



KCCA

KAMPALA CAPITAL CITY AUTHORITY

For a better City



KAMPALA SANITATION IMPROVEMENT AND FINANCING STRATEGY



Acknowledgements

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► Contents

	Executive Summary	5
1.0	Preface	8
1.1	Background to the strategy	9
1.2	Purpose of the Kampala Sanitation improvement and Financing Strategy	9
1.3	Policy, regulatory and institutional framework for the strategy	9
1.4	Scope of the Kampala Sanitation Improvement and Financing Strategy	13
1.5	Strategy Development Process	14
2.0	Proposed Strategy	17
2.1	Objectives	18
2.2	Principles of the Strategy	18
3.0	Areas of Intervention	20
3.1	Containment	21
3.2	Collection & Transport	42
3.3	Treatment & Reuse	51
4.0	Coordination Framework	54
4.1	Coordinated planning, implementation & monitoring	55
4.2	Strategic partnerships	57
5.0	Financing Needs of the Strategy	58
6.0	Financing Approach for the Strategy	61
	Annex 1 - Literature and data sources for strategy	65
	Annex 2 – List of consultative meetings for the strategy development	66
	Annex 3 - Implementation plan	67

Acronyms and Abbreviations

AfDB	African Development Bank
BMGF	Bill and Melinda Gates Foundation
CBD	Central Business District
CATs	Community Activation Teams
DPs	Development Partners
DSTF	Divisional Council Sanitation Task Force
FIs	Financial institutions
FS	Faecal Sludge
FSM	Faecal Sludge Management
FSTP	Faecal Sludge Treatment Plant
GGGI	Green Growth International
GIZ	Gesellschaft für Internationale Zusammenarbeit (German development agency)
GKMA	Greater Kampala Metropolitan Area
GoU	Government of Uganda
HHs	Households
KaSIFS	Kampala Sanitation Improvement and Financing Strategy
KCCA	Kampala Capital City Authority
KfW	Kreditanstalt für Wiederaufbau (German Development bank)
KWSF	Kampala Water and Sanitation Forum
MFIs	Micro Finance Institutions
MOES	Ministry of Education and Sports
MOH	Ministry of Health
MWE	Ministry of Water and Environment
NEMA	National Environment Management Authority
NGOs	Non-Government Organisations
NWSC	National Water and Sewerage Corporation
O&M	Operation and Maintenance
PMT	Project Management Team
PS	Private Sector
PSR	Pupil Stance Ratio
RRR	Resource Recovery and Reuse
SDG	Sustainable Development Goals
SoPs	Standard Operating Procedures
TBC	Toilet Board Coalition
TMG	Toilets Making the Grade
USR	User Stance Ratio
UWASNET	Uganda Water and Sanitation Network
VHTs	Village Health Teams
WASH	Water Sanitation and Hygiene
WinS	WASH in Schools
WWTP	Wastewater Treatment Plant



▶ Executive Summary

Why The Strategy?

Kampala is on a positive trajectory to fulfilling its vision of a vibrant, attractive, and sustainable city. Kampala Capital City Authority (KCCA), National Water and Sewerage Corporation (NWSC) and their partners have made great strides towards improving the water, health, waste management and sanitation situation in Kampala. Assessment of the sanitation situation in 2019 indicated that safely managed sanitation was about 60%, up from 54% in 2015.

Despite the tremendous efforts, Kampala is still challenged with: high use of unlined pit latrines (39%), a high percentage of the population (50%) still relying on shared toilet facilities, poor levels of hygiene and handwashing in households, schools, health centres and public facilities. Open defecation (1%), is an aspect of concern in some of the low-income areas. Also, there is an urgent need to increase faecal sludge emptying efficiency, which is currently at about (60%).

The sewerage network which is a critical part of Kampala's sanitation system that caters for a large proportion of the transient population is facing challenges of: low customer connectivity (15%) in areas where the network exists, a large portion (70%) of sewers are old and are in need of urgent replacement, and limited network expansion into newer areas of Kampala. Consequently, there is a pressing need to increase the treatment capacities of faecal sludge and wastewater to cater to the steadily growing demands.

With the above situation in mind, KCCA jointly with NWSC and key partners, namely GIZ and the Ministry of Water and Environment envisage invigorating the efforts for sanitation improvements by developing this strategy.

What is the Strategy About?

The overall aim of the Kampala Sanitation Improvement and Financing Strategy (KaSIFS) is to guide city-wide planning and investment towards achieving equitable and universal access to improved sanitation and hygiene and safe management of Faecal Sludge (FS) and Sewerage along the entire sanitation chain in Kampala by the year 2030.

The strategy addresses all aspects of the sanitation chain, namely a) containment: Households, KCCA & private schools, KCCA health centres & private clinics, and public sanitation facilities, b) emptying & transport: faecal sludge management & sewerage, and c) treatment of faecal sludge & wastewater and resource recovery and re-use. Additionally, the strategy takes into consideration the impact of the transient population from the surrounding districts of Mukono and Wakiso on Kampala's sanitation system. The impact of poor solid waste management on the sanitation system is also considered in the strategy.

How was the Strategy Developed?

This strategy has been developed with close consultation of key stakeholders and will be a road map for all actors investing in sanitation improvements in Kampala. The strategy is based on information collected from secondary sources and was built ground-up in close consultation with the five divisional councils of Kampala, KCCA, NWSC, MOWE & GIZ. The sanitation improvements in Kampala are based on the CWIS approach and follow eight guiding principles, namely:

Systems approach to sanitation

Demand generation

Facilitating affordable finance

Coordination enhancement

Inclusiveness

Supply chain improvement

Support progressive improvements

Joint Implementation and Monitoring Framework



What does the Strategy Propose to Change the Current Situation?

In households, the strategy aims to increase safely managed sanitation from the current 60% to 100% by 2030. This will be achieved by upscaling the sale of affordable emptiable toilets through a concerted sanitation marketing campaign by medium-sized enterprises targeting landlords and tenants in low-income areas. The SANMARK will be coupled with increasing access to affordable financing to households and landlords and strengthened compliance monitoring of ordinances using smart ICT solutions.

Hygiene and handwashing practices will be increased from the current 24% and 22% respectively, to 100% by 2030. To achieve this, a comprehensive hygiene improvement campaign will be mainstreamed in all the five divisional councils of Kampala. The campaign will focus on, among others: hygiene and handwashing with soap practices, regularisation of pit emptying practices and links to service providers, proper use and maintenance of shared toilet facilities, appropriate solid waste management practices, and popularisation of the Sewage and Faecal Sludge Management Ordinance and KCCA minimum standards.

Open defecation, although low at 1%, will be eliminated by the provision of affordable and modern public toilet facilities located at strategic locations. Which will be combined with awareness-raising campaigns in areas where open defecation is prevalent.

In schools, 74% of primary and 85% of secondary (KCCA) schools do not meet the national standard of the pupil to stance ratio of 40:1, and only 43% of KCCA schools have water and soap for handwashing. The strategy aims to achieve the national standard by constructing 250 additional stances annually until 2030. Additionally, a concerted effort to improve hygiene and handwashing practices in schools will be undertaken by mainstreaming awareness-raising campaigns and increasing operation and maintenance budget to USD 4.5 per pupil per term. Furthermore, the 3-Star approach will be upscaled in all KCCA Schools; this approach addresses inter-sectoral collaboration, sustainable financing mechanism and strengthens school-based sanitation management.

The 3-Star approach will be also be promoted in all private schools, and incentives for better sanitation will be extended to private schools too. Additionally, hygiene and handwashing improvement campaigns will be conducted in private schools, and enhanced monitoring and inspection of all private schools will be regularised.

In health centres, all KCCA health centres will conform to Ugandan National Standards by 2030. This will be achieved by a construction and rehabilitation programme that will construct 325 new stances. Furthermore, the hygiene and handwashing improvement campaign will be mainstreamed in all KCCA health centres to increase awareness. The Water and Sanitation for Health Facility Improvement Tool (WASH-FIT) will be rolled out in all health centres. WASH-FIT is a holistic risk-based approach to protecting public health through the assessment of WASH in health care facilities, making necessary improvements, and sustaining quality WASH infrastructure service and management solutions in health centres. A similar approach to be undertaken for all private clinics in Kampala, with the addition of regular compliance monitoring and inspection of private clinics by health officers.

For public sanitation facilities, the acute shortfall of stances will be improved by building 200 additional modern public toilets in high transient population zones around Kampala by 2021. Furthermore, an estimated 45% of the public facilities are deemed unsatisfactory due to poor hygiene conditions. This will be improved by developing innovative multi-revenue business models that will ensure appropriate operation and maintenance of the facilities. In addition, KCCA will regulate and monitor all public toilets for compliance of ordinances and standards.

For faecal sludge collection & transport, the strategy aims to increase faecal sludge collection in Kampala from the current 911 m³/d to 1500 m³ by 2030, which will be achieved by reducing the costs faecal sludge emptying for the end-user via improved emptying and transport efficiency for pit emptiers (cesspool and gulpers). The transport efficiency will be achieved by piloting and upscaling the following proposed options: scheduled desludging; constructing transfer stations in strategic locations; installing dumping points on sewer networks; introducing innovative ICT approaches to make services cheaper and improve user experience.

Furthermore, the pit emptying sector will be professionalised by developing standard operating procedures for emptying services, regularising and improving on the licencing regime, and building capacities of pit emptiers in business enhancement. Further support to the pit emptiers will be provided via demand creation activities conducted by KCCA in all the five divisions.

KCCA's capacity to provide subsidised emptying services to public institutions will be enhanced by replacing its existing fleet with five new cesspool trucks.

For solid waste accumulation in pits, the practice of disposing refuse in pit latrines will be discouraged as it increases the cost of faecal sludge emptying for end-users and results in an additional waste product that needs special attention for appropriate disposals, such as incineration. The strategy aims at eliminating this practice by a combination of interventions focusing on social/sanitation marketing campaigns targeted at tenants and landlords discouraging the practice. Furthermore, technical solutions such as SatoPans and water closets that will make pits inaccessible will be popularised by KCCA. Additionally, KCCA will increase solid waste collection and disposal points in low-income areas and improve the overall efficiency of solid waste management in Kampala.

For the disposal of contaminated solid waste, NWSC will provide temporary storage areas at the faecal sludge treatment facilities. The solid waste will be periodically disposed in a municipal landfill or incinerated at the site.

For sewerage network, the strategy aims at increasing the sewer connections in sewer areas from the current 15% in the CBD to 90% by 2040. The planned network expansions and densification will provide sewerage connectivity to approximately 1.4 million users (resident and transient population). The coverage will be achieved based on sewer densification plan, coupled with an effective public relations campaign and compliance monitoring of sewer connections - jointly undertaken by NWSC and KCCA to ensure all customers in the sewer areas are connected.

Furthermore, innovative low-cost approaches such as simplified sewer systems (condominium) will be piloted and up-scaled based on detailed evaluation and to further enhance the network; sewer extensions will be undertaken in Nalukolongo, Ggaba, Nakivubo and Lubigi catchments. Additionally, outdated sewerage network will be rehabilitated and replaced to restore more than 50% of Kampala's old sewers.

For faecal sludge and wastewater treatment, the strategy aims at increasing the treatment capacities from the current 400 m³ to 1600 m³/d for faecal sludge and 38,000 m³ to 113,900 m³/d for wastewater to cater to the growing needs of Kampala. New faecal sludge treatment plants will be constructed in Nalukolongo, Mukono and Kajjansi (400 m³/d each), and new wastewater treatment plants will be built in Ggaba, Nalukolongo and Nakivubo (ongoing).

Due to the prevalent land acquisition challenges for the construction of new treatment plants, FS treatment capacities of the existing plants will be enhanced by introducing electro-mechanical dewatering equipment. Additionally, the strategy proposes introducing packaged wastewater treatment systems for high water consumption customers in the non-sewered parts of Kampala. To curtail future consumption of water in Kampala, the strategy also proposes to introduce water-saving measures (hardware & software) to reduce water consumption, thus decreasing wastewater loads.

To enhance resource recovery and reuse, the strategy proposes the co-combustion of FS & organic solid waste or bio-digestion of FS/wastewater with organic waste to produce energy and other by-products.

For improving collaboration and coordinated planning amongst stakeholders, the strategy presents the following mechanisms: 1) a Divisional Council Sanitation Task Force (DSTF) to oversee sanitation-related activities in each division; 2) a GKMA Infrastructure Coordination Taskforce as a platform to plan for future demands of the GKMA and; 3) a joint monitoring and implementation framework to optimise resource allocation for sanitation in Kampala.

The strategy also aims at building strategic partnerships amongst local and international actors to fulfil its objectives, namely in the areas of implementation, financing, technical assistance, business development and research and innovations.

How much does the Strategy Cost?

The required financing to accomplish the objectives of the strategy is estimated at USD 271.7 million, of which the total cost (hardware and software) for improvements in containment is estimated at USD 72.9 million (26.8% of the total cost), the improvements in faecal sludge collection and sewerage networks are estimated at USD 160.4 million (59.0% of the total costs). The increase in treatment capacities of faecal sludge and wastewater is estimated at 36.4 million (13.4% of the total costs), and cross-cutting costs are estimated at USD 2.0 million (0.8% of the total costs).

⁴Note: the NWSC master plan is envisioned until 2040.





WEYONJE!

Build it. Use it. Empty it.



2

Proposed
Strategy

1.1 Background to the Strategy

Past efforts by KCCA, National Water and Sewerage Corporation and their partners for sanitation and sewerage improvements in the City have put Kampala on a positive trajectory. Tremendous progress has been made towards fast-tracking equitable and universal access to improved sanitation & hygiene, safe management of faecal sludge and sewerage along the entire sanitation chain in Kampala City. Several projects by organisations like Amref, Water-for-people, WaterAid, SNV, CIDI, with varying implementation scopes across the sanitation chain, have provided complimentary investment and capacity development benefits that have led to the fast-tracking of improvements. Some of the notable efforts in this direction were achieved through these projects.

- a) Lake Victoria - Kampala Water and Sanitation Program – LV-WATSAN co-financed by the European Development Bank, KfW & AFD.
- b) Improving faecal sludge management through a private sector-led model funded by the Bill and Melinda Gates Foundation and DfID-UK;
- c) Resource Recovery and Safe Reuse (RRR) funded by GIZ and co-financed by the Swiss Development Co-operation (SDC),
- d) Behaviour change campaigns BCC (Weyonje) & City-Wide Inclusive Sanitation in Kampala overseen by KCCA and funded by the Bill and Melinda Gates Foundation etc.
- e) GIS Tracking and mapping of cesspool emptiers in Kampala overseen by KCCA, initiated by GIZ and GSMA.
- f) Kampala City-wide Sanitation Mapping/Assessment conducted by KCCA and financed by BMGF.
- g) The Kampala Capital City Authority (Sewage and Faecal Sludge Management) ordinance 2019.
- h) Operationalization of Service Level Agreements Framework (licensing of Cesspool truck operators) under the Kampala Faecal Sludge Management Project.
- i) Installation and operationalization of the KCCA toll free call centre for handling FS related issues.
- j) Implementation of an integrated project of Water Supply and Sanitation Services for the Urban Poor in Kagugube Parish, Central Division- Kampala funded by African Development Bank (ADB) 2008-2010
- k) Kampala Institutional Infrastructure Development Projects (KIIDP) supported by the World Bank

Nevertheless, Kampala is still challenged with issues such as the poor condition of toilets, inadequate faecal sludge disposal, collection, transport and treatment capacity, low sewerage coverage, weak sector coordination, inadequate compliance monitoring mechanisms and a largely scattered and partly unregulated informal private sector providing services at a premium price. As such, there is still a need to continue the improvement efforts and to reinforce them through strategic interventions and continuous role out of impactful interventions and programmes.

To address the ongoing issues in sanitation, KCCA and its supporting partners specifically GIZ have carried out an assessment of strategic approaches to deal with these challenges for Kampala. This sanitation strategy is part of that effort and, compliments and builds on these immense efforts previously carried out by sector partners.

1.2 Purpose of the Kampala Sanitation Improvement and Financing Strategy

The purpose of the Kampala Sanitation Improvement and Financing Strategy (KaSIFS) is to guide city-wide planning and investment to achieve the Sustainable Development Goals (SDGs) specifically the target 6.2, achieving safely managed sanitation for all – in Kampala by 2030. The strategy aims to provide a framework for all stakeholders investing in sanitation improvements in Kampala and to allow for coordinated programme implementation.

1.3 Policy, Regulatory and Institutional Framework for the Strategy

Policy Framework

The strategy aims to achieve specifically Sustainable Development Goal 6 & namely, target **6.2** – achieving safely managed sanitation in homes, schools, health centres and public places - complemented by wastewater treatment target **6.3** - halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally. Additionally, the strategy also focuses on SDG targets: **3.1–3.3, 3.9** as a way to reduce risk of waterborne disease, support education (**4.1–4.5**) and a productive workforce (**8.5, 8.8**), and address poverty (**1.1, 1.2, 1.4**), gender inequality (**5.1, 5.2, 5.4, 5.5**) and other inequality (**10.1–10.3**)².

²Adapted from UN Water 2016: Water and sanitation interlinkages across the 2030 agenda for sustainable development



Uganda Vision 2040 recognises the greater Kampala Metropolitan Area comprising of Wakiso, Mukono and Entebbe as pivotal for coordinated planning and implementation of different interventions. It also recognises that environment and waste management issues will be emphasized in line with the integrated physical planning models³, and this requires strict control of pollution and waste management, among others. The strategy is designed to promote these same objectives.

The goal of **NDP III (2020-2025)** is to increase average household incomes and improve the quality of life of Ugandans. This goal is to be achieved under the overall theme of “Sustainable Industrialisation for Inclusive Growth, Employment and Sustainable Wealth Creation”. The KaSIFS will contribute to NDP III through the reduction of risk to water-borne diseases and support education through healthy learning environments.

The final objective of the **National Integrated Sanitation and Hygiene Financing Strategy (ISHFS)** is services where household demands are promoted and regulated by a strengthened enabling environment. Implementation of the ISH has been limited by low prioritisation of sanitation at the lower government levels, a situation which will be abated at least in Kampala by the Coordination Framework that this Strategy suggests.

The Strategy also aligns with the **updated Kampala Sanitation Master Plan (2015)** which provides a basis for the proposed improvements of the sewerage network, faecal sludge and wastewater treatment components.

The **Kampala Sanitation Declaration** committed to a number of actions including: Exemplary leadership; community mobilization for promotion and provision of sanitation services for all; Facilitation of urban authorities and sub-counties to develop sanitation action plans; Coordinated and Multi-sectoral approach for sanitation improvement; Focus on schools for health promotion and positive lifelong behaviour change; Conducting of regular sanitation campaigns at district; Women and youth development at all levels; Involvement of Private sector and NGOs in sanitation services delivery, Capacity building at District level and Development of comprehensive policies and guidelines. The principles agreed upon then are still in line with the principles governing this strategy (KaSIFS).

Legal Framework

The supporting legal framework for the strategy includes a set of cross-cutting Laws, Regulations and Ordinances. The most relevant for the strategy are as follows:

The Constitution of the Republic of Uganda. The Constitution advocates for a clean and healthy environment. The Constitution empowers central government, local governments, and the communities/municipalities to ensure that every citizen in Uganda has access to a clean and healthy environment.

The KCCA Act 2010. KCCA is mandated to provide public health and safe sanitation in the communities (Part B, Section 35, 29 (l & s)). The Act allows KCCA to enforce ordinances and Byelaws made by the Authority (Part III, 19 (s)).

The Water Act, Cap 152 Clause 69: Provides for Trade waste from an individual to be treated by the sewerage authority based on the trade waste agreement.

The National Water and Sewerage Corporation Act, 1995 (Revised 2000) Cap 317. Section 4(2) of the NWSC Act mandates NWSC to develop the water and sewerage systems in urban centres and big national institutions throughout the country.

The Public Health Act (Cap 381) 1935 (Revised 2000). The Public Health Act is the principal sector law regulating all aspects of public health. Aspects of public health regulated under the Act, including water, sanitation, sewerage and drainage.

The National Environment Act, Cap 153 (Revised 2019). It is the principal legislation governing the environment in Uganda. Its objective is to provide for sustainable management of the environment, including protection of natural resources such as water.

The Water (Sewerage) Regulations (S.1.152-3). They provide for standards and requirements for trade waste discharged from land to the sewer systems –Regulations 22(3), (4)

³Vision 2040 Section 4.2.5 (230)



The Water (Waste Discharge) Regulations (S.1.152-4). The penalties for non-compliance are clearly spelt out, and this is a driver for innovativeness on the Private sector side to provide technology that would ensure that there is compliance

The KCCA (Sewage and Faecal Sludge Management) Ordinance (2019). This ordinance is for the collection, transportation, treatment and reuse of faecal sludge within Kampala City; and to regulate the service providers engaged in faecal sludge management.

The Local Governments (Kampala City Council) (Solid Waste Management) Ordinance, 2000. KCCA has utilized this ordinance as the basis for engaging the private sector in formalized solid waste collection in Kampala.

Institutional Framework for the Strategy

The strategy is based on the roles and responsibilities as per the current institutional setup of Kampala's sanitation & sewerage sector. The institutional setup of stakeholders is presented below in Table 1.



Sanitation Chain									
	Behavioural Aspects	Toilets				Conveyance		Treatment/ Disposal	Re-use
Functional Attributes	Hygiene Promotion	Household Sanitation	Schools/ Educational Institutions	Healthcare Facilities	Public Facilities	Faecal Sludge Collection/ Transport	Sewerage Network	Treatment and Disposal of Faecal Sludge and Wastewater	Safe, Beneficial Use of Human Excreta
Policy	KCCA/MoH	KCCA/MoH	KCCA/MoES	KCCA/MoH	KCCA/MWE	KCCA/NEMA	NWS/MWE	NWSC/MWE/ NEMA	NEMA/M-WE/MoH
Regulations	KCCA	MoH/KCCA	KCCA/MoES	KCCA/MoH	KCCA	KCCA/NEMA	NWSC/MWE/ KCCA	NWSC/NEMA	NEMA/MoH
Financing	KCCA/UCs/NGOs	HHs / MFIs	EIs/MoES/N-GOs/KCCA/DPs	KCCA/MoH/DPs	KCCA/NWSC/ DPs	PS/KCCA	NWSC/DPs	NWSC/DPs	NWSC/DPs/HH*
Capacity development	KCCA/DPs	NGOs	KCCA/MoH	KCCA/MoH	KCCA	PS/KCCA/NWSC	NWSC/DPs	NWSC/DPs	NWSC/NGOs/RIs NWSC/HH*
Planning	KCCA/UGs/NGOs	HHs/UCs	EIs/KCCA	HCS/KCCA	KCCA/NWSC	PS/ KCCA/DPs/NGOs	NWSC	NWSC/MWE	
Infrastructure provision	KCCA /NGOs	HHs	EIs/ KCCA	HCS/KCCA/MoH	KCCA/NGOs/ DPs/NWSC	PS/KCCA	NWSC/DPs	NWSC/DPs	NWSC/HH*
Enforcement	KCCA/UCs	KCCA/UCs	KCCA/UC	KCCA/UCs	KCCA/UCs	KCCA	NWSC/NEMA/WURD	NEMA	NEMA/KCCA
Asset Mgt	KCCA/NGOs	HHs	EIs	HCS/KCCA/MoH	KCCA / PS	PS/KCCA	NWSC	NWSC	NWSC/HH*
Service delivery	KCCA/NGOs/PS(F)	PS(F/I)	PS(F/I)	HCS / KCCA	PS(F/I)	PS(F/I)/KCCA	NWSC	NWSC	PS/NWSC/HH
Monitoring and evaluation	KCCA	KCCA/MoH	KCCA / MoES	KCCA / MoH	KCCA	KCCA/MWE	NWSC/MWE	NEMA/MWE	NEMA

DPs – Development Partners Management
EHD – Environmental Health Division
EIs – Schools and Educational Institutions
HCS – Health Centres
HHs – Households
KCCA – Kampala Capital City Authority

MFIs – Microfinance institutions
MoES – Ministry of Education and Sports
MoH – Ministry of Health
MWE – Ministry of Water and Environment
NEMA – National Environmental Management Authority
NGO – Non-Governmental Organisations

NWSC – National Water and Sewerage Corporation
PS – Private Sector: F – Formal; I: Informal
RIs – Research Institutions
UCs – Urban Councils
WURD – Water Utilities Regulation Dept
 *Composting toilets

1.4 Scope of the Kampala Sanitation Improvement and Financing Strategy

Geographic Scope

An estimated 2 to 2.5 million⁴ transient population from the towns of the surrounding districts of Wakiso and Mukono use Kampala's sanitation system during the day. Additionally, approximately 23%⁵ of all faecal sludge delivered to the two FSTPs originates from the metropolitan areas. Thus, the strategy focuses on the influence of the metropolitan area (Figure 1) on the city's sanitation systems and considers FS and Sewerage improvements in Kampala.

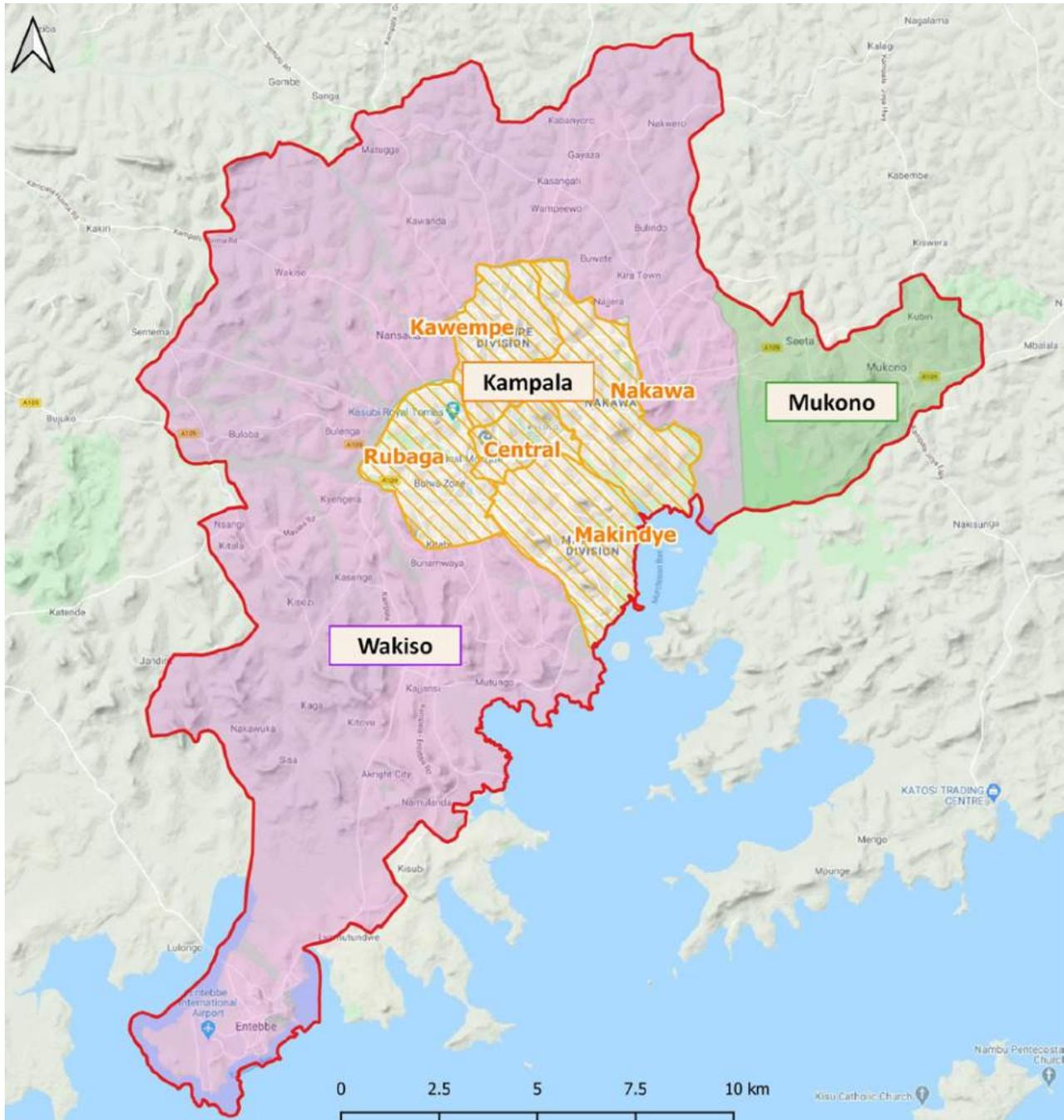


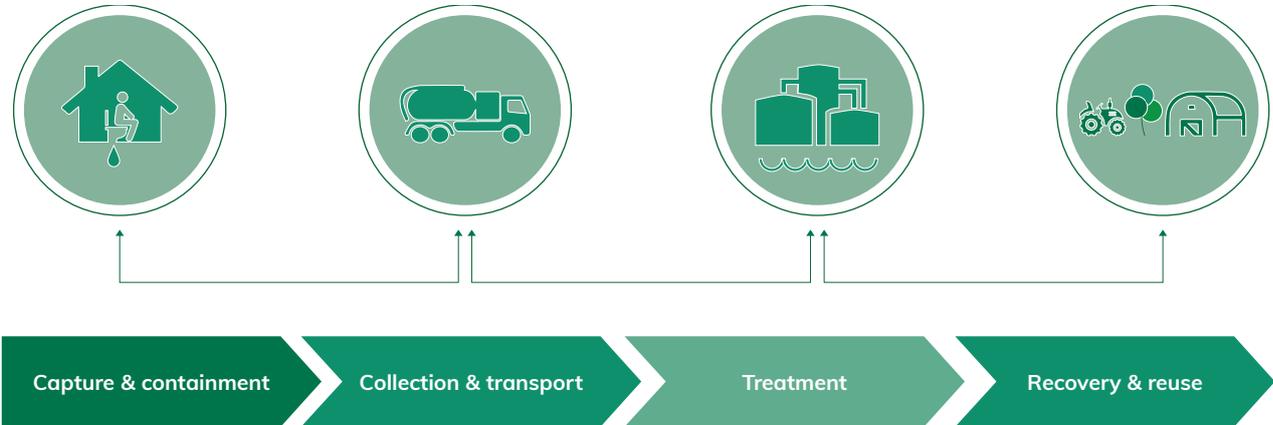
Figure 1: Geographical Scope of the KaSIFS (source: GIZ 2020)

⁴Kampala Capital City Authority Strategic Plan 2014/15- 2018/19, Page 20

⁵KCCA/NWSC Records of FS received at the Treatment Plants (July 2018- August 2019)

Thematic Scope of the Strategy

This Strategy is for Kampala City and covers all aspects of the sanitation chain, namely a) containment: Households, KCCA & private schools, KCCA health centres & private clinics, and public sanitation facilities, b) emptying & transport: faecal sludge management & sewerage, and c) treatment & reuse: faecal sludge & wastewater. In addition, the influence of poor solid waste management on the faecal sludge management is also encompassed in the strategy.



Box 2: Sanitation service chain

1.5 Strategy Development Process

Basis of the Strategy

The strategy is derived from inputs from several stakeholder engagements as well as documents previously produced by key actors in the sector. Figure 4 highlights the strategy development process, and Annex 1 presents a list of documents studied, analysed and discussed for ideas, suggestions and recommendations that form the strategy.

The Strategy Development Process

A project management team (PMT) was established to oversee the strategy development process. The PMT consisted of KCCA, NWSC, MWE and GIZ. The role of the PMT was to actively engage, monitor and make key decisions regarding the strategy. The process of developing the strategy was iterative and divided into seven steps/phases, see figure 2 for details on each step.

Strategy Development Process



Figure 2: Strategy development process



The strategy was informed by a sanitation situation analysis of Kampala that was based on secondary data. The validation of data was carried out via consultations with the five KCCA divisions. A planning retreat was conducted with the PMT to underpin the key issues to be addressed and identify approaches for sanitation improvements. The strategy is derived from close deliberations with key stakeholders ranging from the five KCCA divisions up-to high-level decision-makers. The stakeholders were mapped (figure 3) and actively engaged via several consultative meetings based on the following stakeholder map and engagement plan. A list of the consultative meetings is provided in Annex 2.

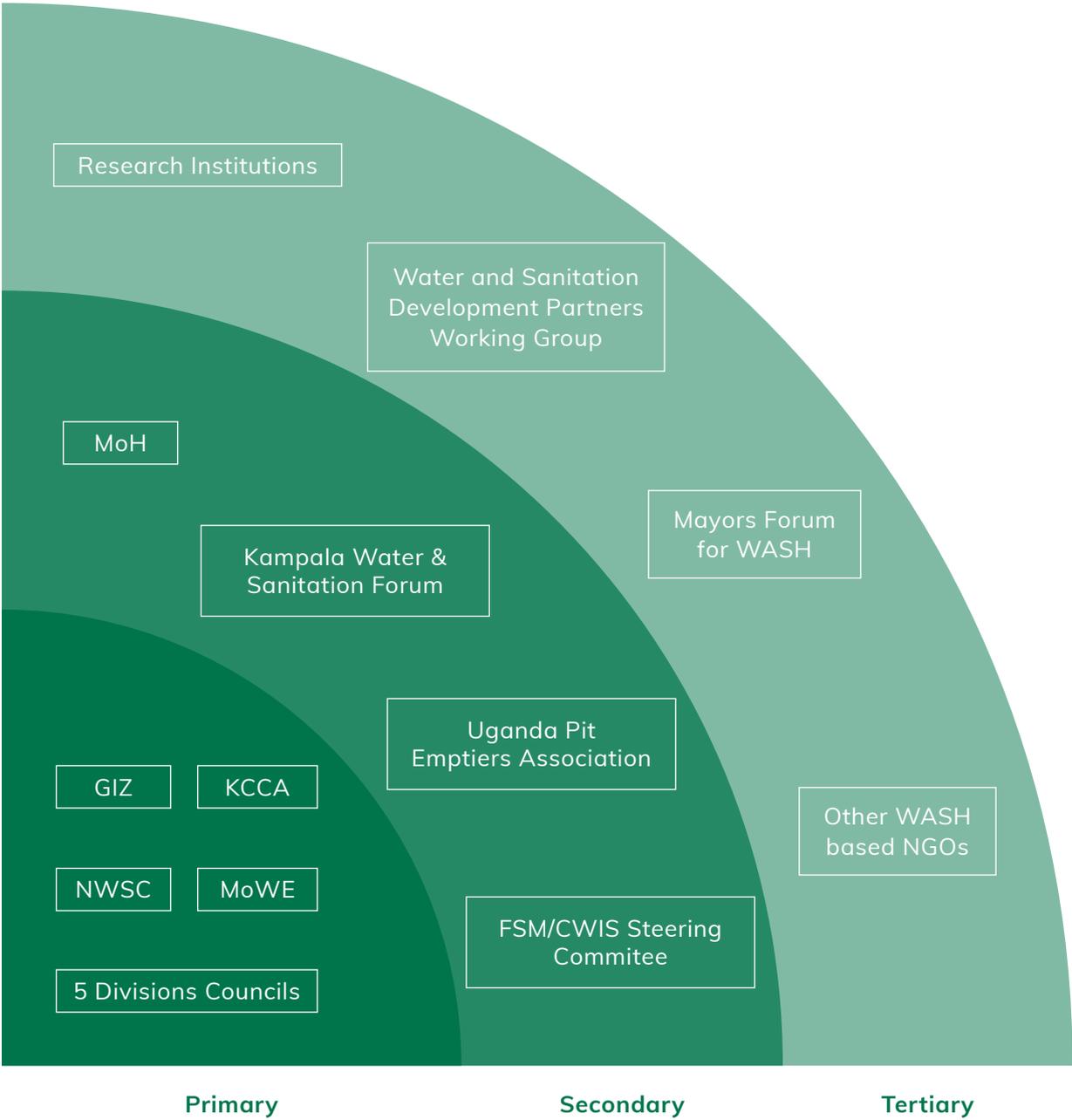


Figure 3: Stakeholder map



2

Proposed
Strategy

2.1 Objectives

The objective of the strategy is:

“To achieve equitable and universal access to improved sanitation & hygiene and safe management of faecal sludge (FS) and sewerage along the entire sanitation chain in Kampala by the year 2030”.

Where in:

Equitable: Implies progressive reduction and elimination of inequalities between population subgroups

Universal: Implies facilities close to home that can be easily reached and used when needed

Safely managed sanitation: Implies the use of an improved sanitation facility (flush/pour flush to piped sewer, septic tank or pit lined latrine or lined composting toilet) which (a) for households could be shared with a maximum of four (4) households and (b) for institutions complies to set the user to stance ratios and, where excreta and wastewater is safely treated on-site or safely transported and treated off-site.

2.2 Principles of the Strategy

The strategy is based on five guiding principles, which determine the approaches used to achieve the objectives:

1. Systems Approach to Sanitation

Develop approaches and measures that consider sanitation as a system (entire sanitation chain) and interdependencies with other associated sectors in urban development.

2. Inclusiveness

Develop approaches and measures to reach the most vulnerable, especially focusing on the urban poor, gender and the disabled.

3. Demand Generation

Create demand by scaling-up social/sanitation marketing campaigns and enforcing compliance of regulations related to safely managed sanitation. Intensify hygiene and handwashing behaviour change awareness campaigns. Increasing budget allocations for O&M of facilities to improve hygiene levels.

4. Supply Chain Improvement

Incentivise and support the private sector to providing affordable products and services across the sanitation chain. Support the improvements in service level efficiencies to reduce costs across the sanitation chain.

5. Facilitating Affordable Finance

Develop, implement and scale-up access to affordable financing schemes for low-income households.

6. Support progressive improvements

Allow stakeholders to improve in a phased and progressive manner to reach Kampala and national standards according to available resources.

7. Coordination Enhancement

Improve coordination & collaborations among actors in Kampala and beyond.

Foster stronger cooperation with local, regional, and global partners for a concerted effort to achieve strategic agreed-upon objectives of interest.

8. Implementation and Monitoring Framework Development

Develop, implement, and sustain a joint transparent system to track sector funding, project implementation and monitor project progress among various actors/players

The strategy with all its elements is presented in figure 4, which provides a snapshot and interlinkages of the objectives, principles applied, the approaches determined and the result areas to improve the sanitation situation in Kampala.



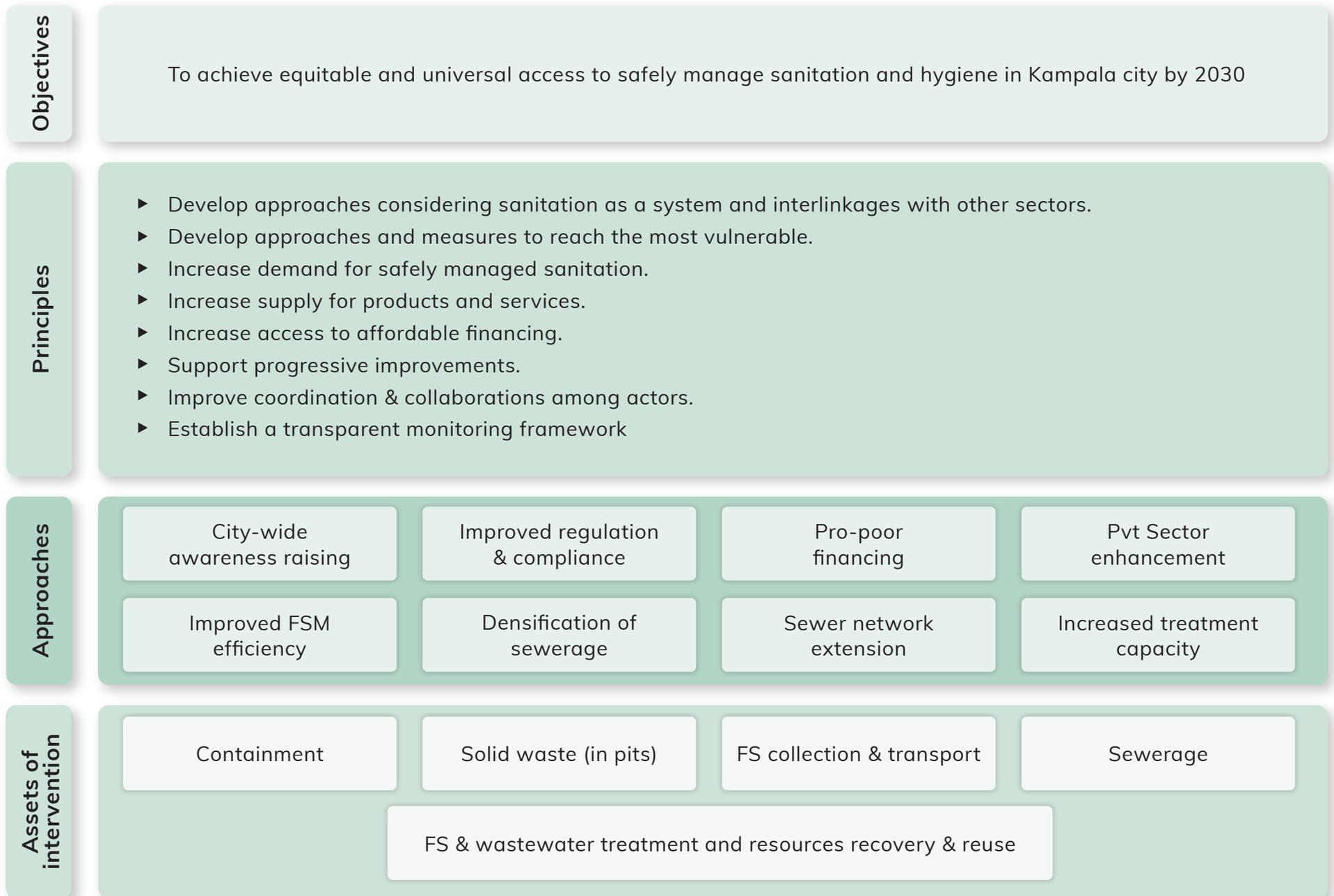


Figure 4: Sanitation strategy and its elements





3

Areas of
intervention

The areas of intervention discussed are containment, collection, and transport and finally, treatment and re-use. For each, an overview of the situational analysis, objectives to be achieved, and approaches identified to overcome the prevailing issues, key stakeholders involved in the approaches, the financing needs, and a set of performance indicators to measure progress is presented.

3.1 Containment

The focus here is on a) households, b) KCCA schools (primary & secondary), c) private schools, d) KCCA health centres, e) Private health clinics and f) public toilets in all five divisions of Kampala.

3.1.1 Households

Situational Analysis

The information for the situation analysis for households was mostly derived from secondary data sources such as: The KCCA city-wide sanitation mapping report and database of 2017; KCCA Sanitation Minimum technology Standards; The National Census report of 2014 (UBOS); Feasibility study report on appropriate sanitation for informal settlements in Kampala, (Fichtner,2015); Sanitation Assessment Reports by KCCA supported by Water Aid and GIZ among others.

- o In order to achieve the safely managed sanitation in households by 2030, an estimated 92000 toilets need to be constructed. The total value is estimated at USD 30 million⁶ over the next ten years.
- o 50% of Kampala's population is using shared sanitation facilities⁷, and these facilities are the largest part of the sanitation landscape in Kampala.
- o Current KCCA minimum latrine standards are too expensive (UGX 3 to 3.5 million/USD 800-950) to construct and unaffordable to most households (average income level of a household is UGX 600,000/USD 165)
- o Less than 30% of the population in Kampala is deemed creditworthy by commercial banks and micro-finance institutions, making it difficult for low-income groups to access financing for toilets.
- o 24% of toilets in Kampala are deemed to have acceptable/satisfactory hygiene level (Fichtner,2015)
- o 22% of the household population in Kampala practice handwashing after toilet use. (Fichtner,2015)
- o Due to the high risk-low return category of sanitation loans, the banks' interest rates range between 25% to 30% per annum and addition collateral security is required which makes accessing financial loans expensive and unattractive to most of the population.
- o Banks/NGOs/MFIs face a shortage in loanable funds limiting their ability to roll-out more credit to the sector.
- o Existing compliance monitoring structures need improvements in terms of capacities, budget and equipment.
- o Open defecation is practiced by 1% of the population; the incidence rates are low and sporadic, mostly taking place during the night when access to public toilets are unavailable. (Sanitation mapping study, KCCA, 2017)

Figures 5 to 8 show an overview of the status of containment facilities in Kampala.

⁶Considering the cost of DuraSan (prefabricated) toilets that are valued at USD 300 to 350 in Kampala.

⁷Several tenants using a single toilet



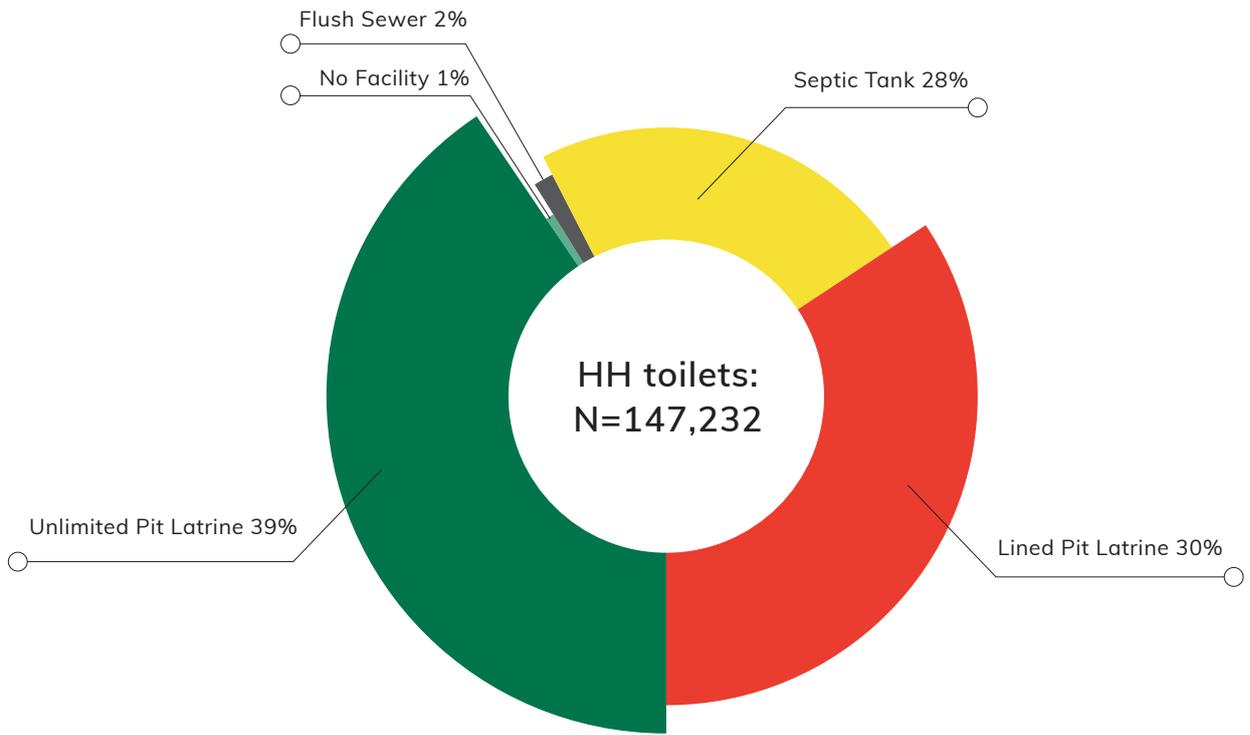


Figure 5: Toilet types for households in Kampala (Source: Sanitation Mapping, KCCA 2017)



Figure 6: Sharing of HH toilet facilities in Kampala (Source: Sanitation Mapping, KCCA 2017)



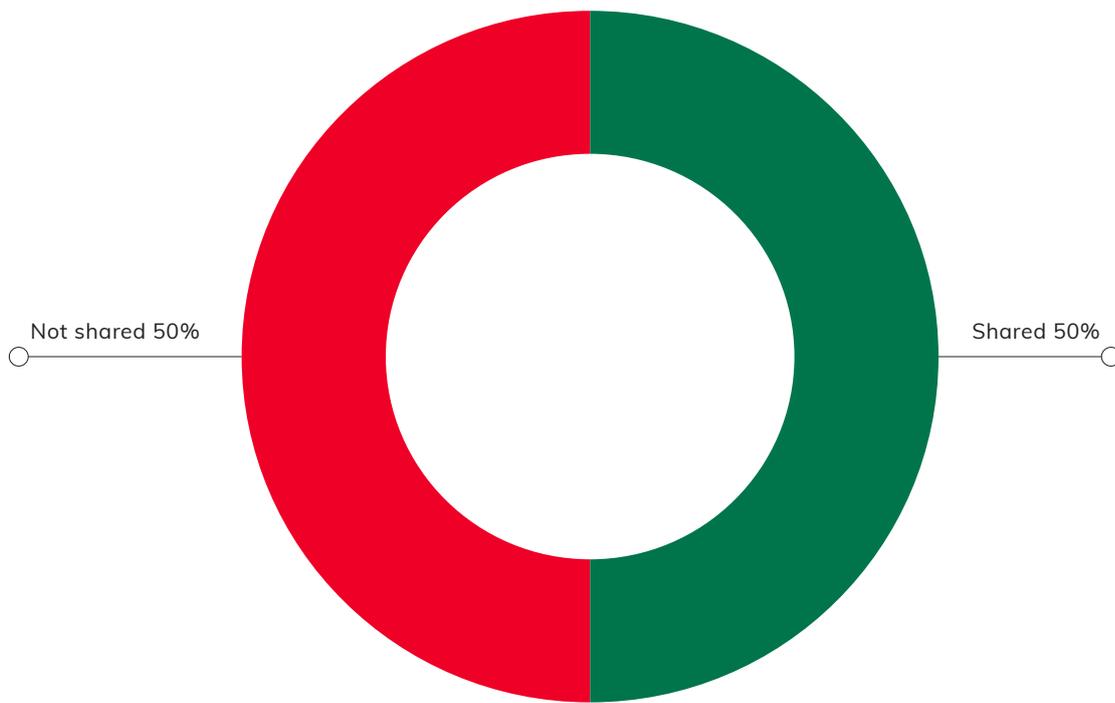


Figure 8: State of shared sanitation in Kampala

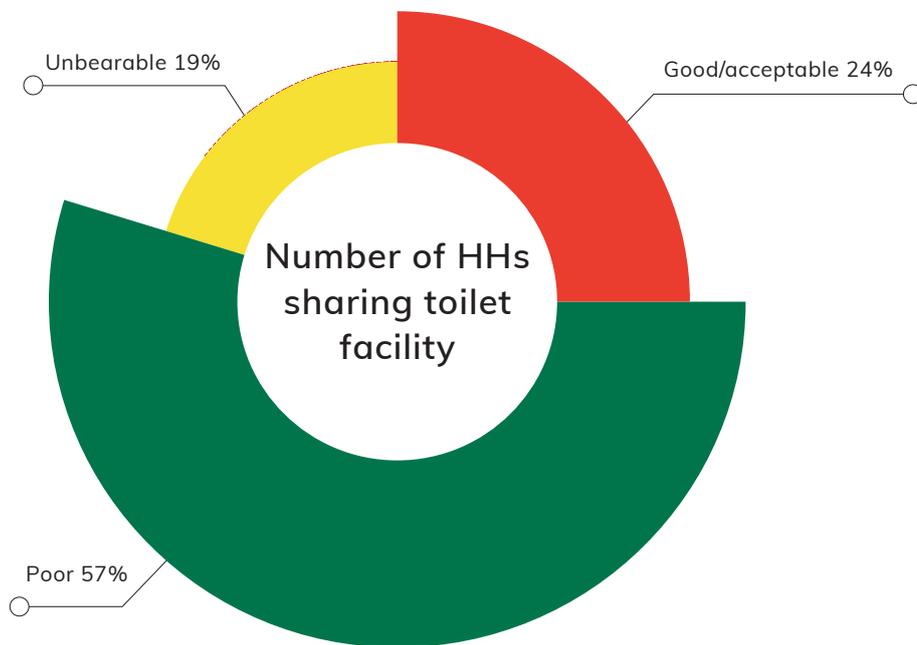


Figure 7: Hygiene levels of household toilets

Objective

Achieve safely managed sanitation and improved hygiene in households by 2030.

Indicator	Baseline Value	Target by 2030
Percentage of households conforming to safely managed sanitation facilities ⁸	60%	100%
Percentage of households with improved hygiene and handwashing practices	24% & 22% respectively	100%
Eliminate open defecation	1%	0

Approach

No.	Components	Descriptions
HH.1	Mainstream hygiene improvement campaigns in five divisions	<p>Develop, implement at scale and sustain a comprehensive sanitation and hygiene awareness campaign in all five divisions of Kampala until 2030. Awareness-raising campaigns will target households, landlords and tenants to improve hygiene practices and compliance to the sanitation laws and ordinances. These activities will focus on:</p> <ul style="list-style-type: none"> Hygiene and handwashing with soap practices Elimination of open defecation Popularisation of the Kampala Capital City Authority 'Sewage and Faecal Sludge Management' Ordinance, 2019 Popularisation of KCCA minimum standards Appropriate solid waste management practices prioritizing waste separation at HH level Regularisation of pit emptying practices and links to service providers Reduce sharing of toilets to 4 households per stance <p>Key implementing partner: KCCA</p> <p>Outputs:</p> <ul style="list-style-type: none"> Assess, update and conceptualise a strategy for the upscaled hygiene improvement campaign in 5 divisions Implement and sustain the hygiene improvement campaign until 2030 Periodically assess the outcomes and realign strategy if required

⁸Entails the use of an improved sanitation facility (flush/pour flush to piped sewer, septic tank or lined pit latrine) and where excreta is transported and treated off-site



No.	Components	Descriptions
HH.2	Menu of affordable emptyable toilets	<p>Develop a menu of low-cost, emptyable toilet options that are: affordable⁹ to households; can be easily produced locally with the help of the private sector; cater for varying needs and demands (including low lying area), and are accessible to all. The onsite sanitation options could include examples such as pre-cast modular toilets, plastic/fibre-glass toilets, container-based sanitation solutions, etc.</p> <p>Key implementing partner(s): KCCA, Development Partners, Research institutions</p> <p>Output:</p> <ul style="list-style-type: none"> o Add affordable toilets toilet options to the KCCA minimum sanitation technology standards
HH.3	Increased access to affordable financing for households	<p>Develop alternative methods for pro-poor sanitation financing that are accessible to the majority of households and are offered at lowered interest rates. The three proposed models that could provide financial institutions and households with a secure funding approach are:</p> <ul style="list-style-type: none"> • Partial Credit Guarantee Fund for sanitation loans • Sanitation Revolving Fund • A results-based sanitation subsidy <p>Key implementing partners: Commercial banks/micro-finance institutions/ Development banks/development partners</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Conducted an in-depth feasibility study on appropriate financing models for household sanitation o Establish a financing mechanism for disbursement of loans/subsidies
HH.4	Medium-sized enterprises to accelerate the supply of standardised design of toilets	<p>A professionalised industry around toilet construction is required to cater for the growing demand in Kampala. The volume of business (approximately USD 30 million) poses an attractive business opportunity for medium-scale companies to develop, produce and market standard/branded toilets. Additionally, Medium-sized companies would need little upfront capital to start the business and are better suited to sustain themselves in the long run as compared to masons and small businesses. Additionally, a business needs a conducive environment and demands that support business growth. A concerted awareness-raising campaign with stringent compliance monitoring of standards will induce demand for toilets. KCCA will ensure that these conditions are well supported.</p> <p>Develop and offer specialised business accelerator programs that support businesses/entrepreneurs with mentorship, partnership and the visibility to scale-up the sanitation economy in Kampala.</p> <p>Key implementing partners: KCCA, medium-sized enterprises, business incubators, such as and among others Enterprise Uganda, SNV's IAP, Makerere University Business school.</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Undertake a series of events to attract medium scale enterprises to join the toilet accelerator program o Develop a business incubation platform for sanitation entrepreneurs

⁹There is a need for toilet design options that are around USD 300



No.	Components	Descriptions
HH.5	Strengthened capacities for compliance monitoring of sanitation ordinance	<p>Strengthen the role of CATs/VHTs in the monitoring of compliance of minimum Standards, and the sanitation ordinance. To reduce the cost of monitoring compliance, smart ICT solutions such as citizens reporting via social media platforms or apps shall be introduced. The app or social media platform is to be interlinked with the currently operating KCCA call centre to make an integrated platform for information exchange, reporting non-compliance of the ordinance, etc.</p> <p>Key implementing partners: KCCA</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Develop and implement a sanitation and sewerage ordinance compliance strategy o Strengthen the operational capacity of compliance monitoring units o Develop and roll out the citizens reporting app.
HH.6	Increase access to public toilets	<p>Identify hotspot areas in the five divisions where open defecation is prevalent and increase access to affordable public toilets to eliminate open defecation. Develop innovative business models that take into consideration the characteristics of the local community and devise affordable tariff, operations protocol, and O&M plans.</p> <p>Key implementing partners: KCCA</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Assessment, analysis and recommendation for the elimination of open defecation in hotspot areas in the five divisions. o Construction of modern toilet facilities based on innovative designs
HH.7	Improve the O&M of shared sanitation facilities	<p>Improving the O&M of these shared facilities is crucial to improve hygiene levels. Targeted campaigns are focusing on landlords and tenants to improve the situation. Campaigns to focus on:</p> <ul style="list-style-type: none"> • Limiting the number of user to 20/stance¹⁰ • Defining the roles between tenants & landlords with respect to the O&M of facilities <p>Key implementing partners: KCCA</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Key messages developed and addressed with the Hygiene Awareness Campaign (HH.1)

¹⁰Research conducted by Guenther, I. et al. (2012): When is shared sanitation improved sanitation? Indicates that hygiene levels drop when a toilet is shared by more than 4 families or 20 users.



3.1.2 KCCA Schools

Situational Analysis

The information for the situation analysis for KCCA Schools was mostly derived from secondary data sources. The main source of data was the baseline assessments undertaken by KCCA with the support of NGOs and development partners such as GIZ and Water Aid. Engagements with the KCCA division officials also provided insight on the operational aspects.

- o An estimated 250 additional stances/year are required in KCCA schools to achieve the national standard of 40:1 ratio considering the growth of pupil intake until 2030.
- o 74% of primary and 85% of secondary schools do not meet the pupil stance ratio (PSR). PSR for primary schools is 58:1 and for secondary schools is 83:1 against the national standards of 40:1 (Source: KCCA/ Water Aid 2018)
- o Only 43% of KCCA schools have water and soap for handwashing at the toilets (Source: KCCA/Water Aid 2018)
- o Most schools provide buckets for used sanitary pads, but the final disposal of pads is a challenge as not clear guidance on disposal/solution (e.g. incinerators) is provided. (Source: KCCA/WaterAid 2018)
- o There is a general lack of prioritisation of a budget for O&M of toilets. Public schools face acute shortfall with an adequate budget for operation and maintenance of hygienic school toilets, handwashing, menstrual hygiene management and other related infrastructure and hygiene routines.
- o The current budget allocation is estimated at USD 30 cents (300 UGX per pupil per term) per pupil per annum. Schools with waterborne toilets are often challenged to pay for the water bills due to lack of adequate O&M budget planning.

Additionally, figures 9 to 11 show an overview of the status of toilet technology, level of hygiene and level of handwashing in KCCA Schools.

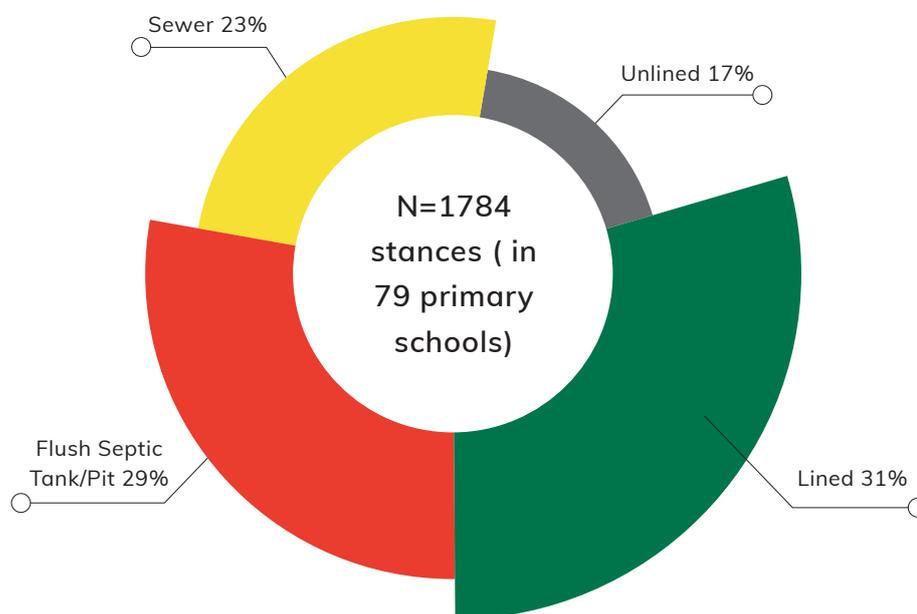


Figure 9: Toilet technologies in KCCA Primary and Secondary schools (Source: KCAA/WaterAid, 2018)

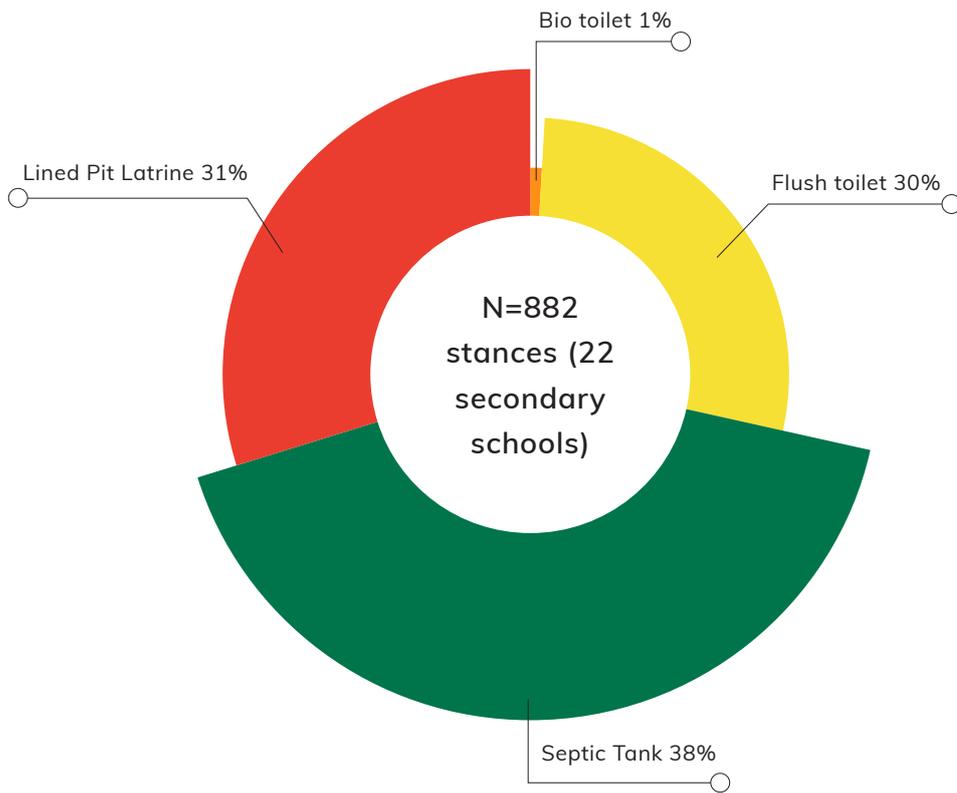


Figure 9: Toilet technologies in KCCA Primary and Secondary schools (Source: KCAA/WaterAid, 2018)

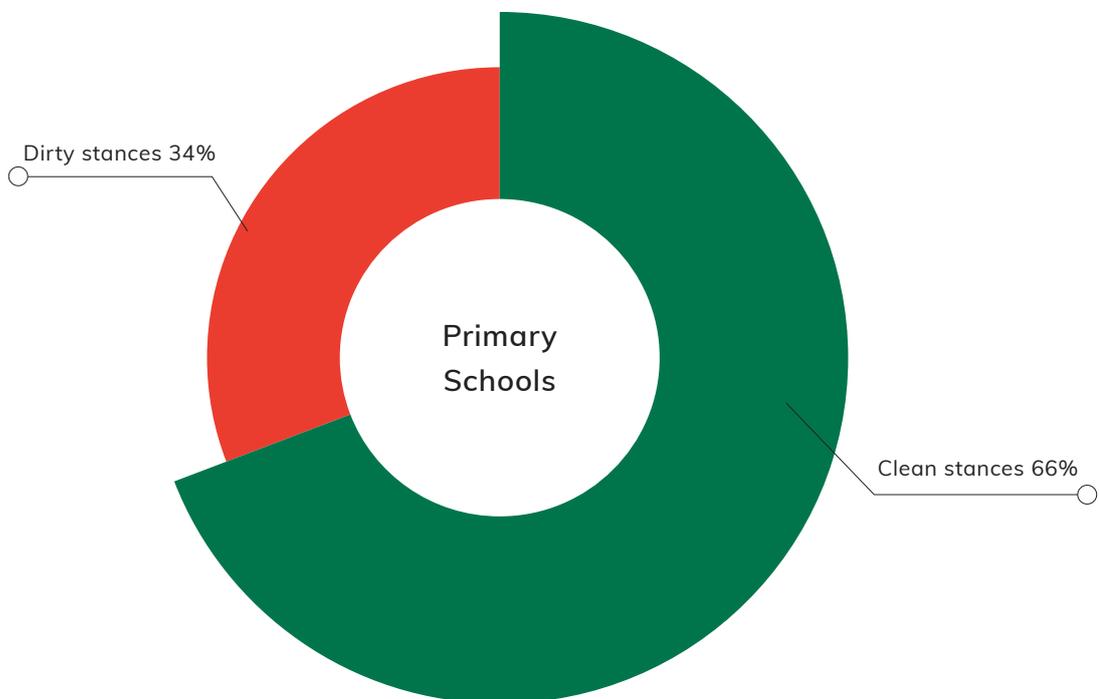


Figure 10: Level hygiene in KCCA primary and secondary schools (Source: KCCA/WaterAid, 2018)



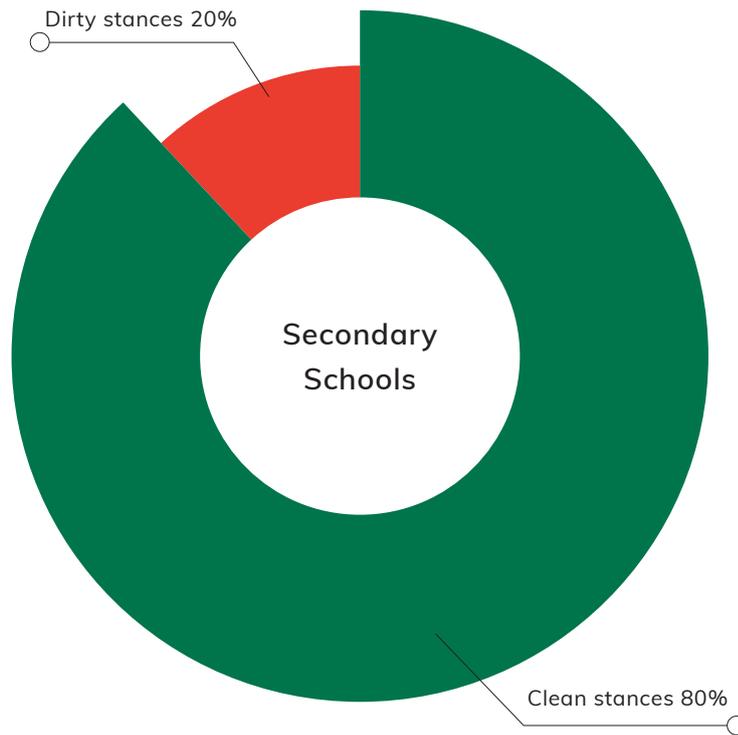


Figure 10: Level hygiene in KCCA primary and secondary schools (Source: KCCA/WaterAid, 2018)

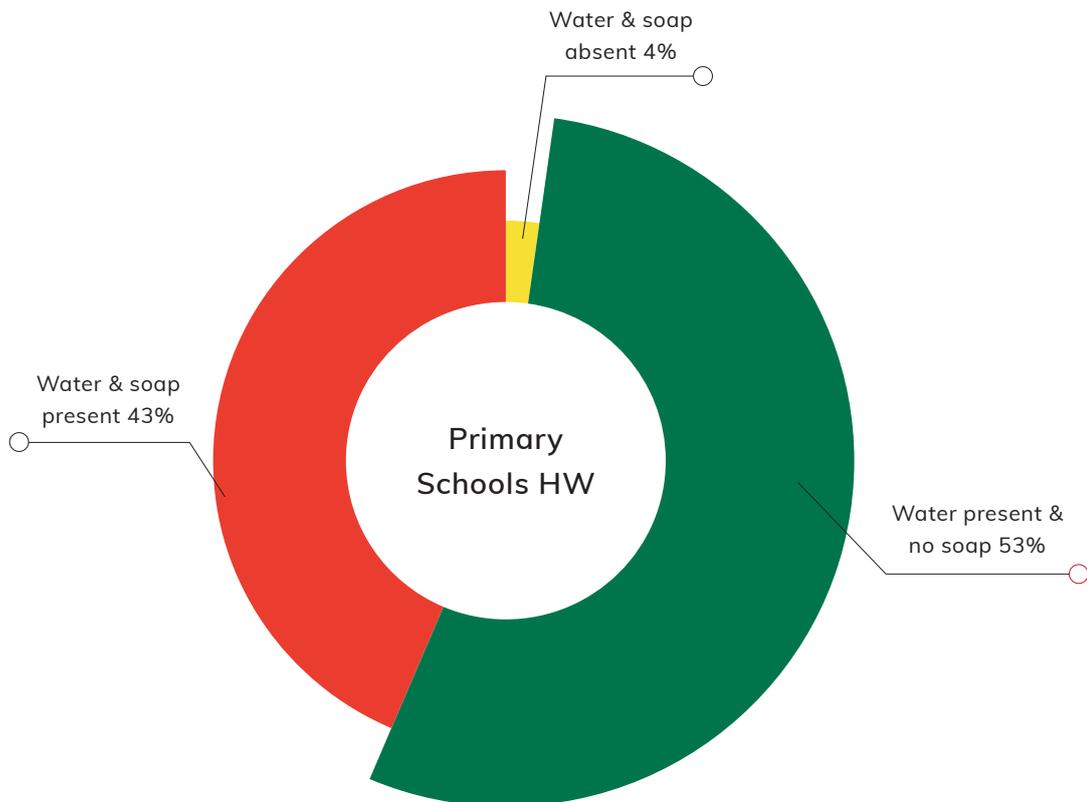


Figure 11: Level of hand washing in KCCA primary and secondary schools (Source: KCCA/WaterAid, 2018)

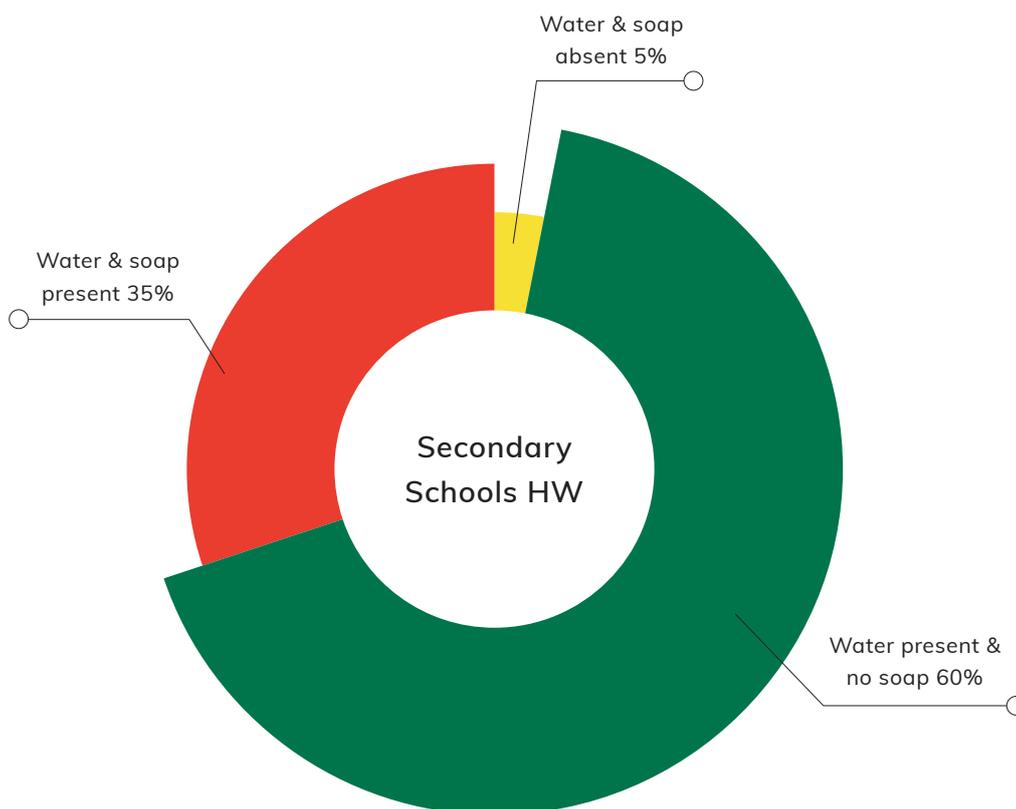


Figure 11: Level of hand washing in KCCA primary and secondary schools
(Source: KCCA/WaterAid, 2018)

Objective

Achieve improved access to water, sanitation and hygiene (WASH) with improved hygiene routines and adequate operation and maintenance of sanitation and hygiene facilities in schools by 2030

Indicator	Baseline Value	Target by 2030
Number of KCCA schools conforming with WASH in schools (WinS) standards (3-star approach)		
Primary schools	26% ¹¹	100%
Secondary schools	15%	100%

¹¹No data available, a proxy-indicator for gender segregated pupil-stance ratio of 40:1 is thus considered.



Approach

No.	Components	Descriptions
SC.1	School toilet construction and rehabilitation programme	<p>Develop a concerted plan to improve sanitation in schools and to implement the same periodically. The plan will identify the needs of the schools in each division, indicate proposed measures and identify supporting development partners to fund improvements fully or partially. An estimated 250 stances annually are required to fulfil the national standard of 40:1. KCCA will provide the major share of resources to the improvements. Part of the infrastructure developments in schools will be supported by development partners.</p> <p>Key implementing partners: KCCA, Ministry of Education and Sports and development partners</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Develop school WASH in Schools (WinS) improvement plan for each school to identify infrastructure needs o Develop a concerted construction and rehabilitation plan for school sanitation improvement o Construct and/or rehabilitate infrastructure in schools o Create incentives for schools to make investments in infrastructure
SC.2	Strengthened operation & maintenance in schools	<p>Increase budget for WASH in schools such that adequate levels of hygiene and functional handwashing facilities are provided to all schools in Kampala. The current estimation for the required budget to cater for adequate levels of Hygiene and handwashing in schools is approximately USD 4.5 per pupil¹² per annum.</p> <p>Additionally, NWSC must consider the application of the pro-poor water tariff to all public schools in Kampala.</p> <p>Key implementing partners: KCCA, NWSC, Ministry of Education and Sports and Development Partners</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Develop a school-driven WASH O&M budget and plan for each school o Increase budget for O&M in schools to USD 4.5 per pupil per term o Apply pro-poor water tariff to KCCA schools
SC.3	Upscale 3-Star approach to reach national WinS standards in all KCCA schools	<p>Upscale the 3-star¹³ approach in KCCA schools which is a policy of the Ministry of Education and Sports. The incremental approach addresses inter-sectoral collaboration, sustainable financing mechanisms, active community involvement and the strengthening of school-based management.</p> <p>Key implementing partners: KCCA/Development partners/ Ministry of Education and Sports</p> <p>Outputs:</p> <ul style="list-style-type: none"> o The 3-star approach is implemented in all KCCA schools o The tested 3-star monitoring mechanism is scaled and mainstreamed to all KCCA schools

¹²Estimation by GIZ Sanitation for Millions programme

¹³The 3-star approach is a mechanism of instilling good water conservation, sanitation and hygiene practices among the learners and school community in an incremental manner. The schools are encouraged to take simple steps with the available local resources to improve their WASH status from one star to the next in order to eventually reach the national standards (3 stars).



No.	Components	Descriptions
SC.4	Incentives for better sanitation in schools	<p>Annually host WASH school competitions with all public schools in Kampala participating in the drive to reach the 3-star level. The top-ranked schools get a reward/token of appreciation for their efforts and under certain conditions can qualify for infrastructure-related awards that correspond to their needs that are articulated in the WinS improvement plans and to the gaps to reach the 3-star level.</p> <p>Key implementing partners: KCCA, Ministry of Education and Sports and Development Partners</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Organise one WASH school competition annually
SC.5	Mainstream hygiene and handwashing improvements in schools	<p>Develop, implement at scale and sustain a comprehensive hygiene and handwashing improvement campaign in all KCCA schools. The campaign will target teacher and pupils, with a focus on, among others:</p> <ul style="list-style-type: none"> • Good hygiene behaviours in school and at home • Handwashing with soap • Menstrual hygiene <p>Outputs:</p> <ul style="list-style-type: none"> o Assess, update and conceptualise a strategy for the upscaled hygiene and handwash improvements campaign for all schools o Implement and sustain the hygiene improvement campaign in KCCA schools o Periodically monitor hygiene and handwashing levels in schools o Assess the outcomes and realign approach if required

3.1.3 Private Schools

Situational Analysis

- o 20% or 141¹⁴ private schools in Kampala have unlined toilet facilities
- o The current PSR in private schools is unknown
- o The hygiene conditions in private schools are unknown
- o The status of functional handwashing facilities is not known.

Objective

Achieve improved access to water, sanitation and hygiene with improved hygiene routines and adequate operation and maintenance of sanitation and hygiene facilities in private schools by 2030.

Indicator	Baseline Value	Target by 2030
Number of private schools conforming with WASH in schools (WinS) standards (3-star approach)	50% ¹⁵	100%
Primary schools		
Secondary schools		

¹⁴This is an estimate based on a sample from the Sanitation Baseline for Kampala 2017.

¹⁵No data available, so value is assumed to be 50%, until verified.



Approach

No.	Components	Descriptions
PSC.1	Promote 3-Star approach to reach national WinS standards in all private schools	<p>Upscale the 3-star¹⁶ approach in KCCA schools which is a policy of the Ministry of Education and Sports. The incremental approach addresses inter-sectoral collaboration, sustainable financing mechanisms, active community involvement and the strengthening of school-based management.</p> <p>Key implementing partners: KCCA, Ministry of Education and Sports and private schools.</p> <p>Outputs:</p> <ul style="list-style-type: none"> o The 3-star approach is promoted in all private schools o The tested 3-star monitoring mechanism is scaled and mainstreamed to all private schools
PSC.2	Incentives for better sanitation in schools	<p>Annually host WASH school competitions with all public and private schools in Kampala participating in the drive to reach the 3-star level. The top-ranked schools get a reward/token of appreciation for their efforts and under certain conditions can qualify for infrastructure-related awards that correspond to their needs that are articulated in the WinS improvement plans and to the gaps to reach the 3-star level.</p> <p>Key implementing partners: KCCA, Ministry of Education and Sports and Development Partners</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Organise one WASH school competition annually
PSC.3	Regularise monitoring and inspection of private schools	<p>Regular monitoring/inspection of schools to be undertaken by education officers. Notices to be issued for non-compliance.</p> <p>Key implementing partners: KCCA</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Establish a baseline for all private schools o Annual monitoring of private schools carried out by divisional education officers
PSC.4	Mainstream hygiene and handwashing improvements in private schools	<p>Develop, implement at scale and sustain a comprehensive hygiene and handwashing improvement campaign in all private schools. The campaign will target teacher and pupils, with a focus on, among others:</p> <ul style="list-style-type: none"> • Good hygiene behaviours in school and at home • Handwashing with soap • Menstrual hygiene <p>Outputs:</p> <ul style="list-style-type: none"> o Implement and sustain the hygiene improvement campaign in private schools o Periodically monitor hygiene and handwashing levels in schools o Assess the outcomes and realign approach if required

¹⁶The 3-star approach is a mechanism of instilling good water conservation, sanitation and hygiene practices among the learners and school community in an incremental manner. The schools are encouraged to take simple steps with the available local resources to improve their WASH status from one star to the next in order to eventually reach the national standards (3 stars).



3.1.4 KCCA Health Centres

Situational Analysis

The information for the situation analysis for KCCA Health Centres was derived from a WASH inventory undertaken by KCCA with support from GIZ. More insights were got from a WASH study undertaken in Kampala by Emory University and Makerere University with the support of Water Aid.

- o A recent WASH study on public health care facilities in Kampala and the metropolitan areas (supported by WaterAid, KCCA, Ministry of Health, Emory University and Makerere University) revealed that 48.1% of HCFs had limited water service; 85.2% had a limited sanitation service; 51.9% had a limited environmental cleanliness service; 57.4% had limited hygiene service, and 53.7% had limited health care waste management service. WaterAid/Emory study (2019)
- o The situation in KCCA health centres also has shortcomings with regards to the user to stance ratios: KCCA health centre in central division (USR 75:1), Kisenyi Health centre (389:1) in the central division and Kiswa Health centre (83:1) in Nakawa division. The standard is a USR of 25:1. The separation between gender was 50%, and this calls for a separation of the sanitation facilities that cater to men and women. (KCCA, WaterAid Report 2018).

Objectives

Achieve improved access to water, sanitation and hygiene with improved hygiene routines and adequate operation and maintenance of sanitation and hygiene facilities in KCCA health centres by 2030

Indicator	Baseline Value	Target by 2030
Number of KCCA Health Centres conforming to Ugandan National Standards for WASH in health facilities	5	8



Approach

No.	Components	Descriptions
HC.1	Initiate the WASH-FIT approach in all KCCA health centres	<p>Introduce and undertake the WHO-Unicef WASH-FIT (Water and Sanitation for Health Facility Improvement Tool) in all KCCA health centres. WASH FIT provides a holistic approach to protecting public health through the assessment and management of risks from an insufficient or unsafe water supply, inadequate sanitation and poor hygiene practices in health centres.</p> <p>Key implementing partners: KCCA and Ministry of Health</p> <p>Outputs:</p> <ul style="list-style-type: none"> o WASH-FIT approach is established in all KCCA Health Centres, including the formation of a WASH FIT team in each health centre and development of a water and sanitation safety plan for each health centre.
HC.2	Construction of new toilet blocks and rehabilitation of existing ones	<p>Assess the infrastructure needs of all KCCA health centres with regards to current and future requirements for new facilities and rehabilitation of existing ones. The current estimations suggest that 325 new stances will be required until 2030.</p> <p>Key implementing partners: KCCA, Ministry of Health and development partners</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Construct new facilities in KCCA health centres
HC.3	Improve monitoring and inspection of WASH in health facilities	<p>Regular monitoring/inspection of clinics to be undertaken by health officers. Notices to be issued for non-compliance.</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Set up a regular monitoring and reporting mechanism for WASH in health facilities
HC.4	Mainstream hygiene and handwashing improvements in KCCA Health care facilities	<p>Develop, implement at scale and sustain a comprehensive hygiene and handwashing improvement campaign in all KCCA health centres. The campaign will target patients, with a focus on, among others:</p> <ul style="list-style-type: none"> • Good hygiene behaviours at all times • Handwashing with soap and awareness of the faecal-oral transmission of diseases • Menstrual hygiene <p>Outputs:</p> <ul style="list-style-type: none"> o Implement and sustain the hygiene improvement campaign o Periodically assess the outcomes and realign strategy if required



3.1.5 Private Health Clinics

Situational Analysis

Information on the sanitation situation in private health clinics is quite scanty, and no comprehensive assessment has been undertaken. The estimates utilised were derived from the sampled facilities in the city-wide mapping database.

- o It is estimated that 17% or 246 private clinics in Kampala do not have lined toilets
- o User to stance ratio in private health clinics is not known
- o The hygiene conditions in private health clinics are not known

Objective

Achieve safely managed sanitation and improved hygiene in KCCA health centres by 2030.

Indicator	Baseline Value	Target by 2030
Number of Private Health Clinics conforming to Ugandan National Standards for WASH in health facilities	*17	100%

¹⁷Data not available, baseline to be established.



Approach

No.	Components	Descriptions
PHC.1	Awareness-raising campaign targeting private health clinics in five divisions	<p>Descriptions</p> <p>Information campaign to target all existing and future private health clinics. The campaign is to focus on the following aspects of waste management</p> <ul style="list-style-type: none"> • Use of Safely contained toilets and regular emptying • User to stance ratios, 25:1 • Hygiene • Medical waste disposal <p>Key implementing partners: KCCA</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Develop information and communication material from existing WASH in health centres to cater to private clinics o Awareness-raising campaigns targeting private clinics in 5 divisions – using existing structures
PHC.2	Initiate the WASH-FIT approach in all Private Health Clinics	<p>Introduce and undertake the WHO-Unicef WASH-FIT (Water and Sanitation for Health Facility Improvement Tool) in all Private Health Clinics. WASH FIT is a holistic risk-based approach to protecting public health through the assessment and management solution in health centres.</p> <p>Key implementing partners: KCCA, Ministry of Health and Private Health Clinics</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Training for WASH-FIT approach in all private Health Centres,
PHC.3	Regularise monitoring and inspection of private clinics	<p>Regular monitoring/inspection of clinics to be undertaken by health officers. Notices to be issued for non-compliance.</p> <p>Key implementing partners: KCCA</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Annual monitoring of private clinics carried out by divisional health officers
PHC.4	Mainstream hygiene and handwashing improvements in private health clinics	<p>Develop, implement at scale and sustain a comprehensive hygiene and handwashing improvement campaign in all private clinics. The campaign will target patients, with a focus on, among others:</p> <ul style="list-style-type: none"> • Good hygiene behaviours at all times • Handwashing with soap and awareness of the faecal-oral transmission of diseases • Menstrual hygiene <p>Outputs:</p> <ul style="list-style-type: none"> o Implement and sustain the hygiene improvement campaign o Periodically assess the outcomes and realign strategy if required



3.1.6 Public Toilets

Situational Analysis

The source of information for public toilets was derived from: The city-wide sanitation mapping database; Public toilet inventories developed by KCCA with support of GIZ; and Assessment Reports from NWSC under the Lake Victoria Watsan Project.

- o Estimated 6% of the transient population (approximately 120,000 persons) use around 400 public toilets in Kampala¹⁸. The rest use institutional/commercial toilets at their places of work.
- o An acute shortfall in the number of stances for public toilets. Estimated 225 persons/stance for KCCA run free toilets, which is more than twice the national USR standard of 100:1
- o 15% of public toilets are unlined
- o 45% of the public facilities are deemed unsatisfactory due to poor hygiene conditions
- o There is no regulatory framework governing public sanitation facilities in Kampala, the management model, standards for service provision, user fees, operating hours are not defined.
- o The current compliance monitoring activities are inadequate to oversee the level of services provided to the users
- o An estimated 300 to 400 public sanitation facilities exist, 200 are under construction or planned for construction. Nevertheless, there is a need to double the number of public toilets by 2030 in key/strategic locations of the city.

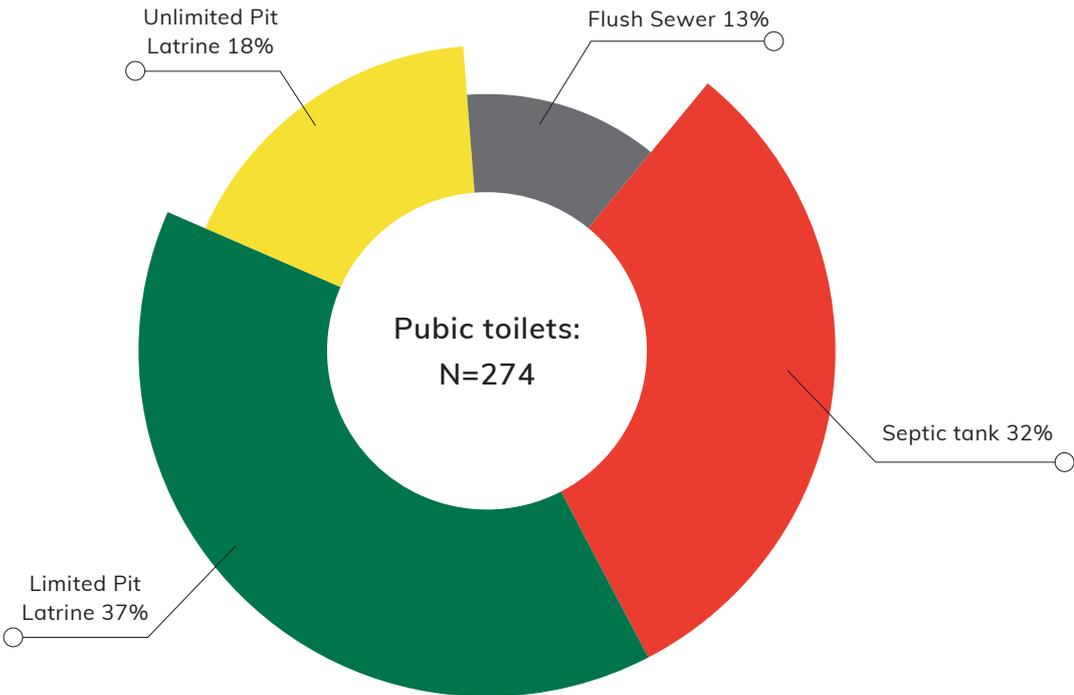


Figure 12: Toilet technologies and cleanliness of public toilets (Source: KCCA sanitation baseline, 2017)

¹⁷Data not available, baseline to be established.

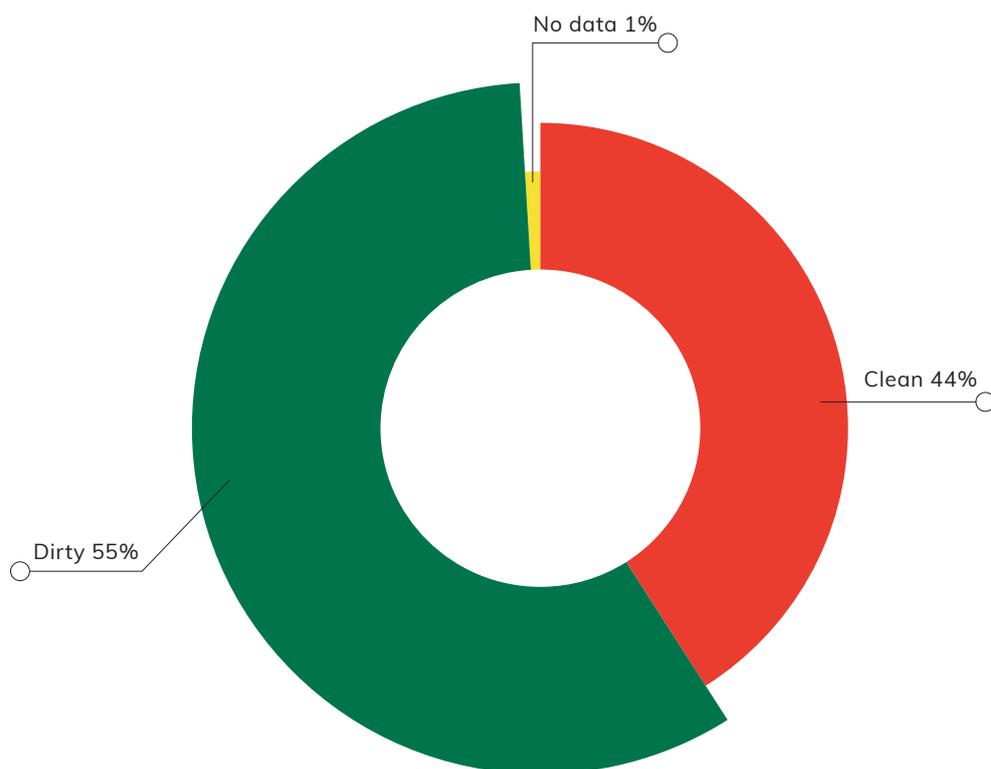


Figure 12: Toilet technologies and cleanliness of public toilets (Source: KCCA sanitation baseline, 2017)

Objective

Achieve safely managed sanitation and improved hygiene in public sanitation facilities¹⁹.

Indicator	Baseline Value	Target by 2030
Number of public toilets conforming to safely managed sanitation practices	340	400+N
Number of public toilets with improved hygiene and handwashing awareness	220	400+N
Number of public toilets conforming to the user-stance-ratio of 100:1	-*-	-*-+N

¹⁹Public Sanitation Facilities are toilet blocks that are KCCA owned and managed or/and privately owned and commercial run. Community run toilets are not considered as public toilets for this report.
 N: Additional stances required by 2030 based on population increase
 -*-: Baseline to be established

Approach

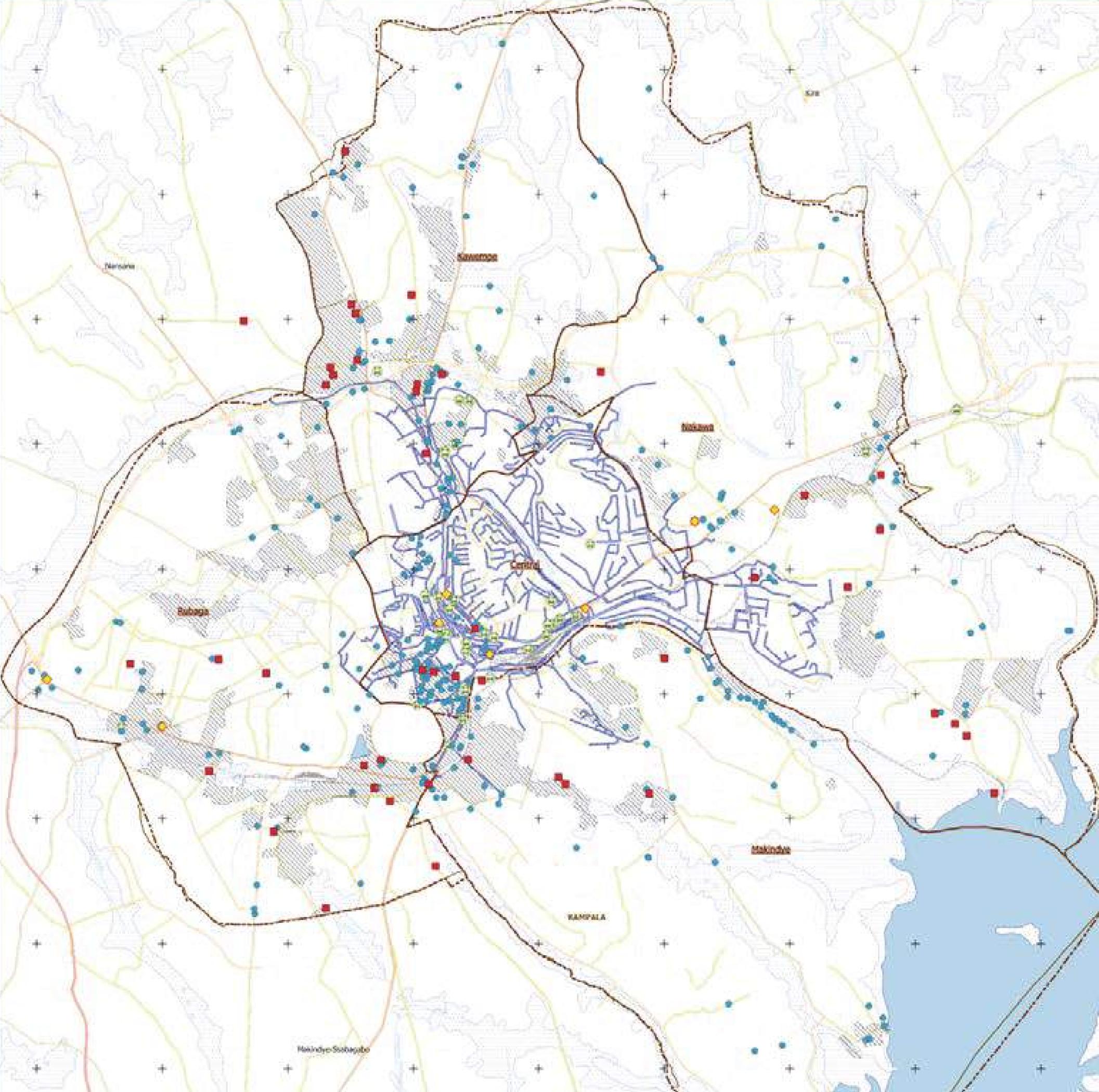
No.	Components	Descriptions
PBT.1	Regulate and monitor commercially-run public toilets	<p>Clarify roles/purposes of community and public toilets and develop appropriate management models for each.</p> <p>Key implementing partners: KCCA, NWSC, vendors associations, private enterprises & development partners.</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Develop a regulatory framework for the functions and operations of public Sanitation facilities. o Periodically monitor public sanitation facilities.
PBT.2	Appropriate alternative business models for operation and maintenance of public toilets	<p>To ensure appropriate operation and maintenance of public sanitation facilities, an innovative business model that will sustain an adequate level of service will be piloted and upscaled. Some of these will be multi-level revenue approaches, – combining of other commercial activities: sale of airtime, consumables, etc. at the facility can supplement the revenues and make public toilets commercially viable for private operators.</p> <p>Key implementing partners: KCCA, NWSC, Vendors associations, private enterprises & development partners,</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Develop alternative business models for public toilets
PBT.3	Identification of strategic locations and construction of modern public toilets in high transient population zones	<p>The locations for public sanitation facilities will be based on hot spots of the transient population, especially around markets, taxi/bus parks, major institutions (courts, municipal buildings, etc) in the central business districts of the five divisions. Two (2) modern public toilets to be built in each parish. Figure 13 shows the location of existing and planned public toilets in Kampala.</p> <p>Key implementing partners: KCCA</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Conduct assessment based on hotspots for a transient population projected until 2030 o Construct public sanitation facilities to cater to growth until 2030.
PBT.4	Increased budget for KCCA managed public toilets	<p>The current budget for KCCA run public toilets (that are free of charge) is inadequate to sustain adequate levels of services. The current O&M expenditures are estimated to be USD 670/month per toilet, which needs to be increased to USD 925/month.</p> <p>Key implementing partners: KCCA</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Increase budget for KCCA managed public toilets.
PBT.5	Mainstream hygiene and handwashing improvements in public toilets	<p>Develop, implement at scale and sustain a comprehensive hygiene and handwashing improvement campaign in all public sanitation facilities. The campaign will target users, with a focus on, among others:</p> <ul style="list-style-type: none"> • Good hygiene behaviours at all times • Handwashing with soap and awareness of the faecal-oral transmission of diseases • Menstrual hygiene • HIV prevention • Gender-based violence, etc. <p>Outputs:</p> <ul style="list-style-type: none"> o Implement and sustain the hygiene improvement campaign o Periodically assess the outcomes and realign strategy if required





BOYS 

Kampala Sanitation Improvement Financing and Strategy



- Sanitation Infrastructure**
- Public Toilets
 - Public Toilets, existing
 - Public Toilets, planned to be constructed
 - Public Toilets, planned to be renovated
- Administrative Limits**
- Kampala Divisions
 - Districts
- Hydrography**
- Lakes
 - Rivers
 - Wetlands
- Transportation**
- Motorway
 - Primary Roads
 - secondary Roads
 - Tertiary Roads
 - Trunk Road
 - Other Road
 - Railway
- Transportation**
- Transportation Hub
- Other**
- Informal Settlements

Figure 13: Existing and planned public toilets in Kampala
(Source: NWSC 2020)



3.2 Collection & Transport

The focus in the emptying and transport/conveyance is on a) faecal sludge and b) sewerage.

3.2.1 Faecal Sludge

Situational Analysis

The main sources of information for the analysis include: KCCA/NWSC Records of FS received at the Treatment Plants (July 2018- August 2019); NWSC updated Sanitation Masterplan for Kampala (2015); and Several KCCA reports and operational documents on improving FS management in Kampala

- o An estimate of Faecal sludge generated in Kampala is 1,200-1,500 m³/day
- o Average FS collected from Kampala and delivered to the treatment plants is 911 m³/day (77% of FS received at the Treatment plants)
- o Average FS collection efficiency for Kampala is about 60.9%-75.9%. The rest of the FS is either buried onsite, or the toilets are abandoned on filling or illegally emptied into the environment during heavy rains.
- o FS collected from Metropolitan areas is about 272 m³/day (23% of FS received at the Treatment plants in Kampala)
- o Illicit FS emptying and disposal in low-lying areas with a high water table
- o FS Emptying costs deemed high for low-income areas (USD 21 to USD 70 per trip)
- o Majority of cesspool emptiers provide services to high-mid income areas and some low-income areas with easy access
- o Semi mechanised emptying (Gulpers) are a promising option for low-income areas, but face challenges with higher operation and transport cost (traffic jams) affecting costs. Current charges are USD 6.5 / 200 litres. – deemed expensive by low-income households.
- o Few (8 No.) fully licensed FS collection and transportation operators out of over 100 operators
- o Absence of guidelines for FS emptying service provision

Objectives

Achieve safely managed sanitation by ensuring that all FS is safely collected and transported to designated treatment plants.

Indicator	Baseline Value	Target by 2030
Improved collection for faecal in Kampala (m ³ /day)	911	1500



Approach

No.	Components	Descriptions
FS. 1	Improve transport efficiency of emptying	<p>Explore options for improving transport efficiency of emptiers (cesspool and gulpers), with an aim to reduce the cost for the customer. The options could include and not limited to:</p> <ul style="list-style-type: none"> • Introduce ICT tools to enhance the efficiency of emptying services • Scheduled desludging of low-income settlements using a combination of gulpers with mobile transfer stations. • Strategic locations for fixed transfer stations within Kampala • Strategic locations for additional de- and semi-centralised FSTPs in Kampala or in Wakiso/Mukono districts • Dumping points²⁰ on existing and planned sewer networks (3 sites to be piloted) • Night-shift operations at current and planned FSTPs • Rationalisation of the dumping fees for gulpers²¹ at the NWSC treatment plant <p>See Figure 14 for a proposed sewerage drop-off points and figure 15 shows the GPS locations of emptying points (Jan to Dec 2019), the current and proposed FSTPs with their range within Kampala (adapted from the updated Kampala Sanitation Master Plan 2015 & revised NWSC concept note for Kampala Sanitation Program Phase I: Tertiary & Secondary Sewer Networks Expansion And Development Of Gaba And Mukono Wastewater Treatment Systems In The Kampala Metropolitan Area)</p> <p>Key implementing partners: KCCA/NWSC/Development partners/Cesspool emptiers association/Gulpers Association</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Develop a collection efficiency plan for gulpers and cesspool emptiers o Pilot viable options o Upscale the most suitable option(s)
FS.2	Professionalise and regulate the Gulpers and cesspool emptiers	<p>Sanitation Safety trainings have been conducted for all emptiers operating in Kampala/Wakiso in 2019 for collection and transportation of FS. These trainings must be developed into Standard Operating Procedures and enforced to systemise and regulate the sector. The SOPs will be jointly developed with the gulper and cesspool emptiers association, NWSC and NEMA.</p> <p>The SoPs shall cover the following topics:</p> <ul style="list-style-type: none"> • Safety procedures while conducting emptying and transport operations • Current regulations of FS • Do's & Don'ts of FSM • Procedures to handle solid waste from pits • Etc. <p>Only licenced operators are permitted to discharge at the NWSC facilities. Non-compliance of procedures shall lead to punitive actions.</p> <p>Additionally, all gulpers and cesspool emptiers are to be tracked via GPS. Data on collection and discharge points to be gathered and monitored by KCCA & NWSC.</p> <p>Key implementing partners: NWSC/NEMA/Development partners/Cesspool emptiers association/Gulpers Association</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Develop SoPs for FS emptying services o Provide training to emptiers based on SoPs o Revise and revamp the GPS tracking system for shared data analytics by NWSC & KCCA o Roll out-licensing by KCCA and NEMA to all operators in the city o Monitor licences at the NWSC treatment plant.

²⁰NWSC will pilot 3 locations for dumping points on sewers for gulpers and will monitor the content and quality of sludge being discharged.

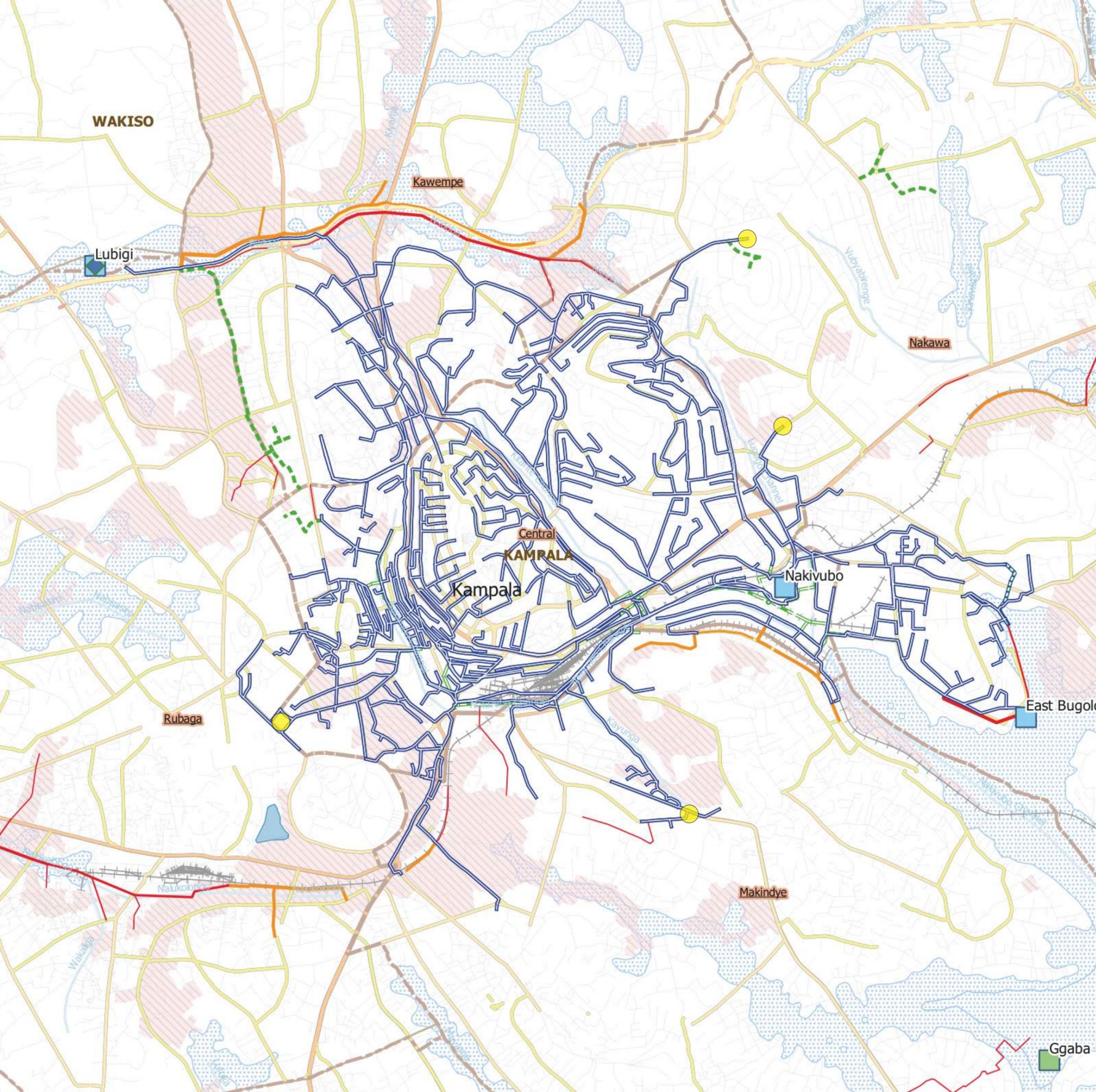
²¹Gulpers pay a dumping fee of USD 2 /m³ vs USD 0.9/m³ by cesspool emptiers, which undermines the pro-poor approach for low-income groups.

No.	Components	Descriptions
FS.3	Demand creation for FS emptying in low-income areas	<p>Awareness-raising campaigns to target effective up-take of safe emptying and elimination of illicit disposal of FS, especially in the low-lying areas. Key messages to emphasize: i) Utilization of toll-free call centre to report any illicit emptying/disposal and or use of Citizens reporting app; ii) Planning/Budgeting for periodic emptying of sanitation facilities; iii) Proper use of sanitation facilities to ease the emptying process. Concurrently, stringent compliance monitoring of the ordinance on illicit discharge and dumping of faecal sludge is undertaken.</p> <p>Key implementing partners: KCCA</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Develop key messages around illicit dumping for the awareness-raising campaign (included under HH.1) o Timely enforcement of the ordinance on illicit dumping
FS.4	Increase capacity of KCCA's pit emptying services for public sanitation facilities	<p>Replace/increase and enhance the fleet of cesspool emptying trucks managed by KCCA, that provide subsidised services for public sanitation facilities. Concurrently, increase the budget for operation and maintenance of the fleet.</p> <p>Key implementing partners: KCCA</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Undertake a demand assessment of FS emptying services for public sanitation facilities o Conduct a life cycle cost analysis of cesspool emptying fleet administered by KCCA o Procure adequate and appropriate cesspool emptying and transport equipment o Increase budget for operational expenditure for the cesspool fleet.





Kampala Sanitation Improvement and Financing Strategy



- Sanitation Infrastructure**
- Feacal Sludge Treatment Plant
 - Existing (Blue diamond)
 - Planned (Green diamond)
- Wastewater Treatment Plant**
- Existing (Blue square)
 - Planned (Green square)
- Sewerage Network**
- Pipes, existing (Solid blue line)
 - Pressure Lines, Existing (Dashed blue line)
 - Sewer Lines, Planned (Dashed green line)
 - Sewer Extension, 2025 (Pink line)
 - Diameter 0-200 (Red line)
 - Diameter 200-800 (Orange line)
 - Sewer Extension, 2040 (Light orange line)
 - Diameter 0-200 (Light pink line)
 - Diameter 0-800 (Light red line)
 - Tentative sewer dumping points (Yellow circle)
- Admisiontrative Boundaries**
- Kampala Divisions (Dotted pattern)
 - Districts (Solid pattern)

Figure 14: Sewerage map with tentative areas for drop-off points for faecal sludge

Kampala Sanitation Improvement and Financing Strategy

- Sanitation Infrastructure**
- Feacal Sludge Treatment Plant
 - Existing
 - Planned
 - Wastewater Treatment Plant
 - Existing
 - Planned
 - Fixed Transfer Stations
 - Sewerage Network
- Distances to next treatment plant**
- | Existing Plant | Projected Plant |
|----------------|-----------------|
| 1km | 1km |
| 2km | 2km |
| 3km | 3km |
| 4km | 4km |
| 5km | 5km |
| 6km | 6km |
| 7km | 7km |
- Topographic Background Information**
- Administrative Limits
 - Kampala Divisions
 - Districts
 - Hydrography
 - Lakes
 - Rivers
 - Wetlands
 - Other
 - Informal Settlements
 - Transportation
 - Motorway
 - Primary Roads
 - secondary Roads
 - Tertiary Roads
 - Trunk Road
 - Railway
 - Transportation Hubs

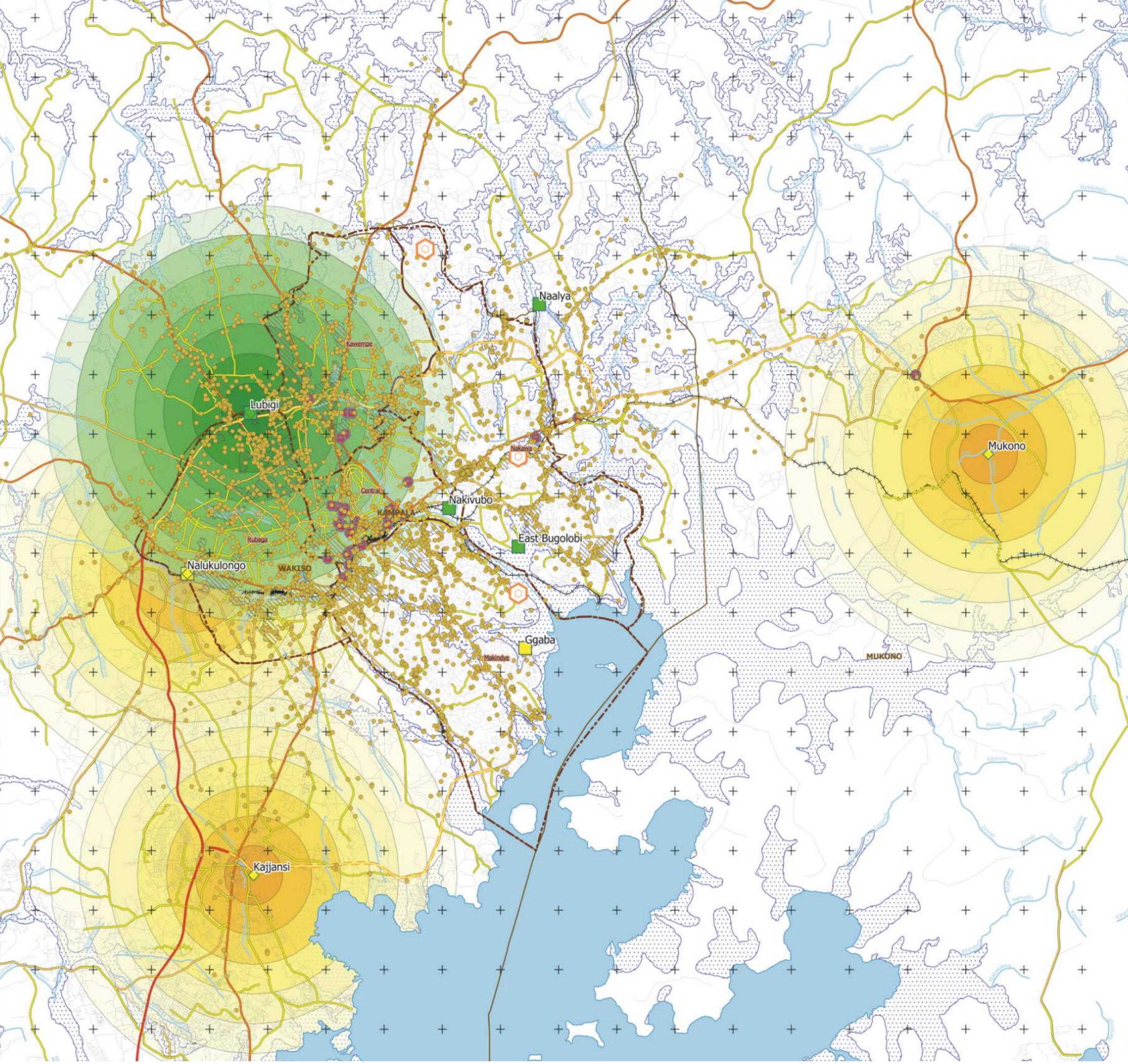


Figure 15: Map of cesspool emptying locations, current and planned discharge points in Kampala and Mukono



3.2.2 Sewerage

Situational Analysis

The main source of information under sewerage is the updated NWSC Kampala Sanitation master plan 2015 which provides the planned sewerage improvements and investments up to 2040. The NWSC Corporate plan 2015 also provided some of the information.

- o About 8,375 active sewer connections are in Kampala serving approximately 40,000 residents of the 3.14 million, with only 120 new connections added annually (Updated NWSC Kampala Sanitation Masterplan, 2015)
- o Reasons for low connection rates are: low willingness to connect due to high cost of connection to sewerage services; high cost of sewerage charges (75% or 100% of the water bill); already existing OSS which is cheaper to maintain and lack of sensitization on the ordinance, benefits and procedures of sewerage connection. (Updated NWSC Sanitation Masterplan, 2015)
- o The distribution of customer categories is domestic 61%, institutional/governmental 4% and industrial/commercial 35%. (Updated NWSC Sanitation Masterplan, 2015)
- o Over 73% of wastewater flows are generated by Commercial, Industrial & Institutional customers/entities which host a high number of the transient population. (Updated NWSC Sanitation Masterplan, 2015)
- o An estimate of about 100,000 people from the transient population rely on the sewer network in Central Division
- o Existing sewerage system covers 2,550 ha of the central area of Kampala City, with only 15% (40000) of the 265000 inhabitants in the area connected to the sewer network. Expansion estimations from NWSC indicate that the current network can potentially reach 90% of the customers in the sewer areas. (Updated NWSC Sanitation Masterplan, 2015)
- o The total length of sewers is 168km with sizes ranging from DN 175 to DN 1500mm (Updated NWSC Sanitation Masterplan, 2015)
- o Most of the backbone sewers (for Nakivubo catchment) planned under the Kampala sanitation master plan have been installed.

Objectives

Increase and improve the sewerage coverage in Kampala (source Updated Sanitation Masterplan, 2015).

Indicator	Baseline Value	Target by 2040
Number of new sewerage connections achieved annually	120	3600
Total Kilometres of sewer network	168	194
Kilometres of sewer network rehabilitated and replaced outdated sewerage network	0	86
Number of FS dumping points on the sewer network	0	10



Approach

No.	Components	Descriptions
SW.1	Densification of sewerage network in Kampala	<p>Develop a sewer densification strategic implementation plan with collaborations from NWSC and KCCA as key implementing partners to achieve a target for connection annually.</p> <ul style="list-style-type: none"> • Target 100% sewer connection in the Central Business District (CBD) • Implement an effective sewerage marketing and communications approach • Adaptation/rationalisation of the current sewerage connection fee • Details of the compliance monitoring mechanism - and if required amendment - of the regulation on sewerage connection to extend the radius from 60 to 100 meters from existing network • Details of a zone-by-zone sewer network expansion programme, including affordable options of simplified sewers. <p>Key implementing partners: NWSC/KCCA/Development banks</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Develop a sewer densification strategic implementation plan, o Implement the sewerage marketing campaign o Undertake sewer network densification in five divisions (60 km) o Enforce household and commercial sewer connection densification in a staggered manner in five divisions starting from the CBD o Introduce a household Incentive for connection to the sewer
SW.2	Improve compliance monitoring of sewer connections	<p>KCCA and NWSC to jointly monitor compliance of the ordinances specific to sewerage. The monitoring should focus on:</p> <ul style="list-style-type: none"> • An illegal connection that connects stormwater drains to sewers or discharge wastewater into stormwater drains • An illegal abstraction of groundwater for potable & non-potable use, especially in arcades and residential building <p>Key implementing partners: NWSC/KCCA</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Develop a KCCA/NWSC joint coordination enforcement unit o Develop a work plan for the enforcement unit o Undertake monitoring and enforcement of sewerage ordinance compliance
SW.3	Extension of sewer network in Kampala.	<p>Implementation of sewer extensions as planned under Updated Kampala Sanitation Masterplan (2040). The sewer network expansion will cover about 1.4 million of Kampala's population (resident & transient) with sewerage sanitation.</p> <p>Key implementing partners: NWSC/Development banks/MWE</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Construction of new sewer network for: Nalukolongo Catchment - Rubaga Division (6.6km), Ggaba WWTP Catchment - Makindye Division (5.76km), Nakivubo and Lubigi Catchments (13.4km)



No.	Components	Descriptions
SW.4	Rehabilitation and replacement of outdated sewerage network	<p>Rehabilitation and replacement of over 50% of the existing sewers Network, to keep the system operational.</p> <p>Key implementing partners: NWSC/Development banks/MWE</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Rehabilitation of sewer networks in Naguru, Lugogo & Kibuye extension area– a total of 2.3 km & East Bugolobi pumping station o Replacement of 84 km (50% of total sewer length) of sewers until 2040
SW.5	Pilot simplified (condominium) sewers as an approach selected low-income areas in Kampala	<p>Simplified sewerage system to be tested as a novel approach to low-cost sanitation option for dense population areas in Kampala. The system has the potential to connect select low-income areas to the existing sewerage system at a fraction of the cost.</p> <p>Key implementing partners: NWSC/Development banks/KCCA</p> <ul style="list-style-type: none"> o As part of the ongoing Lake Victoria WATSAN project, NWSC will pilot condominium sewers in Bunga and Nsambya areas in Makindye division Kampala.

3.2.3 Solid Waste (In Pit Latrines)

Situational Analysis

The sources of information were mainly from existing operational reports at KCCA and engagements with the FS operators.

- o An estimated 20-25% of the contents of a pit latrine in Kampala is solid waste
- o Segregating solid waste from FS makes pit emptying expensive
- o Currently, there is no system to dispose of solid waste soiled with FS in Kampala

Objective

Reduce and eliminate solid waste disposal in pit latrines.

Indicator	Baseline Value	Target by 2030
% of solid waste in FS from Pit latrines	25%	0%



Approach

No.	Components	Descriptions
SWM.1	Sensitisation campaign around solid waste management (targeting tenants) and increasing the sale of SaTo pans	<p>Combine sensitisation of appropriate disposal of solid waste management in conjunction with the awareness-raising campaign in five divisions as well as to popularise the sale of SaTo pans as a technical solution to reduce solid waste in pits.</p> <p>Key implementing partners: KCCA</p> <p>Outputs: - Combined with HH.1</p>
SWM.2	Provisions for disposal of soiled (contaminated with FS) solid waste.	<p>NWSC to make provisions (storage area) for solid waste contaminated with FS. The contaminated FS, along with other waste collected via the sewer network, to be transferred to the municipal landfill for disposal along with other hazardous waste streams – either incinerated or buried in an engineered landfill site.</p> <p>NWSC to collect additional charges from gulper & cesspool emptiers for handling solid waste. Gulper & cesspool emptiers to charge the customer additional handling charges for FS contaminated with solid waste.</p> <p>Key implementing partners: NWSC/KCCA</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Storage area to be provided by NWSC at Lubigi and Bugolobi FSTPs o Scheduled transfer of FS contaminated solid waste to municipal landfill (frequency once in two months)
SWM.3	Increase efficiency of solid waste management in Kampala	<p>Current solid waste collection efficiency in Kampala is estimated at 60%. Part of the uncollected solid waste especially in the informal settlements is disposed of in pit latrines which cause rapid filling of toilets and difficulty in emptying them</p> <p>Over the strategy period, KCCA will give special attention to improving solid waste collection, especially in the informal settlements through:</p> <ul style="list-style-type: none"> • Integrate solid waste management information in all the awareness creation/sanitation marketing messages to be used in the communities targeting political leaders, tenants and landlords • Improvement of road infrastructure in the low-income areas to improve access for garbage collection trucks • Streamlining of fees charged for garbage collection to make them commensurate to the quantity of garbage collected. • Strengthen the operational capacity of compliance monitoring units <p>Key implementing partners: KCCA</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Integrate solid waste management information in all the social/sanitation marketing messages (Combined with HH.1) o Road Infrastructure developed in low-income areas in liaison with Engineering Directorate o Study on streamlining of Solid waste collection fees in Low-income areas of Kampala o Enforcement of solid waste ordinance requirements



3.3 Treatment & Reuse

The focus in the treatment and re-use is: a) Faecal sludge and, b) Wastewater treatment.

Situational Analysis

The main source of information under treatment and reuse is the updated NWSC Kampala Sanitation master plan 2015. More insights engagements with the NWSC team and some of the recent concept notes developed to solicit funds for investment in the sector.

- o Bugolobi WWTP has a design capacity to treat 33,000 m³/day for wastewater and receives about 580 m³/day of FS though it is not designed to treat FS. This plant will be decommissioned once the new Nakivubo WWTP is launched in 2020; hence no more FS will be received in future at this plant.
- o Lubigi WWTP has a design capacity to treat 5,000 m³/day (40,000 PE) of wastewater. The plant was also designed to treat about 400 m³/day of FS. Currently, the plant receives about 660 m³/day of FS – approximately 122% of the treatment capacity.
- o A new Nakivubo WWTP is under construction. It is located at the same site as Bugolobi WWTP which will be taken out of operation once the new plant becomes operational—designed to treat 45,000 m³/day of wastewater. No FS treatment is provided for at the new plant.
- o A new sewage pre-treatment and pumping station have been installed at Kinawataka. This pumps to the new Nakivubo WWTP all the WW collected from the Kinawataka catchment. Although the initial plan was to have an FSTP at Kinawataka, this has been eliminated due to financial constraints
- o NWSC’s planned treatment plants in Kampala are as follows: i) Nalukolongo WWTP and FSTP; ii) Ggaba WWTP; iii) Kajjansi FSTP.
- o NWSC has also planned to construct a WW/FS treatment plant in Mukono District which is part of the metropolitan areas.
- o There is an urgent need to increase the treatment capacity for FSTPs as the current plants are operating above design capacity, which can compromise treatment efficiency.

Objectives

Increase treatment capacity for wastewater and faecal sludge to ensure that future demand until 2040 is catered for.

Indicator	Baseline Value	Target by 2040
Increased capacity (m ³ /d) for faecal sludge treatment	400	1600 m ³ /d
Increased capacity (m ³ /d) of wastewater treatment	38,000	113,900 m ³ /d



Approach

No.	Components	Descriptions
TRT.1	Increased capacity for faecal sludge treatment	<p>Increase faecal sludge treatment capacity in Kampala and metropolitan areas by:</p> <ul style="list-style-type: none"> • Design and construction of new FSTPs in locations as planned in the Master Plan 2015 • Adding electro-mechanical dewatering equipment in Lubigi FSTPs to increase treatment capacities up to 2000 m³ per day • Design and Construction of a new FSTP in Mukono <p>Key implementing partners: NWSC</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Design and Construction of Nalukolongo FSTP (400 m³/day) o Design and Construction of Kajjansi FSTP (400 m³/day) o Design and Construction of Mukono FSTP (400 m³/day) o Develop a concept note for mechanical dewatering of faecal sludge at the Bugolobi and Lubigi FSTP and extending capacities up to 2000 m³ per day
TRT.2	Increased capacity of wastewater treatment	<p>Implement the planned interventions for wastewater treatment as per the Kampala Sanitation Master Plan, i.e. target to treat wastewater of 113,900 m³/d by 2040.</p> <p>Key implementing partners: NWSC</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Design and construction of Ggaba WWTP with a capacity of 8,000 m³/d o Design and construction of Nalukolongo WWTP with a capacity of 17,900 m³/d o Design and construction of Lubigi expansion with a capacity of 33,100 m³/d o Design and construction of Nakivubo WWTP with a capacity of 89,300 m³/d o Design and construction of Mukono WWTP with a capacity of 8,000 m³/d
TRT.3	Additional options for co-treatment of faecal sludge/waste water and organic solid waste	<p>To improve and optimise the faecal sludge and wastewater management in Kampala, option for co-treatment of FS/WW with organic solid waste will be explored, particularly the use of Omni processor for co-combustion of FS & organic solid waste or bio-digestion of FS/wastewater with organic waste to produce energy and other by-products.</p> <p>Key implementing partners: NWSC, KCCA and mid-level private sector</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Conduct feasibility studies to assess the potential co-treatment technologies for a mixed waste stream



No.	Components	Descriptions
TRT.4	Introduce packaged wastewater treatment systems for high water consumption customers, in the non-sewered parts of Kampala	<p>Pilot and upscale onsite/decentralised packaged wastewater treatment systems with tertiary treatment levels for high water consumption users, such as institutions, housing estates, etc. The aim of this measure is to Effectively service high wastewater producers in the non-sewered areas with appropriate wastewater management systems.</p> <p>Key implementing partners: NWSC, NEMA & Private sector organisations dealing with wastewater treatment systems.</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Develop concepts for packaged wastewater treatment systems o Pilot and upscale decentralised packaged wastewater treatment systems
TRT.5	Introduce water-saving measures to reduce water consumption and thus reduce wastewater loads	<p>Initiate a long-term (10-15 year) program to voluntarily reduce water consumption in Kampala, targeting high- and mid-income groups, arcades and institutional facilities. The program to focus on technical solutions, such as low flow taps, introducing shower timers, low-flush toilet cisterns, washing machines and dishwashers (for residential customers), etc. The technical solution should be introduced along with awareness-raising measures to reduce demand for potable water in Kampala, which subsequently will reduce the wastewater loads.</p> <p>Key implementing partners: NWSC, KCCA & Private sector.</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Develop concepts for reducing water consumption in Kampala o Develop a public relations strategy to communicate key messages o Make strategic partnerships with the private sector dealing with technology options o Pilot measures in select housing estates and institutional buildings





4

Financing needs
of the strategy

4.1 Coordinated Planning, Implementation & Monitoring

Situation Assessment

An estimated 2 million transient population from the towns of the surrounding districts of Wakiso and Mukono use Kampala's sanitation system during the day. Additionally, 23% of faecal sludge discharged at the treatment plant is sourced from the two districts, and this is likely to grow in the future. The current FSTPs in Kampala are already operating at twice their designed capacities and to ease this, additional treatment plants constructed outside of Kampala could be a viable option that could share demand from Kampala and the larger satellite towns.

There is a Kampala Water and Sanitation Forum (KWSF) which is a coordination platform with an objective to streamline and optimise coordination of planning, implementation and efficient resource allocation in the sector. However, actors are working in silos, with little sector coordination and lack an overview of who is doing what, where and how to achieve a common goal for sanitation improvements in Kampala.

Objective

To achieve improved planning, implementation and monitoring of sanitation activities in the five divisional councils of Kampala and with the GKMA

Indicator	Baseline Value	Target by 2020-21
Divisional level sanitation taskforce established and functional for each division	0	5 DSTFs
A GKMA infrastructure coordination taskforce, with a subcommittee on water, environment and climate resilience is established and functional	0	1
A joint monitoring framework to evaluate the progress of the strategy is established and sustained over ten years	0	1



Approach

No.	Components	Descriptions
CPIM.1	Establish the Divisional Council Sanitation Task Force (DSTF)	<p>To better coordinate planning and implementation activities at the divisional level, a Sanitation Task Force is operationalised. The task force is mandated to prioritise, plan, coordinate and monitor all activities related to sanitation at the divisional level. The activities of DSTFs will be guided by a Divisional Sanitation Improvement Plan, which in turn will follow the objectives to be achieved by this Strategy.</p> <p>The task force consists of a multi-departmental representation that is mandated with sanitation activities in the divisions. Headed by the Town Clerk, it incorporates the health inspector, the education officer, the law enforcement officer, the community development officer, the physical planner, the awareness-raising campaign rep. (currently the Weyonje officer), a representative for solid waste management, representative of NWSC etc. Additionally, representatives of development partners active in the divisions are also a part of the task force.</p> <p>The Taskforce convenes quarterly to plan and oversee sanitation activities pertaining to households, KCCA & private - schools and health centres and public toilets.</p> <p>Key implementing partners: KCCA, Divisional Councils, Local NGOs</p> <p>Outputs:</p> <ul style="list-style-type: none"> o DSTFs established and operational o Five Divisional Sanitation Improvement Plan developed
CPIM.2	Establish a GKMA infrastructure coordination taskforce	<p>Establish an infrastructure coordination taskforce that plans, sets priorities, and coordinates implementation of sanitation infrastructure to meet the needs of the growing future demand for urban services, in the GKMA. By working together in a coordinated manner, the GKMA will reap the benefits of economies of scale. The coordination platform shall encompass sectors of, and not limited to: a) transport, b) waste management, c) economic development, d) water, environment and climate change resilience, etc.</p> <p>The sub-committee (water/environment/climate change resilience) of the coordination taskforce is chaired by the Ministry of Water and Environment and with representation from the Ministry of Kampala and Metropolitan Affairs, Ministry of Lands, Housing and Urban Development, Min. of Local governments (via the district and municipal councils) and KCCA. The composition of the sub-committee is limited to high-level decision-makers of each representing agency.</p> <p>The sub-committees meet bi-annually to set priorities and make the decisions on issues that may be deemed necessary.</p> <p>Key implementing partners: Ministry of Water and Environment, KCCA, NWSC District and Municipal Councils of Wakiso and Mukono.</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Bi-annual coordination meeting of GKMA sub-committee on water/environment/climate change resilience



No.	Components	Descriptions
CPIM.3	Establishment of a joint monitoring and Implementation framework	<p>Establish a joint sector monitoring framework using the structure of the KWSF. The aim of this framework to ascertain, among others:</p> <ul style="list-style-type: none"> • Activities that each member of the KWSF is undertaking in Kampala • The objectives they aim to achieve (via current and planned projects) with regards to this strategy • Sharing critical learnings from the projects to the sector • Estimated financial contributions towards achieving the objectives <p>The monitoring framework will be a webpage hosted on the KCCA website presenting all the information pertaining to monitoring of the progress to achieve safely managed sanitation until 2030 and is accessible to all actors. The information for the webpage is submitted by stakeholders and updated annually by KCCA.</p> <p>Key implementing partners: KCCA & Development partners</p> <p>Outputs:</p> <ul style="list-style-type: none"> o Assessment of the KWSF with recommendations for further improvements and sustainability o Establishment of the revamped KWSF with a joint sector monitoring framework

4.2 Strategic Partnerships

The strategy is a framework for a combined effort by all actors in Kampala to achieve a common goal. Table 3 presents the current and proposed strategic partners identified for a concerted effort to achieve the strategic objectives by 2030.

Area of Intervention	Current Partners	Proposed Partners
Implementation	KCCA, NWSC, GIZ, Water Aid (schools and health centres), amref Africa, cidi, GGGI, AfDB; UWASNET, Pit Emptiers Association, Sanitation solution, Sanitation Africa, etc.	Unilever, P&G, MTN
Financing (commercial)	Post Bank, DFCU, FINCA, etc.	Water.org, GSMA
Financing (ODA)	KfW	World Bank, AfDB, European Development Bank, Global Climate fund
Research & Development	Water for People, Makerere University	EAWAG, Stockholm Environment Institute
Business development		Stone Family Foundation, Aqua for All, WASTE, etc.
Technical assistance	GIZ, BMGF, KfW, AFD	



5

Coordination
framework

The following section provides an estimation of the financing requirements need to operationalize the strategy. The estimations are based on costs derived from activities under each approach mentioned in section 4 and discussions/ inputs from key stakeholders. A total of USD **271.7 million** will be required to finance this strategy. The share of infrastructure costs for onsite sanitation and sewerage improvement until 2030 is estimated at USD **77.1 million** (28%) and USD **194.6 million** (72%) respectively.

Cost Estimation for Improvement at the Containment Level

The investments by households to build toilets conforming to KCCA standards is estimated to be around USD **30.4 million**²² - which will need affordable financing, either in terms of low-interest loans or partial subsidies to facilitate demand. The demand creation activities (awareness-raising & compliance monitoring) around improving households' sanitation will cost approximately USD 10 million up to 2030. This cost should be internalised with KCCA budget.

The cost to improve KCCA run facilities, schools, health centres and public toilets as per KCCA standards is estimated at USD **15.34 million** up to 2030 and to maintain the facilities with adequate hygiene levels is estimated at USD **939.000** annually.

Additional demand creation activities around private schools, health centres and commercially-run public sanitation facilities are estimated at around USD **6.37 million** for the next ten years.

Cost Estimations for Improving Faecal Sludge Collection & Transport

The cost of improving faecal sludge collection and transport by providing transfer stations (one for each division, with a capacity of 50 m³) in a strategic position and professionalising the pit emptying business is estimated at USD **2.0 million**.

Cost Estimations for Sewerage

The cost estimations for sewer densification, replacement and expansion are based on the NWSC 2015 Master Plan. The estimated total cost under this item is approximately USD **158.2 million**, including demand creation activities (marketing and compliance monitoring) for densification of sewerage.

Cost Estimations for Increased Treatment

The estimated costs to increase faecal sludge treatment capacity is estimated at USD **10.8 million** (two FTSPs with a combined design capacity of 800 m³). For wastewater treatment, the estimated cost as per NWSC Master Plan 2015 is around USD **24.5 million** until 2030. It should also be noted that the NWSC master plan has a design horizon until 2040 and further investments in the plan are anticipated, but not considered in this strategy as the scope of the strategy is defined until 2030.

Figure 16 presents is a graphic illustration of the cost of hardware and software interventions spread across the sanitation chain, considering the different elements:

²²Considering the cheapest variant available which is estimated at USD 300 per unit – DuraSan



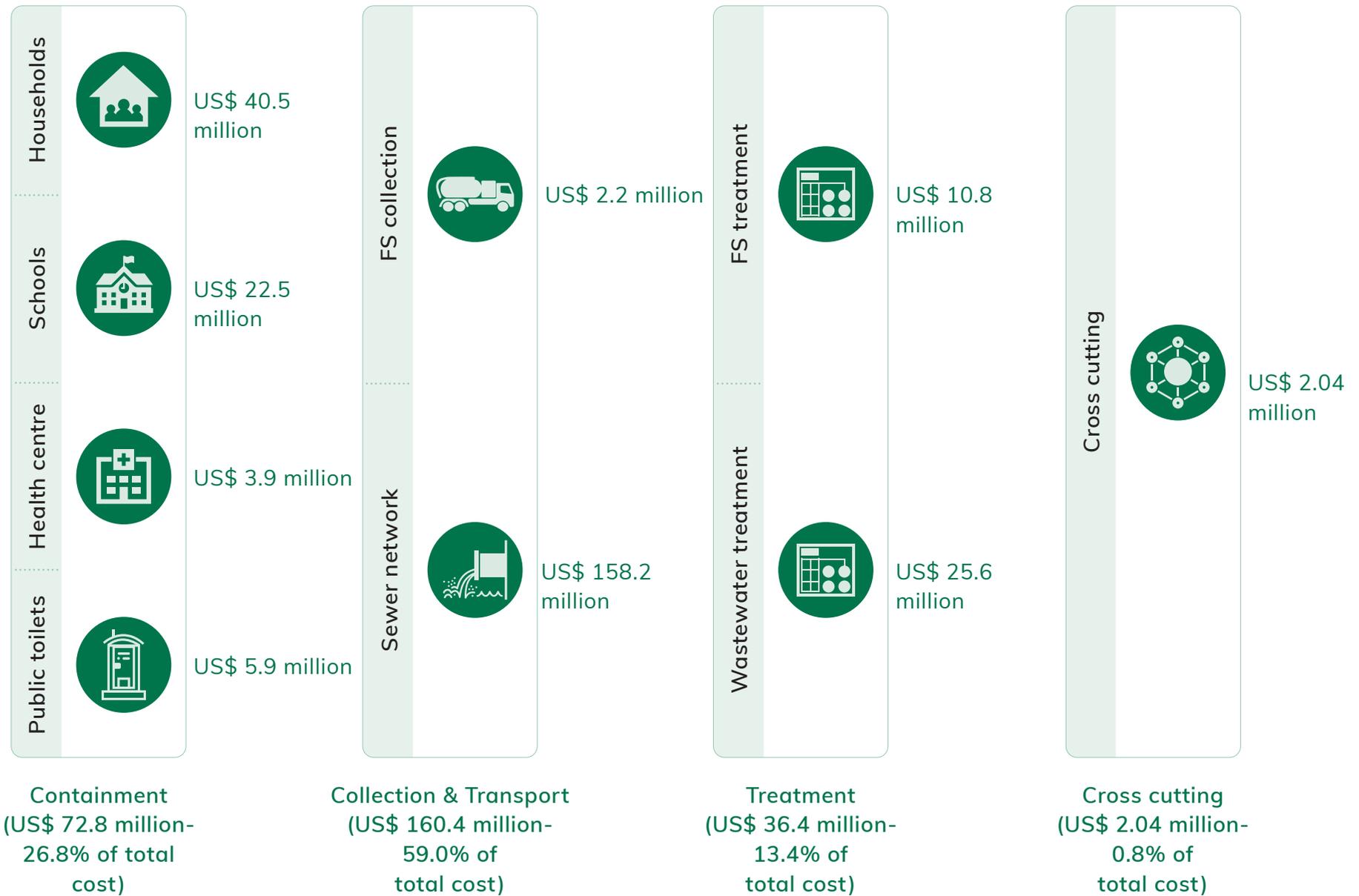


Figure 16: Cost estimations for improvements (hardware + software) across the sanitation chain in Kampala



6

Financing approach
for the strategy

Current Financing Trends

Based on KCCA Ministerial Policy Statements for the past four years, the funding to Sanitation was estimated at USD 1.4 million (Note this is as an estimate as figures are consolidated with figures for Solid Waste). Over 95% of this funding is from Non-Tax Revenue (NTR). The complete overview of funding from various Development Partners, specifically for Kampala is unavailable, but an annual estimation from KCCA records (based on current projects financed by Development Partners) is around USD 1.6 million. This gives annual funding for sanitation of USD 3.0 million.

The Proposed Financing Approach for the Strategy

The total financing required to implement this strategy is USD 271.7 million for period 2020-2030. The financing will be mobilised and raised from the following sources namely: Development Banks (DBs)/Government of Uganda (GoU)- USD 199.9 million, Development Partners (DPs) –USD 31.8 million, DPs/GoU –USD 25.2 million and GoU – USD 14.8 million.

. Figure 17 indicates the possible financial needs and flows from various organisations for the accomplishments of the strategy.

The mobilised funds shall be utilised by the different players in the sector namely NWSC-USD 190.75 million, KCCA –USD 45.07 million, KCCA/NWSC-USD 3.99 million, Local Banks (creation of guarantee fund in partners with DPs and households)-USD 30.36 million and KCCA/DPs-USD 1.5 million.

The allocation of financing to the different players is in accordance with the identified key challenges that the strategy is seeking to address, as explained below:

- The bulk of the financing is allocated to sewerage network (USD-158.23 million -58.2%) because the strategy seeks to address and improve the low sewerage coverage in Kampala. This shall be financed by mainly DBs and GoU as planned for in the NWSC Master Plan 2015.
- Funds amounting to USD 72.8 million, representing 26.8% is allocated to the containment stage of the value chain. The Strategy seeks to address the containment challenges at households, schools and health centres and public toilets. Household financing (USD 30.36 million) shall be mobilized for the low-income HHs partly through the provision of loan via financing mechanisms (set-up by DPs) and partly relying on the household/ landlords to invest in toilets. The KCCA resources contributing (USD 10.14 million). Public schools (USD 17.72 million), Public toilets (USD 5.93 million) and Public health centres (USD 2.26 million) financing shall be mobilized by KCCA through its budget and income-generating activities. Private schools and Private Health Centres shall mobilise own financing, and KCCA shall monitor compliance with regulations and laws.
- The third highest component of financing is treatment, with USD 36.36 million (13.8%). The Strategy aims at improving the current capacity for faecal sludge and wastewater treatment. The financing for this shall be mobilized from DBs/GoU as planned for in the Master Plan.
- Emptying and collection component of Strategy is allocated USD 2.2 million shall be mobilized from mainly KCCA resources (USD 0.6 million), Development Partners (USD 1.5 million) and NWSC (USD 0.1).
- Administration and monitoring allocation is USD 2.039 million (0.8%). The purpose of this is to ensure that monitoring, coordination, and administrative parts of the strategy are smoothly managed. All administrative and coordination activities, which include detailed plans for the mobilization of funding and their implementation, among others, shall be undertaken using the provided funding.

The key players, namely GoU through its bodies, namely KCCA and NWSC, shall undertake the critical role of ensuring that a detailed funds mobilization plan is put in place and implemented to finance this Strategy.



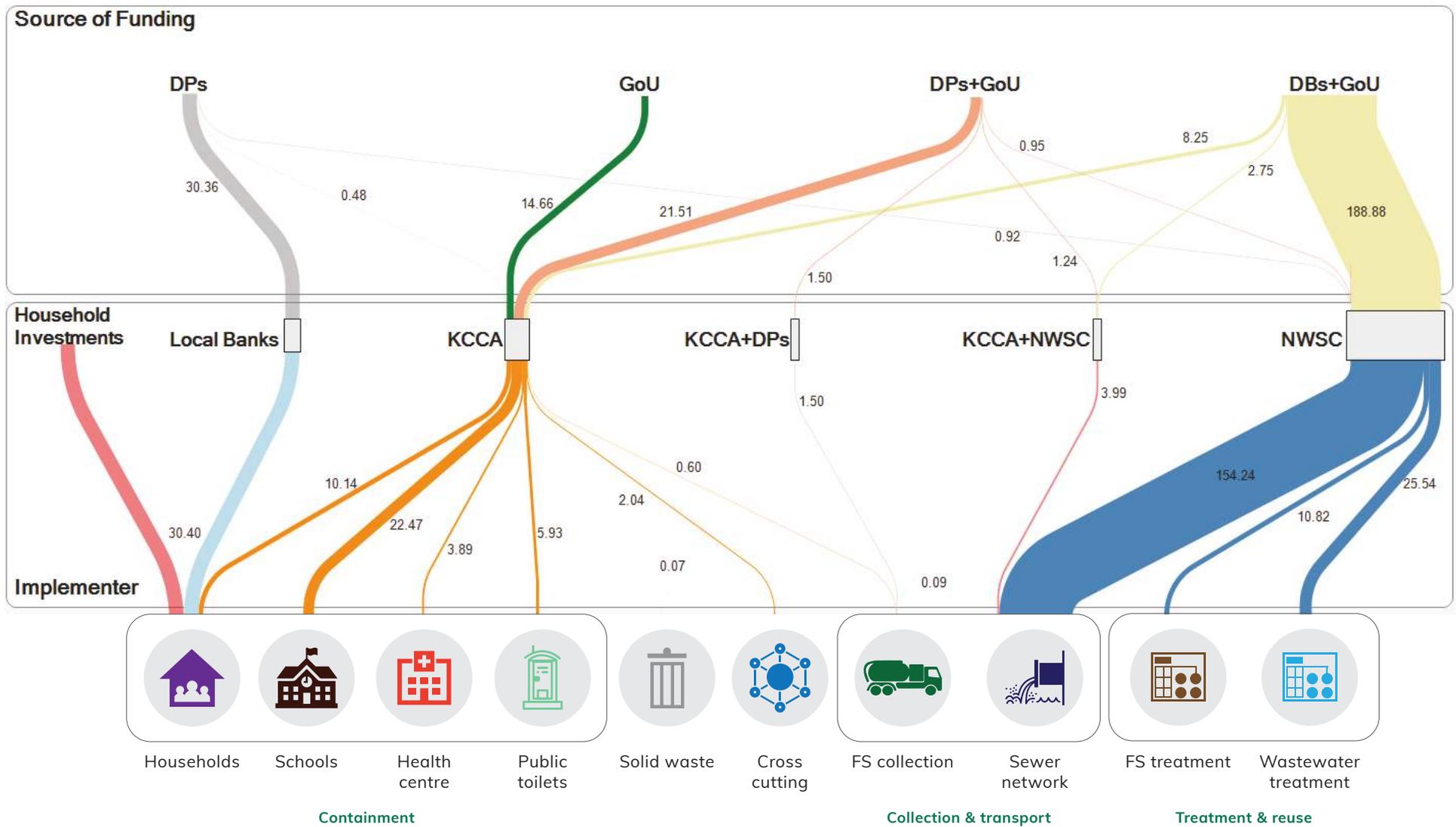


Figure 17: Financial flows to operationalise the strategy

All values are in Millions USD



7

Annex

Annex 1 - Literature and Data Sources for Strategy

- [1] Development of an Appropriate Sanitation Concept, Review of Water Supply Aspects in Informal Settlements & Feasibility Study. Final feasibility Report. Fichtner-GFA-M&E Associates. February 2015.
- [2] Kampala Sanitation Master Plan update. Fichtner-IGIP-M&E Associates. October 2015. Volume 1: Final Report.
- [3] Sanitation Strategy & Master Plan for Kampala City. Beller Consult- Mott Mac Donald- M&E Associates. April 2004. Volume 2: Draft Master Plan- Main Report
- [4] Kampala City-wide Sanitation Mapping/Assessment. Final Report. KCCA/BMGF. September 2017
- [5] Shit Flow Diagram (SFD) for Kampala 2016. Final Report. EAWAG/Sandec
- [6] National Water and Sewerage Corporation Corporate Plan July 01, 2012 – June 30, 2015. June 2012
- [7] Improving Faecal Sludge Management (FSM) for Onsite Sanitation in Kampala City, Uganda. Analytical Report- Kampala Capital City Authority- August 2014.
- [8] Kampala Capital City Authority Strategic Plan 2014/15- 2018/19.
- [9] 2018-2030 Integrated Sanitation and Hygiene Financing Strategy. Government of Uganda/Africa Ministers' Council on Water. December 2017
- [10] Promoting Green Urban Development in African Cities. Kampala Uganda. World Bank- Korea Green Growth Partnership. September 2015
- [11] Uganda Vision 2040. Government of Uganda
- [12] Minimum Standards for onsite sanitation technology options in Kampala. KCCA/GIZ. 2016
- [13] Feasibility Study on financing options for Entrepreneurs and Households to on-site sanitation related infrastructure, Equipment and Services. Demis Consults LTD/GIZ. May 2019
- [14] An inventory of Public/ Community Toilets in Kampala. KCCA/GIZ. September 2015 [Separate Reports for each division]
- [15] Rapid Assessment of Public Toilet services supply, Demand and Willingness to pay in Kampala. KCCA. February 2018
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- [18] Strategic Urban Sanitation Plan (SUSAP) centered on non-sewer sanitation and faecal sludge management for the city of Kampala (Uganda). KCCA-NWSC-AFWA. September 2018.
- [19] Assessment of Sanitation and Hygiene in Public Primary and Secondary Schools and Health centres in Kampala. KCCA/Water Aid. September 2018. June 2018
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- [21] The Kampala Capital City (Sewage and Faecal Sludge Management) Ordinance, 2019.
- [22] Uganda Bureau of Statistics 2017, The National Population and Housing Census 2014- Area Specific Profile Series, Kampala, Uganda.
- [23] The Kampala Capital City Act 2010.
- [24] Sanitation Safety Plan for the Collection and Transportation of Faecal Sludge from Kamwokya II Ward, Kampala Capital City Authority, Uganda. KCCA/GIZ. March 2017.
- [25] The Local Governments (Kampala City Council) (Solid Waste Management) Ordinance 2000.
- [26] Assessment of Sanitation & hygiene in Public Primary & Secondary Schools and KCCA Health Centres in Kampala. KCCA/WaterAid. June 2018.



Annex 2 – List of Consultative Meetings for the Strategy Development

Meetings	Dated	Participants
Inception meeting	07. September 2019	KCCA, GIZ, NWSC
National Sanitation Working Group meeting	17. September 2010	MoH, MoWE Development Partners, Civil Society Organisation
Five division consultative workshop	15 to 21. October 2019	Five Divisions
Strategic Planning workshop	28 to 29. October 2019	KCCA, GIZ, NWSC & MoWE
CWIS Steering Committee Meeting	14. November 2019	MoWE, GIZ, BMGF, KCCA, Private operators, NWSC, Makerere University Researchers, Consultants
PMT meeting	11. February 2020	KCCA, GIZ, NWSC & MoWE
NWSC Management meeting	18. March 2020	NWSC, KCCA and Consultants
KCCA Management meeting	TO BE COMPLETED	TO BE COMPLETED



Annex 3 - Implementation Plan

The following section provides a framework for the operationalisation of the strategy. It presents an overview of the various components (across the sanitation chain), their outputs, the actors involved in each output, and financing requirements in terms of short (2020), mid (2025) and long term (2030).



Household

Output	Lead	Implemented By	Financed By	Indicator	Calculation Estimate	Short (2020)	Mid (2025)	Long (2030)	Total [USD]
Component HH1: Mainstream hygiene awareness campaign in five divisions									
Assess, update and conceptualise the awareness campaign for 5 divisions	KCCA	Consultant	KCCA	Revised awareness campaign concept	USD 500 per day for 20 days	10,000	-	-	10,000
Implement and sustain the awareness-raising campaign until 2030	KCCA	KCCA	KCCA	Annual awareness-raising monitoring report	USD 2 per Household for average number of 435,877 Households per year	2,615,260	2,615,260	4,358,767	9,589,287
Periodically assess the outcomes and realign strategies if required	KCCA	Consultants	KCCA	Annual evaluation report	USD 500 per Day for an average number of 10 Days per year	15,000	15,000	25,000	55,000
Sub-total									9,654,287
Component HH2: Develop menu of affordable toilets options for emptyable toilets									
Assess and revise the KCCA min. standard	KCCA	Consultants	KCCA	Revised KCCA min. Standard	USD 500 per Day for 20 Days	10,000	-	-	10,000
Sub-total									10,000
Component HH3: Increase access to affordable financing for households									
Conducted in-depth feasibility study on appropriate financing models for household sanitation	Development banks/Development partners	Consultants	Development banks/Development partners	Feasibility report on financing options	USD 800 per Day for 50 Days	40,000	-	-	40,000
Establish a financing mechanism for disbursement of loans/subsidies	Development banks/Development partners	Consultants	Development banks/Development partners	Establishment of the Kampala sanitation fund	USD 27.6 million (USD 300/toilet x 92000 units) + 10% administrative charges = USD 30.4 million	10,120,000	10,120,000	10,120,000	30,360,000
Sub-total									30,400,000

Household Continued

Output	Lead	Implemented By	Financed By	Indicator	Calculation Estimate	Short (2020)	Mid (2025)	Long (2030)	Total [USD]
Component HH4: Attract medium-sized enterprises to accelerate the supply of standardised design of toilets									
Undertake series of events to attract medium scale enterprise to join the toilet accelerator program	KCCA/ Development partners	Selected business accelerator	Development partners	One event held every year x 3 years	USD 15,000 X 3=45,000	30,000	15,000	-	45,000
Develop a business incubation platform for sanitation entrepreneurs	Selected business accelerator	Selected business accelerator	Development partners	At least 10 mid-sized enterprises functional	USD 25,000 per Event for 3 Events	75,000	-	-	75,000
Sub-total									120,000
Component HH5: Strengthen capacities for compliance monitoring of sanitation ordinance									
Develop a sanitation ordinance compliance strategy	KCCA	Consultants	KCCA	Detailed concept report on the ordinance compliance strategy	USD 500 per day for 20 days	10,000	-	-	10,000
Strengthen the operational capacity of compliance monitoring units	KCCA	KCCA	KCCA	Annual report on compliance monitoring activities	USD 50 per operation for 500 operations	75,000	75,000	125,000	275,000
Develop and roll out the citizens reporting app	KCCA	App developer/ consultants	KCCA	App used by at least 25,000 users	USD 30,000 for app development	30,000	-	-	30,000
Sub-total									315,000
Total						13,030,260	12,840,260	14,628,767	40,499,287

Public Schools

Output	Lead	Implemented By	Financed By	Indicator	Calculation Estimate	Short (2020)	Mid (2025)	Long (2030)	Total [USD]
Component SC1: Develop a school toilet construction and rehabilitation programme									
Develop school WASH in Schools (WinS) improvement plan for each school to identify infrastructure needs	KCCA	KCCA	KCCA/ Development Partners	Improved WinS plan	USD 1,000 per school for 98 schools (9 schools per year)	27,000	27,000	44,000	99,000
Develop a concerted construction and rehabilitation plan for school sanitation improvement	KCCA	Consultants	KCCA/ Development Partners	Construction and rehabilitation plan for school sanitation improvement	USD 500 per Day for 20 Days	10,000	-	-	10,000
Construct and/or rehabilitate infrastructure in schools	KCCA	KCCA/Devel- opment Partners	KCCA/Devel- opment Partners	Constructed and rehabilitated infrastruc- ture	USD 3,000 per stance for 250 stances per year	2,250,000	2,250,000	3,750,000	8,250,000
Create incentives for schools to make investments in infrastructure	KCCA	KCCA	KCCA/ Development Partners	Increased investments in schools	Lump sum of USD 10,000 per year	30,000	30,000	50,000	110,000
Subtotal									8,469,000
Component SC2: Strengthen operation & maintenance in schools									
Develop a school-driven WASH budget and plan for each school	KCCA	Consultant	KCCA/Devel- opment Partners	WASH Budget and Plan for each school	USD 500 per Day for 30 Days per year	15,000	-	-	15,000
Increase budget for O&M in schools from USD 0.30 per pupil to USD 4.5 per pupil per year	KCCA	KCCA	KCCA	Increased O&M budget	Assumed 1,000 pupils per school x USD 1.5 per term x 3 terms annually = USD 4,500 /year/school x 98 schools.	1,195,110	871,235	959,750	3,026,095
Apply pro-poor water tariff to KCCA schools	NWSC	KCCA/NWSC	NWSC	Pro-poor water tariff implemented in KCCA schools	This is already under implementation. No extra costs provided	-	-	-	-
Subtotal									3,041,095

Public Schools

Output	Lead	Implemented By	Financed By	Indicator	Calculation Estimate	Short (2020)	Mid (2025)	Long (2030)	Total [USD]
Component SC3: Introduce the 3-Star approach for health education in all KCCA schools									
The 3-Star approach is tested and implemented in KCCA schools	KCCA	KCCA/Development Partners	KCCA/Development Partners	The number of schools that are successfully enrolled on 3 –star	USD 5,000 per school for 98 schools per year	1,470,000	1,470,000	2,450,000	5,390,000
Subtotal									5,390,000
Component SC4: Incentivise schools for better sanitation									
Organise one Toilets Making the Grade (TMG) school competition annually	KCCA	KCCA/Development Partners	KCCA/Development Partners	One competition held annually	USD 15,000 per School competition for 1 School competition per year	45,000	45,000	75,000	165,000
Subtotal									165,000
Component SC5: Mainstream hygiene and handwashing improvements in schools									
Assess, update, and conceptualise a strategy for up-scaled hygiene and hand wash improvements campaign for all schools	KCCA	KCCA/Consultant	KCCA/Development Partners	A study report on strategies for up-scaling hygiene and handwashing improvements.	USD 500 per day for 20 days	10,000	-	-	10,000
Implement and sustain the hygiene improvement campaign in KCCA schools	KCCA	KCCA/Development Partners	KCCA/Development Partners	No of improvements campaigns in KCCA schools.	USD 500 per school for average number of 100 schools per year	150,000	150,000	250,000	550,000
Periodically monitor hygiene and handwashing levels in schools	KCCA	KCCA/Development Partners	KCCA/Development Partners	No of inspections to monitor hygiene and handwashing levels.	USD 20 per inspection for 100 inspections (100 schools, each inspected twice a year gives 200 inspections.)	12,000	12,000	20,000	44,000
Assess the outcomes and realign approach if required	KCCA	KCCA/Development Partners	KCCA/Development Partners	A study on outcome and approaches for realignment	USD 500 per day for 10 days-once every year	15,000	15,000	25,000	55,000
Subtotal									659,000
Total						5,229,100	4,870,235	7,624,750	17,724,095

Private Schools

Output	Lead	Implemented By	Financed By	Indicator	Calculation Estimate	Short (2020)	Mid (2025)	Long (2030)	Total [USD]
Component: PSC1: Promote 3-Star approach to reach national WinS standards in all KCCA schools									
The 3-star approach is promoted in all private schools	KCCA	Consultant	KCCA/ Development Partners	Information and education material on 3-star approach	USD 500 per Day for 20 Days	10,000	-	-	10,000
The tested 3-star monitoring mechanism is scaled and mainstreamed to all private schools	KCCA	KCCA/DPs	KCCA/ Development Partners	Improved awareness and practices in private schools	USD 25 per School for 564 Schools (Repeated Annually)	42,300	42,300	70,500	155,100
Subtotal									165,100
Component PSC2: Incentives for better sanitation in schools									
Organize one WASH school competition annually	KCCA	KCCA/ Development Partners	KCCA/ Development Partners	One competition held annually	USD 15000 per School competition per year	45,000	45,000	75,000	165,000
Subtotal									165,000
Component PSC3: Regularise monitoring and inspection of private schools									
Establish a baseline for all private schools	KCCA	Consultant	KCCA/ Development Partners	Baseline data for all private schools	USD 500 per day for 30 days (One-time cost)	15,000	-	-	15,000
Annual monitoring of private schools by divisional education officers	KCCA	KCCA	KCCA	Number of inspections and improved compliance	USD 20 per inspection for 705 inspections (705 schools, each inspected twice a year gives 1,410 inspections.)	42,300	42,300	70,500	155,100
Subtotal									170,100

Private Schools

Output	Lead	Implemented By	Financed By	Indicator	Calculation Estimate	Short (2020)	Mid (2025)	Long (2030)	Total [USD]
PSC.4 Mainstream hygiene and handwashing improvements in schools									
Implement and sustain the hygiene improvement campaign in private schools	KCCA	KCCA/ Development Partners	KCCA/ Development Partners	No of improvements campaigns in KCCA schools.	USD 500 per school for an average number of 705 schools per year.	1,057,500	1,057,500	1,762,500	3,877,500
Periodically monitor hygiene and handwashing levels in schools	KCCA	KCCA/ Development Partners	KCCA/ Development Partners	Number of inspections to monitor hygiene and handwashing levels.	USD 20 per inspection for 705 inspections (705 schools, each inspected twice a year gives 1,410 inspections.)	84,600	84,600	141,000	310,200
Assess the outcomes and realign approach if required	KCCA	KCCA/ Development Partners	KCCA/ Development Partners	A study on outcome and approaches for realignment	USD 500 per day for 10 days-once every year	15,000	15,000	25,000	55,000
Subtotal									4,242,700
Total						1,311,700	1,286,700	2,144,500	4,742,900

Public HCs

Output	Lead	Implemented By	Financed By	Indicator	Calculation Estimate	Short (2020)	Mid (2025)	Long (2030)	Total [USD]
Component HC1: Initiate the WASH-FIT approach in all KCCA health centres									
WASH-FIT approach is established in all KCCA Health Centres, including the formation of a WASH FIT team in each health centre and development of a water and sanitation safety plan for each health centre.	KCCA	KCCA	MoH/GoU	Number of HCs that have implement FIT	Total cost 8 HC @USD 10,000	40,000	40,000		80,000
Subtotal									80,000
Component HC2: Construction of new toilet blocks and rehabilitation of existing ones									
Construct new facilities in KCCA health centres	KCCA	KCCA/ Development Partners	KCCA/ Development Partners	No. of new stances built/Rehabilitated	USD 4,000 per stance for 30 stances per year which give a total of about 325 stances by 2030	24,000	36,000	60,000	120,000
Subtotal									120,000
Component HC3: Strengthen operation & maintenance in Public Health Centres									
Operation and maintenance	KCCA	KCCA	KCCA	Increased O&M budget	USD 20 per patient for 9,000 patients (USD 0.056 per day X 365 days gives USD 20 per year for 1 Patient. Cost is 9,000 X 20X11=USD 2,007,500)	547,500	547,500	912,500	2,007,500
Subtotal									2,007,500
HC.4 Mainstream hygiene and handwashing improvements in health centres									
Implement and sustain the hygiene improvement campaign	KCCA	KCCA/ Development Partners	KCCA/ Development Partners	No of improvements campaigns in KCCA schools.	USD 500 per HCs for average number of 8 HCs per year	12,000	12,000	20,000	44,000
Periodically assess the outcomes and realign strategy if required	KCCA	KCCA/Devel- opment Partners	KCCA/ Development Partners	Number of inspections to monitor hygiene and handwashing levels.	USD 20 per inspection for 8 HCs (8 HCs, each inspected four times a year gives 32 inspections.)	1,920	1,920	3,200	7,040
Subtotal									51,040
Total						625,420	637,420	995,700	2,258,540

Private HCs

Output	Lead	Implemented By	Financed By	Indicator	Calculation Estimate	Short (2020)	Mid (2025)	Long (2030)	Total [USD]
Component PHC1: Awareness raising campaign targeting private health clinics in five divisions									
Develop information and communication material from existing WASH in health centres catering to private clinics	KCCA	Consultant	KCCA/ Development Partners	Baseline Data on WASH in private health centres	USD 500 per day for 20 days (One-time cost)	10,000	-	-	10,000
Social/sanitation marketing campaigns targeting private clinics – using existing structures	KCCA	KCCA	KCCA	Improved awareness and sanitation practices in Health Centres	USD 25 per private clinic for 246 private clinics	16,667	12,150	13,384	42,201
Subtotal									52,201
Component PHC2: Initiate the WASH-FIT approach in all KCCA health centres									
Training for WASH-FIT approach in all private Health Centres	KCCA	KCCA	MoH/GoU	Number of HCs that have implement FIT	Total cost 246 PHC @USD 150	36,900	-	-	36,900
Subtotal									36,900
Component PHC3: Regularise monitoring and inspection of private health clinics									
Annual monitoring of private health centres by divisional officers	KCCA	KCCA	KCCA	Number of inspections and improved compliance	USD 20 per inspection for 250 inspections (246 HCs, each inspected once a year gives 246 inspections-approx. 250)	15,000	15,000	25,000	55,000
Subtotal									55,000
Component PHC4: Mainstream hygiene and handwashing improvements in private health clinics									
Implement and sustain the hygiene improvement campaign	KCCA	KCCA/ Development Partners	KCCA/ Development Partners	No of improvements campaigns in HCs.	USD 500 per HCs for average number of 246 HCs approx. 250 per year.	375,000	375,000	625,000	1,375,000
Periodically assess the outcomes and realign strategy if required	KCCA	KCCA/ Development Partners	KCCA/ Development Partners	Number of inspections to monitor hygiene and handwashing levels.	USD 20 per inspection for 250 HCs (250 HCs, each inspected twice a year gives 500 inspections.)	30,000	30,000	50,000	110,000
Subtotal									1,485,000
Total						488,567	432,150	713,384	1,634,101

Public Toilets

Output	Lead	Implemented By	Financed By	Indicator	Calculation Estimate	Short (2020)	Mid (2025)	Long (2030)	Total [USD]
Component PBT1: Regulate and monitor commercially-run public toilets									
Develop a regulatory framework for functions and operations of public Sanitation facilities.	KCCA	Consultant	KCCA/ Development Partners	Framework for regulating public toilets	USD 500 per Day for 20 Days (One-time cost)	10,000	-	-	10,000
Periodically monitor public sanitation facilities.	KCCA	KCCA	KCCA	Number monitoring visits and no of compliant public toilets	USD 20 per toilet for 600 toilets	36,000	36,000	60,000	132,000
Subtotal									142,000
Component PBT2: Develop appropriate alternative business models for operations and maintenance of privately public toilets									
Develop alternative business models for public toilets	KCCA	Consultant	KCCA/ Development Partners	Number of alternative business models for public toilets	USD 500 per Day for 20 Days	10,000	-	-	10,000
Subtotal									10,000
Component PBT3: Strategically locate and construct public toilets in high transient populations zones									
Conduct assessment based on hotspots for transient population projected until 2030	KCCA	Consultant	KCCA/ Development Partners	Number toilets designed in hotspots	USD 500 per day for 20 days	10,000	-	-	10,000
Construct public sanitation facilities to cater for growth until 2030.	KCCA	KCCA/ Development Partners	KCCA/ Development Partners	Number of public toilets constructed	USD 20000 per toilet for 22 toilets annually	1,320,000	1,320,000	2,200,000	4,840,000
Subtotal									4,850,000
Component PBT4: Increase in the budget for KCCA managed public toilets									
Increase budget for KCCA managed public toilets.	KCCA	KCCA	KCCA	Number of public toilets that are maintained in accordance with KCCA standards	USD 0,02 per User for 810,000 Users in a year (Average number of free toilets 15 used by 1800 users for 30 days in a month =15x1,800x30=12,150)	36,450	36,450	60,750	133,650
Subtotal									133,650

Public Toilets

Output	Lead	Implemented By	Financed By	Indicator	Calculation Estimate	Short (2020)	Mid (2025)	Long (2030)	Total [USD]
Component PBT5: Mainstream hygiene and handwashing improvements in public toilets									
Implement and sustain the hygiene improvement campaign	KCCA	KCCA/ Development Partners	KCCA/ Development Partners	No of improvements campaigns conducted in KCCA PBT.	USD 100 per PBT for average number of 600 PBTs per year	180,000	180,000	300,000	660,000
Periodically assess the outcomes and realign strategy if required	KCCA	KCCA/ Development Partners	KCCA/ Development Partners	Number of inspections to monitor hygiene and handwashing levels.	USD 20 per PBT per year for 600 PBTs	36,000	36,000	60,000	132,000
Subtotal						1,638,450	1,608,450	2,680,750	792,000 5,927,650

Private Schools

Output	Lead	Implemented By	Financed By	Indicator	Calculation Estimate	Short (2020)	Mid (2025)	Long (2030)	Total [USD]
Component: PSC1: Promote 3-Star approach to reach national WinS standards in all KCCA schools									
The 3-star approach is promoted in all private schools	KCCA	Consultant	KCCA/ Development Partners	Information and education material on 3-star approach	USD 500 per Day for 20 Days	10,000	-	-	10,000
The tested 3-star monitoring mechanism is scaled and mainstreamed to all private schools	KCCA	KCCA/DPs	KCCA/ Development Partners	Improved awareness and practices in private schools	USD 25 per School for 564 Schools (Repeated Annually)	42,300	42,300	70,500	155,100
Subtotal									165,100
Component PSC2: Incentives for better sanitation in schools									
Organize one WASH school competition annually	KCCA	KCCA/ Development Partners	KCCA/ Development Partners	One competition held annually	USD 15,000 per School competition per year	45,000	45,000	75,000	165,000
Subtotal									165,000
Component PSC3: Regularise monitoring and inspection of private schools									
Establish a baseline for all private schools	KCCA	Consultant	KCCA/ Development Partners	Baseline data for all private schools	USD 500 per day for 30 days (One-time cost)	15,000	-	-	15,000
Annual monitoring of private schools by divisional education officers	KCCA	KCCA	KCCA	Number of inspections and improved compliance	USD 20 per inspection for 705 inspections (705 schools, each inspected twice a year gives 1,410 inspections.)	42,300	42,300	70,500	155,100
Subtotal									170,100

Collection and Transport

Output	Lead	Implemented By	Financed By	Indicator	Calculation Estimate	Short (2020)	Mid (2025)	Long (2030)	Total [USD]
Component FS1: Improve collection efficiency of pit emptying									
Develop a collection efficiency plan for gulpers and cesspool emptiers	KCCA	Consultant	KCCA/ Development partners	Developed transport efficiency plan	USD 500 per Day for 20 Days in a year	10,000	-	-	10,000
Pilot viable options	KCCA	KCCA/ Development Partners	Development partners	Number of piloted viable options	USD 30,000 per pilot for 3 pilots in a year	90,000	-	-	90,000
Upscale the option	KCCA	KCCA/ Development Partners	NWSC/ Development Partners	Number of HHs using the transfer station	Est. cost per option USD 25,000(Capex - excluding land) + 2,500 X 11years (Opex @10% of Capex) = (25,000 + 27,500) X 5 Divisions = USD 262,500. Translates to USD 8,750/yr/div	131,250	131,250	-	262,500
Subtotal									362,500
Component FS2: Professionalise and regulate the Gulpers and Pit emptiers									
Develop SoPs for FS emptying services	NWSC	NWSC	NWSC	SoPs developed	USD 500 per Day for 20 Days in a year	10,000	-	-	10,000
Provide training to emptiers based on SoPs and provide licences	NWSC	NWSC	NWSC	Training report of Emptiers on SoPs and number trained	USD 100 per User for 100 Users in a year	20,000	-	-	20,000
Revise and revamp the GPS tracking system for shared data analytics by NWSC & KCCA	KCCA	Consultant	Development Partners	Revised and revamped GPS tracking tool	USD 500 per days for 30 days in a year	30,000	-	-	30,000
Roll out-licensing by KCCA and NEMA to all operators in the city	KCCA	KCCA	Development Partners	Number of licensed operators.	Lump-sum of USD 10,000 per year for each of the first 3 years	30,000	-	-	30,000
Monitor licences at the NWSC treatment plant.	NWSC	NWSC	Development Partners	Number of compliant operators	Lump-sum of USD 5,000 per year.	15,000	15,000	25,000	55,000
Subtotal									145,000

Collection and Transport

Output	Lead	Implemented By	Financed By	Indicator	Calculation Estimate	Short (2020)	Mid (2025)	Long (2030)	Total [USD]
Component FS3: Create demand for FS emptying in low-income areas									
Develop key messages around illicit dumping for the awareness-raising campaign (included under HH.1)	KCCA	KCCA	KCCA	No awareness-raising campaigns	covered in BCC under households	-	-	-	-
Timely enforcement of ordinance on illicit dumping	KCCA	KCCA	KCCA	Number of enforcements in low-income areas	covered in compliance monitoring under households	-	-	-	-
Subtotal									0
Component FS4: Prioritise FS emptying from Public Schools, Health Centres, Markets etc									
Conduct demand assessment and assess the lifecycle cost for of FS emptying services for public sanitation facilities	KCCA	Consultant	KCCA	Report on demand and lifecycle cost assessment	USD 500 per Day for 20 Days	10,000	-	-	10,000
Increase capacity of KCCA's pit emptying services for public sanitation facilities	KCCA	KCCA	KCCA/DPs	Number of trucks purchased that meet standards	USD 300,000 per truck for 2 trucks	1,500,000			1,500,000
Operational expenditure for the cesspool trucks	KCCA	KCCA	KCCA	Annual expenditure (IN USD) per truck	USD 15,000 per truck per year	45,000	45,000	75,000	165,000
Subtotal									1,675,000
Total						1,891,250	191,250	100,000	2,182,500

Solid Waste

Output	Lead	Implemented By	Financed By	Indicator	Calculation Estimate	Short (2020)	Mid (2025)	Long (2030)	Total [USD]
Component SWM1: Sensitisation campaign									
Sensitisation campaign targeting tenants around solid waste management	KCCA	KCCA	KCCA	Reduction of solid waste in pit latrines	Considered under the awareness-raising campaign	-	-	-	-
Subtotal									
Component SWM2: Make provisions for disposal of contaminated solid waste.									
Storage area to be provided by NWSC at Lubigi and Bugolobi FSTPs	NWSC	NWSC	NWSC	Assumed that NWSC has the land at the treatment site. Just consider the one-time cost of USD 20,000 for fencing off the area	USD 20,000 per fence for 2 fences	40,000	-	-	40,000
Scheduled transfer of FS contaminated solid waste to municipal landfill	NWSC	NWSC	NWSC	Solid waste transported to KCCA landfill once a month	USD 200 per trip for 12 trips	7,200	7,200	12,000	26,400
Subtotal									
SWM.3 Increase efficiency of solid waste management in Kampala									
Integrate solid waste management information in all the social/sanitation marketing messages	KCCA	KCCA	KCCA		Costs considered in HH.1	-	-	-	-
Road Infrastructure developed in low income areas in liaison with Engineering Directorate	KCCA	KCCA	KCCA		At actuals	-	-	-	-
Study on streamlining of Solid waste collection fees in Low-income areas of Kampala	KCCA	Consultant	KCCA	Report on rationalisation of SWM fees	USD 500 per Day for 20 Days	10,000	-	-	10,000
Enforcement of solid waste ordinance requirements	KCCA	KCCA	KCCA		Costs considered in HH.5	-	-	-	-
Subtotal									
Total						57,200	7,200	12,000	76,400

Treatment and Reuse

Output	Lead	Implemented By	Financed By	Indicator	Calculation Estimate	Short (2020)	Mid (2025)	Long (2030)	Total [USD]
Component TRT1: Increase capacity of FS treatment within Kampala									
Design and Construction of Nalukolongo FSTP and Kajjansi FSTP	NWSC	NWSC	NWSC/DPs	Installed FS treatment capacity m ³ /day	NWSC Master plan 2015	5,394,600	5,394,600	-	10,789,200
Develop a concept note for mechanical dewatering of faecal sludge at the Bugolobi and Lubigi FSTP and extending capacities up to 2000 m ³ per day	NWSC	Consultant	NWSC/DPs	Developed concept note	USD 800 X 40 days	32,000	0	0	32,000
Subtotal									10,821,200
Component TRT2: Increase the capacity of wastewater treatment									
Design and construction of Ggaba WWTP with capacity of 8,000 m ³ /d	NWSC	NWSC	NWSC/DPs	Installed wastewater treatment capacity m ³ /day	NWSC Masterplan 2015	-	6,050,000	-	6,050,000
Design and construction of Mukono WWTP with capacity of 8,000 m ³ /d	NWSC	NWSC	NWSC/DPs	Installed wastewater treatment capacity m ³ /day	NWSC Masterplan 2015	-	6,050,000	-	6,050,000
Design and construction of Nalukolongo WWTP with capacity of 17,900 m ³ /d	NWSC	NWSC	NWSC/DPs	Installed wastewater treatment capacity m ³ /day	NWSC Masterplan 2015	7,104,000	-	-	7,104,000
Design and construction of Lubigi expansion with capacity of 33,100 m ³ /d	NWSC	NWSC	NWSC/DPs	Installed wastewater treatment capacity m ³ /day	NWSC Masterplan 2015	5,394,600	-	-	5,394,600
Design and construction of Nakivubo WWTP with a capacity of 89,300 m ³ /d – 2040 (USD 26 million)	NWSC	NWSC	NWSC/DPs	Installed wastewater treatment capacity m ³ /day	Planned for 2040 after strategy period ending 2030	-	-	-	-
Subtotal									24,598,600
Component TRT3: Explore additional options for co-treatment of faecal sludge/wastewater and organic solid waste									
Conduct feasibility studies to access the potential co-treatment technologies for mixed waste stream	NWSC	Consultant	NWSC/DPs	Feasibility report on treatment technologies	USD 500 per Day for 40 Days	20,000	-	-	20,000
Subtotal									20,000

Treatment and Reuse

Output	Lead	Implemented By	Financed By	Indicator	Calculation Estimate	Short (2020)	Mid (2025)	Long (2030)	Total [USD]
Component TRT4: Introduce packaged wastewater treatment systems for high water consumption customers, to reduce wastewater in sewers									
Develop concepts for packaged wastewater treatment systems	NWSC	Consultant	NWSC/DPs	Developed concepts	USD 500 per Day for 40 Days	20,000	-	-	20,000
Pilot and upscale decentralised packaged wastewater treatment systems	NWSC	Consultant	NWSC/DPs	Pilot study	USD 500 per Day for 40 Days	20,000	-	-	20,000
Subtotal									40,000
Component TRT5: Introduce water-saving measure to reduce water consumption and thus reduce wastewater loads									
Develop concepts for reducing water consumption in Kampala	NWSC	Consultant	NWSC/DPs	Developed concepts	USD 500 per Day for 40 Days	20,000	-	-	20,000
Develop a public relations strategy to communicate key messages	NWSC	Consultant	NWSC/DPs	Communication Strategy	USD 500 per Day for 20 Days	10,000	-	-	10,000
Make strategic partnerships with the private sector dealing with technology options	NWSC	Private sector	Private sector	Improved technologies.	USD 10,000 per division per year (Annual cost is USD 50,000 for the 5 divisions)	150,000	150,000	250,000	550,000
Pilot measures in select housing estates and institutional buildings	NWSC	NWSC	NWSC	Pilot study	USD 10,000 per division per year (Annual cost is USD 50,000 for the 5 divisions-for the first 6 years	150,000	150,000	-	300,000
Pilot measures in select housing estates and institutional buildings	NWSC	NWSC	NWSC	Number of piloted measures	To be estimated based on scale.	-			
Subtotal Total						18,315,200	17,794,600	250,000	36,359,800

Cooperation System

Output	Lead	Implemented By	Financed By	Indicator	Calculation Estimate	Short (2020)	Mid (2025)	Long (2030)	Total [USD]
Component CPM1: Establishment of the Divisional Council Sanitation Task Force (DSTF)									
DSTFs established and operational	KCCA	KCCA	KCCA	Quarterly DSTF meeting report	USD 500 per meeting x 4 times annually per division (Gives 4X5 =20 meetings)	30,000	30,000	50,000	110,000
Five Divisional Sanitation Improvement Plan developed	KCCA	KCCA	KCCA	Divisional Sanitation Improvement Plan	10,000 per plan. One-time cost	50,000	-	-	50,000
Subtotal									160,000
Component CPIM2: Establishment of a GKMA infrastructure coordination taskforce									
Bi-annual coordination meeting of GKMA sub-committee on water/environment/climate change resilience	MoWE	MoWE	MoWE	Bi-annual meeting report	Two meeting per year conducted until 2030. USD 2,000 per meeting	12,000	12,000	20,000	44,000
Subtotal									44,000
Component CPIM3: Establishment of a joint monitoring framework									
Assessment of the KWSF with recommendations for further improvements and sustainability	KCCA	Consultant	KCCA	KWSF assessment report	10 days into USD 500	5,000	-	-	5,000
Establishment of the revamped KWSF with a joint sector monitoring framework	KCCA	KCCA	KCCA/ Development Partners	One KWSF event held every year	Lump-sum of USD 5,000 per year	15,000	15,000	25,000	55,000
Subtotal									60,000
Total						112,000	57,000	95,000	264,000

Cost of Administering the Strategy (KCCA)

Output	Lead	Implemented By	Financed By	Indicator	Calculation Estimate	Short (2020)	Mid (2025)	Long (2030)	Total [USD]
Component TRT1: Increase capacity of FS treatment within Kampala									
Coordinator	KCCA	KCCA	KCCA	Progress reports, annual reports	USD 5,000 per month for 12 months -Source: SUSAP Strategy	180,000	180,000	300,000	660,000
Other staff (at least 5)	KCCA	KCCA	KCCA	Timely reports	USD 2,500 per month for 12 months -Source: SUSAP Strategy	90,000	90,000	150,000	330,000
Purchase of vehicle(s) plus motorcycle (if needed)	KCCA	KCCA	KCCA	Vehicle(s) purchased	USD 75,000 per Vehicle for 1 Vehicles -Source: SUSAP Strategy	75,000	-	-	75,000
Vehicle/motorcycle fuel	KCCA	KCCA	KCCA	Receipts, mileage	USD 833 per month for 12 months -Source: SUSAP Strategy	30,000	30,000	50,000	110,000
Servicing and vehicle O&M	KCCA	KCCA	KCCA	Receipts	USD 250 per month for 12 months -Source: SUSAP Strategy	9,000	9,000	15,000	33,000
Mid-term evaluation	KCCA	KCCA	KCCA	Mid-term evaluation report	USD 500,00 per Evaluation for 1 Evaluations -Source: SUSAP Strategy	100,000	50,000	-	150,000
End of project evaluation	KCCA	KCCA	KCCA	Final evaluation report	USD 75,000 per Evaluation for 1 Evaluations -Source: SUSAP Strategy	-	-	150,000	150,000
Annual audit	KCCA	KCCA	KCCA	Annual audit reports	USD 2,500 per Audit for 1 Annual Audits -Source: SUSAP Strategy	7,500	7,500	10,000	25,000
End of project audit	KCCA	KCCA	KCCA	Annual audit reports	USD 6,000 for End-of-Project-Audit -Source: SUSAP Strategy	18,000	18,000	30,000	66,000
Other unforeseen	KCCA	KCCA	KCCA	Timely completion of all activities	Source: SUSAP Strategy	48,000	48,000	80,000	176,000
Subtotal						557,500	432,500	785,000	1,775,000
Total						142,285,857	97,704,965	31,676,851	271,667,673



