

CWIS CITY SNAPSHOT

CWIS | CITYWIDE
INCLUSIVE
SANITATION

KAMPALA



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The Citywide Inclusive Sanitation (CWIS) city snapshots are designed to provide compact summaries of initiatives that are being implemented in eight cities, namely Lusaka, Kampala, Dakar, Khulna, Trichy, Warangal, Narsapur and Wai. Each of these cities has active investments designed to achieve the CWIS goals of equitable, safe, and sustainable sanitation service delivery. These city snapshots are part of the CWIS Monitoring and Learning initiative led by Athena Infonomics with support from the Bill & Melinda Gates Foundation.

This city snapshot focuses on the city of Kampala where the Kampala Capital City Authority (KCCA) is the lead implementing partner. This factsheet outlines the pathway that Kampala is taking to achieve its CWIS goals and tracks the progress being made, including key shifts in institutional and service delivery models to support safe, equitable and sustainable delivery of services.

1. City Sanitation Overview

Category	Indicator	Value
Demographic	Administrative boundary	Kampala is Uganda's capital and largest city with an area of 189 km ² . Informal settlements exist both within the Kampala City area and outside of the city boundary, in the Greater Kampala Metropolitan Area (GKMA). The Kampala Capital City Authority (KCCA) currently works within the Kampala City boundary, whereas the National Water and Sewerage Corporation (NWSC) also extends its services to some of the informal settlements in GKMA. The information and statistics in this snapshot are based on the Kampala City boundary.
	Population	1,507,080 ¹
	% of population living in informal settlements	60% ²
Geographic	Topography	Kampala is a city of rolling hills, and grassy wetlands in the valleys ³ . The majority of the areas, particularly slums, are low lying and are affected by flooding due to poor drainage infrastructure network, which makes construction of improved toilets expensive. ⁴
	Groundwater table	Some of Kampala's informal settlements are situated in low-lying areas with shallow groundwater table (<1m) and sandy aquifers, which are prone to infiltration of contaminants from unsanitary onsite systems. ⁵
Basic Sanitation Statistics (as of 2020)	% of population covered by sewerage networks	8% ⁶
	% of population practicing open defecation	1% ⁷
	% of population relying on onsite sanitation	91% ⁸
	Treatment hardware available (combined capacity)	5 Wastewater Treatment Plants (WWTP) with operational capacity of 40 MLD. The treatment plants are currently running over capacity.

¹ Uganda Bureau of Statistics 2017; National Population and Housing Census 2014 – Area Specific Profile Series, Kampala, Uganda.

² Presentation on Private Sector Engagement in Sanitation Service provision by Julian Musiime, Sharon Nakigudde, and Dr. Najib Lukooya Bateganya (PhD), at an International Training Program on Sustainable Water and Sanitation (ITP-SUWAS), 18th January 2018.

³ Richard Mutabazi (KCCA (2017), Poster Presentation at the International Training Programme on Sustainable Urban Water and Sanitation – Integrated processes (ITP-SUWAS)

⁴ Presentation by Dr. Najib Lukooya Bateganya, Ag. Director Public Health and Environment (KCCA), at a WaterAid Workshop on Sustainable WASH (SusWASH), November 2017.

⁵ Nyenje, P.M.; Havik, J.C.N.; Foppen, J.W.; Muwanga, A.; Kulabako, R. Understanding the fate of sanitation-related nutrients in a shallow sandy aquifer below an urban slum area. *Journal of Contaminant Hydrology* 164 (2014): 259-274.

⁶ Presentation by National Water and Sewerage Corporation (NWSC) at a WaterAid Workshop (November, 2017).

⁷ Water and Environment Sector Performance Report 2018. The same data point is not available in the 2019 Sector Performance Report.

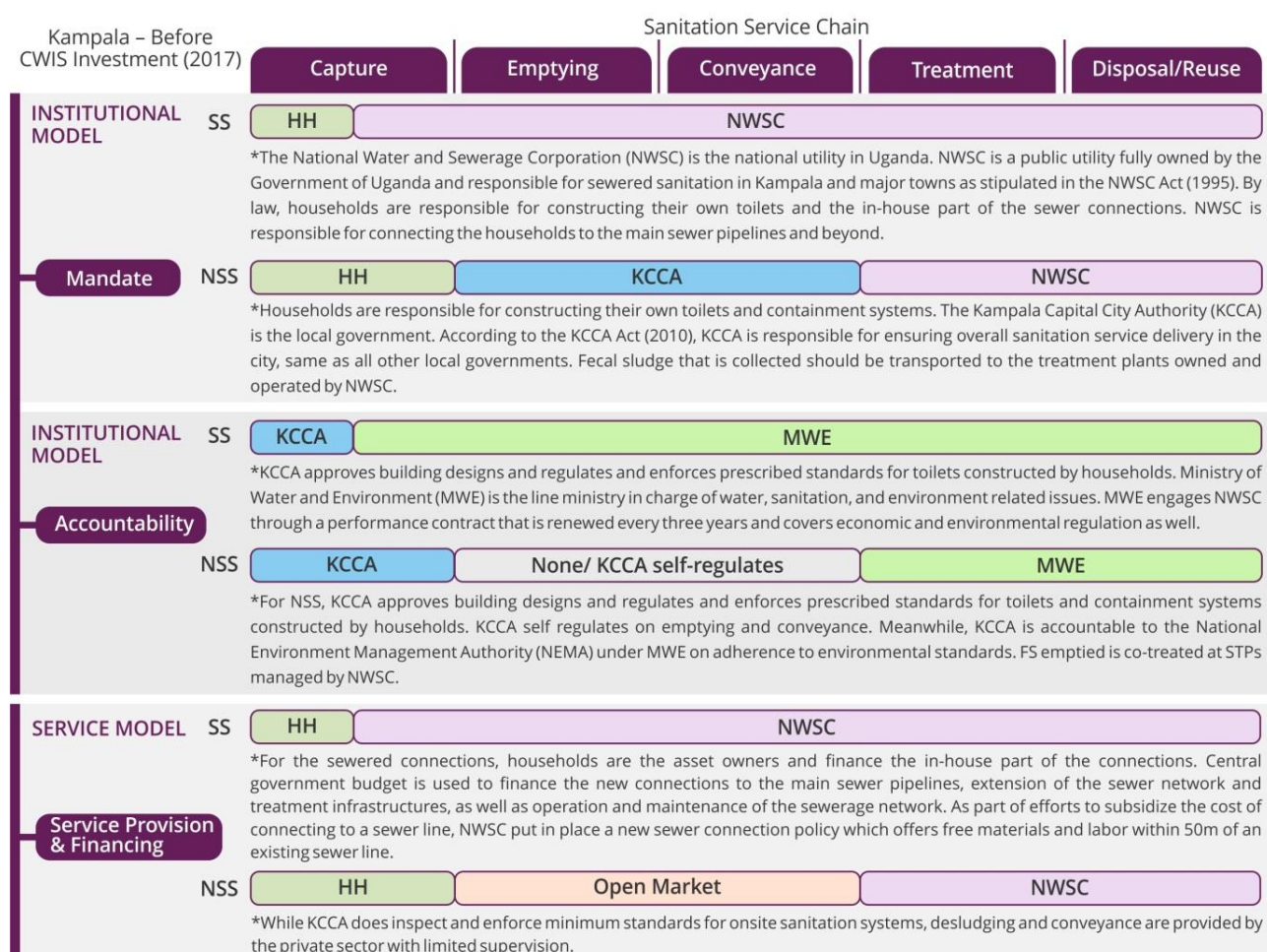
⁸ Ibid.

2. Institutional and Governance Framework of City Sanitation Service Delivery

The graphics below show the institutional mandate, accountability and service provision models for Kampala before the CWIS program started and the current scenario as of 2020. The full institutional model of urban sanitation service delivery covers all three of the systems functions under CWIS—Responsibility⁹, Accountability¹⁰, and Resource Planning/ Management (financing framework)¹¹. The illustration in this section presents only responsibility and accountability, as financing framework is complex and varies widely across cities. The section on service model illustrates how sanitation services are being delivered. The service model includes a wide range of options such as direct provision by the mandated service authority, public private partnerships, and direct provision by the private sector but with oversight/regulation by the service authority or through open markets with limited oversight/regulation.

In Kampala, the main change during the course of the CWIS program is the regulation of private desludging operators. KCCA is engaging private operators using a PPP model which would allow the authority more oversight on service quality and pricing.

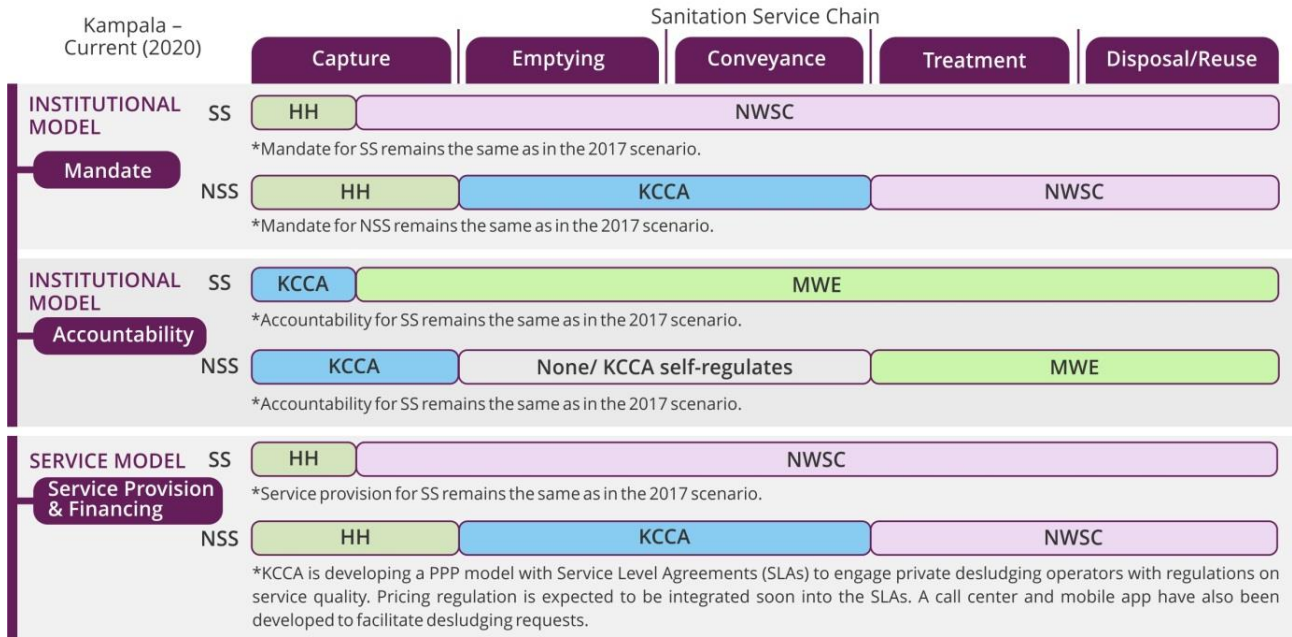
Legends: SS - Sewered Sanitation; NSS - Non-Sewered Sanitation



⁹ Responsibility means that authority (ies) executes a clear public mandate to ensure safe, equitable, and sustainable sanitation for all.

¹⁰ Accountability means that authorities' performance against their mandate is monitored and managed with data, transparency and incentives.

¹¹ Resource Planning/ Management means that resources – human, financial, natural, assets – are effectively managed to support execution of mandate across time / space.



3. List of CWIS Interventions

This section seeks to capture Kampala's path to CWIS goals of equity, safety and sustainability and its performance on key functions such as clarity of mandate/responsibility, accountability and resource planning/ management. The table below is a list of Key Performance Indicators (KPIs)¹² used to gauge changes towards CWIS, followed by another table detailing the scenario in Kampala. The KPIs EQ-1 and SF-1 specifically follow the definitions as laid out in the Shit Flow Diagram (SFD) manual¹³.

KPIs for Interventions

	Equity <i>Services reflect fairness in distribution and prioritization of service quality, prices, and deployment of public finance/subsidies</i>	Safety <i>Services safeguard customers, workers, and communities from safety and health risks—reaching everyone with safe sanitation</i>	Sustainability <i>Services are reliably and continually delivered based on effective management of human, financial and natural resources</i>
Service Outcomes	<ul style="list-style-type: none"> • EQ-1: % safely managed sanitation in low income areas <ul style="list-style-type: none"> ○ % wastewater (WW) contained ○ % supernatant (SN) contained ○ % FS contained ○ % FS emptied • EQ-2: Women's participation in sanitation related matters • EQ-3: Gender friendly PT/CT design • EQ-4: % of sanitation workers covered by social security and health insurance 	<ul style="list-style-type: none"> • SF-1: % safely managed sanitation <ul style="list-style-type: none"> ○ % WW contained ○ % WW contained delivered to treatment ○ % SN contained ○ % FS contained ○ % FS emptied (contained + not contained) ○ % wastewater treated ○ % FS treated • SF-2: Health and safety standards and SOPs exist to protect sanitation workers from occupational hazards, and compliance is monitored 	<ul style="list-style-type: none"> • SS-1: % of treated wastewater that is reused • SS-2: % of treated biosolids that is reused • SS-3: % of utility capital investments covered by budget line/ government transfers • SS-4: % of O&M cost recovered for sanitation infrastructure (STPs/WWTPs, FSTPs, CT/PTs, desludging trucks, etc.)
	Responsibility <i>Authority (ies) executes a clear public mandate to ensure safe, equitable, and sustainable sanitation for all.</i>	Accountability <i>Authorities' performance against their mandate is monitored and managed with data, transparency and incentives.</i>	Resource Planning/ Management <i>Resources – human, financial, natural, assets – are effectively managed to support execution of mandate across time / space.</i>
System Functions	<ul style="list-style-type: none"> • RS-1: Policy mandate for service delivery covers both sewered and non-sewered sanitation across the entire sanitation service chain <ul style="list-style-type: none"> ○ Mandate has no exclusions ○ Mandate is explicitly pro-poor ○ Mandate is gender intentional and inclusive of vulnerable groups 	<ul style="list-style-type: none"> • AC-1: Service authority performance is monitored externally with clear KPIs and targets • AC-2: Performance data is sufficiently collected and reported, representative, and transparent • AC-3: Incentives and/or penalties tied to performance exist for sanitation service authority 	<ul style="list-style-type: none"> • RPM-1: Clear financing framework • RPM-2: Staff are in place and capable to execute mandate • RPM-3: Quality of investment decision-making • RPM-4: Integrated citywide sanitation plan

¹² The KPIs are based on the list of CWIS indicators, which are more detailed and intended to offer comprehensive insights into a city's progress towards CWIS. This KPI list focuses on a subset of CWIS indicators and seeks to highlight interventions that can contribute to improved outcomes, as most cities are still in early stages of investment maturity. For example, the CWIS indicators measure women's usage of PT/CTs as quantitative outcomes, while the KPI EQ-3 focus on gender friendly PT/CTs as an intermediate outcome that can lead to more women using PT/CTs.

¹³ Definitions as per the [SFD Manual](#) i.e., %SN contained = 0.5 * %Septic tank/ fully lined tank (sealed)/ lined tank with impermeable walls and open bottom connected to a centralized/decentralized combined sewer or foul/separate sewer; %WW contained = %Toilet discharges directly to a centralized/decentralized combined sewer or foul/separate sewer; %FS contained (all conditions when there is 'low risk' of groundwater pollution) = %Toilet discharges directly to soak pit + %Septic tank/ fully lined tank (sealed)/ lined tank with impermeable walls and open bottom connected to soak pit or no outlet + % Lined/ unlined pit, no outlet or overflow + % Pit (all types), never emptied but abandoned when full and covered with soil, no outlet or overflow + %SN contained.

Kampala Scenario

The table below presents the scenario in Kampala before the CWIS program was initiated, the target that needs to be achieved and the reforms and interventions made to reach this target. The table seeks to cover key interventions, both those completed over the past few years and those under planning, by all stakeholders that contribute to goals aligned with the CWIS idea. The table is not restricted to interventions that are part of the BMGF funded CWIS program or the CWIS grantee

*NOTE: Acronyms are available at the end of the section.

Service Outcomes	Starting Scenario (2017)	Equity	Safety	Sustainability
		<ul style="list-style-type: none"> • EQ-1: 45% safely managed sanitation in low income areas.¹⁴ <ul style="list-style-type: none"> ○ 3.2% WW contained (HH connected to sewers).¹⁵ • EQ-2: Limited women’s participation in sanitation related matters. • EQ-3: No data exists on gender friendly PT/CT. • EQ-4: Only sanitation workers employed by KCCA and NWSC have social security and health insurance. 	<ul style="list-style-type: none"> • SF-1: 54% safely managed sanitation.¹⁶ <ul style="list-style-type: none"> ○ 22% WW contained; ○ 13% WW contained delivered to treatment; ○ 38% FS contained; ○ 29% FS emptied (14% contained emptied + 15% not contained emptied); ○ 8% wastewater treated; ○ 22% FS treated. • SF-2: Health and safety standards and SOPs to protect sanitation workers from occupational hazards do not exist. 	<ul style="list-style-type: none"> • SS-1: 0% of treated wastewater is reused. • SS-2: All treated biosolids are sold but at below market prices. No standards exist for the reuse of biosolids. • SS-3: For SS, the GoU is required to contribute a certain percentage towards sewerage expansion and treatment plant construction project cost while the rest is covered by IFIs and donors.¹⁷ For NSS, KCCA primarily relies on development partners’ funding support for public toilets, desludging vehicles, and mobile transfer stations. Government budget for NSS Capex is very limited. • SS-4: Very limited data on O&M cost recovery for sanitation infrastructure.

¹⁴ KCCA CWIS results framework.

¹⁵ KCCA, Citywide Sanitation Mapping Report, 2017.

¹⁶ All data is extracted from the Kampala SFD (desk based), 2016. <https://www.susana.org/resources/documents/default/3-2593-7-1478269444.pdf>.

¹⁷ For example, in the flagship Lake Victoria Water and Sanitation Project, GoU contributed 47% for Phase II (2011-2019).

	Reforms & Interventions	<ul style="list-style-type: none"> • KCCA commissioned a detailed market analysis to evaluate potential technological FSM options for informal settlements for testing, promotion and scale up.¹⁸ • KCCA plans to provide an incentive of up to 20% of construction costs for landlords in LICs to build safe containment systems. • KCCA conducted a baseline assessment of women's participation in WASH service provision. • KCCA established a municipal based WASH forum to build momentum for women leaders and entrepreneurs in sanitation businesses. • KCCA implemented Weyonje¹⁹ social and sanitation marketing campaign integrating FS, solid waste and drainage in Low Income Communities (LICs). 	<ul style="list-style-type: none"> • KCCA plans to train and promote local construction companies and masons to scale up sanitation facilities (toilets and containment systems) and enforce minimum standards for design and construction. • KCCA plans to construct 2 decentralized wastewater treatment plant (including transfer station) and pilot condominium sewers in Makindye and Kibuye. • KCCA plans to build 200 new public toilet facilities; develop guidelines, business models, and O&M manual for management of public toilets. • KCCA provided service licensing to 28 private operators²⁰ to regulate and monitor safe emptying in the city. • KCCA developed a health and safety policy, established guidelines and SOP for sanitation workers, and trained 210 pit emptiers on the SOP. 	<ul style="list-style-type: none"> • KCCA plans to conduct joint research programs in partnership with NWSC and Makerere University Kampala on resource recovery and reuse. • KCCA/NEMA/MWE/GIZ are in a collaboration to develop standards for the reuse of biosolids. • KCCA plans to promote biogas technologies in institutions.
	Target Scenario (2021 & beyond)	<ul style="list-style-type: none"> • EQ-1: 60% safely managed sanitation in informal settlements. 	<ul style="list-style-type: none"> • SF-1: 80% safely managed sanitation. <ul style="list-style-type: none"> ○ 30% WW contained (by 2030). • SF-2: Health and safety standards and SOPs exist to protect sanitation workers from occupational hazards, and compliance is monitored. 	<ul style="list-style-type: none"> • SS-2: Standards exist for biosolids reuse, and commercial reuse potential is further realized.

¹⁸ The study, carried out by Water for People, examined the following toilet design options for the urban poor: a). DuraSan toilets with ring liners and handwashing facilities; b). VIP toilets with brick lining and bathrooms; c). raised VIP toilets with brick lining.

¹⁹ Weyonje is a city-wide community sensitization programme targeting informal settlements and their landlords; and tenants and local leaders

²⁰ While the total number of private operators in the city is not known exactly, it is estimated to be around 90.

		Responsibility	Accountability	Resource Planning/Management
System Functions	Starting Scenario (2017)	<ul style="list-style-type: none"> • RS-1: NWSC has the mandate for sewerage sanitation (NWSC Act, 1995) while KCCA has the mandate for NSS (KCCA Act, 2010; Public Health Act, 2000). <ul style="list-style-type: none"> ○ Neither institution has an explicit pro-poor mandate as defined in the policy documents. However, NWSC has its own pro-poor policy following MWE's pro-poor strategy (2006); ○ Mandate document for neither institution explicitly mentions the needs of women or other vulnerable groups. Issues of gender inclusion and addressing sanitation needs of vulnerable groups are captured at the operational level. 	<ul style="list-style-type: none"> • AC-1: For SS, NWSC operates under a performance contract with MWE, which covers both performance and economic regulation and is renewed every three years; for NSS, KCCA self-regulates and does not have a grievance redressal system. • AC-2: Sanitation related data is limited—citywide baseline data has been collected but no MIS exists for sanitation data. • AC-3: Incentives and/or penalties tied to performance do not exist for KCCA. 	<ul style="list-style-type: none"> • RPM-1: Budget allocation is based on needs. NWSC's sanitation budget is ring fenced. Of the total KCCA Water and Environment budget²¹, less than 3% is allocated to sanitation. • RPM-2: Dedicated staff for NSS exist within KCCA, but is insufficient—only a third of all positions are filled. • RPM-3: Investment decision-making relies heavily on funding availability from development partners, especially for NSS. While the GoU requires all local authorities to conduct community needs assessment and integrate community needs into the annual planning cycle, this is rarely done properly due to resource constraint. • RPM-4: A city sanitation master plan exists (by NWSC), but does not cover NSS.
	Reforms & Interventions	<ul style="list-style-type: none"> • KCCA passed the Kampala Capital City Ordinance, 2019 which focuses on streamlining the roles and responsibilities, increasing sewer connection, promotion of minimum standards and regulation of service. 	<ul style="list-style-type: none"> • KCCA established a Call Centre as a platform to disseminate sanitation information, handle sanitation related complaints, and link customers to desludging operators. • KCCA developed a city-wide sanitation GIS database, following the 2016/17 sanitation mapping. The database has information on household, commercial, institutional and public sanitation facilities. • KCCA is collecting data throughout the sanitation service chain--desludging data from the Call Centre, treatment plant dumping data, weekly & monthly reports at the division level; and through the "Weyonje" app. 	<ul style="list-style-type: none"> • NWSC developed a strategy document that outlines the strategic focus areas for sanitation and environment for the period 2019-2026, including sewer and treatment plant investment. • KCCA plans to develop a 10 year sanitation service improvement strategy and action plan, focusing on NSS. • KCCA plans to develop a spatially differentiated service level model to guide investments for sanitation service improvements.

²¹ Budget of the Department of Health and Environment (DPHE) of KCCA.

	Target Scenario	<ul style="list-style-type: none"> • RS-1: Improved coordination between the service authorities responsible for SS and NSS 	<ul style="list-style-type: none"> • AC-1: Grievance redressal system exists for NSS • AC-2: Sanitation related data is comprehensively collected and captured in an MIS 	<ul style="list-style-type: none"> • RPM-4: Integrated citywide strategy and action plan in place for sanitation (SS & NSS) and environment, aligned with the SDGs
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Acronyms:

CT/PT: Community Toilet/ Public Toilet

FSM: Fecal Sludge Management

FSTP: Fecal Sludge Treatment Plant

KCCA: Kampala Capital City Authority

LIC: Low Income Community

MWE: Ministry of Water and Environment

NWSC: National Water and Sewerage Corporation

NEMA: National Environment Management Agency

NSS: Non-Sewered Sanitation

SS: Sewered Sanitation

STP: Sewage Treatment Plant