the Prime Minister
PASA	Pan African Association of Sanitation Actors
PPE	Personal protective equipment
SACCOs	Savings and Credit Cooperative Societies
SDG	Sustainable Development Goals
UAL	Urban Action Lab
UBOS	Uganda Bureau of Statistics
UN	United Nations
UNHCR	United Nations High Commission for Refugees
UNICEF	United Nations Children's Fund
UNCST	Uganda National Council of Science and Technology
UPEA	Uganda Private Emptiers Association
URA	Uganda Revenue Authority
URSB	Uganda Registration Services Bureau
UTIs	Urinary Tract Infections UTIs
WfP	Water for People
WHO	World Health Organisation
WWP	Women for Water Partnership
WWSN	Women in Water and Sanitation Network

## Executive Summary

Sanitation services are pivotal not only for enhancing public health but also for fostering the productivity of urban systems, particularly as cities continue to expand. In the face of staggering global statistics—where 3.6 billion people lack safely managed sanitation services and 700 million urban residents still lack access to improved sanitation—the pressing challenge remains to ensure that all urban populations, especially those in informal settlements, can access essential sanitation facilities. Amidst efforts by public, private, and civil society actors to engage the sanitation sector through decentralized and small-scale service provision models, significant challenges related to workforce welfare, legitimacy, and adequate financing persist, underscoring the need to recognize and support the often-overlooked sanitation workers who play a crucial role in achieving sustainable sanitation for all. Informed by the interests of sanitation workers organisations in Kampala, this study sought out to unravel the intended and unintended consequences of sanitation workers formalization and visibility enrichment in Kampala city, Uganda.

The research employed an explorative and participatory approach, utilizing both qualitative and quantitative methods to assess the implications of formalizing and enhancing the visibility of the sanitation workforce in Kampala. Through working with Brilliant Sanitation Limited (BSL), this involved comprehensive data collection strategies, including a literature review, surveys administered to sanitation workers and organizations, key informant interviews with relevant stakeholders, stakeholder mapping and focus group discussions that explored the dynamics of the workforce. The key aspects considered include; the current operational environment, challenges experienced, socio-economic, financial, health, safety, networking and occupational welfare and associated interventions to elevate, recognize and formalize the sanitation workforce

### Key findings

#### Conditions and challenges facing the sanitation workforce

- The sanitation workforce in Kampala is predominantly composed of young population, with 60% identifying as migrants and 91% being male, and yet majority (69%) earn less than UGX. 600,000 (USD. 163). Further, the workforce is largely characterized by casual employment, with 62% working as casual laborers and a significant portion facing financial constraints.
- The sanitation sector is a significant employment area in Kampala city, where nearly half of the workers (44%) enter this field due to a lack of alternative job options, while 25% view it as a business opportunity. Employment arrangements reveal a precarious situation, with over half of the workers employed casually (67%) and only 15% holding permanent contracts, indicating a critical need for improved job security and worker protections. Besides, the majority of sanitation workers are employed by private companies, reflecting the essential role of the private sector in providing job opportunities amidst the challenges faced in the sanitation infrastructure landscape.
- Sanitation workers in Kampala face a range of significant health and socio-economic challenges, including injuries (51%) and fatigue (40%), with additional issues such as exposure to harmful environments, psychological stress, and limited access to healthcare services. Social stigma and discrimination affect 66% of workers, while economic hardships are compounded by high living costs (73%), low payments (57%), and inadequate protective equipment. Furthermore, environmental and infrastructure problems, such as poor-quality sanitation facilities and flooding, hinder their ability to work effectively, leading to increased health risks and compromised public health.
- Sanitation worker organizations/enterprises face critical challenges impacting their sustainability and effectiveness, including pervasive stigma and discrimination affecting 74% of enterprise owners, which undermines worker dignity and recruitment efforts. Financial burdens from high operational costs (71%) and infrastructural issues further complicate service delivery, while environmental factors and occupational risks contribute to health concerns for workers, including exposure to hazardous conditions. The outdated technology and equipment inefficiencies hinder innovation and operational

capabilities, resulting in time wastage and increased costs that threaten the viability of sanitation services in the community.

#### **Pathways to sanitation workforce welfare improvement**

- Sanitation workers in Kampala benefit from various employment incentives aimed at enhancing their health and safety, with 43% receiving training, 35% enjoying normal work days off, and 32% equipped with safety equipment. While many workers appreciate monetary rewards and allowances for food and transport, a significant percentage still face challenges related to insufficient protective gear and job satisfaction varies. Despite high satisfaction rates regarding their safety provisions, improvements are needed to further enhance their well-being and work conditions. However, the benefits contribute positively to the sanitation workforce's quality of life and motivation to provide essential services in the community.
- 49% of sanitation workforce in Kampala access financial services, primarily relying on banks (37%) and Savings and Credit Cooperative Societies (SACCOs) (23%) for their monetary needs. Although many use personal networks for borrowing, significant barriers exist, such as a lack of collateral (21%) and the informal nature of their jobs, hindering access to credit. Despite these challenges, a strong desire for business loans (36%) and financial skills training (15%) was noted, reflecting their aspirations for economic improvement. Savings practices vary, with 83% indicating they save, often through informal methods, highlighting a need for more accessible financial solutions that foster stability and growth.
- 50% of sanitation workers in Kampala received training, focusing primarily on equipment operation, entrepreneurship, and financial literacy, with government institutions being the main providers. Workers expressed a demand for further training in business skills and financial management. Also, 52% of sanitation workers belong to social networks, mainly Savings and Credit Cooperative Societies (SACCOs), which enhance their saving capabilities and provide financial assistance and job connections. These networks also offer anticipated benefits, including skills development and social networking opportunities, reinforcing their importance in supporting the sanitation workforce.

#### **Sanitation worker organisations/enterprises welfare and operation arrangements**

- 74% of sanitation enterprises/ worker organisations are established by migrants, with 97% formally registered and 77% holding government-issued operating licenses. On average, the enterprises have operated for nine years, with motivations for joining the sanitation sector driven by perceived business opportunities (58%) and existing expertise (32%). The enterprises utilize various technologies for service delivery, with 65% using gulper 1, 58% employing cesspool trucks, 23% utilizing gulper 4, and 13% using pit vacuums; however, 19% still resort to scooping for facilities where available technology cannot be applied. The workforce is primarily employed on a permanent basis (58%), with a diversity of employment arrangements including part-time (32%), temporary (32%), and casual roles (10%). Sanitation workers enterprises earn an average monthly income of UGX 3,190,300 (USD 876), while incurring costs of UGX 2,105,600 (USD 578), resulting in an average profit of UGX 1,084,700 (USD 298). These enterprises play a crucial role in urban sanitation service delivery especially in under-served settlements in Kampala and other parts of Uganda.
- 58% of sanitation enterprises received support for development, primarily in the form of training (42%) and equipment (32%), highlighting the importance of skill enhancement and tangible resources. Government agencies emerged as the main supporters (35%), followed by civil society organizations (CSOs) and development (26%), while private sector involvement was limited. The assistance has improved operational efficiency, enabled better record-keeping and tax compliance, and facilitated business growth, particularly for female-led enterprises, thereby contributing to community relations and job creation. Notably, organizations like Water for People (WfP) and Water Aid have played



significant roles in facilitating training, contracts and resource provision, especially during the COVID-19 crisis and afterwards.

- 68% of enterprises access financial services, primarily through banks (55%) and SACCOs (19%), with a significant reliance on mobile money for transactions. Despite this, 35% do not borrow at all, and many face challenges like high loan interest rates (42%) and lack of collateral (35%), hindering their financial growth. Most enterprises save in bank accounts (84%), indicating a preference for formal saving methods. Training in areas such as equipment operation (68%) and entrepreneurship (58%) has been beneficial, yet gaps remain, particularly in financial management and networking skills. Moreover, 90% of enterprises belong to networks/coalitions that provide valuable support through training, financial assistance, and job connections, highlighting the importance of collaboration in overcoming financial challenges and enhancing operational efficiency.

#### **Intended and unintended outcomes of recognition, formalisation and visibility elevation strategies**

- An impressive 90% of organization owners/directors reported official recognition from public institutions like National Water and Sewerage Corporation (NWSC), National Environment Management Authority (NEMA), and Kampala Capital City Authority (KCCA), facilitating collaborations with various government Ministries, Departments and Agencies (MDAs) and Civil Society Organisations (CSOs) or development partners. Key strategies that are crucial for formalisation and visibility elevation include; training on occupational health and safety, establishment of standard operating procedures (SOPs), and functional worker associations that advocate for rights and offer support services. In addition, 48% of enterprises utilize facilities such as sewer treatment plants for cesspool operators and 52% use the dumping bay still at Lubigi sewer treatment plant, significantly improving operational capacity. While legal frameworks exist to protect sanitation workers and formalize their services, ongoing challenges such as high interest rates for loans and inadequate support from government agencies remain. Nonetheless, 96% of enterprise operators perceive such strategies to be effective, emphasizing the need for collaborative efforts among stakeholders to further enhance workforce welfare and service delivery in the sanitation sector.
- In regards to the positive outcomes, 74% of enterprise operators observe reduced service delivery gaps, particularly in low-income areas. Enhanced recognition has decreased stigma, with 71% acknowledging improved societal perceptions of sanitation workers, alongside a significant increase in adherence to safety standards and PPE usage. Skill development initiatives have improved worker capabilities for 65% of enterprise owners, while 52% noted greater awareness of sanitation challenges, fostering respect for the workforce. Moreover, the shift towards modernized systems has reduced illegal dumping practices and improved payment stability for 39% of enterprises. The emerging local networks have bolstered participation in broader sanitation issues hence increasing advocacy and demand for regulatory improvements, legal protection, and better access to healthcare and financial services for sanitation workers.
- The unintended effects involve increased tax burdens for 61% of enterprises, which now face challenges in sustaining operations due to higher financial obligations related to income taxes, trade licenses, and environmental permits. While 52% of sanitation workers aspire to scale their operations, this ambition brings demands for more permanent employment and investment, complicating financial viability amid rising operational costs. Compliance with mandatory certifications and safety standards has resulted in navigational challenges within existing policies, causing delays and scepticism in processes, particularly regarding regulatory approvals from agencies like NEMA. Further, the rise of collective organizations has led to advocacy for workers' rights but also created inequities, sidelining less connected workers from opportunities and weakening collective bargaining efforts due to fragmentation. Increased operational restrictions, such as early closure times at dumping bays, have further exacerbated illegal dumping practices, and concerns remain regarding the threat of larger financially-capacitated individuals taking over smaller enterprises, impacting their sustainability.

- The formalization process of the sanitation workforce is supported by various key actors, each enhancing service delivery and conditions within the sector. Ministries and agencies, such as the Ministry of Water and Environment (MWE) and the Ministry of Health (MoH), establish policy frameworks and health guidelines, while the Kampala Capital City Authority (KCCA) enforces safety standards and promotes innovation. The National Water and Sewerage Corporation (NWSC) ensures safe sludge handling and workforce training, and the National Environment Management Authority (NEMA) issues operational permits and sets service standards. Civil society organizations and development partners, including WaterAid and GIZ, provide financial support, capacity building, and advocacy, while unions and associations champion workers' rights and regulatory compliance. Additionally, over 60 private sanitation enterprises, along with more than 250 sanitation workers, play critical roles in delivering essential services, enhancing public health, and ensuring occupational safety across the region.

### **Conclusions and recommendations**

This study investigated the intended and unintended effects of visibility elevation, formalization, and recognition of sanitation workers in Kampala city, highlighting the intricate socio-economic, occupational health, and welfare dynamics affecting this workforce. The increased public recognition has led to improved service delivery and reduced stigma surrounding sanitation work, while skill enhancement initiatives have better equipped workers to meet evolving demands. However, challenges such as rising tax burdens, financial pressures from compliance costs, and inequities within collective organizations complicate the situation. Despite the positive advancements, ongoing challenges require collaborative efforts from all stakeholders to establish an inclusive and sustainable framework for sanitation services in Kampala, ensuring the recognition of workers' rights and enhancing their welfare conditions. The study recommends the following strategies for action by different stakeholders;

- Revise taxation frameworks for sanitation enterprises by developing a tailored system that offers tax relief and incentives, especially for emerging businesses.
- Establish clear regulatory guidelines through collaboration with relevant government agencies to create comprehensive, user-friendly frameworks that enhance compliance and protect workers' rights.
- Promote inclusive practices within collective organizations to provide all workers with equal access to opportunities and resources, focusing on marginalized groups.
- Enhance capacity-building initiatives through partnerships with civil society and educational institutions to deliver ongoing training on technical skills and best practices in sanitation.
- Strengthen existing advocacy networks to support improved working conditions for sanitation workers by organizing coalition-building workshops with stakeholders.
- Increase public awareness campaigns that highlight the critical role of sanitation workers and their challenges, utilizing various media platforms for dissemination.
- Conduct periodic assessments of sanitation working conditions and socio-economic status to inform policy and practice while building capacities within the workforce for credible research.
- Evaluate the impact of policy changes through established monitoring frameworks, and prioritize researching successful sanitation models from other regions for potential adaptation in Kampala.

## Section One: Background and objectives

Sanitation is a crucial service necessary for improved health and productivity of urban systems. Andersson et al., (2016) state that the provision of services for fast-growing urban populations is one of the world's most urgent challenges. Global data shows that 3.6 billion people lack safely managed sanitation services, which results into improper discharge of faecal waste into the environment (Almansa et al., 2023; WHO & UNICEF, 2021). Moreover, 1.7 billion people lack basic sanitation services, 580 million only have limited services and 6161 million use unimproved facilities (WHO & UNICEF, 2021). Major disparities in access to sanitation facilities and services exist across geographical unities (like cities and rural areas) and also within socio-economic configurations. For example, access to safely managed sanitation services remain a barrier to making cities and especially informal settlements more inclusive and safe areas to live (Tumwebaze et al., 2023).

Currently, over 700 million urban residents lack access to improved sanitation worldwide, and yet 80 million practice open defecation (WHO & UNICEF, 2015). Low sanitation services levels and coverage are predominant in developing countries within African, South Asia and East Asia where more than 80% of the unserved populations reside (Andersson et al., 2016). Despite high dependence on on-site sanitation facilities that are largely shared, open defecation in Africa and Asia stands at 28% and 48% respectively (Bishoge, 2021; Nansubuga et al., 2016). As cities continue to grow and expand coupled with large informal settlements residence for majority of the urban populations, heavy investments in sanitation services and infrastructure are a pre-requisite to address the prevailing gaps in service delivery especially in Sub-Saharan Africa. The investments in sanitation are particularly urgent in the low-income settings that house over 60% of the urban population. Service levels have for last two decades remained despite heavy investments made by governments, civil society organizations, development partners and more recently the private sector (Tumwebaze et al., 2023).

In developing countries, basic sanitation remains a dream as many secondary towns and cities have no sewer networks at all and yet bigger cities also fare poorly (Lawhon, Nsangi Nakyagaba, et al., 2023; Schaub-Jones, 2010). Several households especially in Africa, Asia and Latin America rely on variety of latrines, usually outside and often shared between more than one household (Ramani et al., 2017; Tumwebaze et al., 2023). As gaps to just sanitation access, coverable, and affordability endure in developing countries, enterprises and other organization are taking responsibility to offer sanitation products and services, particularly to communities and institutions lack or are underserved by the existing infrastructure. Sanitation entrepreneurship has direct consequences on economic growth, regional development and service coverage through promotion of environmental security and health, enriching labour productivity and income generation (Willets et al., 2016). Gero et al., (2014) and Murta et al., (2018) stipulate that micro, small and medium private and social enterprises are emerging as important players in the water, sanitation and hygiene sector.

The public, private and civil society actors are engaging the sanitation sector in an attempt to provide alternative service provision models, particularly in informal settlements (Cherunya et al., 2020). Contrary to large-scale centralized models, the decentralized and small-scale sanitation systems have been reported to offer possibilities for rapid installations, cost reductions, local adaptation to available spaces and to preferences, and possibilities for local experimentation and learning (Larsen et al., 2016; Nakyagaba et al., 2021; O'Keefe et al., 2015). However, challenges around legitimacy, workforce welfare, scaling up and out, financing among others derail the desired optimization of sanitation enterprises (Lawhon, Nsangi Nakyagaba, et al., 2023; O'Keefe et al., 2015; Ramani et al., 2017). Although headways toward enhancing the sanitation service infrastructure and realizing the rights of end users "to" sanitation are visible, this crucial body of work has overlooked the rights of an unseen, diverse population working the service, including those who handle human waste (Bhakta et al., 2022). The issues of sanitation workers especially; recognition, visibility and welfare intertwine efforts to enhance sanitation service delivery continues at all scales, and are at the center of global discourses in policy, practice and advocacy (Brown et al., 2023; Monteiro, 2022).

Sanitation workforce provide an essential public service that is key to achieving the Sustainable Development Goals (SDG), but often costs them their dignity and health. Sanitation workers compose individuals working in any part of the sanitation, performing the most important jobs in society but normally unseen and unappreciated (Raghavendra & Kumar, 2022). The number of sanitation workers globally is difficult to estimate because they often have multiple jobs or are categorized with other sectors (e.g., solid waste and healthcare facility management (Oza et al., 2022). Besides largely operating in the informal economy, workers face occupational and environmental health hazards/risks, limited healthcare services, absence of legal and social protection, stigma, discrimination, lack of protective equipment as well as financial insecurity (Peal & Kapulu, 2001; Philippe et al., 2022; World Bank, ILO, Water Aid & WHO, 2019; Philippe et al., 2022). In India and Mumbai city for example, sanitation workers are the most disadvantaged section of society with manual scavenging still manifesting as a hereditary occupation that constitutes 50% of female workers who face exploitation, job insecurity, work-related health issues and lack of healthcare (Dubey & Murphy, 2021; Sharad et al., 2021).

Most of the sanitation workforce mainly encounter occupational and environmental challenges that include difficulties in accessing healthcare services, legal protection and financial security that are associated with the informal economy (Philippe et al., 2022). They also face many health risks include wide range of biological and chemical agents, injury from heavy labor, poor and prolonged postures as well as psychological stress (Oza et al., 2022). Sanitation enterprises too lack adequate customer base, capacity building opportunities, financing options for entrepreneurs and customers and government support, thereby undermining the sustainability of sanitation entrepreneurship and welfare of the workforce (Mortar et al., 2018). There are increasing calls within and beyond the Water, Sanitation and Hygiene (WASH) sector for sanitation workers-marginalized by their informal and hazardous roles, and intersections of socio-economic, institutional and regulatory binaries to realize right to safe and secure working conditions and social security. While scholarly work has predominantly focused on the technical and health-centric perspectives of sanitation, limited attention has been given to the lived realities of sanitation entrepreneurship and workforce welfare (Bhakta et al., 2022).

Like any other developing country, Uganda still struggles with meeting basic sanitation for its citizens, especially those living in low-income neighborhoods of cities. According to UBOS, (2023) indicates that about 23% (close to 11 million people) of the total population (46.2 million people) live in urban areas and this is projected to increase to 50% by 2050. Unfortunately 60% of the urban population reside in informal settlements with limited sanitation services and infrastructure (Bateganya, 2020). Urban sanitation coverage is at about 89.1% but only 38.9% access safely access safely managed sanitation, and yet 61% rely on basic sanitation facilities that are usually shared while others practice open defecation (Bateganya, 2020; Tumwebaze et al., 2023). Only 10% of toilets in Uganda are designed to be emptied and a significant number of facilities are usually abandoned or covered. Manual emptying and subsequent indiscriminate disposal of sludge is also a common practice. The informal settlements residents always share sanitation facilities that are characteristically unhygienic, poorly maintained, excessively used and sub-standard (Tumwebaze & Mosler, 2014)

In Kampala, majority of the urban poor use shared latrines (about 70%), and yet 47% of sanitation facilities are clean enough to be used while another 45% being abandoned (Kwiringira et al., 2023). Sewer infrastructure connection and use is estimated to be less than 10%, compelling majority of the population to rely on on-site sanitation systems (Lawhon, Nsangi Nakyagaba, et al., 2023; McConville et al., 2019). Moreover, only 1.3% of the households in the Kampala city region are connected to the sewer system (McConville et al., 2019). Kampala Capital City Authority (KCCA) estimates that only 360 of the 900 cubic meters of sludge produced daily is collected. On-site sanitation facilities fill up fast, leaving emptying as the most viable option for their sustained reuse (Semiyaga et al., 2022). Formal and informal enterprises providing sanitation services compose the Kampala sanitation infrastructure, providing sanitation needs of emptying, construction, transportation and disposal of faecal sludge especially in low-income settlements.

Scholars have recently given the heterogeneous nature of sanitation infrastructure attention and evidence is incrementally increasing on socio-technological configurations like those around the gulper, everyday realities,

technical and operation issues and politics around legitimacy in contrast to the existing structural limits (Lawhon et al., 2018; Lawhon, Follmann, et al., 2023; Lawhon, Nsangi Nakyagaba, et al., 2023; Nakyagaba et al., 2021, 2023; Semiyaga et al., 2022). Hardly any attention has been given to the sanitation enterprises and workforce welfare despite being critical service providers in Kampala city and other urban areas of Uganda. This study sought out to unravel the intended and unintended consequences of sanitation workers formalization and visibility enrichment in Kampala city, Uganda. The key specific objectives that guided the study include;

- a) To determine the different sanitation workers' formalization and visibility raising initiatives overtime.
- b) To identify and characterize actors involved in the formalization and visibility raising processes of sanitation workers services in Kampala city.
- c) To analyze the multi-dimensional intended and unintended impacts of formalizing and increasing the visibility of the workforce for the most marginalized sanitation workers.
- d) To co-design multi-stakeholder pathways towards effective formalization, integration and recognition of sanitation workers.

## **Section Two: Study area and methodology**

### **2.1 Situating Kampala city**

Kampala city's areal coverage is about 189 km<sup>2</sup> and is home to about 1.8 million people during night which rises to over 3.5 million during day (MacroTrends, 2023; UBOS, 2020). Over 60% of the city's population resides in informal settlements and face heightened poverty amid various socio-economic and environment risks and shocks. Most of the urban poor in Kampala live in slums located in degraded wetland corridors that are prone to floods. The city has huge infrastructure and services deficits i.e., sewer networks, public sanitation facilities, sewer network, roads, water among others. The sewerage network covers less than 10% of the city, hence a high dependence on on-site sanitation facilities exists with over 80% of the urban population relying on such systems for sanitation. Two operational sewerage treatment plants exist i.e., one at Lubigi accepts both mechanical and semi-mechanical enterprises dumping and another at Bugolobi that only allows mechanical enterprises. A dumping bay for semi-mechanical operators is also being constructed by Community Integrated Development Initiative (CIDI) along Nakawuka road. Over 60 market-based sanitation enterprises exist to provide sanitation services to low-income households, institutions and commercial establishments within the city and across the entire country.

### **2.2 Research Approach and Design**

The research deployed an explorative and participatory approach using both qualitative and quantitative methods to build an understanding of the intended and unintended consequences of formalizing and increasing the visibility of the sanitation workforce. The targeted workforce included; mechanical/cesspool and semi-mechanical/gulper operators, toilet/sanitation facilities caretakers and/or cleaners, sanitation enterprise owners and directors, sewer plant managers and workers, and supporting organisations in government, private sector, development partners and civil society landscapes. This approach was appropriate as it provides the study with opportunity to initiate efforts to create a knowledge base on actions, policies and networks in place to formalize sanitation services and workforce. This was coupled with identification of actors, interests, roles, values and their positionality, contribution to everyday lives and welfare of sanitation workers and how they fit into and reconfigure the mainstream sanitation infrastructure arrangements and service delivery imaginaries. The study deployed arrange of specific methods to achieve specific set objectives. These methods included; literature review, Focus Group Discussions (FGDs), stakeholder mapping, key informant interviews and surveys.

### **2.3 Methods of Data Collection**

#### **2.3.1 Literature review**

A comprehensive desk review of all relevant documents and other secondary data sources including books and journal articles, media reporting, reports and policy papers from the government, donor agencies, NGOs and governing bodies was conducted to take stalk of the past, current and planned initiatives to formalize sanitation workers services, and how these are realizing or not realizing the intended objectives of such interventions. The review also considered progress on various initiatives aimed at increasing the visibility of sanitation workers.

#### **2.3.2 Surveys**

Two standard questionnaires were designed by Urban Action Lab (UAL) researchers and collectively reviewed by Brilliant Sanitation Limited (BSL) and UAL so that it comprehensively captures all the relevant aspects related to sanitation workforce visibility elevation, recognition and acknowledgement in Kampala city. The first survey tool was administered to a total of 276 sanitation workers in Kampala. This survey tool captured data on the socio-demographics of the sanitation workers, nature of sanitation workers' working environment and services provided, perceptions about the nature of the job in the past, currently and in the future, formalization and visibility elevation effects on sanitation workers' welfare and challenges and/or risks facing sanitation workers during service provision. The second survey tool was administered to 30 sanitation worker organisations/enterprises to capture data on their profiles, support received, financial services and networks coupled with formalisation, visibility elevation and recognition strategies they are engaged in coupled with the associated effects. The survey data was collected using programmed tablets using the Kobo Toolbox and Open Data Kit (ODK) application, and administered by well-trained researchers from the UAL and the BSL.

### **2.3.3 Key informant Interviews**

A total of eighteen (18) Key Informant Interviews (KII) were conducted with strategic respondents purposively selected from city authorities, Ministries, Departments and Agencies (MDAs), Non-Governmental Organizations (NGOs), Civil Society Organizations (CSOs), sanitation workers associations, private companies and financial institutions. The selection of respondents for key informant interviews was purposively done based on the roles they are playing in the Water and sanitation sector, regulatory and policy formulation and making and implementation. This was conducted in close collaboration with BSU after survey and FGDs with sanitation workers. Key informants were selected from the Ministry of Water and Environment (MWE), National Water and Sewerage Corporation (NWSC), National Environmental Management Authority (NEMA), and Kampala Capital City Authority (KCCA), to determine appropriate measures aimed at facilitating inclusion, support, regulation and integration of sanitation workers concerns within short, medium and long-term programming, planning, implementation and policy. Further, NGOs and CSOs like Water Aid Uganda, Water for People (WfP), Community Integrated Development Initiative (CIDI), were engaged to determine current and future efforts towards protecting sanitation workers.

### **2.3.4 Focus group discussions**

Eight (8) Focus group discussions were conducted with selected individuals amongst sanitation workers from public toilet facilities, separate groups of men and women from working using semi-mechanical tools and those using manual tools to offer sanitation services across the city. These groups were composed of 8-10 individuals. Female sanitation workers discussion groups were conducted to explore the gendered aspects of sanitation workers formalization and visibility enriching initiatives. The FGDs aimed at deeply exploring the current knowledge and practices in sanitation workers formalization processes, how such initiatives have been exploited and how they contribute to the lives and livelihoods of workers. Further, priorities for formalization and visibility of the work of sanitation workers were explored as well as suggestions for meaningful formalization processes and visibility improvement.

### **2.3.5 Stakeholder mapping**

A stakeholder mapping exercise was conducted to engage with key state and non-state institutions to build a holistic understanding of roles, interests and values and establish concerns, needs and support for appropriate alignment with lives of sanitation workers. A stakeholder analysis is essential in identifying key stakeholders, their interests, influence, and resources around the entire process of sanitation workers formalization, visibility enhancement and livelihood improvement. The stakeholder mapping and identification process was continuous and part of every field-based activity during the study. Further, some stakeholders were identified during literature review, others were identified during surveys and more stakeholders were identified to us during FGDs and KIIs engagements.

## **2.4 Data processing and analysis**

Collected data from Kobo toolbox and Open Data Kit (ODK) application were submitted to the online server created for data storage and management immediately after each day's field data collection exercise. Such data was downloaded, standardized and imported into SPSS Version 25 software. Descriptive statistical analysis was run to generate frequencies and percentages and means. Qualitative data from KIIs and FGDs was transcribed and analyzed using content analysis. The thematically analyzed data were triangulated to inform the interpretation and inferences drawn from other sources.

## **2.5 Ethical Considerations**

All participants provided verbal and written consent to participate in the study, which was ethically approved by Makerere University College of Agricultural and Environmental Sciences Research Ethics Committee (CAES-REC Ref. No. 2024-55) and Uganda National Council of Science and Technology (UNSCT- Ref. No. SS2816ES). All participants provided written and verbal consent prior being engaged during the study.

## **2.6 Reflections on partnership with the sanitation worker organization**

A formal Partnership Memorandum of Understanding (MoU) was established between the UAL and BSL to govern the collaborative activities associated with the study. This MoU delineates the roles, responsibilities,

and expectations of each party, fostering a mutual understanding aimed at enhancing synergy among stakeholders. It served as a guiding document that outlines shared objectives, reporting protocols, and mechanisms for conflict resolution, thereby ensuring that all activities align with the overarching goals of the study. Further, the MoU provided opportunity for commitment to further collaboration beyond the project period. A commitment pledge reflects a shared commitment to sustaining collaboration and fostering ongoing relationships among all stakeholders involved in the sanitation sector. The mutual understanding and cooperation established through the pledge are essential for addressing research and data driven challenges and opportunities for evidence-based recommendations and actions for sustainable sanitation solutions in the future.

The UAL and BSL actively engaged in developing and utilizing data collection tools necessary for effective study implementation. Such collaborative participation ensured that the tools are contextually relevant and user-friendly for sanitation workers. Furthermore, BSL has contributed significantly to the delivery of the workplan, ensuring that all milestones are achieved within streamlined workflow processes and strengthened accountability. Besides, there were endeavours to build documentation capacities of BSL through write-shops. A total of three writeshops were conducted during study report writing with staff at BSL to facilitate training in knowledge production and dissemination at various levels.

BSL successfully mobilized sanitation workers, relevant companies, and community forums to participate in study activities. Led by three staff members of BSL, this mobilization strategy facilitated the establishment of a strong network, allowing for the sharing of best practices, resources, and experiences among stakeholders. By engaging various actors in the sanitation sector, the BSL has enhanced the project's visibility and encouraged broader community involvement and support.

Strategic plans are in place to ensure active participation in the uptake and dissemination of research findings from the project. This involves engaging with local communities, stakeholders, and policymakers to share research outcomes effectively. Both UAL and BSL will play a pivotal role in this process, leveraging its established networks to promote awareness and understanding of the findings, thus contributing to informed decision-making and policy development in the sanitation sector.

The study emphasized capacity building in essential areas such as research ethics and knowledge management. The Director of the BSL successfully obtained a Certificate of Good Clinical Research Conduct, demonstrating a commitment to upholding ethical standards in research activities. Training sessions were organized to equip BSL staff and partners with the skills needed for ethical research practices, efficient data collection, and effective knowledge management.

## **2.7 Limitations**

The implementing the sanitation project faced significant challenges that hindered its progress and effectiveness. A primary issue was the inability to engage several operators/organisations at the National Water and Sewerage Corporation (NWSC) Bugoloobi sewerage treatment plant. The resistance to participate in the study stemmed from trust issues following previous research by a Non-Government Organisation (NGO) that led to loss of clients since the NGO started a parallel initiative to provide the services to those in need of them in various settlement. Such led to the reduction in business opportunities which created a barrier to vital collaboration and information sharing. This lack of engagement limited the project's ability to gather comprehensive data about the sanitation sector and understand operational challenges directly from sanitation enterprises and workers at the Bugolobi sewerage treatment plant. To navigate this limitation, researchers employed a transparent approach from the onset. The collaborative approach with BSL facilitated the articulation of the study's purpose, emphasizing that the goal was to identify needs, enhance working conditions, and promote the welfare of sanitation workers. Clearly communicating the intent to develop solutions that support rather than penalize the workforce, the research team was able to build trust. Additionally, involving key stakeholders from the sanitation sector in the planning phase proved crucial in dispelling fears. This collaboration helped to create a sense of shared ownership over the research process and its outcomes.



Furthermore, sensitivity surrounding certain questions on dignity and safety posed to sanitation workers also presented challenges. Some workers expressed discomfort with specific inquiries related to personal experiences, which prompted for the necessity for a more thoughtful and culturally sensitive approach to questioning. Working directly with BSL addressed some of these challenges since the coproduction process resulted into trust, enabling majority of workers to positively respond to the questions posed during the study.

Compounding the challenges was the issue of research fatigue. Many sanitation enterprises and workers felt overwhelmed by the frequency of studies conducted in their sector. They often reported a disheartening cycle of surveys, interviews, and focus groups, followed by a disappointing lack of meaningful change or improvement as a result of this extensive data collection. To address this fatigue, the research team pivoted to a more streamlined and focused methodology, prioritizing quality over quantity. Recognizing that participants had valuable insights but were disillusioned by past experiences, the researchers sought to incorporate their feedback into the study design. Surveys were simplified, and interviews were structured to be concise yet comprehensive. The team also committed to sharing preliminary findings with participants, highlighting how their contributions could lead to actionable insights and potential benefits for the sanitation workforce. Further, the study emphasized a participatory approach. By involving sanitation workers as co-researchers or community ambassadors, the study fostered a deeper connection between the researchers and the workforce. This participation not only alleviated feelings of fatigue but also empowered workers, making them feel integral to the research process.

## **Section Three: Results of the study**

### **3.1 Socio-demographics and economic characteristics of sanitation workers**

The socio-demographic and economic characteristics of sanitation workers are shown in Table 1. Findings revealed a predominance of migrants and male respondents. 60% of the sanitation workers identified as migrants<sup>1</sup>, suggesting a dynamic population that moved into Kampala city seeking better opportunities or living conditions outside their original locales in the rural countryside.

The study identified a striking imbalance in terms of gender, with males comprising an overwhelming 91% of the sanitation workers that participated in this study compared to only 9% females (9%). The male dominance is further mirrored in the household headship, where 94% of the households are headed by men, indicated the traditional gender roles within communities in Uganda.

The age distribution showed a youthful population, with 72% of the sanitation workers that participated in the study aged between 18 and 35 years. This demographic is still critical as it signifies potential for economic productivity and growth within the sanitation enterprise development sector. In contrast, only a small percentage of individuals are over 60 years old, suggested that older persons are less represented in the sanitation services delivery within Kampala city.

In regards to marital status, 61% of the respondents indicated to be married while 33% were single. This indicates that sanitation workers aspire to have stable familial structures, with marital commitments influencing economic and social behaviors. The average size of sanitation workers households is 4 persons, with 78% (f=216) having between 1-5 household members, 18% (f=50) indicated to have 6-10 members and 3% (f=9) having >10 members.

Educational attainment highlighted that 45% had completed secondary education, making it the most common level of education among the respondents. However, a notable 5% of respondents never attended formal education, illustrating challenges in educational accessibility for some sanitation workers. Above average number (55%) of the respondents reported to have vocational skills mainly in mechanics and automotives (13%; n=36), building and construction (8%; n=22), welding and fabrication (4%; n=10), electronics/electrical installation (3% each), agriculture, carpentry and woodwork (2% each). Other skills possessed by sanitation workers included; tourism and hospitality, marketing, cosmetology and body therapy, fecal sludge management, baking, crafts making, driving and financial management.

In regards to occupation or modalities of employment and main sources of income, majority of respondents (62%) are casual laborers, reflecting the informal nature of employment across the sanitation service chain. Meanwhile, 28% are in formal employment, but only a small fraction engages in business activities (2%) thereby indicating limited opportunities for entrepreneurship or barriers that prevent individuals from starting their own businesses in the sanitation sector. Formally employed workers mainly engaged in toilet emptying, cleaning, complemented by supportive roles in cesspool trucks or tricycle driving and management yet casually employed sanitation workers reflect a diversity of activities within the sewerage and sanitation sector with roles involving emptying, cleaning, and transportation. Some sanitation workers also indicated to earn additional income from agriculture, transportation, rental housing, and small business operations (retail businesses), which is reflection of adaptability of the workforce in pursuing various livelihood strategies.

For monthly income, the results illustrated financial constraints faced by many. While 25% of respondents earn between UGX. 150,000(USD 412) and 300,000 (USD 82.36), only a small percentage earn above UGX., 2,000,000 (USD 549), highlighting economic challenges and the need for broader employment opportunities and income-generating activities. The key assets indicated to be essential in mobilization of incomes amongst

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<sup>1</sup> Migrants reportedly came from districts including: Masaka, Wakiso, Kiboga, Jinja, Kasese, Mityana, Mukono, Mpigi, Mubende, Kayunga, Soriti, Butambala, Gomab, Mbarara, Iganga, Kisoro, Luweero, Hoima, Ibanda, Lwengo, Fort Portal, Bushenyi, Mbale, Kumi, Iganga, Ntoroko, Bunyangabo, Kasanda, Rakai, Kiboga, Kanungu, Bukomansimbi, Masindi, Rukungiri, Kakumiro, Ntungamo, Ssembabule, Mayuge, Kaberamaido, Kyankwanzi, Bundibugyo, Sheema, Kabarole, Buikwe, Kayunga, Kiryandongo, Kibuku, Nairobi-Kenya, Isingiro, Arua, Kabale, Kakamega- Kenya, Kalisizo, Nakasongola, Busia, Kisoro.

sanitation workers included; mobile phones (82%; f=225), land (32%; f=89), livestock (31%; f=85), motorcycle (boda-bodas) (13%; f=37), bicycle (11%; f=29), and motor vehicle (3%; f=9).

Generally, the findings showed a predominantly young, male and economically vulnerable population with implications for targeted interventions to support education, employment and gender inclusivity in the sanitation workforce.

**Table 1: Socio-demographic and economic characteristics of respondents**

Socio-demographic and economic characteristics		Frequency (n)	Percentage (%)
Migration status	Non-migrant	109	40
	Migrant	166	60
	Did not answer	1	0
Sex of respondent	Male	252	91
	Female	24	9
Household head	Male	227	94
	Female	14	6
Age (yrs)	>18	10	4
	18-35	198	72
	36-60	65	24
	>60	3	1
Marital status	Single	92	33
	Married	168	61
	Divorced/separated	10	4
	Widowed	4	1
Education level	Never attended formal – educ	14	5
	Primary	78	28
	Secondary- O level	123	45
	Secondary - A level	43	16
	Tertiary	17	6
Occupation	Casual laborer	171	62
	Formal employment	76	28
	Business	5	2
	Other	22	8
	Did not answer	2	1
Monthly income (UGX)	<150000	22	8
	150001-300000	69	25
	300,001-450,000	47	17
	4500001-600,000	52	19
	600001-750000	18	7
	750001-900000	26	9
	900001-2000001	29	11
	Prefer not to say	6	2
	2000000-5000000	4	1

### 3.2 Conditions and Nature of Sanitation Workers' Environment

#### 3.2.1 Reasons for joining sanitation sector and employment arrangements

The sanitation sector has emerged as a crucial area of employment, yet conditions under which sanitation workers operate reveal significant challenges and motivations that underpin their involvement in this line work. The study explored factors influencing worker's decision and contractual arrangements that characterize their employment in Kampala city (See Table 2). With an average duration of 4 (four) years working in the sanitation sector, nearly half (44%) of the respondents joined the sanitation sector primarily due to a lack of alternative employment options. This finding highlights a pressing economic reality for many individuals, where sanitation work is not merely a choice but a necessity driven by limited job prospects in other fields or sectors. From a more entrepreneurial perspective, 25% of the sanitation workers reported that they entered the sector with the intention of treating it as a business opportunity. This result suggests that for some section of the workforce,

sanitation work is viewed not only as a means of survival but also as a viable avenue for generating income, further emphasizing the sector's potential in economic development. Family influence was found to play a significant role in shaping employment choices of sanitation workers, with 14% of respondents indicating that they were drawn into the sector due to family ties or traditions. The KIs and FGDs revealed that they were influenced to join sanitation work by their relatives who had initially joined and earned livelihood from the sector. This sense of familial attachment and responsibility underscores the weaving of community and cultural values in employment decisions. Further, a diversity of other reasons was cited to explain why sanitation workers joined the sector, and these included; past expertise in sanitation related work (10%), and flexibility of sanitation related jobs (8%), reflecting a range of motivations that drive workers beyond mere necessity.

The study further established the contractual arrangements of sanitation workers (Table 2). A slightly above average (51%) portion of workers are reportedly employed casually without formal agreements, which raises concerns around job security, benefits and worker rights. An additional 16% revealed to work casually but with some form of agreement, indicating a slight appreciation of formalities yet still lacking the stability of jobs realized through permanent positions. Only 15% of respondents revealed to hold permanent contracts, showcasing the need for improved employment opportunities and protections within the sector. Meanwhile, part-time or temporary contracts were found to be held by just 4% of the sanitation workers, which illustrates a trend towards greater insecurity in employment arrangements. Interviews showed that the precarity in employment is a result of the instability in requests services which keep the companies without enough work to enable them recruit workers on the permanent basis. Besides, two (2) of the study participants revealed to be working under a gentle-man's agreement with the owner of the sanitation enterprises. The results showed no significant gaps in the number of days worked by sanitation workforce in a month, with those employed on a part-time and casual basis averagely working for 24 days while those employed on a permanent basis worked 25 days a month on average. Similarly, the results showed that the average monthly pay for sanitation workers is UGX. 484,200, with UGX. 320,000 being the median monthly pay and yet UGX. 300,000 being the mostly paid rate across the sanitation workforce per month.

The KIs and FGDs revealed reasons that reflect the diverse circumstances under which the sanitation workforce chooses to join such kind of work, and these embed an intersection of economic needs, personal, kinship and communal values. For many, the fundamental drive is the need to earn a living through securing a source of living while others expressed the allure of well-paying opportunities within the sector standing out. With the low levels of education and lack of adequate skilling, some male individuals revealed that the financial benefits of sanitation work faired better than other available jobs. Several workers also revealed to have been introduced to the work through connections and recommendations made by friends or family, highlighting the importance of social networks in facilitating employment opportunities in the sanitation sector. In fact, within the survey, statements like *"my friend connected me when I had nowhere to go"* and *"recommended by a friend or my brother"* illustrate how interpersonal relationships and kinship creates pathways for employment in the sanitation sector. The results also indicated the desire to improve community sanitation as a motivating influence especially for the workforce that sought to establish sanitation enterprise, hence showcasing a sense of civic responsibility and an appreciation or understanding that their work impacts public health. FGDs established individuals that felt motivated by their neighbors or were hired by those already working within the sector. KIs also revealed individuals who viewed sanitation work as an alternative that viably supports livelihood particularly after losing previous jobs or during the times of economic hardships arising from unemployment and the COVID-19 crisis. For such individuals, it was indicated that joining the sanitation sector marked a pragmatic choice to counter challenges like poverty or the need to support basic living expenses including school fees. FGDs revealed stories of appreciation of the sanitation sector as many male respondents expressed genuine interest or enjoyment in their work with phrases such as *"I just like this sector"* and *"it really pays well"* signifying a blend of personal fulfillment alongside financial incentive. Lastly, the desire to acquire specific skills related to sanitation and faecal sludge management was pointed out by ambitious sanitation workers who anticipated becoming entrepreneurs in the sector through setting up own enterprises.

In regards to employing institutions, the majority of sanitation workers (69%) are employed by private companies<sup>2</sup>, reinforcing the significant role of the private sector in providing jobs with the sector. This concentration suggests a reliance on private enterprises to offer employment opportunities and the role such enterprises play in filling the service gaps that arise from limited capacities of city and utilities authorities in delivering sanitation infrastructure and services across Kampala city. A smaller percentage works in the public sector (16%) particularly Kampala Capital City Authority (KCCA) and National Water and Sewerage Corporation, and other organizations, indicating a limited diversification in employment sources. The Civil Society Organizations (CSOs) found to employ sanitation workers in Kampala city include; Community Integrated Development Initiative (CIDI) and Water for People (WfP).

**Table 2: Sanitation worker conditions in Kampala city**

Sanitation workers conditions		Frequency (n)	Percentage (%)
Reasons for joining the sanitation sector	Lack of alternative options	122	44
	Joined it as a business	70	25
	Family work	38	14
	Other	34	12
	It's my area of expertise	28	10
	It is flexible	22	8
Contractual arrangements	Casual- without agreement	142	51
	Casual- with agreement	44	16
	Contract- permanent	42	15
	Contract- full time but not permanent	28	10
	Contract- temporary/part time	12	4
	Other	4	1
	Volunteer	3	1
	Apprentice	2	1
Employing institution	Private company	190	69
	Other	44	16
	Public/Government	34	12
	Self employed (own company)	8	3
	Civil Society Organisation	4	1

### 3.2.2 Sanitation chain operations, technologies and job satisfaction

The study revealed a complex web of processes and technologies that are essential in maintaining the sanitation workforce's delivery of sanitation services across the stages of the sanitation chain and the specific technologies. The findings revealed that majority (75%) of the sanitation workers that participated in the study engage in emptying, highlighting the urgency of managing human waste as a fundamental aspect of sanitation protocols (See Table 3). Conveyance or transportation is the second most frequent activity reported by 52% of the respondents that ensure safe transfer of fecal waste to disposal sites in Lubigi and Bugolobi. A slightly small number of respondents reportedly engaged in subsequent stages of the sanitation chain i.e., disposal (30%), toilet cleaning or containment (5%), fecal matter treatment processes (8%) and only 2% in recycling (See Table 3). Such result suggests that the initial stages of the sanitation chain offer more opportunities for workforce employment and thus attention is warranted to enhance the efficacy of disposal and treatment processes within the sanitation chain, mainly through infrastructure development and/or expansion and innovations.

<sup>2</sup> There are several (over 40) sanitation enterprises operating in Kampala. Those that participated in the study include; ACCA cesspool services, Bamukasa sanitation services limited, Brilliant Sanitation Service Limited, Byanfuna company, Cesspool Cleaning Limited, Cesspool Emptiers Association Uganda, Cesspool Emptier Services, Classic sanitation services, Detail multi-service, Dream solution, Faith Emptying Sanitation Service, Forever Sanitation, Frempa Cleaning Services, General techniques limited, Grace sanitation limited, Green hazards sanitation services, Haka Cesspool Services, Ham Cesspool, Kabagambe and Robert Sanitation, Kaka cesspool services, Kampala Emptiers Association of Uganda, Klong Group, Kyana Kyango Limited, Lukisi Sanitation, Lukwago Lumu Enterprise, Mibiru Sanitation Services, Muge Sanitation Service, Perfect Emptiers Limited, Pit Care Sanitation Uganda, Private Emptiers Association of Uganda, Gulper Association of Uganda, R&D Sanitation Services, Sanitation Africa Limited, Sanitec Engineering Services, Shamo Sanitation Services, Telikigaana Sanitation Services, Twezimbe, Viale Sanitation Service.

Sanitation workers that operate at toilets or containment facilities indicated to predominantly work at flush/pour flush toilet facilities with a septic tank (16%), followed by other systems such as lined empty-able pit latrines (7%), unlined pit latrines and flush/pour flush toilet to elsewhere (4% each) and yet only 2% revealed to work on Ecological Sanitation Systems (ECOSAN).

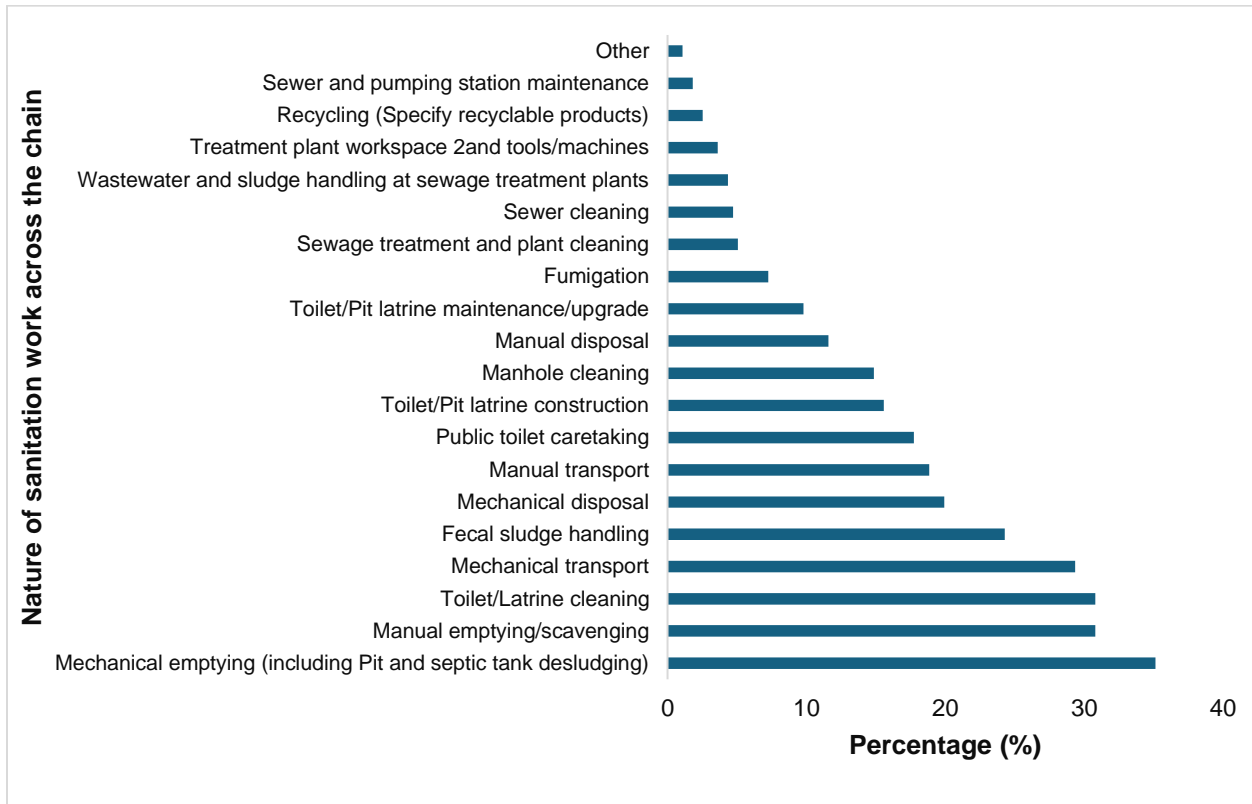
In terms of technologies for emptying waste, mechanical technologies represented as cesspool trucks emerge as the most commonly used methods, employed and/or used by 36% of the sanitation workers while semi-mechanical technologies use or deployment was reported by 32% of the sanitation workforce (See Table 3). The results observed increased diffusion of various types of semi-mechanical technologies within the sanitation services landscape in Kampala city, with the Gulper 1 established to be used by 20% of the workforce followed Gulper 4 (5%), and Pit Vaq (3%). Only one enterprise indicated to have used the recent technology- the Pupu pump to carry out emptying services but highlighted that such equipment is owned by KCCA and can only be used upon request by any enterprise. Moreover, 3% of the workforce highlighted to use traditional unsafe practices to empty sanitation facilities. Such practices include; hand scooping, use of long poles and cut jerrycans, hand emptying, and other tools such as hoes, spades and buckets. This diversity in emptying technologies signifies a mixed approach to addressing sanitation needs but it may also indicate a lack of uniformity in practices that could benefit from standardization.

**Table 3: Sanitation operations and technologies used by the sanitation workforce**

Sanitation operations and technologies used		Frequency (n)	Percentage (%)
Stages of sanitation chain	Emptying	208	75
	Conveyance/transportation	143	52
	Disposal	82	30
	Toilet/Containment	68	25
	Treatment	21	8
	Recycling	5	2
Emptying technologies used	Cesspool truck	100	36
	Gulper 1	55	20
	Gulper 4	15	5
	Others	11	4
	Pit vaq	9	3
	Pupu pump	1	0
Sanitation infrastructure worked on	Flush/pour flush toilet with septic tank	44	16
	Lined empty-able pit latrine	19	7
	Unlined pit latrine	11	4
	Flush/pour flush toilet to elsewhere	11	4
	Ecological Sanitation System (ECOSAN)	5	2
	Other	1	0

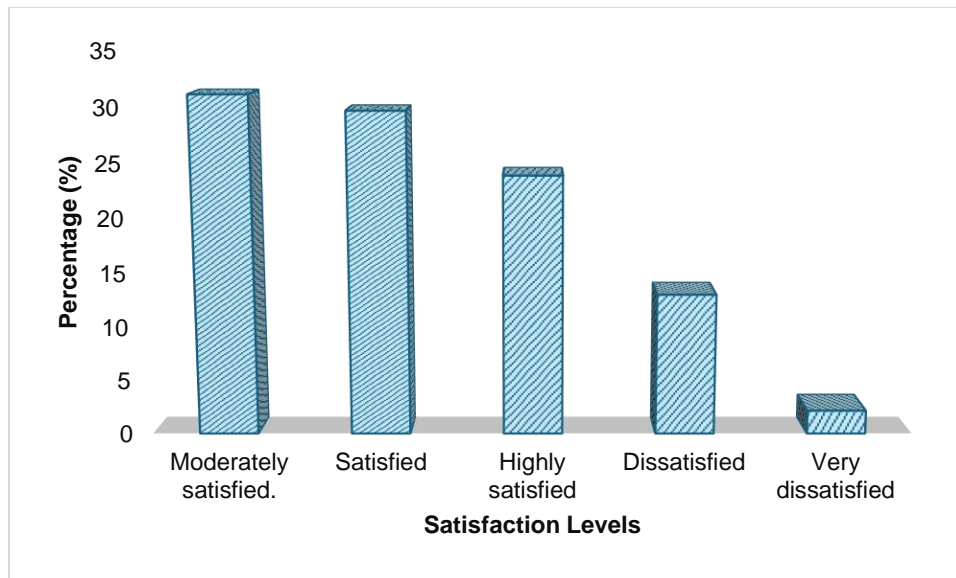
Across the stages of the sanitation chain, sanitation work in Kampala city encompasses a multifaceted range of activities aimed at maintaining public hygiene and health (See Figure 1). The findings showed that the sanitation workforce primarily engaged in mechanical emptying including pit latrine and septic tank desludging as the most prevalent activity, accounting for 35%, followed by manual emptying and scavenging and toilet and latrine cleaning (31% each). The KIIs and FGDs further highlight that the concentration of the sanitation workforce in activities that embodies proper disposal of fecal matter and the hands-on-nature of sanitation labour which emphasize the vital role of manual labour in ensuring clean and functional sanitation facilities for the city residents in informal settlements and business corridors respectively. Further, significant operations were identified as fecal sludge handling (24%) and mechanical transport (29%) as crucial for efficient fecal waste management. The workforce is also reportedly involved in public toilet caretaking and manual transport (18% and 20% respectively), ensuring that shared sanitation facilities are maintained in good conditions for public use. In addition, the workforce is engaged in more infrastructure-related tasks such as toilet/pit latrine construction and maintenance/upgrade which account for 16% and 10% of the reported nature of operations.

Whereas the workforce indicated tasks like manual disposal and manhole cleaning as integral to the sanitation processes in Kampala, they were found to be less frequent.



**Figure 1: Nature of activities that involve sanitation workforce across the sanitation chain**

The study also determined the chemicals used by the sanitation workforce to treat fecal matter and equipment as well. The findings suggested that a variety of detergents such as omo detergent and liquid soap are used to treat fecal matter, with manual labour workforce often relying on products like chlorine, paraffin, and other mixed chemicals that were not specified. Further, some sanitation workers also reported not to use anything to treat fecal waste, thereby increasing likelihood of exposure to pathogens. Equipment was reportedly indicated to be treated by omo detergent, liquid soap, variable kinds of magic powders and detergents and yet several sanitation workers revealed to use a combination of omo and liquid soap, with some few using nothing.



**Figure 2: Sanitation workforce levels of satisfaction with the job/working environment**

The study established a below average satisfaction levels of sanitation workers with the job environment. (See Figure 2). The results generally suggests that 85% of the workforce is satisfied with the job/working environment while 15% reported to be dissatisfied. Most respondents expressed some degree of satisfaction with their job i.e., 31% being moderately satisfied (f=86), 30% classified themselves as satisfied (f=82) and 24% (f=66) indicated to be highly satisfied. However, 13% (f=36) of the respondents described themselves as dissatisfied and a small fraction of 2% (f=6) identified as very dissatisfied. The findings implies that while many workers find satisfaction in their job or working environment, experiences of dissatisfaction manifests, hence implying that there are potential areas of improvement in working conditions and support within the sanitation sector. The key factors for satisfaction embed: an appreciation that the job provides a stable income, allowing them to meet basic needs and enjoy the flexibility to manage other responsibilities; well-paying nature especially during the peak seasons when there are no rains, and the positive impact of workers' efforts on community sanitation and disease prevention. Dissatisfaction was revealed to arise from grievances for low payments that are relative to the hard and tiresome nature of work, insufficient personal protective equipment (PPE), exposure to unpleasant working conditions, lack of adequate business opportunities and frustrations between clients and bosses regarding payments.

### **3.3 Challenges facing sanitation workers during service provision**

#### **3.3.1 Health challenges faced by sanitation workers**

The analysis of health challenges faced by sanitation workers revealed a significant prevalence of injuries and cuts, affecting 51% of respondents, followed closely by fatigue experienced by 40% (See Table 4). Muscle pain and stress or depression are also common, reported by 36% and 34% of sanitation workers, respectively. Other notable issues include the contraction of diseases (31%), headaches and dizziness (30%), and exposure to unhealthy environments, such as inhalation of faecal matter (23%) and chemical exposure (22%). Skin-related problems, including exposure to faecal matter and rashes which were reported to affect 16% and 13% of sanitation workers respectively. Limited access to healthcare services was indicated by 15% of sanitation workers as an additional challenge, while less common issues included dust exposure, difficulty in breathing when wearing masks, and watery eyes. The other health challenges included; physical ailments and risks of infections such as Urinary Tract Infections (UTIs) and typhoid, which are compounded by inadequate access to necessary cleaning supplies and hydration. FGDs also revealed lack of appetite and cold exposure during transportation of fecal matter to the dumping bay among the health challenges faced by sanitation workers. The study also established that 9% (f=26) have ever used or use drugs while going to or at work. Alcohol and marijuana were the most common substances used by sanitation workers and yet some expressed the fear of arrest as a reason for their unwillingness to disclose drug/substance use. The respondents indicated that they



use substances primarily to cope with work-related stress, to enhance energy, relieve problems, and pass time. The influence of social settings and peer groups and a history of use which has been consistent overtime due to personal challenges such as marriage and depression. A KII interview with the director of a sanitation enterprise revealed as follows;

*“... some people work with- the sanitation workers sometimes use drugs and come in very different or unusual moods to work.....they eventually don’t want to listen since they feel more energetic after using drugs.... We let them be”.*

**Table 4: Health challenges facing sanitation workers**

<b>Health challenges</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
Injuries and cuts	142	51
Fatigue	111	40
Muscle pain	100	36
Stress and/or depression	94	34
Diseases contraction	85	31
Headache and dizziness	84	30
Inhalation of faecal matter	63	23
Chemical exposure	60	22
Skin exposure to faecal matter	45	16
Limited healthcare services	42	15
Skin rushes/damage	37	13
Dust exposure	32	12
Difficulty in breathing	27	10
Others	18	7
Watery eyes	18	7

### 3.3.2 Socio-economic challenges faced by sanitation workers

The findings highlighted the socio-economic challenges faced by sanitation workers in Kampala city. Socially, 66% of the workers reported to experience stigma and discrimination, which profoundly affects their well-being and sense of belonging. A considerable number of workers face work overload, difficulties in accessing financial services and lack of personal protective equipment (PPE), (each 30%) all of which impede their ability to perform their jobs safely and effectively (See Table 5). The feeling of being unrecognized for their essential services (28%) and the absence of legal and social protections (28%) further exacerbate the challenges of sanitation workers, along with cultural exclusion which was reported by 25% of respondents. The children of cesspool emptiers were indicated to be bullied because their fathers drive cesspool trucks and yet the illiterate people within the sanitation service itself are very arrogant and reportedly hard to deal with. Some clients were also indicated to be abusive and yet company directors were found to be hesitant to employ female workers. FGDs revealed that female sanitation workers disproportionately experienced stigma as indicated by one of the participants below;

*“Sometimes, being a woman... we work under stigma.... when we reach the community, we find housewives who start to as us very many questions related on our work..... they make fun of us because of what we do... but when I tell them about my story, they are shocked.... The men are worse since they can traumatise you through stereotypic naming..., I keep on pushing since I know what I want out of this kind of work”.*

The chairperson of GAU indicated as follows on selective employment that creates a tendency to disenfranchise women from participating in sanitation work.

*“I think introducing ladies in this sector requires studying the entire chain of the job..... You can’t take a lady to the pit latrine to scoop out faecal matter.....They don't have that much energy and yet the whole work is energy intensive..... Ladies may be employed as marketing agents, cashiers or after-sales call attendants to company clients to determine customer satisfaction of the services provided.... Such simple jobs can easily be done by ladies”.*

Economically, the situation is equally dire, with 73% of sanitation workers citing high living costs as a major burden, while 57% struggle with low payment and 36% face exorbitant health expenses (See Table 5). Insecure payment structures and limited access to credit compound these financial woes, with some individuals unable to afford necessary PPE. Some workers reported tendencies of defaulting payments by clients, delays in payments and supply of PPEs as well as high cost of transport in form of petrol and taxes, little daily allowances and complaints from company directors as challenges. Public toilet cleaners revealed not having formal contracts that tend to come along with job security. A public toilet cleaner said that *“in Uganda, there no contract for low-income earners, may be in parliament, they are there”*.

**Table 5: Socio-economic challenges facing sanitation workers**

<b>Social challenges</b>	<b>Frequency (f)</b>	<b>Percentages (%)</b>
Stigma and discrimination	183	66
Work overload	84	30
Difficulty in accessing financial services	84	30
Lack of personal protective equipment	83	30
Unrecognized service	81	29
Lack of legal and social protection	77	28
Cultural exclusion	69	25
Lack of social security	47	17
Others	9	3
<b>Economic challenges</b>		
High costs of living	201	73
Low payment	158	57
High expenses on health	99	36
Insecure payments	73	26
Lack of access to credit	68	25
Inability to afford personal protective equipment	62	22
Others	9	3

### 3.3.3 Environmental and infrastructural related challenges faced sanitation workers

The study also found out environmental and infrastructure challenges confronting sanitation workers in Kampala city. Majority (60%) of the respondents face limited work opportunities in certain seasons, which severely impacts livelihoods, while 29% reported that climate hazards especially floods and rainstorms complicates sanitation workers efforts. The presence of faecal matter leaks into the environment is a notable concern, albeit affecting a smaller segment (4%) of respondents. FGDs revealed that heavy rains and the consequent flooding make roads slippery, limit access to work sites and lead to an overload of work due to increased mud and toilet cleaning demands. Conversely, the sunny season presents its own hurdles, with reports of decreased job availability and discomfort arising from breathing difficulties. FGDs also established that the sewerage leaks from toilets and during transportation are prevalent, with some public toilet operators irresponsibly discharging faecal sludge into drainage channels during rainy weather, exacerbating the risk of disease and infections in local neighborhoods. Further, the poor condition of toilets and inadequate handling during transport contribute to environmental contamination and in turn endanger public health of both sanitation workers and communities.

The situation is equally troubling when it comes to infrastructure, with 44% of the sanitation workers indicating that poor quality sanitation facilities as a major challenge, followed by 40% who highlighted the presence of solid waste mixed with faecal matter (See Table 6). Access to clients in informal settlements proves difficult for 34% of workers, which is compounded by infrastructure issues such as the collapse of walls during manual pit emptying (25%) and the transportation of heavy faecal sludge containers (23%). In fact, during the study period, there was a reported death of sanitation worker following operation on a delapidated sanitation facility which collapsed on him. Moreover, the lack of knowledge in operating machinery (17%) and the risks of electric shock

(12%) further illustrate the hazardous conditions the sanitation workers navigate. FGDs indicated poor toilet practices and poor infrastructure as main challenges facing caretakers of public toilets, while emptiers find it hard to open heavy manhole covers. The operational challenges are compounded by inadequate water supply at dumping sites and the inconvenience caused by the NWSC's dumping time limits. It was found out that NWSC stipulated that dumping should stop at 6:00PM EAT, which implies that enterprises are unable to work on clients that are far away from the dumping site at Lubigi sewerage treatment plant or else they will have to work and park somewhere till the next day when the plant is opened. Such temporal restrictions were reported to have resulted into illegal dumping of waste into ecologically sensitive sites like swamps which compromise the community and ecosystem health conditions. The respondents also revealed that interpersonal conflicts, harsh customer complaints and encounters with discarded dead infants in toilets as infrastructure related challenges faced by sanitation workers.

**Table 6: Environmental and infrastructure related challenges**

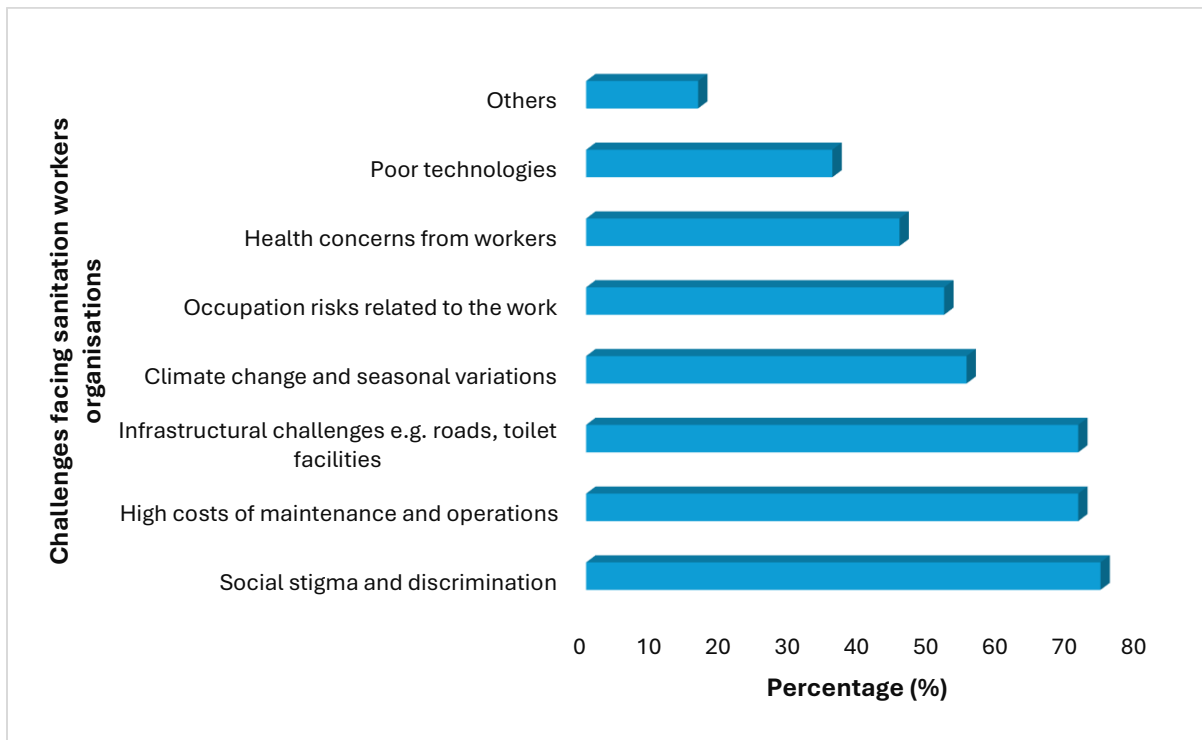
<b>Environmental challenges</b>	<b>Frequency (f)</b>	<b>Percentages (%)</b>
Limited work in some seasons	179	65
Climate hazards	79	29
Leaks of faecal matter into the environment	11	4
Others	9	3
<b>Infrastructure related challenges</b>		
Poor quality of sanitation facilities	122	44
Solid waste content in faecal matter	110	40
Limited access to clients in informal settlements	95	34
The collapse of walls and fixtures during manual pit emptying.	70	25
Transportation of heavy faecal sludge containers to vehicles.	63	23
Lack of/Limited knowledge to operate machinery/equipment.	46	17
Electric shock during operations	32	12
Others	29	11
Entrapment in confined spaces.	29	11

### **3.4 Multi-dimensional challenges encountered during sanitation worker organizations operations**

The sanitation workers organisations face a variety of significant challenges that threaten their sustainability and effectiveness (See Figure 3). The key issues reported include; pervasive social stigma and discrimination, reported by 74% of sanitation enterprise owners, which undermines the dignity of workers and hinders workforce recruitment as well as community support. Financial burdens pose another major concern, with 71% of owners reporting high maintenance and operational costs that affect service quality and viability. Similarly, infrastructural challenges, also noted by 71% further complicate access to facilities and increase operational difficulties. Environmental issues, specifically climate change and seasonal variations, impact 55% of enterprises, disrupting service delivery and infrastructure. Occupational risks were acknowledged by 52% of owners, presenting serious health and safety concerns for workers, while 45% reported health problems that affect productivity and increase healthcare costs. Technological challenges indicated by 35% reflected a reliance on outdated methods that inhibit innovation and service improvements. The other challenges included unforeseen issues such as defaulting of payments by clients and the misuse of company resources.

The KII's revealed inhalation of fecal sludge odour, diseases such as hepatitis and typhoid and chronic conditions like diabetes as severe health risks exposed to during operations. It was also highlighted that headaches, stomachaches, and infections particularly tetanus were reportedly common. In addition, exposure to harmful chemicals and poor toilet usage raises ongoing health concerns and yet cuts, injuries and muscle pain further compounds the physical toll on sanitation enterprises workforce. Enterprise owners also

indicated that hazards from collapsing toilets and electric circuits as challenges and yet lack of proper safety measures such as quality PPE exacerbates the risks. The respondents further highlighted that social stigma and discrimination associated with sanitation work also affects dignity and morale as majority of enterprise owners reported being undermined and mocked by society, with perceptions of being uneducated or “dirty”. Enterprise owners thus feel devalued and stigmatized for their role, leading to mental and emotional challenges that impact their performance and wellbeing. Worker organisations also indicated to be struggling with outdated and inefficient technologies. The findings established frustrations with the limited capabilities of equipment such as gulper machines, which fail to handle solid waste dumped in sanitation facilities effectively. Frequent machine breakdowns and repair expenses were reported to create significant financial capacity coupled with heightened costs of maintenance, fuel and access to dumping sites. Such challenges were found to result into time wastage, hinder growth and ultimately affect service delivery as owners struggle to balance operational costs with business sustainability. Bad roads were indicated to hinder access to service areas, increasing the risk of accidents and limiting service delivery in congested areas. The presence of unlined and collapsing toilets was revealed to exacerbates operational challenges, compromising safety and sanitation standards.



**Figure 3: Multi-dimensional challenges experienced by sanitation workers organisations/enterprises**

#### Section Four: Sanitation workers' welfare: A path to formalisation and visibility elevation in Kampala city

This section presents findings on formalisation and visibility of sanitation workers in Kampala city. It begins with a highlight of work-related benefits received, occupational health and safety strengthening and safeguards available for the sanitation workforce thereby enhancing their welfare in Kampala city.

##### 4.1 Work benefits, occupational health and safety of sanitation workers

The findings in Table 4 social the work benefits, occupation health and safety safeguards enjoyed by sanitation workers in Kampala city as part of the processes for formalizing their service through decent employment. The results showed training (43%) is the most common benefit received by the sanitation workforce, followed by normal work/day offs (35%) and safety equipment (32%). Further, it was revealed that extra work allowances, and incentives (both at 16%), counseling and psycho-social support (14%) as well as certification of skills and appreciation tokens (11% each) were benefits enjoyed by sanitation workforce. Participation in workshops (9%), health insurance (5%) and access to cash credits/loans (5%) are also provided, while benefits like referrals to job opportunities (4%) and social security scheme subscriptions (3%) were received by a few and less common. Lastly, paternity/maternity leave (2%) and awards (1%) are among other less common benefits received. Other benefits (12%) embed a sense of freedom and independence within their work, allowing them to manage their duties alongside other responsibilities with flexibility, critical assistance during hardships or emergencies such as the loss of a family member. For the workforce caretaking toilet facilities, accommodation was reported to be a benefit. However, some workers revealed to receive no benefits especially those that are not affiliated to any sanitation enterprise. Despite the benefits, the desire for independence resonates strongly among many sanitation workers, indicating a preference for autonomy in their roles, even when it comes without structured support from organizations/enterprises.

**Table 7: Work related benefits received by sanitation workers**

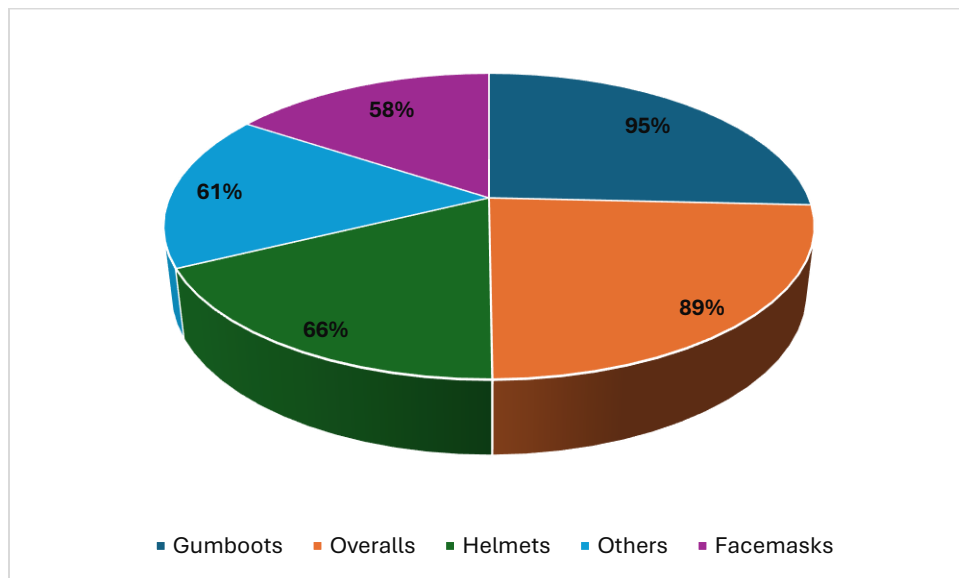
Benefits received from sanitation enterprise	Frequency (f)	Percentage (%)
Training	119	43
Normal work leave/Day offs	96	35
Safety equipment i.e., masks, gloves, overalls, boots and safety goggles	88	32
Extra work allowance	45	16
Incentives like transport, health subsidy or costs clearance, food, cash etc.,	44	16
Counselling and psycho-social support	38	14
Others	33	12
Certification of skills	29	11
Appreciation tokens	29	11
Participation in workshops/events	25	9
Health insurance	15	5
Cash credit/Loans	14	5
Referral/recommendation to better job opportunities	12	4
Social security scheme subscription like National Social Security Fund (NSSF)	8	3
Paternity/Maternity leave	6	2
Awards	4	1

The findings also established that the training offered to the sanitation workforce encompasses a wide range of essential skills and knowledge, with the most common focus on toilet emptying, followed by training on safety measures, operating equipment and disease prevention. Additional training areas include; communication skills, financial management and specialized topics like sludge handling and machine operation. This diverse training aims to enhance the workers' competences in their roles while ensuring their safety and health in the job.

Sanitation workers receive various appreciation tokens that recognize and reward their efforts. The most common form of appreciation is monetary such as cash rewards as a way of acknowledging their performance. In addition, some receive bonuses for successful months with high client volumes and gratuity fees every year as a testament to their commitment. Other tokens include financial support for medical expenses and small cash gifts given occasionally. FGDs revealed that these tokens not only serve as a motivation for workers but also highlight their critical role in maintaining sanitation services effectively.

The workforce also reported to be provided with various incentives that contribute to their overall well-being and job satisfaction. A significant number of workers receive food allowances, highlighting meals as a key incentive which indicates that access to food is a vital aspect of their compensation scheme. Furthermore, many workers benefit from transport allowances, often combined with food provisions such as transport and lunch or food and transport. In addition to these, some receive cash payments post-operation or financial allowances to support their needs. Health-related incentives also play a role in formalisation processes as workers mentioned support for medical expenses and health subsidies, ensuring they have access to necessary care. A few of the sanitation workers engaged reported receipt of housing support, which includes covering costs for utilities like water and electricity, reflecting and understanding of the holistic needs of workers. These incentives not only help the sanitation workforce not only meet the basic needs of sanitation workers but also demonstrate a commitment to their health and welfare, allowing them to focus on their crucial roles within the community.

The study also established that the sanitation workforce is equipped with a comprehensive range of safety equipment aimed at ensuring their protection while performing their demanding roles. 96% (f=266) of the respondents revealed to have the necessary personal protective gear/equipment for use while working. The main gear reported included; gumboots (95%), overalls (89%), helmets (66%), facemasks (58%) and others (61%) such as goggles and hand gloves (See Figure 4). A significant number of workers reported receiving essential protective gear including masks, gloves, overalls, gumboots and safety goggles with a notable emphasis on these items to shield them from potential hazards in their environment. FGDs participants frequently mentioned gloves- often combined with boots and overalls being critical in safeguarding workers' hands from contaminants and injuries. Many workers also highlighted the provision of helmets and gumboots, which further enhance their safety while engaging tasks that involve challenging conditions. During FGDs, workers expressed gratitude for the comprehensive provision of Personal Protective Equipment (PPE) which includes reflective gear for visibility and specialized items like chemical gloves. The diversity of safety equipment reflects a commitment to maintain high standard of occupational health and safety. The focus on safety underscores the importance of protecting sanitation workers as they carryout their essential services.



**Figure 4: Personal Protective Equipment (PPE) commonly used by the sanitation workforce**

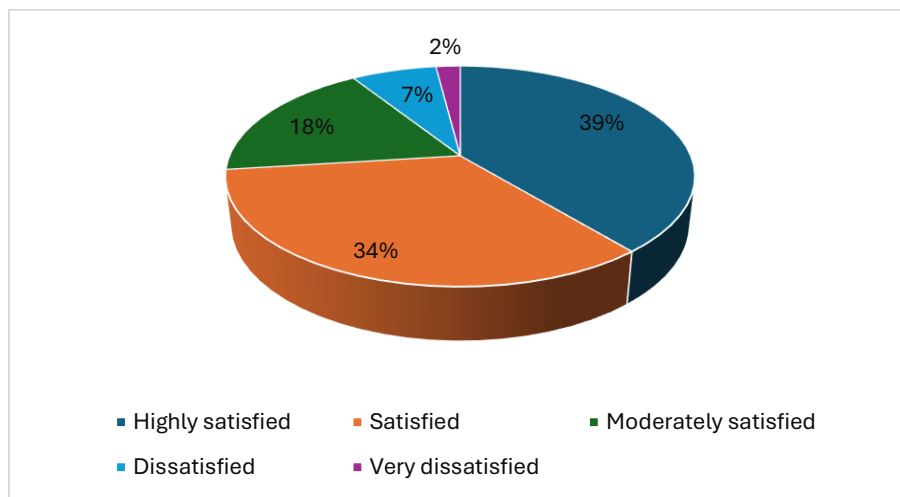
In regards to satisfaction of sanitation workforce with the protection and safety during work, 91% of the respondents indicated to be satisfied. Although satisfaction generally reflect a positive outlook, the level of satisfaction varied with 39% of workers indicating to be highly satisfied hence posing a strong appreciation for the PPE resources and support received to perform services safely, 34% are reportedly satisfied while 18% are moderately satisfied, suggesting an acknowledgement of efforts made to guarantee safety and yet there still

exist room to enhance occupational health and safety standards so as to improve the welfare of the sanitation workforce (See Figure 5). FGDs revealed that most workers feel well protected while performing their duties, with this sense of security underscored by perceived effectiveness of the PPE provided which prevent them from getting injuries and infections. The discussions further showed appreciation of employers for providing necessary safety. However, some workers highlighted the lack of sufficient protective equipment, the poor state of PPE and delays in receiving replacements which results into dissatisfaction. The KII from National Water and sewerage Corporation (NWSC), Gulpers Association of Uganda (GAU) and operators of private sanitation enterprises indicated as follows;

*“When management doesn’t provide PPEs on time, we the immediate supervisors face a hard time telling someone to put on PPEs yet they don’t have them..... the challenges of providing the right quality of PPEs persist as we are given poor quality products that usually wear out in a short time”. Said the respondent from NWSC.*

*“The PPEs provided are not sufficient, I can’t use one overall to work all the time, It’s really not enough..... But our bosses are also held up since we can’t demand so much from them”. Said the operators of sanitation enterprises.*

*“How do we protect sanitation workers from their profit-minded directors/enterprise owners?... people don’t want to invest their companies... we are trying to enforce penalties for non-compliance to safety guidelines.... In this case, any sanitation workers without a safety gear like gumboots, we penalize the company instead of the operator so that the director acknowledges the value of mandatory safety measures”. Said the Chairperson Gulpers Association of Uganda (GAU).*



**Figure 5: Sanitation workforce satisfaction level about personal protection and safety**

The FGDs and KIIs also emphasized that PPE is vital for workforce safety hence protecting them from health risks associated with handling of hazardous materials. The protection from PPE was indicated to reduce the likelihood of infections and diseases and also enhance their mental well-being by allowing them to work with peace of mind. Financial support and the opportunity to improve skills contribute positively to the livelihoods of the sanitation workforce. The flexibility of the work enables many workers to manage personal responsibilities such as attending school, side businesses and/or caring for their families. The increased earnings, whether through better job conditions or additional financial service was revealed to offer means for living standards improvement, enabling means to afford basic needs like housing, and even save for future investments. Overall, sanitation workers who receive support reportedly experience enhancement in their quality of life, safety and financial security, which collectively contributes to their welfare and motivation to deliver services effectively.

#### 4.2 Financial Services: Credit and Savings for Sanitation Workers

The study established that 49% (f=134) access financial services. Table 5 shows the financial welfare. The findings revealed that sanitation workers primarily rely on various financial institutions to manage their monetary needs. 37% reportedly access banks, reflecting a moderate level of engagement with formal financial institutions. A variety of banks were reported to be used by sanitation workers to meet their financial needs for example Centenary bank, Post bank, Equity bank, DFCU bank, Pride Microfinance, Finance Trust bank, Diamond Trust bank, Stanbic bank, Opportunity bank, Tropical bank, ABSA bank, Orient bank and Standard Chartered bank. Further, reliance on micro-finance institutions is minimal, with only 5% utilizing these options. A more significant portion, 23% turns to Savings and Credit Cooperative Societies (SACCOs), suggesting that cooperative models may be integral to sanitation workers financial strategies, yet 16% of the workers participate in cash rounds, a community-based savings method, while 9% rely on private money lenders. The preference for banks and SACCOs indicates a slight uptake of financial literacy, but the limited engagement with micro-finance institutions illustrate barriers in accessing financial services. The key microfinance institutions engaged by sanitation workers include; Trinity Bank, Ugafode and St. Balikudembe Microfinance while SACCOs accessed were mainly; Kyedeva SAACO, Tukwasizewamu, Gulpers SACCO, Emptiers SACCO, Byalunda SACCO, Zimudi Tululakulane Group, Kampala Gulpers and Sanitation Cooperative Group, Gyoga Martin SACCO, Kibaati Saving Group and WASE SACCO.

When it comes to borrowing, the findings indicated that 29% of sanitation workers turn to friends and relatives for financial assistance (Table 5). This reliance on personal networks reveals the communal nature of financial support among sanitation workers, suggesting that trust plays a significant role in their borrowing behavior. Other sources of credit include; money lenders (9%), saving groups, mobile money loans and banks (10% each). A notable 18% of sanitation workers reported that they do not borrow money, which may reflect a lack of access to credit or a preference to avoid debt.

Sanitation workers borrow money for various purposes, reflecting their immediate and essential financial needs. The results showed that 19% borrow particularly to pay school fees, underscoring the importance of education within their families. The findings further indicated that 15% use borrowed funds for medical services, given the health risks associated with their work, whereas some expense borrowed money on food purchases (14%) and utility purchases such as water and energy (15%). Business-related borrowing, while important (18%), is less emphasized compared to essential living costs and education, highlighting the precarious financial positions which many workers occupy.

The study also explored significant barriers facing sanitation workers in accessing financial resources. The primary challenge reported is the lack of collateral security (21%), a significant obstacle that limits their ability to secure loans. Also, the informal nature of their occupations contributes to the perception that their jobs are not formally recognized, which hinders their access to credit (16%). Other challenges include; bureaucratic hurdles (7%), high loan interest rates (10%), and low financial literacy (6%) which altogether highlight the systemic issues that constrain capacities of sanitation workers to improve their financial welfare. The KIIs with respondents from Water for People (WfP) and GAU portrayed challenges facing sanitation workers in accessing financial services as follows;

*“Financial institutions do not want to support sanitation workers.... however, WfP has had successful engagements with Post Bank, and Opportunity bank, and currently discussions with Centenary bank, and Housing Finance bank are ongoing..... most commercial banks do not want to support sanitation workers because they have no contracts with their employees”. Said the respondent from WfP.*

*“All the financial institutions in Uganda do not have the information about emptying business..... They look at this sanitation work as not bankable because they see people with their own toilet facilities not using our services in over 4 years..... so they wonder where we will get the money to repay loans..... But, there are some institutions like schools where we work almost on a daily basis..... they do not know that there are slum areas where the water tables are very high and so jobs come more often and*



*lastly they don't know that there are spillages in communities where we go and work". Reported by the respondent from GAU.*

Identifying the specific financial needs of sanitation workers is essential for fostering their welfare. The findings indicated that a strong demand for business loans (36%), reflecting the aspiration to improve their economic situations through entrepreneurship. There is also a substantial need for equipment loans/subsidies (18%), which could enable them to enhance their work conditions and efficiency. Moreover, many workers expressed interest in financial skills training and savings programs (15% each), revealing an awareness of the necessity for better financial management.

**Table 8: Financial welfare of sanitation workers**

Financial institutions accessed	Financial institution	Frequency (f)	Percentage (%)
	Bank	58	37
	SACCOs/Saving and credit	35	23
	Cash rounds	24	16
	Others	17	11
	Private money lenders	14	9
	Micro-finance institutions	7	5
Sources of borrowed money	Friends and relatives	50	29
	I don't borrow money	30	18
	Cash rounds	18	11
	Savings group/SACCO	17	10
	Bank	17	10
	Money lenders	16	9
	Other	13	8
	Microfinance institutions	9	5
Purpose of borrowed money	Paying school fees	35	19
	For business	33	18
	Paying for medical services	28	15
	Buying food	26	14
	Other	27	14
	Building/Construction	6	3
	For social events/recreation	4	2
	Paying utilities- energy, water etc.	28	15
Challenges faced to borrow money	Lack of collateral security	88	21
	The job is not formally recognized.	67	16
	Others	57	13
	Low capital inflow	46	11
	High/Exaggerated loan interests	43	10
	Ignorance about existing credit services	32	8
	Bureaucracy	28	7
	Low financial literacy	25	6
	No guarantors	23	5
	Stringent regulatory requirements	17	4
Financial services needs	Business loan	149	36
	Equipment loan and/subsidies	75	18
	Savings	63	15
	Financial skills training	63	15
	Business capitalization incentives	39	9
	Social security schemes	12	3
	Others	13	3

In regards to savings, 83% (f=239) of sanitation workers indicated to have savings. Sanitation workers exhibit a diverse range of practices depending on accessibility and personal preferences. The results in Table 6 showed that 33% prefer to keep their savings at home, a trend which suggests a significant reliance on informal saving methods and reflecting a desire for immediate accessibility to funds and distrust in formal financial institutions. Besides, 23% reportedly utilize banks, 33% opt for saving groups, SACCOs or cooperative groups, highlighting the importance of community-based financial networks in their financial management strategies. Cash rounds (13%) were revealed to be participated in as a traditional form of communal saving where members contribute to a set amount of money regularly, benefiting from immediate access to a lumpsum at intervals. This approach underscores the communal spirit among sanitation workers as they often pool resources to support one another. The workers also use microfinance institutions (2%) and other methods (9%) such as mobile money, safe boxes, entrusted family members that depend on personal trust. FGDs revealed that participation in saving groups and community initiatives such as Sankara Youth Development Group indicates the willingness to engage in collective financial mechanisms, though the limited trust with these groups negatively impacts their decisions. For sanitation workers employed by National Water and Sewerage Corporation (NWSC) and Kampala Capital City Authority (KCCA), it was established that they have social protection through nationally recognized schemes under the National Social Security Fund (NSSF) and yet their counterparts employed by private sanitation enterprises do not enjoy such benefits. An interview with GAU revealed as follows;

*“Social protection of sanitation workers depends on profitability..... if companies were making profits, we would enforce payment of NSSF but because we are not making good money, we do not do so... companies do not even pay as you earn (PAYE) taxes”. Said the chairperson GAU.*

Mobile money (83%) stands out as the most used financial services owing to its ability to facilitate quick, convenient transactions and savings through technological adaptation across sanitation workers (See Table 6). This shows a shift towards digital finance but also hints at the necessity for financial tools that cater for the sanitation workers on-the-go lifestyles. In addition, 20% of workers use cash rounds for immediate financial support and yet 4% use savings and loan schemes. Only 3% reported to engage in financial training and yet access and utilization of business savings and loan scheme is minimal at just 1%, portraying that fewer workers are focusing on entrepreneurial endeavors and the inadequacy in promotion or accessibility of such schemes.

Sanitation workers leverage their savings for a wide range of purposes, demonstrating the integral role of financial resources in their everyday lives. FGDs revealed that many utilize savings to pay for essential needs such as school fees, rent, and bills, reflecting their commitment to supporting their families and maintaining household stability. Several workers highlighted the importance of savings in managing emergencies, from medical bills to unforeseen challenges, indicating a reliance on these funds for quick financial relief. Savings were revealed to also facilitate investments, with some members able to purchase land, livestock, or start small businesses, signifying aspirations for long-term financial growth and security. These findings show that savings not only enhance the living conditions of sanitation workers but also provide a foundation for future investments, reinforcing the need for accessible financial solutions that empower workers in their efforts to improve their livelihoods and support their families.

**Table 9: Sanitation workers savings**

<b>Savings</b>		<b>Frequency (f)</b>	<b>Percentage (%)</b>
Sanitation workers savings location	Home	90	33
	Bank	63	23
	Saving group/SACCO/Cooperative group	60	22
	Cash rounds	36	13
	Other	24	9
	Microfinance institution	6	2
Financial services used	Mobile money	229	83
	Cash rounds	56	20
	Access to loans	18	7
	Microfinance support	13	5
	Micro Savings and loan scheme	11	4
	Others	10	4
	Financial training	8	3
Business savings and loan scheme	4	1	

#### **4.3 Training, skilling and social networks for sanitation workers**

The results of the study showed that 50% (f=139) of sanitation workers received training and skilling. Findings in Table 7 indicated that sanitation workers primarily received training in equipment operation and entrepreneurship/business skills (20% each) and financial literacy (19%). Government institutions are the predominant providers of training, contributing to 24% of the programs, followed by employers/directors of sanitation enterprises and NGOs, each accounting for 13%. FGDs also revealed that sanitation workers have been trained on safety and health at workplace, sanitation practices, proper waste handling, customer relations, and personal protective measures. These trainings were reportedly provided by Kampala Capital City Authority (KCCA) under the Weyonje campaign, Viare sanitation services, Loan officers, Uganda Revenue Authority (URA), individuals and Makerere University students. An interview with the manager of Lubigi faecal waste treatment plant revealed that most sanitation workers are skilled in plumbing as the key training determining their employment, with additional skills in waste management provided to them by NWSC while on-site. However, training needs for sanitation workers were expressed, with a significant demand for business/entrepreneurial skills (57%), financial management (46%), and risk management (21%) which signifies a strong interest in enhancing their business acumen and financial capabilities.

**Table 10: Training and skilling programs accessed and needed by sanitation workers**

Training and skilling programs		Frequency (f)	Percentage (%)
Training/Skilling Program received	Equipment operation	56	20
	Entrepreneurship/business skills	55	20
	Financial literacy	53	19
	Machine maintenance	27	10
	Others	20	7
	Communication	16	6
	Vocational skills	15	5
	Leadership and life skills	13	5
	Marketing	12	4
	Record keeping	7	3
	Metal fabrication	4	1
Institutions providing the training	Government	67	24
	My employer	37	13
	NGO	36	13
	Others	12	4
	SACCO/Cooperative/Association	6	2
	Friends and family	5	2
	Church based institutions	2	1
Training needs	Business/Entrepreneurial skills	156	57
	Financial management	128	46
	Risk management	58	21
	Equipment operation	58	21
	Other	37	13
	Welding/fabrication	30	11

Social networks play a significant role in providing financial and social support to sanitation workers. About 52% (f=144) of the sanitation workers reportedly belonged to social group or network. The findings revealed that the majority of sanitation workers belonged to saving groups, primarily SACCOs (26%) followed by other types of social networks such as associations (17%) and youth groups (13%). The primary benefit gained from these networks is enhancing the ability to save (42%), along with financial assistance (18%) and job connections (14%).

The findings reveal that the majority of individuals belong to savings groups, primarily SACCOs (26%), followed by other types of social networks such as associations (17%) and youth groups (13%). The primary benefit gained from these networks is the ability to save (42%), along with financial assistance (18%), and job connections (14%). Members also anticipate benefits such as skills development and training (19%), financial assistance (17%), and social networking opportunities (7%) after joining these groups.

**Table 11: Belonginess to social networks**

<b>Belongingness to a social group/network</b>		<b>Frequency (f)</b>	<b>Percentage (%)</b>
Savings group belonged to	SACCO/Saving group	71	26
	Others	51	18
	Association	46	17
	Youth Group	35	13
	Women group	7	3
	Cooperative	6	2
Benefits received from belonging to a social network	Helped me to save	116	42
	Received financial assistance/credit.	51	18
	Other	41	15
	Job connections	40	14
	Skills development/training	37	13
	Received social assistance (for health, when lost a relative, wedding etc.)	33	12
	Information exchange	30	11
Expectations after joining a social group/network	Helped me to save	62	22
	Skills development/training	52	19
	To get financial assistance/credit	47	17
	Social networks	20	7
	To get financial assistance/credit	19	7
	Information exchange	16	6
	Other	3	1

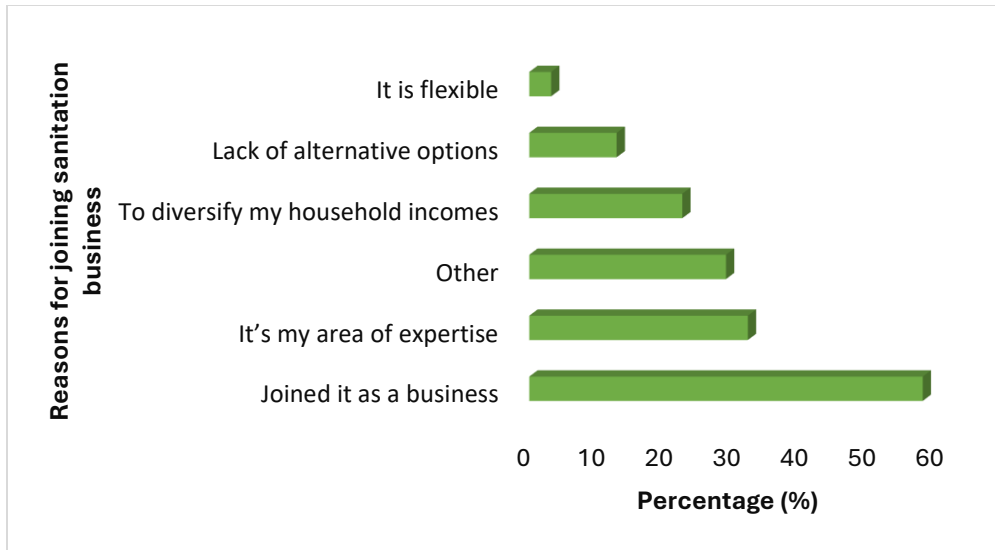
## **Section Five: Sanitation workers organizations/enterprises operations and working arrangements**

As earlier stated, the study engaged a total of 31 sanitation enterprises organizations in Kampala. This section presents findings on sanitation workers organization/enterprises and working arrangements, integrating aspects of formalizing these organization in the Kampala sanitation landscape.

### **5.1 Organisation profiles and working arrangements**

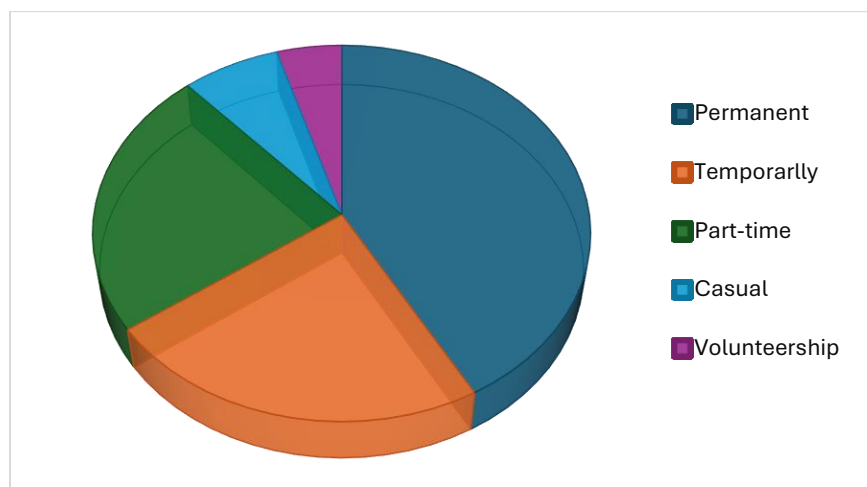
The results showed that 74% (f=23) of the enterprises were established by migrants, 97% (f=30) formally registered and only one was in the process of registering at the time of fieldwork. 77% (f=24) of the enterprises reportedly possess operating licenses issued by government institutions such as Kampala Capital City Authority (KCCA), Uganda Revenue Authority (URA), National Environment Management Authority (NEMA), National Water and Sewerage Corporation (NWSC) and the Uganda Registration Services Bureau (URSB). It was established that sanitation workers enterprises had operated in sector for 9 years on average with the 25 years and 2 years being the highest and lowest duration of operation of an enterprise/organization. The respondent from Water for People (WfP) highlighted that WfP secured a partnership with KCCA, NEMA and NWSC in 2020 that led to a resolution which enabled sanitation enterprises/companies to be issued with temporary working permits known as Environmental Sanitation Service (ESS) mandating them to operate within the spatial boundaries of Kampala city. It was found out that the ESS permit is always issued annually, with costs of renewal being set at one hundred thousand Ugandan shillings (UGX.100,000/USD 27.45). Such regulation enabled worker organizations to leverage opportunities to deliver services to areas beyond Kampala city especially in new cities like Masaka, Fort Portal, Gulu and Mbarara, and to key institutions such as schools, health facilities and industries in different parts of the country.

Sanitation service delivery entrepreneurship, while often overlooked, plays crucial role in enhancing urban service delivery. The study sought to understand motivations or enterprise owners to joining the sanitation service delivery business (See Figure 6). Many (58% of 31) were motivated by the business opportunity perceived in sanitation work. It was highlighted that the work offered a viable business opportunity with profitability potentials to the entrepreneurs, while at the same time contributing to addressing sanitation challenges facing communities. Besides, 32% indicated to be experts in the field of sanitation work, with entrepreneurs motivated to join the work due to their existing expertise in skills such as plumbing, enterprise development and transport. The need to diversify household incomes (23%) was also revealed to be a motivation, with respondents seeking financial security through creating additional earning opportunities through sanitation work. About 13% said that the lack of alternative options due to the limited job opportunities prompted them to join sanitation work, 9% indicated to have been motivated by flexibility of the work, and yet 29% cited other reasons including; connections or referrals from local councils, receipt of prior training from Water for People (WfP) and passion for the work following initial service provision as a cesspool operator, which enabled establishment of own enterprises with guidance from KCCA.



**Figure 6: Entrepreneur motivations to join the sanitation sector**

Figure 7 illustrates the diversity in employment types within sanitation worker organizations, shedding light on the workforce composition and the various working arrangements in place for sanitation workers. Majority (58%) of the enterprises revealed to have a workforce on permanent employment basis. FGDs and KIs indicated that permanent positions typically offer job security, benefits and career development opportunities, contributing to a stable workforce. 32% of the enterprises reportedly offer part-time employment, which provides flexibility for workers who may be balancing other commitments such as education or caregiving. Another 32% of the enterprises were revealed to offer temporary employment and these are usually contracted depending on availability of clients or any other time specific projects that require extra workforce. Co-existing with part-time roles, casual employment arrangements were also reported by 10% of the sanitation enterprises. FGDs showed that casual workers are often employed on an as-needed basis, making it a suitable option for both workers seeking temporary flexibility and employers' need to manage fluctuating workloads. Lastly, 6% of the sanitation workers enterprises indicated to have workforce under volunteerism. Volunteers were revealed to play a vital role in sanitation organisations, with a number of workers contributing their time and skills without financial compensation.



**Figure 7: Employment types of sanitation workers**

The results further indicated that 58% of enterprises averagely employ 8 (eight) sanitation workers on a permanent basis, 32% employ 6 (six workers) on a temporary basis, 29% employ 7 workers on part-time

arrangement and yet only 6% indicated to have volunteer positions for sanitation workers. Each company on average employs 2 (two) female sanitation workers. Job security is essential for any individual engaged in some kind of work. The findings illustrated that 55% of the sanitation worker organizations employ workers causally without agreement, 26% have workers that are permanent and with contracts, 19% casual with agreements, 16% revealed to have workers that have contracts and full time but not permanent and yet 13% of the worker organisations or enterprises highlighted to have workforce on contrary under temporary or part-time arrangements. On average, sanitation workers reportedly earn three million and one hundred ninety thousand three hundred Ugandan shillings (UGX. 3,190,300/ USD 876) per month and incur monthly costs of two million one hundred and five thousand six hundred Ugandan shillings (UGX. 2,105,600/USD 578). This implies that the entrepreneurs make averagely one million eight four thousand seven hundred shillings (UGX. 1,084,700/USD 298) per month.

The sanitation enterprises deploy various technologies to deliver services in Kampala city. The results showed that 65% (f=20) use gulper 1, 58% (f=18) use cesspool trucks, 23% (f=23) use gulper 4 and 13% (f=4) use pit vaq. Further, 19% (f=6) reportedly rely on scooping, even when they possess the indicated technologies and this practice is usually used on sanitation facilities that can't enable use of the technologies available.

## **5.2 Support, financial services and networks for sanitation worker enterprises/organizations**

### **5.2.1 Receipt of sanitation enterprise development support**

The study established that 58% (f=18) had received support to facilitate enterprise development in the sanitation sector. Table 12 shows the nature and source of support for enterprise development received by sanitation workers organizations. Notably, training emerged as the most prevalent form of support received by enterprises (42%), indicating a string emphasis on enhancing skills and knowledge. This was followed by equipment and machines (32%), underscoring the importance of tangible resources for operational effectiveness and yet assistance for registration (16%) was found crucial for formalizing operations. The training support mainly covered areas like; sanitation and toilet facilities emptying, equipment operation, risk management, safety protocols and appropriate workplace behavior. FGDs highlighted that equipment support compose of PPEs like gumboots, gloves, helmets and overalls as well as new technologies like the Pitvaq AND Gulper 4 machines that are accessed from Kampala Capital City Authority (KCCA) through hiring at subsidized rates. Job connections and scholarships to specialized trainings such as commercial development, financial literacy, legal aspects of the sanitation sector and International Organization for Standardization (ISO) sanitation standards were indicated to be provided to sanitation workers organizations entrepreneurs. KIIs revealed that the support received impacted various aspects of enterprises operations through enabling effective record keeping and tax compliance, which in turn has reduced expenditures and increased income inflow, fostered business growth from its inception, guiding day-today operations and allowing for service expansion to underprivileged communities while creating jobs for the youth. In addition, improvements in sanitation service provision efficiency and recognition of female-led enterprises have been realized through the support provided, hence contributing to overall business sustainability and harmonious community relations.

In terms of sources of support (See Table 12), government emerged as the dominant provider, cited by 35% of the enterprise owners and hence reflect reliance on public sector initiatives for enterprise development. Civil Society Organizations (CSOs) were the second most significant source, with 26% of the enterprises indicating their support, while urban/city authorities contributed to 10% of the assistance. The involvement of private institutions and international development agencies was minimal, each representing only 3% of sources, thereby highlighting gaps with potential area for growth in leveraging diverse support avenues for enterprises. Government enterprise development support mainly comes from Kampala Capital City Authority (KCCA), Ministry of Water and Environment (MWE), Office of the Prime Minister (OPM) and National Water and Sewerage Cooperation (NWSC) while the reported CSOs providing support included; Water for People (WfP), Water Aid, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), United Nations Children's Fund (UNICEF) and United Nations High Commission for Refugees (UNHCR). One sanitation enterprise revealed to have secured a contract to provide sanitation services from a collective urban refugee registration and support mobilization mechanism in Kampala city driven by the OPM, UNHCR and KCCA. Further, It was established from existing



literature and KIIs that Water Aid in partnership with KCCA contracted a number of sanitation enterprises to provide services to various informal settlements during the COVID-19 crisis between 2020-2023, coupled with installation of transfer stations at convenient points across informal settlements (Sseviiri et al., 2023). Total Uganda was the only private actor which was found to have supported sanitation enterprise business development and yet some enterprises revealed to have been supported by the Kampala Gulpers and Emptiers Cooperative Society (KGECS).

**Table 12: Nature and source of support for enterprise development**

Nature and source of support for enterprise development		Frequency (f)	Percentage (%)
Nature of support received	Training	13	42
	Equipment/Machines	10	32
	Registration	5	16
	Scholarship to attend courses, events, workshops	4	13
	Connections	4	13
	Start-up capital	4	13
	Marketing	3	10
	Technological incubation, trialling, and validation	2	6
	Exchange programs/Visits	2	6
	Research and innovation	1	3
	Project co-implementation	1	3
Source of support	Government	11	35
	Civil Society Organisation	8	26
	Urban/City authority	3	10
	Private institution	1	3
	International or national development agency	1	3
	Sanitation Worker Organisation Network	1	3
	Others	1	3

### 5.2.2 Workers' organization welfare: Financial services, trainings and networks

The financial welfare of sanitation workers enterprises in Kampala city is influenced by various aspects including, access to financial services, borrowing habits, savings practices, utilization of financial services and specific financial needs (See Table 13). The findings revealed that 68% (f=21) of the sanitation enterprises have access to financial services, with 55% predominantly relying on banks followed by Savings and Credit Cooperative Organisation (SACCOs) (19%). Private moneys lenders account for only 6% and yet micro-finance institutions remain a minor fraction indicating a string preference for formal banking systems. The main banks used by sanitation workers organisations include; Equity bank, Post Bank, Centenary bank, Bank of Baroda, Opportunity bank, Stanbic bank, and DFCU while the key SACCOs reported were mainly for associations uniting enterprises such as Kampala Gulpers Association, Kampala Gulpers and Emptiers Association, and Tulibumu. When it comes to borrowing money, 39% of the enterprises reportedly borrow from banks, further underscoring their reliance on these institutions. Interestingly, a significant portion of sanitation enterprises (35%) do not borrow at all. SACCOs and saving groups (35%) were also revealed to be used for borrowing while friendships and familial networks support borrowing for 23%. Only a small percentage of enterprises rely on money lenders or microfinance institutions, reflecting hesitance toward high-interest options as was found out in FGDs and KIIs. The KIIs revealed multiple reasons why sanitation enterprises borrow money i.e., to acquire assets and equipment for business operations, increasing capital for growth, and addressing mechanical issues facing their machines. The specific needs revealed include; purchase of tricycles, repairing of vehicles and obtaining necessary PPEs which indicates a greater focus on enhancing business functionality and solving immediate financial challenges. It was established that public sanitation organisations like NWSC had different arrangements of financial services that provide benefits to workers. The manager of Lubigi sewerage treatment plant indicated as follows;

*“NWSC has a provident fund in which all NWSC workers have accounts to save their 5% of their income and the employers tops up 5%.....This money is accessible to the worker on retirement.....*

NWSC also has a SACCO known as WASE where NWSC staff join voluntarily to save and access loans.....There is also an arrangement with some banks for example Centenary Bank and Standard Chartered Bank where the loan officers just get forms and details of workers directly at our Kampala Water Headquarters along Jinja road and provide the loans to workers so long as the contract is still on”.

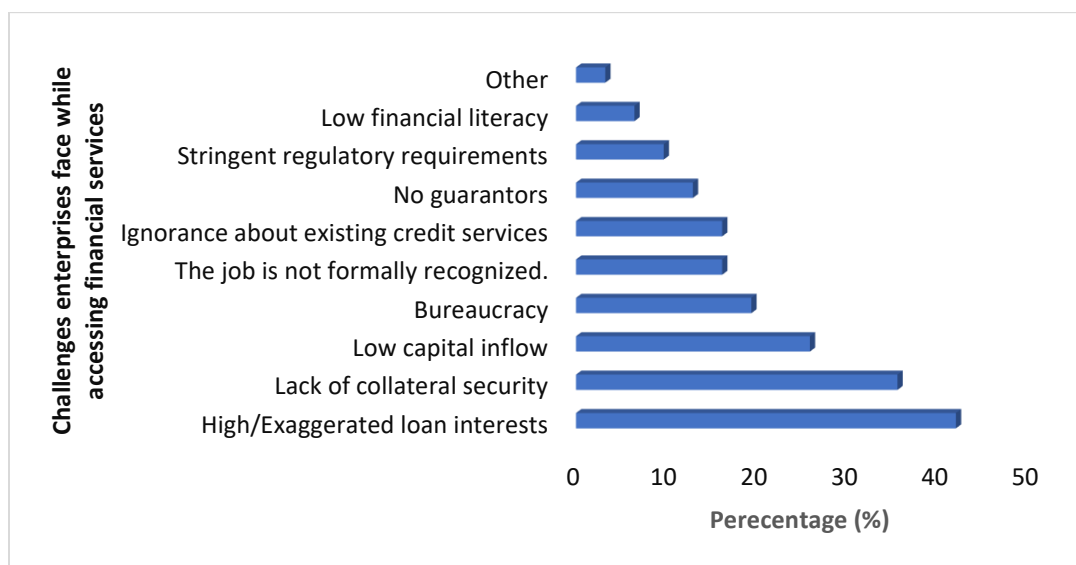
The study showed that sanitation enterprises primarily save money in banks, with a notable 84% (f=26) reporting this method, followed by SACCOs (32%). Only 13% save at home which signifies a low preference for informal saving methods. These findings suggest a strong inclination towards formal and regulated saving channels among sanitation enterprises. The usage of financial services among enterprises indicated that 90% utilize mobile money platforms due to convenience and access of digital transactions across Kampala. Access to loans was revealed to be important (29%), while a smaller proportion seeks financial training (10%), business savings and loan schemes (6%) and micro-savings options (3%).

The financial welfare of sanitation enterprises is closely tied to specific needs. A significant 61% expressed need to equipment loans and subsidies, which are crucial for enhancing their businesses. Business loans were reportedly indicated by 45%, while 29% require tax exemptions or incentives. Other needs include business capitalization incentives (26%), registration waivers (19%) and social security schemes (16%), demonstrating a comprehensive understanding of the financial support necessary for sustaining their enterprises.

**Table 13: Financial welfare of sanitation enterprises in Kampala city**

Financial welfare of enterprises		Frequency (f)	Percentage (%)
Financial services accessed	Bank	17	55
	SACCOs/Saving and credit	6	19
	Private money lenders	2	6
	Micro-finance institutions	1	3
	Others	1	3
Sources of borrowed money	Bank	12	39
	I do not borrow money	11	35
	Savings group/SACCO	8	26
	Friends and relatives	7	23
	Money lenders	5	16
	Microfinance institutions	1	3
	Other	1	3
Where enterprises save money	Bank	26	84
	Saving group/SACCO/Cooperative group	10	32
	Home	4	13
Financial services used	Mobile money	28	90
	Access to loans	9	29
	Financial training	3	10
	Other	2	6
	Business savings and loan scheme	2	6
	Cash rounds	2	6
	Micro Savings and loan scheme	1	3
Financial services needs	Equipment loan and/subsidies	19	61
	Business loan	14	45
	Tax exemptions/incentives	9	29
	Business capitalization incentives	8	26
	Registration waivers	6	19
	Savings	5	16
	Other	5	16
	Social security schemes	5	16

The sanitation enterprises face a myriad of challenges when accessing financial services, significantly affecting their operational efficiency and growth potential (See Figure 8). A predominant issue found out was the high and exaggerated loan interest rates, reported by 42% of enterprises, which creates a substantial barrier to obtaining necessary funding. Further, the lack of collateral security, highlighted by 35% of the enterprises, making it difficult for sanitation workers to secure loans. Besides, 26% of enterprises experience low capital inflow, limiting their ability to invest in essential equipment and services. Bureaucracy poses another hurdle, with 19% of enterprises indicating that administrative obstacles of banks which complicate their access to financial resources. Moreover, enterprises also reported the challenge of job recognition (16%) whereby the lack of formal recognition of their work hinders financial opportunities. Such challenges were reportedly compounded by a lack of awareness of existing credit services and the absence of guarantors, both noted by 16% and 13% of enterprises respectively. Lastly, low financial literacy (6%) and stringent regulatory requirements (10%) limit the ability of sanitation enterprises to navigate the financial landscape effectively.



**Figure 8: Challenges faced in accessing financial services**

The study established that 94% (f=29) of the sanitation enterprises possessed savings. Results in Table 14 indicated that a significant majority (84%) of sanitation workers enterprises save in banks, while 32% utilise saving groups or SACCOs and 13% save at home. Furthermore, mobile money services are predominantly used, with 90% of enterprises relying on this method for their savings, followed by another 29% that utilises savings as leverage to access loans. Financial training is less common but often accessed by 10% through the saving schemes and yet cash rounds and micro savings and loan schemes show minimal engagement at 6% and 3% respectively. KIIs revealed that the use of savings has significantly contributed to business growth and operational efficiency by enabling easy access to emergency funds, facilitating loans, covering taxes, handling repairs and operational costs and supporting expansions through investments in new equipment and resources, ultimately helping enterprises to expand their financial base and achieve yearly targets. The findings further showed that financial needs of sanitation enterprises are predominantly centred around equipment loans and subsidies, with 61% of entrepreneurs highlighting this as a critical necessity. Business loans also play a significant role, as indicated by 45% of entrepreneurs, while tax exemptions and incentives are important for 29% of the enterprises. In addition, 26% expressed a need for business capitalisation incentives, 19% seek registration waivers, and 16% are focused on savings, social security schemes and other financial avenues, indicating a diverse range of financial support required for stability and growth in the sanitation sector. The other needs indicated were provision of cesspool trucks to the association and support to repair and maintain vehicles. KIIs found out that enterprises are challenged by high taxes during the dry seasons when work is scarce and thus advocate for exemptions. This expressed a need for a simplified tax system from government institutions like URA, NEMA, KCCA, and NWSC to alleviate financial burdens.

**Table 14: Savings and financial services for sanitation enterprises**

<b>Savings and financial services of sanitation worker enterprises</b>		<b>Frequency (f)</b>	<b>Percentage (%)</b>
Where enterprises save	Bank	26	84
	Saving group/SACCO	10	32
	Home	4	13
Financial services used and relevant for savings	Mobile money	28	90
	Access to loans	9	29
	Financial training	3	10
	Other	2	6
	Business savings and loan scheme	2	6
	Cash rounds	2	6
	Micro Savings and loan scheme	1	3
Financial needs	Equipment loan and/subsidies	19	61
	Business loan	14	45
	Tax exemptions/incentives	9	29
	Business capitalization incentives	8	26
	Registration waivers	6	19
	Savings	5	16
	Other	5	16
	Social security schemes	5	16

The study found out that 97% (f=30) of enterprise owners had previously received training relevant to sanitation issues. Table 15 shows training received and the needs expressed by sanitation entrepreneurs. A substantial 68% of the enterprises owners reportedly received training in equipment operation, making it the most common area of focus, followed by entrepreneurship and business skills (58%) and machine maintenance (58%) which underscores a strong emphasis on practical skills that are essential for day-to-day operations. Further, financial literacy (42%), and marketing skills (39%) were highlighted to aspects of previous training, though slightly fewer entrepreneurs received training in leadership and life skills (35%) and record keeping (32%). Other trainings received included; customer care, sludge management, community sensitization on sanitation services, defensive driving, occupational health and safety, resource mobilization, data management and computer training. Such diversity is indicative of the diverse skills needed for effective sanitation services. The provision of training was indicated to be largely undertaken by government institutions (65%) and NGOs (55%), which play pivotal roles in supporting growth of sanitation enterprises. Other sources of training, while present, are less common, and involve SACCOs, friends and family as well as faith-based organizations. The key CSOs/NGOs that have previously provided training to sanitation workers organizations include; WfP, GIZ, and Water Aid, yet Namasuba College of Commerce and Freshpit Emptying Services were also reported to have built training capacities of sanitation workers enterprises. Government institutions providing training are mainly KCCA, NWSC and URA, while Kampala Gulpers Association and Gulpers Association of Uganda provided training to enterprise owners.

Despite receipt of training in various areas, significant gaps in skillsets of sanitation entrepreneurs were identified (See Table 15). Training needs are predominantly pivoting around business and entrepreneurship, and financial management (48% each), coupled by strong demands for improved networking (45%), risk management and marketing (42%). Specific interests in resource mobilization (29%), communication (26%), equipment operation (23%) indicating a collective desire for comprehensive skill enhancement that could growth and stability in their enterprises. Other trainings needed include; organizational management skills and sludge recycling technology.

**Table 15: Trainings received and needs by sanitation entrepreneurs**

<b>Trainings received and needs by sanitation entrepreneurs</b>		<b>Frequency (f)</b>	<b>Percentage (%)</b>
Trainings received	Equipment operation	21	68
	Entrepreneurship/business skills	18	58
	Machine maintenance	15	48
	Financial literacy	13	42
	Marketing	12	39
	Leadership and life skills	11	35
	Record keeping	10	32
	Others	9	29
	Communication	7	23
	Vocational skills	4	13
Metal fabrication	2	6	
Institutions providing trainings	Government	20	65
	NGO	17	55
	Others	3	10
	SACCO/Cooperative/Association	3	10
	Friends and family	2	6
	Church based institutions	2	6
	My employer	1	3
Training needs	Business/Entrepreneurial skills	15	48
	Financial Management	15	48
	Networking	14	45
	Risk management	13	42
	Marketing	13	42
	Funds/Resources mobilisation	9	29
	Communication	8	26
	Equipment operation	7	23
	Others	2	6
	Welding/fabrication	1	3

The study established that 90% (f=28) of sanitation worker organisations belong to networks including associations, SACCOs/groups and a women group. The key networks that bring together sanitation worker organizations include; Kampala Gulpers Association, Gulpers Association of Uganda, Uganda Private Emptiers Association, Uganda Private Cesspool Emptiers Association, Tulibumu SACCO, Women for Water Partnership, Women in Water and Sanitation Network, and the Pan African Association of Sanitation Actors (PASA). It was also found out that the key benefits to belonging to such networks were; opportunities for skills development/training (45%), information exchange and creation of pathways to saving (39% each), social assistance support when facing challenges like health complications and loss of a relative as well as functions like weddings (32%), source of financial assistance and credit (29%), job connections (26%) and others (23%) such as lobbying for rights of private emptiers, increasing credibility and trust in services of enterprises, and representation for appropriate regulation of the sector as well as ensuring safety, occupational health, togetherness or unity and discipline.

## **Section Six: Recognition of sanitation workers and organizations/enterprises**

### **6.1 Strategies for sanitation workers and enterprise recognition, appreciation and acknowledgement**

The study established several initiatives aimed at acknowledging and enhancing the visibility of sanitation worker organizations, which further pose spillover benefits to the sanitation workforce in Kampala city (See Table 16). A considerable majority of sanitation worker organization owners (90%) noted that sanitation worker services have been recognized by public institutions, including prominent entities like the Nation Water and Sewerage Corporation (NWSC), the National Environment Management Authority (NEMA) and the Kampala Capital City Authority (KCCA). This recognition was reported to be critical in affirming the essential role sanitation workers play in the city, and further enables collaborations with other government institutions such as the Ministry of Water and Environment (MWE) and Office of the Prime Minister (OPM) as well as development partners for example UNHCR, WaterAid, GIZ and Water for People. Training programs focusing on occupational health and safety across the sanitation service chain was also reported by 90% of the respondents as a key recognition, acknowledgement and visibility elevation strategy. The trainings were indicated to have equipped workers with the necessary skills and knowledge, underscoring a growing commitment to both the empowerment and protection of sanitation workers as a way of aligning work with health standards and operational guidelines. KIIs and FGDs found out that safety and occupational health precautions are top priority endeavors at the treatment plant and to this effect WfP instituted surveillance systems to monitor adherence to the safety and occupational health guidelines especially for sanitation operators or workers using semi-mechanical systems like gulpers.

The findings also found out strategies like establishment of guidelines and standard operating procedures (SOPs) (65%) to guide operations, reflecting a structure approach to sanitation service delivery. Such frameworks are vital for ensuring consistent practices that enhance worker safety and service quality. Further, the presence of functional sanitation worker organisations, associations and unions (58%) are indicative of ongoing efforts to empower workers. These collectives not only advocate for the rights and needs of sanitation workers to foster a sense of community and support among individuals but are also important in enhancing workers welfare through improving access to credit and savings, and offering psychosocial services. Besides, the introduction of new technologies (55%) has improved efficiency and safety for sanitation workers as innovation solutions like the pitvaq technology was reported to have enhanced working conditions which in turn makes sanitation work less hazardous and more effective. NWSC revealed to collaborate with the Ministry of health to carry out regular immunization of staff working at sewerage facilities and yet scheduled times were introduced to protect workers from chemical toxification. This was indicated by the Engineer Lubigi Sewerage Treatment Plant as follows;

*“The biggest challenge is that of smell, which we have also handled by enclosing the critical structures for example sedimentation tank as a way of preventing gases from extending to our neighbors.....Our staff works in shifts.....A staff who works in critical areas works only 3 hours a day then leaves the plant.....Our staff are also given milk to neutralize the gases that have been consumed throughout the day..... In collaboration with the Ministry of Health, we conduct a regular immunization program for our staff”. Said the Engineer at Lubigi Sewerage Treatment Plant.*

The results also highlighted efforts to enable conditions for sanitation workers to utilise utility agency facilities such as sewer treatment plants (48%). It was revealed that workers access sewerage treatment plants to dump faecal waste for further handling. Further, gulper operators indicated that KCCA engaged NWSC and WfP to secure space where a dumping bay was established at Lubigi treatment plant, thereby guaranteeing sustained access to dumping infrastructure. Such initiative was revealed to significantly enhance operational capacity and integration into formal sanitation systems. This was indicated to further stimulate research into effective technologies and practices (48%) that necessitate continuous improvement in sanitation services and workforce welfare.

Further acknowledgement and recognition efforts were seen in the inclusion of private sanitation services in policies and strategies (45%) alongside legal protections for services, occupational health and safety of sanitation workers. Similarly, coordination between utility operators and sanitation workforce or enterprises

was also found to be apparent, reported by 45% of the respondents. The legal frameworks such as the Kampala Capital City Sewerage and Faecal Sludge Management Ordinance of 2019 legally guides management of faecal sludge in Kampala city and thus recognises both mechanised and semi-mechanised technology. Further, all public agencies like NEMA, KCCA and NWSC in liaison with WfP and other unions agreed to nominate the director of public health and environment in KCCA as a focal person for monitoring activities of all sanitation enterprises that secure Environmental and Social Safeguards (ESS) permits. KIIs also revealed other policy, legal and action frameworks that streamline sanitation service delivery in Kampala city and Uganda at large. Such include; (i) the National Environment (Waste Management) Regulations, 2020 governs the licensing of effluent treatment plants and other sanitation-related activities, (ii) The Kampala Sanitation Improvement and Financing Strategy which aims at improving sanitation in Kampala- including collection, transportation, treatment and reuse of faecal sludge, and the Kampala Sanitation Program (KSP) which protects the inner Murchison Bay of Lake Victoria through improved sanitation and sewerage. Such frameworks were reported to provide direction on safeguarding workers rights, regulate environmental sanitation services, put in place minimum standards for onsite sanitation technology options and faecal sludge transportation. Such frameworks were established to be leveraged upon to support technological uptake and innovation, real-time service delivery and customer-sanitation services provider relationship through connections using KCCA's call centre as well as partnerships that mobilise contractual arrangements with organisations.

Strategies aimed at addressing social challenges such as stigma include counselling and rehabilitation services (42%) and widespread awareness raising on the significance of sanitation workers in Kampala city. The design of health measures to protect workers was reported by 35%, reinforcing the importance of health and safety of sanitation workforce. The other strategies included; documentation of sanitation workers safety and occupational health (29%), advocacy for workers' rights (26%), incentivisation of formal registration of sanitation organisations (23%), trials and validation of technologies (19%), institution of financial schemes to boost services and livelihoods (16%) and eased access to credit services (10%). In fact, BSL revealed to have received funds in form of grants through the sanitation workforce unions or collectives to expand its activities and infrastructural resources as a way of enhancing its operations.

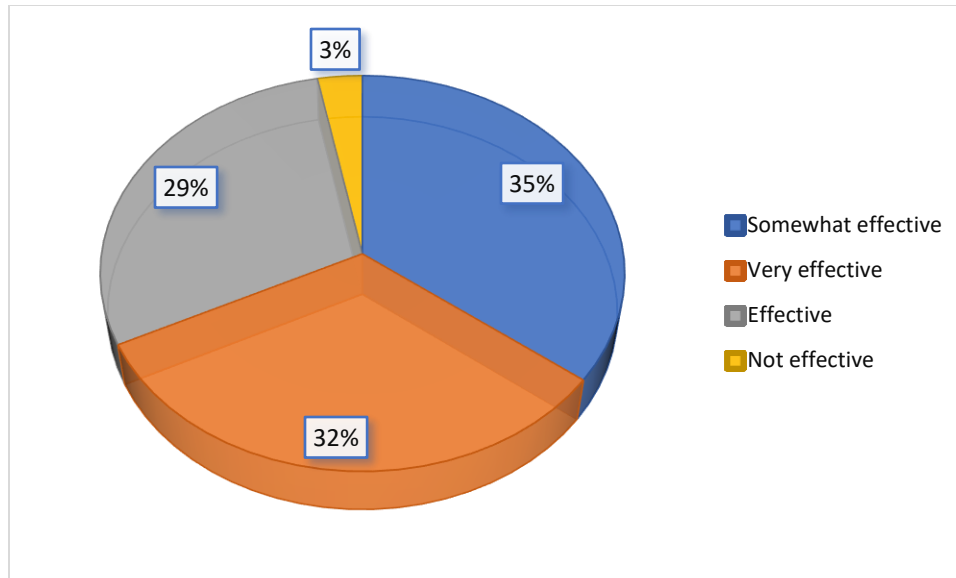
**Table 16: Initiatives to acknowledge and enhance visibility of sanitation workers organizations**

<b>Initiatives to acknowledge and enhance visibility of sanitation worker organisations</b>	<b>Frequency (n)</b>	<b>Percentage (%)</b>
Sanitations workers services recognized by public institutions i.e. NWSC, NEMA, KCCA etc.	28	90
Training of sanitation workers on occupational health and safety across the sanitation service chain	28	90
Guidelines/SOPs to guide operations are in place.	20	65
Sanitation worker organizations/ associations and unions exist to empower workers	18	58
New technologies have been presented to improve the efficiency and safety of sanitation workers	17	55
Enabling conditions in place to allow sanitation workers use utility agency facilities like sewer treatment plants.	15	48
Research on effective technologies and practices	15	48
Private sanitation services acknowledged in policies/strategies.	14	45
Occupational health and safeguards of sanitation workers is legally protected.	14	45
Sanitation workers are sub-contracted to offer services on behalf of utility operators.	14	45
Counselling and rehabilitation services to stigmatized workers	13	42
Health measures in place to protect sanitation workers.	11	35
Documented information on sanitation worker safety and occupational health	9	29
Efforts to advocate for sanitation workers' rights exist.	8	26
Incentives towards formal registration of sanitation workers' organizations	7	23
Trials, validation, and incubation of technologies	6	19
Financial schemes have been introduced to boost the services and livelihoods of sanitation workers	5	16
Eased processes to access credit services from financial institutions	3	10
Others	1	3

The study further explored the perceived level of effectiveness of the strategies indicated above. Findings showed that 96% of the enterprise operators revealed that strategies are effective (See Figure 9). KIIs further indicated that some strategies increased visibility of the sanitation workforce and formal recognition especially, access to dumping facilities, training and funds although many workers feel that the support is still inadequate and inconsistent. It was noted that government agencies such as NWSC and KCCA provided limited support although KCCA has engaged in campaigns to clean the city and compensated the workforce with well for specific tasks across the service chain. Vaccination against diseases and the provision of PPE are seen as positive steps but a general consensus was found that there is need for more effort to create awareness in local communities coupled with enhanced implementation of policies and guidelines. It was identified that such signs of progress require collaboration among government, CSOs, development partners, the private sector and communities to strengthen sustainable improvements in the welfare of the sanitation workforce and worker organizations. The FGD with male operators revealed as follows on vaccination;

*“We are vaccinated against various diseases so we don't have many health issues.....They vaccinate us Hepatitis B, tetanus, typhoid and the owner of the organization/enterprise pays” Revealed by men operating gulper technology.*





**Figure 9: Perceived level of effectiveness of appreciation, recognition and acknowledgement strategies**

### 6.2 Positive outcomes of sanitation workforce recognition and visibility elevation strategies

The study sought to establish the positive outcomes of sanitation workforce visibility and formalisation efforts (See Table 17). 74% of the respondents reported reduced service delivery gaps, indicating a marked improvement in the effectiveness of sanitation services provided by the workforce especially in low-income settlements of the city. The findings also showed reduced stigma and discrimination as 71% of participants acknowledged a decrease in negative societal perceptions towards sanitation workers and yet a strong compliance to safety and occupational health standards has seen an increased uptake and use of PPE gear (71%) which enhances workers' safety and health during service delivery. Skill enhancement and capacity-building initiatives have been pivotal with 65% of the enterprise owners recognizing improvements in the abilities of sanitation workforce. Besides, the strategies reportedly increased awareness about the challenges faced by sanitation workers (52%) which has contributed to changing attitudes and promoting respect for those engaged in sanitation service delivery and yet another 52% indicated that the formalisation efforts have led to a stronger adherence to safety and health precautions, fostering a culture of safety across the workforce.

Findings further suggested that the strategies have led to the emergence of diversified opportunities for collaboration, research, and innovation (48%) which has facilitated continued advancement in sanitation practices and technologies. Also, the strategies have enabled a shift towards semi-mechanized or motorized systems (45%), reflecting a modernization in service delivery technologies and innovations. FGDs and KIs revealed that some gulper operators were previously engaged in manual scooping and dumping faecal waste in wetland corridors creating more public health and ecological risks but currently offering the service using legally and socially acceptable technologies and practices. In addition, the recognition resulted into the construction of a dumping bay hence reducing illegal dumping practices. A respondent from WfP revealed that the formalisation and recognition of sanitation workers and their services led to the withdrawal of 80% of the sanitation works from illegal emptying and sludge disposal to embracing proper sludge management practices. A significant number of respondents (42%) revealed enhanced participation in local, national and global networks which has resulted into a surge in membership and engagement in local, national and international events on water and sanitation.

It was found out that the heightened visibility has contributed to improved stability in payments for sanitation workers as 39% of the enterprise owners reported more consistent financial remuneration that results from increased number of clients and financial returns from the sanitation services. The local networks reportedly increased demands for recognition at various levels including global, national and local levels (35%), alongside

with improvements in mental health wellbeing amongst the sanitation workforce. There was also reported upsurge in interests to regulate sanitation services and enhancing cooperation between sanitation workers and public and civil society sectors, highlighting a more integrated approach to addressing sanitation issues. Lastly, there was indicated improvements in legal and social protection for sanitation workers (32% each), access to reliable essential and emergency healthcare services and enhanced access to financial services (23% each).

**Table 17: Positive effects of visibility and formalisation efforts of the sanitation workforce**

<b>Effect of visibility and formalisation efforts</b>	<b>Frequency (%)</b>	<b>Percentage (%)</b>
Reduced service delivery gaps	23	74
Reducing stigma and discrimination	22	71
Enhanced uptake and use of personal protective gear	22	71
Sanitation workers' skills and capacity enhancement	20	65
Raised awareness about the plight of sanitation workers	16	52
Changed attitudes towards workers engaged in the sanitation service delivery	16	52
Increased adherence safety and health precaution	16	52
Diversified opportunities for collaborations, research, and innovations	15	48
Technological change i.e., from manual to semi-mechanized or motorized systems	14	45
Increased membership to and participation in local, national, regional, and global networks and/or events	13	42
Improved stability in payments	12	39
Increased global, national, and local demands for recognition	11	35
Mental health improvement amongst workers	11	35
Increased interest in regulation of sanitation workers and cooperation with the public and civil society sectors	10	32
Enhanced synergies for collaboration between sanitation workers organizations, public and civils society sectors	10	32
Improved legal and social protection	10	32
Improved access to reliable healthcare services	7	23
Increased access to financial services	7	23

The KIIs revealed positive effects of strategies for sanitation workforce elevation, formalisation and visibility as follows;

*“The beauty of having partners such as Wfp has made the situation better to improve recognition and formalisation processes..... KCCA is now more comfortable given the shifted perception and reception of gulper emptiers.....KCCA has moved away from the punitive approach as it is no longer a case of arresting them since it can't be done forever but rather working with other actors to see how to assist the sanitation workforce improve their working environment”. Said the Deputy Executive Director of Community Integrated Development Initiative (CIDI).*

*“Since the sludge treatment plant is not safe, NWSC recruited an occupational health and safety specialist to guide direction.....This led to adoption of safety programmes and every month we hold sessions to discuss issues of work-related accidents.....Trainings have been designed to target issues of accidents at work, compensations in case the accident and periodic inspections”. Indicated by the Human Resource Manager of Lubigi Sewerage Treatment Plant.*

*“There has been reduced disease outbreak across Kampala city especially in the underserved settlements which were hotspots for cholera over the last decade..... Following the recognition of the workforce services, Kampala has not had any widespread cholera outbreak”. Said the respondent from Wfp.*

*“There has been a general increase in market share for the gulpers... More people are confident in us, because KCCA has talked to the communities about us..... The making and passing of the sanitation ordinance by KCCA enabled us to get operational permits.... We are able to get clients and contracts from and with Non-Government Organizations (NGOs), United Nations (UN) organizations, and the oil and gas sector which wasn't the case previous.... Our recognition increased our customer base and provided sanitation entrepreneurs with customer retention system....” Said the Chairperson of Gulper Association of Uganda (GAU).*

*“With KCCA recognizing sanitation entrepreneurs, it introduced a digital application under the Weyonje program where it connected different sanitation companies to specific households and such clients remain specific to companies within the system”. Said the Chairperson GAU.*

*“With recognition, policies, action plans and frameworks have been put in place to protect sanitation workers rights and promote visibility of their sanitation worker services... These frameworks include the Kampala Capital City Sewerage and faecal Sludge Management Ordinance, 2019 and the Kampala Sanitation Improvement and Financing Strategy 2030... Such policies have enabled sanitation enterprises to operate and provide free PPEs to the operators”. Revealed by the respondent from KCCA.*

*“There used to be discrimination in the community but with visibility, its slowly diminishing.... There was stigma...my wife left me when I joined this job, but now things are better as we now have more exposure to trainings and direction... we also keep ourselves smart even when the job we largely engage with is dirty”. Said a sanitation enterprise owner who was previously an operator.*

*“The networks like the Uganda Emptiers Association and Gulpers Association have given me a voice and more recognition..... As an individual, I didn't have the capacity to own a dumping bay but now I get to use it because it's for the gulper operators”. Said the Sanitation Entrepreneur*

### **6.3 Unintended effects of sanitation workers and enterprises recognition and visibility elevation**

The recognition and formalisation of the sanitation workforce have led to several unintended consequences that merit consideration. The study found out that 61% of the enterprises face tax burdens in form of income tax, trade licenses, and environmental and social safeguards (ESS) permits. This increase in financial obligations was revealed to pose challenges for sanitation enterprises aiming to sustain their operations while balancing costs. Further, there is a growing desire among sanitation workers and organisations to scale operations, highlighted by 52% of the respondents. This ambition stems from the increased visibility and recognition of their work, but simultaneously brings about an increased demand for permanent employment arrangements, more investment in equipment and technical capacity which comes with higher costs of operations. Some entrepreneurs revealed struggling to scale up and out operations within Kampala and other areas of the country due to higher costs of operations mainly in transport, labour, and need for more equipment. Such pressures are straining the financial viability of businesses as they attempt to meet both operational needs and regulatory requirements. The director of BSL indicated as follows on tax burdens facing enterprises;

*“.....We are now paying more taxes compared to the past years before our work was recognized”. Said the director of BSL*

The formalisation processes also resulted into mandatory certification requisites related to technology, safety and environmental standards that require approval from various entities (45%). This was reported to have resulted into compliance challenges that complicate the operational landscape for sanitation workers. Alongside this, there was revealed emergence of contradictions and compliance issues with existing policies and legal frameworks (45%) that creates barriers to progress as organisations navigate the complexities of regulation. For instance, KILs revealed that even when NEMA issues ESS permits it is not certain about the safety

of the sludge handling services by the gulper operators, a situation which creates delays and skepticism around the formal processes previously agreed upon by various stakeholders.

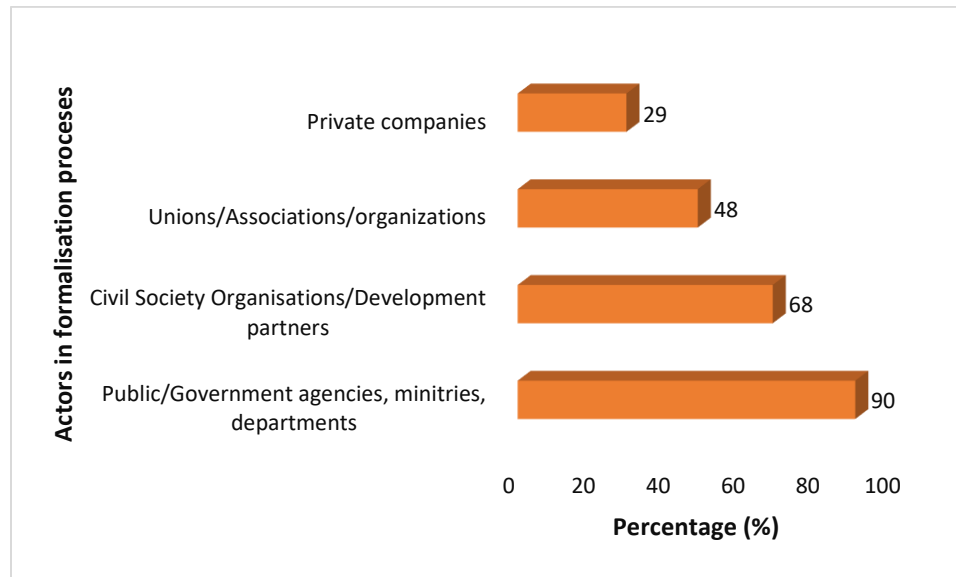
The rise of collective organisations, associations and unions to bargain for and support formulation of supportive policies that showed a shift towards advocating for workers' rights was also revealed to be unintended (39%) as more pressure was put on formal institutions to regulate the sector in favour of emerging enterprises with a significant workforce. Further, there was concerns of potentials for inequities within the workforce due to patronage of certain worker organizations (35%) which has resulted exclusion of some workers from available opportunities. Enterprises that were less connected and owned or operated by the workforce with low levels of education were revealed to be sidelined from opportunities to grants, reliable clients and networking opportunities at national, regional and international levels. Moreover, 26% of the respondents indicated to have noted fragmentation of sanitation worker organizations due to leadership related concerns that have weakened collective efforts and diluted the impact of advocacy initiatives. This has challenged efforts by the sanitation workforce to build and present a unified front in negotiations for better policies and conditions. The other unintended effect was putting in place closure time at the dumping bay where operators are inhibited from dumping beyond 06:00PM EAT and yet some continue operating beyond such time. Such practice has led to the reversal to illegal dumping in wetlands. In addition, entrepreneurs also revealed risk of their business being taken over by individuals with large financial capacities that may eventually push them out of business.

**Table 18: Unintended consequences of sanitation workforce recognition, visibility and formalisation in Kampala**

<b>Unintended effects of sanitation workforce recognition, visibility and formalisation strategies</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
Huge tax burdens like income tax, trade licenses, ESS permits	19	61
High desires to scale operations.	16	52
Increased demand to permanently employ workers at a higher cost	16	52
Mandatory certification requisites i.e., technology, safety, environment, and social safeguards (ESS) require approval by different entities	14	45
Emergence of contradictions/Compliance issues with the existing policy and legal frameworks	14	45
Collective bargaining of rights and supportive policies	12	39
Patronage of some worker organizations which result into exclusion from existing opportunities	11	35
Splitter factions of sanitation worker organizations	8	26
Other	4	13

### Section Seven: Characterization of actors in formalisation and visibility processes in Kampala city

The study established various actors behind the formalisation and visibility enhancement processes of sanitation workers in Kampala city. It was established that majority efforts are pushed by public, government agencies, ministries and departments (90%) followed by civil society organisations and/or development partners (68%), unions/associations/organisations (48%) and private sanitation companies (29%) (See Figure 10).



**Figure 10: Key actors in sanitation workforce formalisation processes in Kampala city**

The sanitation workforce formalization process is supported by a range of actors, each playing distinct roles in enhancing service delivery and improving conditions within the sector (See Table 19). The key actors and their roles are described below;

- **Ministries, Departments, and Agencies (MDAs):** The Ministry of Water and Environment (MWE) operates at the national level, focusing on the development and implementation of overarching policy and legislative frameworks that guide sanitation initiatives. The Ministry of Health (MoH) also functions on a national scale, responsible for creating guidelines related to occupational health and safety, alongside conducting regular immunization campaigns to protect the health of sanitation workers and the communities they serve. At the city level, the Kampala Capital City Authority (KCCA) plays a crucial role by establishing environmental and occupational safety standards, issuing ESS permits, supervising compliance with laws and regulations, and actively promoting technological innovation and community awareness about sanitation services.
- **The National Water and Sewerage Corporation (NWSC)** focuses on sludge treatment and safe handling, providing spaces for dumping waste, regulating worker conduct at dumping sites, and offering training for workforce capacity development. Similarly, the National Environment Management Authority (NEMA) is responsible for establishing guidelines and standards for sanitation services, issuing operation permits, and raising awareness of essential requirements for effective sanitation service delivery.
- **Civil Society Organizations and Development Partners:** A small group of civil society organizations (CSOs) and development partners operate globally to enable the inclusion of various sanitation policies. WaterAid works at a regional level by providing grants to support business development, while Water for People (WfP) facilitates links between clients and like-minded organizations at multiple levels, ensuring collaboration and resource sharing. The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) assists with infrastructure development in urban areas, and the Community Integrated Development Initiatives (CIDI) focuses on neighborhood-level training, capacity building,

and advocacy for workers' rights, while mobilizing workers into unions and conducting research for knowledge dissemination.

- **Unions, Associations, and Organizations:** Various unions and associations contribute to the advocacy of workers' rights on a global scale. The Kampala Gulpers Association (KGA) is focused on regional training and capacity development for workers, while the Gulpers Association of Uganda (GAU) engages in research and knowledge sharing. The Uganda Private Emptiers Association (UPEA) and Uganda Private Cesspool Emptiers Association work at city and neighborhood levels, respectively, toward the integration of occupational health and safety standards and ensuring compliance with existing regulations. Organizations such as the Women for Water Partnership (WWP) and the Women in Water and Sanitation Network (WWSN) mobilize partnerships for business growth and technological advancements in the sector, while the Pan African Association of Sanitation Actors (PASA) manages complaints and grievances.
- **Private Sanitation Enterprises:** More than sixty private sanitation enterprises provide essential sanitation services across the country. These include mechanical cesspool emptiers, which operate at the city level, ensuring adherence to workers' rights, and semi-mechanical enterprises, or gulper emptiers, which enhance social protection and protect occupational health standards while providing employment opportunities.
- **Sanitation Workers:** Over 250 sanitation workers at the neighborhood level are pivotal to service delivery. They not only provide essentials within the sanitation sector while enhancing public health and safety.

**Table 19: Key stakeholders in the sanitation formalisation process in Kampala**

<b>Actors</b>	<b>Estimated number</b>	<b>Scale of operation</b>	<b>Roles</b>
<b>Ministries, Departments and Agencies</b>			
Ministry of Water and Environment (MWE)	Not applicable	National	Develops and decides overall policy and legislative frameworks
Ministry of Health (MoH)	Not applicable	National	Develop guidelines for occupational health and safety Conduct regular immunisation campaigns
Kampala Capital City Authority (KCCA)	Not applicable	City Neighbourhood	Put in standards for safeguarding the environment, occupational health and safety Mobilise multi-actor support for enhanced service delivery Supervise compliance to existing laws and regulations Support technological innovation, access and uptake Awareness raising of sanitation workforce services in communities Capacity building and training Mobilisation of clients for enterprises Research, knowledge product development and dissemination Issue ESS permits to enterprises Develop city-specific policies, legal frameworks and guidelines
National Water and Sewerage Cooperation (NWSC)	Not applicable	National City	Sludge treatment and safe handling Provision of space for dumping facility Regulation of workforce conduct at dumping bay Training and capacity development of workers

National Environment Management Authority (NEMA)	Not Applicable	National City	Develop guidelines and standards for sanitation services Issuance of operational permits Awareness raising on key requirements necessary to provide sanitation services
<b>Civil Society Organisations (CSOs) and Development Partners</b>	About four (4)	Global	Enable policy inclusion
<ul style="list-style-type: none"> <li>WaterAid</li> <li>Water for People (WfP)</li> <li>Deutsche Gesellschaft für International Zusammenarbeit (GIZ)</li> <li>Community Integrated Development Initiatives (CIDI)</li> </ul>		Regional National City Neighbourhood	Provision of grants for business development Facilitate links to clients and like-minded organisations at local, national and global levels Support infrastructure development Training and capacity building of workers Enable occupational health and safety standards integration Advocacy for workers rights Mobilise workers into collective unions or associations Research, knowledge product development and dissemination
<b>Unions, Associations and Organisations</b>	About seven (7)	Global	Advocacy for workers rights
<ul style="list-style-type: none"> <li>Kampala Gulpers Association (KGA)</li> <li>Gulpers Association of Uganda (GAU)</li> <li>Uganda Private Emptiers Association (UPEA)</li> <li>Uganda Private Cesspool Emptiers Association</li> <li>Women for Water Partnership (WWP)</li> <li>Women in Water and Sanitation Network (WWSN)</li> <li>Pan African Association of Sanitation Actors (PASA)</li> </ul>		Regional National City Neighbourhood	Training and capacity building of workers Research, knowledge product development and dissemination Enable occupational health and safety standards integration Monitor compliance to existing standards Mobilise partnership for business uptake, expansion and policy mainstreaming Enable technological innovations, trailing and improvements Complaints and grievance management
Private sanitation enterprises	Over sixty (60)	National City Neighbourhood	Provide sanitation services Adhere to workers rights Enhance social protection Ensure adherence to occupational health and safety standards Provide employment to workers
Sanitations workers	Over two hundred fifty (250)	Neighbourhood	Offer sanitation services

Attend training and skills development programs  
Join workers unions for collective advocacy efforts on workers rights  
Interest illegal operators to join formal enterprises  
Enhance awareness in communities  
Mobilise customers and potential clients

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## **Section 8: Conclusions and Recommendations**

### **8.1 Conclusions**

This study set out to unravel the intended and unintended effects of visibility elevation, formalization, and recognition of sanitation workers in Kampala city. It highlights the complex socio-economic, occupational health and safety, financial, networking dynamics that interface the sanitation workforce alongside a series of welfare concerns arising from the precarious nature of the work and strategies for mainstreaming within policy, practice and advocacy landscape. The positive outcomes reveal a substantial reduction in service delivery gaps, with 74% of respondents reporting improvements, particularly in low-income neighbourhoods. This enhancement in service delivery is attributed to increased public recognition of sanitation workers' essential roles, leading to a 71% decrease in stigma and fostering a culture of safety through heightened compliance with occupational health standards, evidenced by a 71% rise in the use of personal protective equipment (PPE). Furthermore, skill enhancement initiatives have resulted in significant improvements, as recognized by 65% of enterprise owners, equipping sanitation workers with competences to meet evolving demands. This aligns with the 52% of respondents who reported greater awareness of the challenges faced by sanitation workers, fostering respect for their contributions to public health and urban service delivery. The shift towards semi-mechanized and mechanised systems further demonstrates modernization in service delivery, addressing prior public and ecological health risks associated with manual practices.

However, the formalization process has also introduced several unintended challenges. A striking 61% of enterprises reported increased tax burdens, including income taxes and environmental permits, complicating their financial viability. Further, 52% of sanitation workers expressed a desire to scale operations, but the rising costs associated with compliance, equipment investments, and permanent employment arrangements create significant operational strain. Compliance with regulatory requirements has added complexity, with 45% of respondents experiencing difficulties navigating mandatory safety and environmental certifications. Moreover, the emergence of collective organizations and unions aimed at advocating for workers' rights has led to inequities within the workforce, as reported by 35% of respondents, highlighting the exclusion of less connected workers from vital opportunities. Fragmentation among worker organizations, noted by 26% of participants has weakened collective advocacy efforts, diluting their impact on negotiations for improved policies and conditions. Restrictive measures, such as mandated closure times at the dumping bay, have inadvertently revived illegal dumping practices, posing environmental and public health risks. Furthermore, concerns about larger enterprises potentially displacing smaller sanitation businesses highlight precarity on sector's sustainability and continuity to recognise or protect workers' rights and enabling improvements in welfare conditions.

Lastly, while the recognition and formalization of sanitation workers in Kampala have led to substantial advancements in service delivery and societal perceptions, significant challenges remain that require deliberate action from all stakeholders involved. Collaborative efforts among government agencies, civil society organizations, and private enterprises are essential to create a more inclusive and sustainable framework for the sanitation workforce. Addressing regulatory burdens, enhancing organizational inclusivity, and fostering a supportive ecosystem is crucial in ensuring the long-term viability of sanitation services and the welfare of the workers who provide them. Tackling these challenges proactively will enable stakeholders to ensure that the contributions of the sanitation workforce are not only fully recognised, acknowledged and respected but also strengthen the overall sanitation landscape in Kampala city.

### **8.2 Recommendations**

Based on the findings of the study, the following recommendations are suggested for enhanced action across policy, practice, advocacy and research landscapes.

#### **8.2.1 Policy recommendations**

- a) **Revise taxation frameworks for sanitation enterprises:** There is need to develop and implement a tailored taxation framework that provides tax relief or incentives for sanitation enterprises, particularly for emerging businesses and during periods of low service demands. This can be realized through conducting stakeholder consultations to assess the impact of existing tax burdens and identify

potential reforms. Policy makers can consequently be engaged to develop a graduated tax system based on the size and revenue of sanitation enterprises.

- b) **Establish clear regulatory guidelines:** Collaborations with MDAs especially KCCA, NEMA and NWSC alongside other line ministries need to be initiated to create comprehensive, user-friendly regulatory frameworks that are socially acceptable, financially viable and environmentally feasible for sanitation workers. These can help resolve inconsistencies within existing frameworks. In addition, simplified regulatory guidelines for sanitation enterprises should be generated and disseminated to facilitate compliance with occupational health and safety, workers' rights or welfare requisites and environmental standards. Regular trainings should be conducted amongst sanitation workers and enterprises on compliance requirements.
- c) **Facilitate access to certifications:** Deliberate efforts should be made to facilitate access to certifications necessary for safety, environment safeguarding and hygiene standards. A centralized focal unit or body need to be established to streamline the certification application process, including support services for sanitation workers organisations or enterprises in completing applications and meeting requirements.

### 8.2.2 Recommendations for practice

- a) **Promote inclusive practices in collective organisations:** Efforts to foster establishment of inclusive practices within unions and collective organisations to ensure all workers have access to opportunities, financial empowerment and resources need to be put in place. These can be achieved through launching training programs on inclusive advocacy strategies, tailored to empower marginalized groups within the sanitation workforce especially the women, the least educated and the operators of equipment coupled with encouragement of mentorship programs that link experienced workers with new entrants.
- b) **Enhance capacity building initiatives:** Sustained capacity building programs focused on technical skills, safety standards and management practices for sanitation workers and enterprises. Partnerships with CSOs, development partners and education institutions can be secured to develop and deliver training materials through workshops, training sessions and resources on best practices in sanitation service delivery.
- c) **Encourage use of technology:** There should be intentional strategies to promote the adoption of technology and mechanization in operational practices within sanitation enterprises to improve efficiency and safety. This should be done through facilitating access to funding opportunities in form of loans, grants, subsidies and enabling savings for technology investment and offer training on new technologies applicable to sanitation services.

### 8.2.3 Recommendations for enhanced advocacy

- a) **Strengthen advocacy networks:** The existing sanitation networks need to be strengthened and sustained for continued advocacy for improved working conditions and rights. This can be through organising coalition-building workshops and roundtable discussions with various stakeholders to identify common goals and strategies for advocacy initiatives.
- b) **Increase public awareness campaigns:** Public awareness campaigns need to be conducted to highlight the critical role of sanitation workforce and challenges they face. In doing so, various media platforms including social media, community radios, and public events to disseminate information and stories that raise awareness of sanitation issues and the need for support to further improve service delivery while at the same time protecting the integrity and dignity of sanitation workers.
- c) **Advocate for legal protections for sanitation workers:** There should be initiatives to push for the development and enforcement of legal protections to safeguard sanitation workers' rights within the labour market. Platforms for collaborating with sanitation enterprises and labour rights organisations

to generating legal frameworks aimed at protecting workers against exploitation and conduct lobbying efforts with government MDAs to promote the adoption of such legislation and policy uptake.

#### **8.2.4 Research oriented recommendations**

- a) **Conduct periodic assessments on sanitation conditions:** Regular assessments of working conditions and the socio-economic status of sanitation workers and worker enterprises or organisations need to be implemented to inform policy and practice. Partnerships with academic institutions and research organisations to develop comprehensive studies that track the impact of interventions coupled with documentation of emerging challenges within the sector. These assessments should embed components of building capacities of sanitation workforce to conduct credible research and packaging knowledge products for policy development and guiding direction of actions as a way of generating a community of practice for sanitation workers appreciating the research process and possess competences to deliver research and data for development.
- b) **Evaluate the impact of policy changes:** This should be done through conducting evaluations of newly implemented policies or practices to assess their effectiveness and areas for improvement. A monitoring and evaluation framework that includes key performance indicators related to sanitation worker welfare and delivery outcomes need to be established for meaningful assessment of policy changes.
- c) **Research best practices:** Efforts to investigate successful sanitation models and best practices from other regions to identify potential adaptations for Kampala, success stories and lessons for meaningful change need to be prioritised. This can be through facilitating knowledge exchange workshops, field trips and technological or practices transfer amongst stakeholders to enable learning from successful interventions worldwide, focusing on sustainability, service delivery optimisation and worker engagement strategies.

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## About implementing institutions

### Urban Action Lab (UAL), Department of Geography, Geoinformatics and Climatic Sciences, Makerere University

The Urban Action Innovations Lab (UAL) stands at the forefront of addressing the pressing challenges of sustainable urban development. This cutting-edge, knowledge-based initiative is designed to serve as a proactive learning environment, drawing in a diverse range of stakeholders, including academic institutions, community members, the private sector, and policymakers. By fostering collaboration and engagement, UAL seeks to stimulate actionable solutions that directly respond to the complex urban issues facing contemporary societies.

Operating as a regional hub for enhancing university education and research on urban challenges, UAL is anchored by Makerere University. This partnership underscores its commitment to advancing sustainable urban development, climate change adaptation, and effective urban planning methodologies. At the heart of UAL's approach is a "learning-by-doing" philosophy, which equips students and researchers with the critical skills required to navigate the intricacies of modern urban challenges.

UAL's mission pivots on the provision of quality education and the promotion of innovation among students. To achieve this, the lab has outlined several key objectives:

- **Collaborative Research Environment:** UAL aspires to create a vibrant and collaborative space that pools skills, resources, and intellectual capital. This environment nurtures not only senior researchers but also early-career scholars and graduate students focused on urban issues.
- **Durable Research and Policy Strategies:** By incubating and disseminating research that champions economic and gender justice, UAL empowers communities that are at the forefront of urban struggles, helping to elevate their voices in developmental discourse.
- **Mentorship and Engagement:** UAL places a strong emphasis on mentoring early-career urban scholars from the Global South, enriching the urban research landscape and building capacity within the region.
- **Attracting New Partnerships:** The lab actively seeks to engage new partners and create innovative pathways for collaboration across diverse sectors, enhancing its impact and reach.
- **Contributions to Theory and Practice:** UAL partners with urban scholars, activists, planners, policymakers, community leaders, and organizations to produce critical, situated, and interdisciplinary knowledge that informs practical applications.
- **Evidence Generation:** The lab is committed to co-generating rigorous research and evidence that aid in designing, testing, and scaling effective urban programs. This work aims to unlock the potential of communities and influence policymaking, ultimately improving quality of life and advancing economic opportunities.

A vital component of UAL's success is its partnership with the National Slum Dwellers Federation of Uganda (NSDFU). As a community-based organization, NSDFU plays an essential role in facilitating access for students and researchers into local communities, thereby bridging the gap between academic research and real-world application.

In conclusion, the Urban Action Innovations Lab (UAL) is dedicated to cultivating a collaborative and innovative urban research environment. By empowering scholars, practitioners, and community members to engage actively in sustainable urban development, UAL aims to translate research into actionable insights. Through a multi-stakeholder engagement approach, UAL is poised to advance the urban agenda and improve lives across the East African region.

### Brilliant Sanitation Limited (BSL)

Brilliant Sanitation Limited (BSL) is a sanitation enterprise in Uganda dedicated to becoming the leading sanitation and hygiene service provider in Africa. With a mission focused on delivering quality, affordable, reliable, and sustainable sanitation solutions, BSL aims to meet and exceed the expectations of its customers and stakeholders. The company offers a wide array of services tailored to address diverse sanitation needs. BSL specializes in toilet emptying, efficiently handling various types of toilets, including septic tanks and VIP toilets, using advanced mechanical and semi-mechanized systems. Its fleet of cesspool and vacuum trucks, with capacities of 4,000 and 10,000 liters, ensures effective service delivery, while innovative gulping technology addresses challenges in slum areas where truck access is restricted. In addition to toilet emptying, BSL provides expert installation of Sato pans at affordable rates, enhancing sanitation quality. Their construction and maintenance services cover soak pit setting, toilet and septic tank construction, catering to the specific needs of clients. The company is also committed to public health through general cleaning, compound maintenance, and fumigation services that promote hygiene and safety in various environments. BSL also actively engages in community sensitization initiatives, raising awareness about sanitation practices to prevent epidemics, particularly in vulnerable areas. Their plumbing services further support sanitation infrastructure by supplying essential equipment and offering tailored plumbing solutions. In addition, BSL provides consultancy services to assist clients in overcoming sanitation challenges and optimizing their systems. Commitment to the highest standards of sanitation service is at the core of Brilliant Sanitation Limited's operations. With a focus on quality, affordability, and reliability, the experienced team at BSL continuously strives to foster healthier communities and enhance sanitation and hygiene practices across Africa.

