

UPSCALING NON-SEWER SANITATION SERVICES IN SMALL TOWNS AND MUNICIPALITIES IN UGANDA

A SIMPLE GUIDE TO SOME PRACTICAL APPROACHES AND TOOLS FOR SCALING UP FSM IN SMALL TOWNS AND MUNICIPALITIES IN UGANDA

Najib Lukooya Bateganya, Ph.D. PMP

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1.0 Introduction

1.1 Background

Despite making tremendous progress, the world is currently off-track to deliver sanitation for all by 2030. With only 10 years left until 2030, the rate at which sanitation coverage is increasing will need to quadruple if the world is to achieve the Sustainable Development Goal (SDG) sanitation targets. Globally, over 2.4 billion people still lack access to basic sanitation services and more than 80 percent of wastewater resulting from human activities is discharged into the environment untreated, causing significant human health consequences. An estimated 673 million people have no toilets at all, lack basic sanitation services and practise open defecation.¹

The world is rapidly urbanising, swelling impoverished urban settlement populations – exacerbating exclusion and inequality in access to water, sanitation, and hygiene (WASH) services for the poorest and most marginalised children. As of 2018, an estimated 4 billion people, or 55 per cent of the global population were living in urban areas². Whereas Africa is currently the least urbanized, it has the highest urbanization rate and projected increase in urban population³. In sub-Saharan Africa (SSA), nearly a third of the urban population are living in informal settlements – with inadequate access to basic services and infrastructure including, but not limited to, water, sanitation, and waste management services. In urban settings of sub-Saharan Africa, over 90% of the population relies on on-site sanitation with inadequate systems to deal with the resulting faecal sludge (FS). In addition, the amount of solid waste is increasing drastically as a result of the increased population; thus, most municipal waste is not collected, treated, and disposed off appropriately, leading to gross deterioration in public health and environmental quality.

Like other countries in the SSA region, Uganda is experiencing rapid urbanization estimated at an annual rate of 5.1%. Whereas less than 25% of Uganda’s population currently lives in urban areas, it is projected to exceed 50% by 2050⁴. Unfortunately, over 60% of the urban development in the country translates into informal settlements characterized by inadequate infrastructure and lack of access to basic services. Whereas there is reported progress in the status of Hygiene and Sanitation Sector Indicators for urban areas in Uganda, the backlog for ‘leaving no one behind’ towards SDG 6 target 6.2 by 2030 is still significant.

According to the Water and Environment Sector Performance Report 2020, the urban sanitation sector in Uganda has achieved; 89.1% Sanitation Coverage (population accessing any form of sanitation facility) with only 38.9% accessing safely managed sanitation and over 61% of the remaining urban population segment either accessing basic sanitation, sharing sanitation facilities, or practicing open defecation. On a countrywide scale, 8.8 million people are reported to be practicing open defecation whereas access to hand washing with soap at household level is at 61.1% in urban areas.

The progress to achieving universal WASH services has been further constrained by the COVID-19 pandemic and increasing influx of vulnerable refugee populations across the country. Therefore, the dynamics of service provision, infrastructure development and accompanying software measures, especially in urban areas, calls for ambitious and innovative approaches to

¹ United Nations Children’s Fund (UNICEF) and the World Health Organization (2020). State of the World’s Sanitation: An urgent call to transform sanitation for better health, environments, economies and societies. New York.

² UNICEF (2020). Global Framework for Urban Water, Sanitation and Hygiene..

³ Oxford Economics, 2016-survey for 769 Cities.

⁴ Bidandi, F. and Williams, J. J. (2017). ‘The Challenges Facing Urbanisation’. Urban Forum, (September).

attain scale and sustainability if Uganda is to make progress towards achieving SDG target 6.2 by 2030.

1.2 Rationale and Objectives of the Guide

To contribute to increased access to safely managed sanitation in Uganda, the Ministry of Water and Environment (MWE) and Water For People have over the past decade been working in close collaboration and partnership with private sector, urban authorities, utilities, and local governments to tackle urban WASH and FSM challenges along the entire value chain using innovative market-based approaches across the country. Some of these interventions have yielded tremendous results which can be upscaled in municipalities and small towns through; capacity building, peer to peer learning coupled with benchmarking and targeted support in establishing action plans, regulatory tools, private sector service delivery systems and implementation of behavioural change campaigns to create demand. Consequently, with support from the Water Supply and Sanitation Collaborative Council (WSSCC), Water For People in collaboration with Ministry of Water and Environment (MWE) and Kampala Capital City Authority (KCCA) implemented a pilot project focusing on scaling up Market-Based Sanitation in two (2) small towns and one (1) municipality. The selected towns included Kole and Pallisa Town Councils and Nansana Municipality.

The project was aimed at developing a standardized approach for strengthening Faecal Sludge Management (FSM) in un-sewered peri-urban areas in Uganda, which is capable of being rolled out at scale and is applicable to at least 80% of towns in Uganda. Specifically, the project was meant to:

- i. Undertake a detailed market assessment in the towns of Pallisa and Nansana. This would provide an accurate understanding of the whole FSM environment, from which solutions can be developed.
- ii. Develop Shit Flow Diagrams (SFD) and City Service Delivery Assessment (CSDA) for the initiation of FSM system in the 3 small towns, including systems to design and optimize all technical, operational, and regulatory aspects of FSM encountered in the towns.
- iii. Develop and test the implementation and applicability of Town Sanitation Plans in 2 towns of Pallisa and Nansana.
- iv. Promote the establishment and development of market-based pit emptying business in the 3 towns of Pallisa, Nansana, and Kole. Pit emptiers and private sector participation in FS plant management.
- v. Undertake modifications at treatment plants to receive thick sludge for unlined pits and provide re-use options.
- vi. Provide a menu of FS treatment options for different contexts, to ensure that options provided are fit for purpose and sized appropriately according to the waste potential and anticipated growth of FS services in that location.
- vii. Develop national capacity to support the wide scale adoption of all aspects of the program to enable an efficient roll out.

It was envisaged that this pilot project would provide a basis for countrywide adoption and learning on how to scale up market-based sanitation approaches to accelerate access to safely managed sanitation. The project was also envisaged to test tools, guidelines, and systematic approaches for peer-to-peer learning and benchmarking with practical solutions to catalyse improvement to FSM services in un-sewered urban/peri-urban areas. Following key lessons and experiences gained in the pilot project, this guide presents a compilation of basic guidelines, approaches, and tools to facilitate learning and benchmarking which can trigger incremental improvement in urban sanitation service delivery in Uganda.

1.3 Scope of Approaches and Tools used in Upscaling Urban Sanitation

The approaches and tools used in this project and described in this simplified guide have been used by Water For People and partners before and were adapted from various sources and experiences locally and internationally but specifically applied to suit the local situation and context during project implementation. The guide describes and provides recommendations on how to adapt and apply the tools from a practical implementation perspective to achieve the intended urban sanitation and FSM outcomes at a municipality or small town council level. At each implementation phase and level, specific tools were adapted and used with special consideration regarding applicability, suitability, flexibility, relevance, and availability of expertise and experience.

As illustrated in Figure 1, the pilot project involved three phases/levels for enhancing the scaling up of urban sanitation and FSM services in the selected municipality and small towns (i.e., Municipal Entry, Project Implementation, and Action Planning). The municipal entry level mainly involved preliminary activities for: engaging municipal governance and technical leadership to trigger inspiration and buy-in; establishing baseline service levels; understanding service delivery systems, structures, opportunities, and blockages; establishing and connecting with key stakeholders; and elaboration of the project scope/implementation roadmap. The main project implementation level generally involved undertaking planned activities in close collaboration with the town council leadership, key stakeholders, and partners. Lastly, the action planning level involved identifying and prioritizing interventions for developing a costed sanitation/FSM improvement action plan with clear targets, indicators, and timelines. The action plan was also envisaged to be the basis for continuous technical support, benchmarking, and resource mobilisation for driving local action at municipality/town council level.

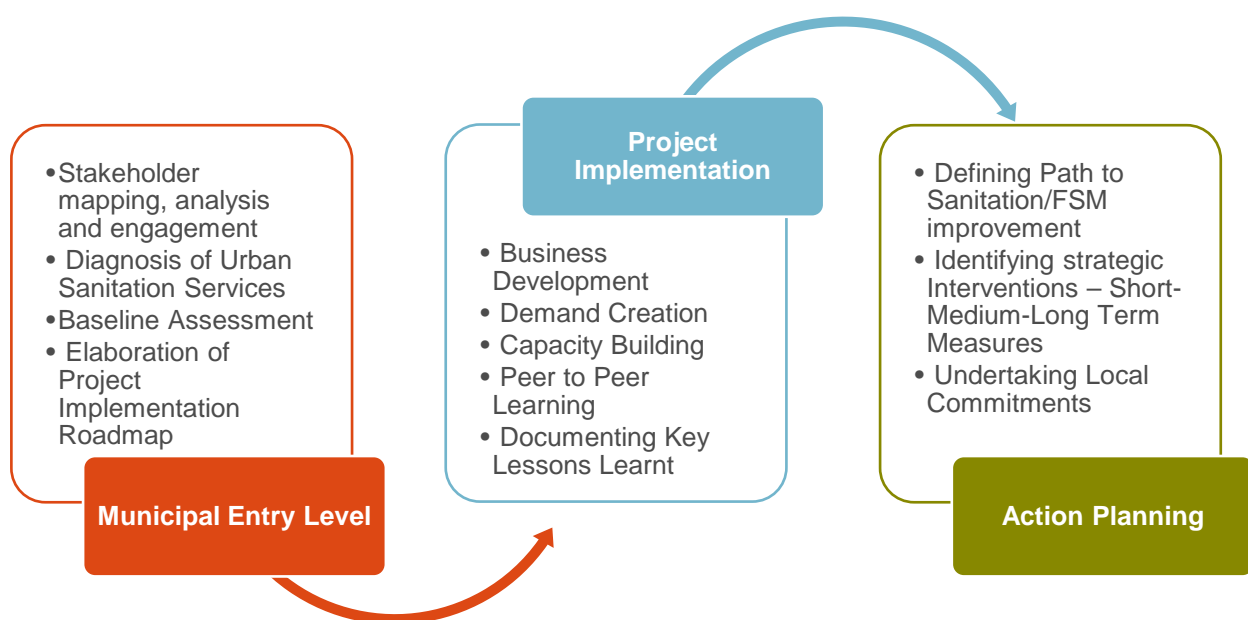


Figure 1: Key stages and levels of project implementation for enhancing the scaling up of urban sanitation/FSM services in selected town councils/municipalities

2.0 Municipal/Town Council Entry

2.1 General Overview

Small towns in Uganda are rapidly emerging with a fast-paced transition of rural growth centres into urban settings. The rapid rates of urbanisation mean that conventional urban planning and development approaches can no longer keep pace with population growth, service delivery demands and urban sprawl. Therefore, urban service delivery programs especially for emerging town councils and municipalities should recognise this complexity to provide pragmatic and adaptive solutions that meet local priorities and people's needs.

Experiences gained from the pilot project indicated that urban authorities are resource constrained yet face enormous pressure from multiple and competing service delivery demands. These constraints coupled with increase in demographic pressure places a strain on already weak service-delivery mechanisms such as garbage collection, the availability of potable water and sanitation, affordable and predictable housing, and efficient public infrastructure all of which remain in short supply. To push the FSM/Sanitation improvement agenda, program/project orientation is critical to set a firm foundation for implementation and sustainability. In 2015, MWE developed an Urban Sanitation Implementation manual⁵ in order to simplify the applicability of the Improved Sanitation and Hygiene (ISH) strategy and guide all the stakeholders in the urban sanitation sub-sector in implementation of improved sanitation investments and hygiene promotion in small towns and rural growth centres. With the current shift towards FSM approaches to achieve scale along the entire sanitation value chain, models and benchmarks from practical implementation are increasingly becoming essential.

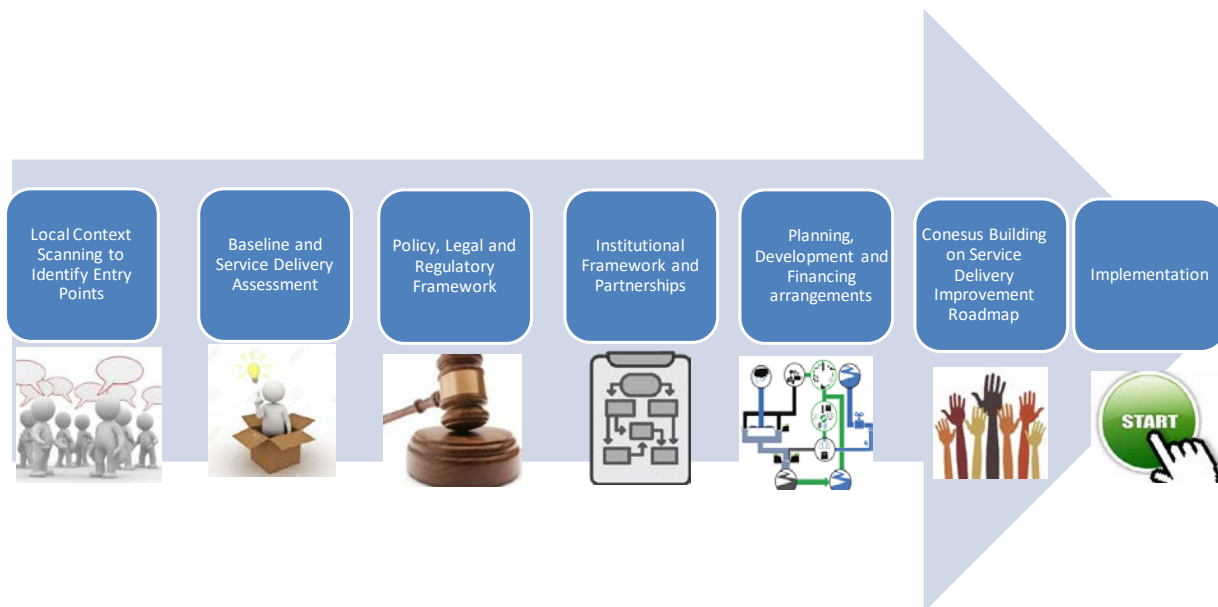


Figure 2: Illustration of a systematic approach for urban sanitation improvement program inception and entry into a municipality/town council setting

Figure 2 shows an illustration of a systematic approach with key town/municipal entry stages which were found to be practical and adaptable for local buy-in and consensus building towards a sustainable roadmap for urban sanitation/FSM improvement.

⁵ MWE (2015), Urban Sanitation Implementation Manual.

2.2 Local Context Scanning to Identify Entry Points

This stage is essential in building rapport with the local political, technical, and community leadership who are critical in influencing the prioritization of sanitation and FSM on the planning, development and financing agenda of a town or municipal council. Key approaches and tools during this stage include: stakeholder mapping and analysis, municipal/town council stakeholder engagements, and preliminary field visits.

2.2.1 Stakeholder Mapping and Analysis

- As is the case for many development projects or programs, stakeholder mapping and analysis is essential in identifying critical entry points as well as development of an engagement strategy throughout the project cycle.
- Table 1 shows an example of a simple stakeholder matrix which can be used for identifying stakeholders, their potential impact, interest and influence, and potential strategies for engagement and or involvement. The table can be filled through a meeting or workshop at the city level.
- In Nansana, Kole and Palisa towns, some of the key stakeholders included: the Mayors, Town Clerks, Planners, Health Inspectors/Assistants, Engineers, Local Councillors (LCs), local community, special interest groups (Women, Youths, Cultural and Religious leaders, reservation schemes) and Private sector.

Table 1: A Simple Stakeholder Analysis Matrix

Stakeholder (Organisation, Institution, Private company, NGO, CBO, International Agency)	
Key Contact Person (Position and Directorate or Department where applicable) <i>Phone, Email, Website, Address</i>	
Impact <i>How much impact can they have on achieving the intended objectives of the project? (Low, Medium, High)</i>	
Interest <i>How much interest do they have over the project? (Low, Medium, High)</i>	
Influence <i>How much influence do they have over the project? (Low, Medium, High)</i>	
What is important to the stakeholder? (Containment, Emptying, Conveyance, Treatment, Re-use, Entire chain)	
How could the stakeholder contribute to the project? (Policy Decisions, Political Influence, Community Participation, Financing, Implementation, Service Provider, User/Beneficiary, Specify others)	
How could the stakeholder block the project? (Policy Decisions, Political interference, Withdraw Financing, Community resistance, Sabotage implementation, Specify others)	
Strategy for engaging the stakeholder for successful project implementation (Consultation, Engagement, Information, Involvement and participation in implementation, sensitisation, and awareness, specify others)	

2.2.2 Municipal/Town Council Stakeholder Engagements

- The primary entry point are municipal/town councils since they play a key facilitative role, set clear local policies and strategies for sustainability, provide a platform for broad stakeholder consultation and facilitate capacity building and learning.

- The main objective of undertaking stakeholder engagements is to ensure effective and efficient stakeholder participation, consensus building and sustainability of the project/program interventions.
- Due to the current huge investment gaps in municipal and town sanitation/FSM in most urban areas in Uganda, it is critically essential to clearly communicate the project objectives, scope, impact, outcomes, limitations, and synergies with existing programs and interventions to reduce stochastic expectations and/or demands.
- For identified key stakeholders, well-structured engagements are organized through courtesy calls, strategic meetings, focused group discussions and workshops. Due to COVID-19 social distancing and physical interaction restrictions/safeguards, online engagements and individual/group interactions are strongly recommended compared to big workshops.
- It is useful to phase the engagements for different stakeholder categories starting with those with the highest level of interest, impact, and influence (Municipal/Town Council leadership) on the project or program. Entry meetings with political and technical leaders are a good starting point before cascading these to the lowest user group/community level.
- In Nansana, Kole and Palisa towns, courtesy calls and one on one strategic meetings carried out with Water For People, MWE, Mayors, Town Clerks and Public Health officials were very critical in identifying existing institutional, technical, policy and financing arrangements for leveraging sanitation/FSM improvements.
- In market based sanitation, establishing contact and networks with existing and potential private sector partners for initiating supply chains and community-based structures for demand creation are paramount.
- Due to the COVID-19 restrictions, workshops were limited to consensus building, validation of key findings, and/or trainings on specific issues such as dissemination of baseline data, SFDs, CSDAs, and action planning. In all cases, social distancing, wearing of masks and regular handwashing/sanitizing were strictly observed. Moreover, venues were closed based on compliance with natural ventilation and social distancing criteria.

Table 2: Simplified template for capturing key preliminary information during entry meetings in Kole, Nansana, and Palisa with stakeholders

Date and Time			
Name(s) and Contact of Recorder (Notes, Minutes)			
Name(s) and Contact(s) of Interviewee(s)/Attendees			
Assessment Area	Specific Information Requirements	Key Responses	Additional Remarks/Notes/References
Institutional	Institutional Roles/Mandates along the FSM/Sanitation value chain		
	Existing capacity and gaps. Potential reforms for service delivery improvement and efficiency		
	Potential Contribution to Planned Project		
Policy, Legal and Governance	Existing bylaws on sanitation at town/municipal council level		
	Enforcement mechanisms		
	Existing political, public, and private Participation approaches and opportunities in FSM/sanitation		
	Policy and regulatory regime gaps and required reforms		

Financing	Existing financing arrangements FSM/Sanitation systems (Public, Private, NGOs, Households, Institutions)
	Strategies for closing the financing gap for infrastructure, software measures and required services
Technical	Responsibility, potential and capacity for developing and maintaining a sewage network and treatment infrastructure if any
	Responsibility and capacity for developing and maintaining on-site sanitation systems for households, public premises, and institutions (markets and schools)
	Existing and planned Faecal Sludge collection and transport arrangements
	Responsibility, initiatives, scale and capacity regarding public health and hygiene promotion with specific focus on FS and municipal waste at household, community, and institutional levels
	Appropriate onsite sanitation technological/product options, existing demand, supply chain and marketing approaches

2.2.3 Preliminary Field Visits

- Whereas conceptual or theoretical frameworks based on expertise, stakeholder engagements and literature review to design urban sanitation/FSM projects are essential, field experience is a critical breakthrough in defining and/or refining high impact interventions.
- For FSM based projects, exploring the underserved vulnerable communities, demand and existing services levels or options along the entire value chain helps to elucidate the critical gaps as well as identify investment opportunities with the greatest impact.
- Rapid field assessments through: transect walks in communities, targeted visits to selected households, institutions, public toilets and disposal and treatment facilities and interaction with direct users/potential beneficiaries are useful approaches.
- Preliminary field visits should normally be approved by the municipal/town council officials, pre-planned with municipal technical staff (e.g., public health inspectors/assistants) and guided by local council officials and Village Health Teams (VHTs) in the respective area of jurisdiction.
- Tools for capture and documentation of data, information and on-the-ground status can be used. These may range from: short videos, photography, audio recording, and note taking.

2.3 Baseline and Urban Diagnosis for Service Delivery

Generally, baseline assessments provide critical reference data and information for assessing the anticipated impact of FSM/sanitation projects and programs in a targeted area. Methodologies

and tools for baseline assessments are well documented with several benchmarks for development projects and programs implemented by governments, multilateral and bilateral development agencies and NGOs worldwide. The scale and complexity of the baseline depends on the program, project, sponsor, purpose, and many other factors. For FSM/sanitation projects in municipalities and small towns, simple urban sanitation profiles with basic data and information can be useful in planning, financing, and implementation of less resource intensive but impactful projects with a rationale of incremental improvements to achieve long term local aspirations.

A number of diagnostic tools (Figure 3) have been developed and applied for assessing sanitation services city-wide⁶. In Nansana, Kole and Palisa towns, baseline and service delivery assessments were implemented using three approaches and tools, including:

- i. Development of an Urban Sanitation Profile
- ii. Shit Flow Diagram (SFD)
- iii. City Service Delivery Assessment (CSDA)
- iv. Other tools

Summary of tools and their objectives

	Tool	Objective
Diagnostic tools	1. Fecal Waste Flow Diagram	Represent where fecal waste goes, what proportion is managed and where the unmanaged portion ends up
	2. City Service Delivery Assessment	Assess the enabling environment and quality of service delivery along the service chain, identifying areas for attention
	3. Prognosis for Change (Political Economy Analysis)	Identify the interests and incentives that could block action, and possible entry points for overcoming them
Decision-support tools	4. Service Delivery Action Framework	Guide identification of actions in relation to the enabling environment, necessary to deliver desired results
	5. Intervention Options Assessment	Guide for identification of technical interventions along the service chain – linking to Program Design guidelines
Tools being developed by partners	Fecal sludge technical tools	Quantify volumes and characteristics of sludge, using standard methods. Assess FS end-products to suit market potential, evaluate collection and transport options and optimized treatment processes for resource recovery.
	Urban Sanitation Status Index	Quantify and represent in cartographic form the status of sanitation services, disaggregated by neighborhood
	FSM finance tool	Estimate the costs of fecal sludge management services

Figure 3: Diagnostic and decision/support tools for assessing urban sanitation services⁷

2.3.1 Urban Sanitation Profile

An urban sanitation profile is critically essential in providing precise data and information of a city, municipality, or town council with a broad aim of promoting information sharing with key stakeholders, benchmarking, development planning and partnerships, resource mobilisation and related sector development aspects relevant to sanitation/FSM improvement. It should be noted

⁶ R. E. Scott, I. Ross, P. Hawkins, I. Blackett, and M. D. Smith (2019). Diagnostics for assessing city-wide sanitation services. *Journal of Water, Sanitation and Hygiene for Development*, IWA

⁷ Extracted from World Bank (2016). *Fecal Sludge Management: Diagnostics for Service Delivery in Urban Areas*.

that the urban sanitation profile also provides background data and information for other diagnostics and planning tools such as the SFD and CSDA.

Due to scanty sanitation data/information in municipalities and town councils, it is often essential to undertake a baseline study/assessment whose scope can significantly vary depending on the intended outcome or overall objective, scale of the project/program investment, availability of resources (financing, expertise, time scale, etc.), and many other factors. Baselines are generally resource intensive and need to be well planned and structured into the project/program work plan and budget.

Urban sanitation profile data and information can also be obtained from secondary data sources and/or desk reviews where previous studies or interventions by government, development partners, NGOs etc. have been implemented. This approach saves time and resources but requires expert input from consultants. In Uganda, secondary data on urban sanitation/FSM can be obtained from among other sources: sector performance reports from Ministry of Water and Environment (MWE), statistical abstracts from Uganda Bureau of Statistics (UBOS), District Reports, and other project-based reports undertaken by NGOs, universities, and research institutions.

The basic data and information required to develop an urban sanitation profile is summarized in Table 3. Whereas the table is not exhaustive, it provides a good starting point for planning, advocacy, resource mobilisation and designing of sanitation improvement programs and projects in small towns and municipalities.

Table 3: Data and Information Collection Template for Developing a simple Urban Sanitation Profile for small towns and municipalities

Component	Key Data and Information Requirements	Description
Urban Context	Geographical location	Map with simple description of urban landscape, existing services and infrastructure and related geographical settings
	Climate and Topographic settings	Simple description of climate, soils, natural environment/resources, topography, water table and related information
	Demographic Characteristics	Population characteristics, urbanization rate and related social-economic data/information
Enabling Environment	Governance	Overall description of political and technical structure. Specific governance frameworks supporting sanitation and FSM improvements such as committees, task force etc.
	Policy, Legislation and Regulatory Instruments	Overall description of existing or planned bylaws, ordinances and related instruments; Enforcement mechanisms and arrangements
	Strategic Development and Planning Tools	Information regarding sanitation strategic plans with clear targets, performance indicators and timelines
	Institutional Arrangements and Capacity	Institutional structural settings with clear mandate and responsibilities to deal with Sanitation and FSM including basic information on existing capacities
	Sanitation Programming and portfolio management	Completed, ongoing and planned programs including local coordination arrangements
	Financing	A simple description of existing local sanitation budget, financing mechanisms and arrangements

Sanitation Profile	Containment (<i>May be segregated by Households, Schools, Health Facilities, other public premises</i>)	% of the population: <ul style="list-style-type: none"> • Connected to sewer network • Using onsite sanitation • Practicing open defecation • Using Basic Sanitation • Using Safely Managed Sanitation, Type of Containment facilities (%) <ul style="list-style-type: none"> • Connected to Septic tank • Lined Pit Latrines • Traditional pit latrines • Other types • No facility
	Handwashing with Soap (<i>May be segregated by Households, Schools, Health Facilities, other public premises</i>)	% of the population with basic hand washing facilities
	Emptying and Transportation	% of facilities emptied using: <ul style="list-style-type: none"> • Vacuum tankers • Semi-mechanised (Gulpers) • Manual % of facilities abandoned for new pit
	Disposal, Treatment and Reuse	Brief description of a designated disposal and treatment facility (if any) (Type, capacity, functionality, O&M arrangements etc.) Other disposal methods (Safe burial, open environment disposal etc.) FS reuse options (if any)

2.3.2 Shit Flow Diagram (SFD)

An SFD summarizes service outcomes in terms of the flow and fate of excreta in urban areas. It includes a qualitative assessment of the context in which service delivery takes place and a complete record of data sources. The aim of an SFD is to give a compelling visual summary of a sanitation chain, specifically showing at which stages problems need to be solved. A participatory process with municipal or town council officials is highly recommended to ensure ownership of results and development of sustainable improvement solutions to the identified sanitation challenges.

A detailed manual for data requirements, processes and guiding principles for developing an SFD has been developed and is accessible on the sustainable sanitation alliance (susana.org) website using the following link: <https://www.susana.org/resources/documents/default/3-2357-7-1529046600.pdf>.

In addition, the urban sanitation profile (Table 3) developed using standard data collection methods provides some of the basic data/information requirements critically relevant for SFD development. Reference can also be made to the guide on FSM tools developed by the World Bank.⁸ For Nansana, Kole and Palisa urban areas, simplified (Initial) SFDs were developed using an online SFD generator accessible on the following link: <https://sfd.susana.org/data-to-graphic>. The SFD production process involves three simple steps:

⁸ World Bank (2016). Fecal Sludge Management: Diagnostics for Service Delivery in Urban Areas.

- (i) Input of data relevant to the urban area
- (ii) With a couple of clicks, the tool produces an SFD Graphic
- (iii) Download the SFD graphic for use in reports, publications and advocacy

Figures 4-6 show the SFD graphic outputs for Kole, Nansana, and Pallisa urban areas.

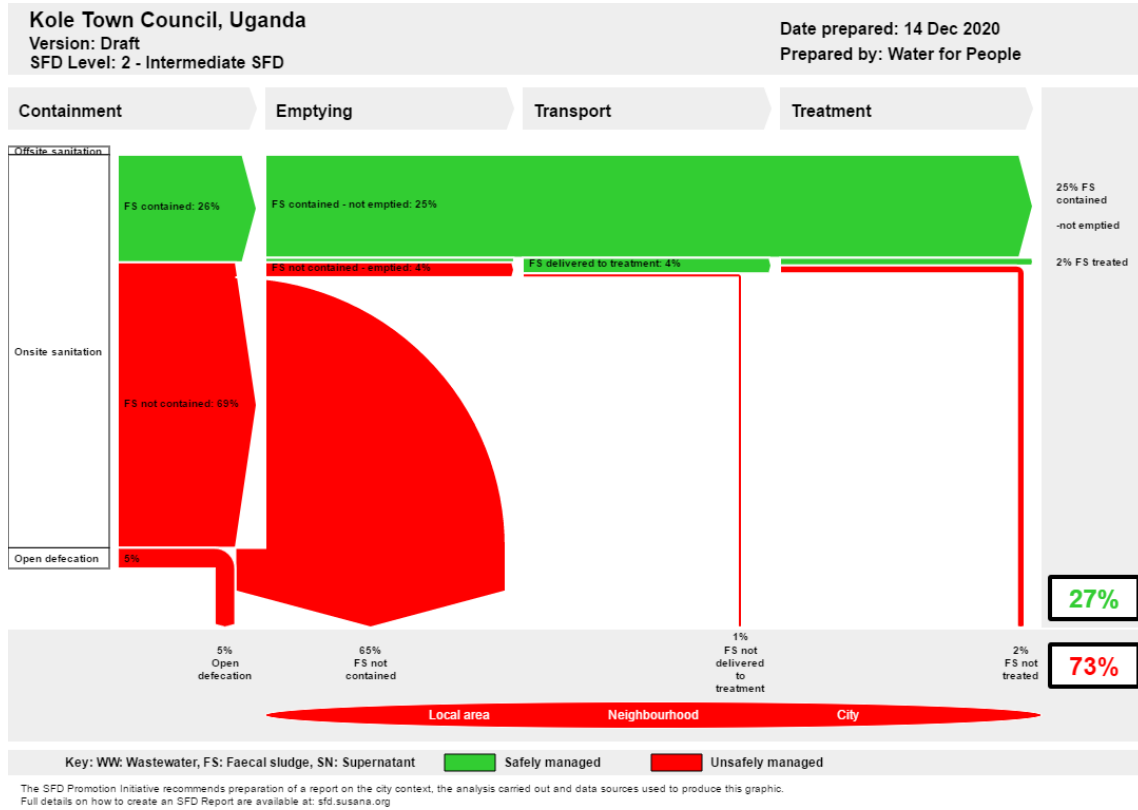


Figure 4: SFD for Kole Town Council

Figure 5: SFD for Nansana Municipality



Figure 6: SFD for Pallisa Town Council

In summary, the SFD is⁹:

- A tool for engineers, planners, and decision-makers
- Based on contributing populations and an indication of where their excreta goes
- A representation of public health hazard
- An effective communications and advocacy tool
- An overview from which to develop sanitation priorities

2.3.3 City Service Delivery Assessment (CSDA)

The CSDA is a complementary tool to the SFD and is generally used as a means of working with stakeholders at city, municipal or town level to address various components of the enabling environment to enhance improved sanitation service delivery. The CSDA graphics are intended to support a process of discussion and decision-making on sanitation, with government decision-makers, utilities, municipal authorities, service providers, sanitation users, development partners and any other key sanitation stakeholders. The detailed description of the CSDA tool and its application can be obtained from the User Guide¹⁰ accessible on the link below: <https://www.susana.org/en/knowledge-hub/resources-and-publications/library/details/3700>.

Based on the revised version¹¹, the CSDA tool has three main components:

- i. An Initial Assessment, which gives a rapid high-level overview
- ii. A Full Assessment, which analyses the enabling environment in more detail
- iii. An Action Checklist, which sets out for consideration a number of interventions which have been found useful in improving sanitation services

The Full CSDA is structured around three pillars:

- i. Enabling: the policy, legal and institutional environment
- ii. Delivering: the resources and mechanisms available to improve sanitation
- iii. Sustaining: the operating environment, funding and personnel needed to provide ongoing and sustainable sanitation services

Each pillar is composed of three building blocks, of which one focuses on inclusion. Each building block, in turn, is composed of between one and four indicators, or specific questions, 6 which are each assigned a score during the assessment process. Separate assessments are made for each of the three steps in the service chain.

For Nansana, Kole and Pallisa towns, the CSDAs developed were based on the initial assessment criteria only (Table 4) to provide stakeholders with a general high-level context of the enabling environment. Moreover, this approach also facilitates dialogue and learning on which fundamental areas that need to be prioritized as an initial step for adopting the CWIS approach can be identified and implemented.

Table 4: Initial CSDA Score Card

Town Sanitation Service Delivery Assessment				
City				
Date				
Non-sewered service chains Questions	Interface, containment	Emptying, conveyance	Treatment, reuse	Scoring

⁹ World Bank (2016). Fecal Sludge Management: Diagnostics for Service Delivery in Urban Areas

¹⁰ Isabel Blackett and Peter Hawkins, (2020). City Service Delivery Assessment for Citywide Inclusive Sanitation: A user Guide

¹¹ Isabel Blackett and Peter Hawkins, (2020). City Service Delivery Assessment for Citywide Inclusive Sanitation: A user Guide

	(toilet, pit, or septic tank)	(emptying & transport)			
Are there defined institutional mandates for managing non-sewered sanitation, and are they adequately structured, financed and staffed?				1:	Institutional arrangements are clearly defined, structured, financed and staffed
				0.5:	Institutional arrangements are defined or partially defined, but inadequately structured, financed and/or staffed
				0:	Institutional arrangements are undefined
Are there legal and/or regulatory arrangements that recognise sanitation services by non-sewered sanitation service chains?				1:	Non-sewered sanitation is officially clearly recognised as a public service
				0.5:	Partial or unclear recognition of NSS
				0:	Some types of safe NSS are explicitly illegal or NSS is not recognised
What proportion of excreta captured by onsite sanitation facilities is safely managed? (Ref SFD)				1:	80%-100%
				0.5:	50%-80%
				0:	0%-50%

Inclusion Questions		Scoring	
Is the local leadership committed to an inclusive approach aiming to deliver sanitation services to <i>all urban dwellers</i>?		1:	Yes, local leaders are committed to and starting to make the changes needed to implement fully inclusive sanitation services
		0.5:	Some local leaders are becoming interested, or statements have been made, but commitment is not yet translated to action and budgets
		0:	The leaders are not yet interested or motivated and there is no significant action and budgets. leadership evident
Are there legal or regulatory requirements and budgets for improving sanitation services in informal settlements?		1:	Regulatory and financial support for sanitation in informal settlements exists and is actioned
		0.5:	Regulatory and financial support for sanitation in informal settlements is limited, due to unclear mandates or lack of action

		0:	There is no framework for public management of sanitation in informal settlements	
Are there defined institutional mandates for delivering sanitation services in informal settlements, and are they adequately structured and staffed?		1:	Institutional arrangements are clearly defined, structured, and staffed	
		0.5:	Institutional arrangements are defined, but not adequately structured and staffed	
		0:	Institutional arrangements are not defined	
What proportion of excreta originating from informal settlements is safely managed? (ref SFD)		1:	80%-100%	
		0.5:	50%-80%	
		0:	0%-50%	

The CSDA outputs based on initial assessments for the pilot towns are illustrated in Figure 7.

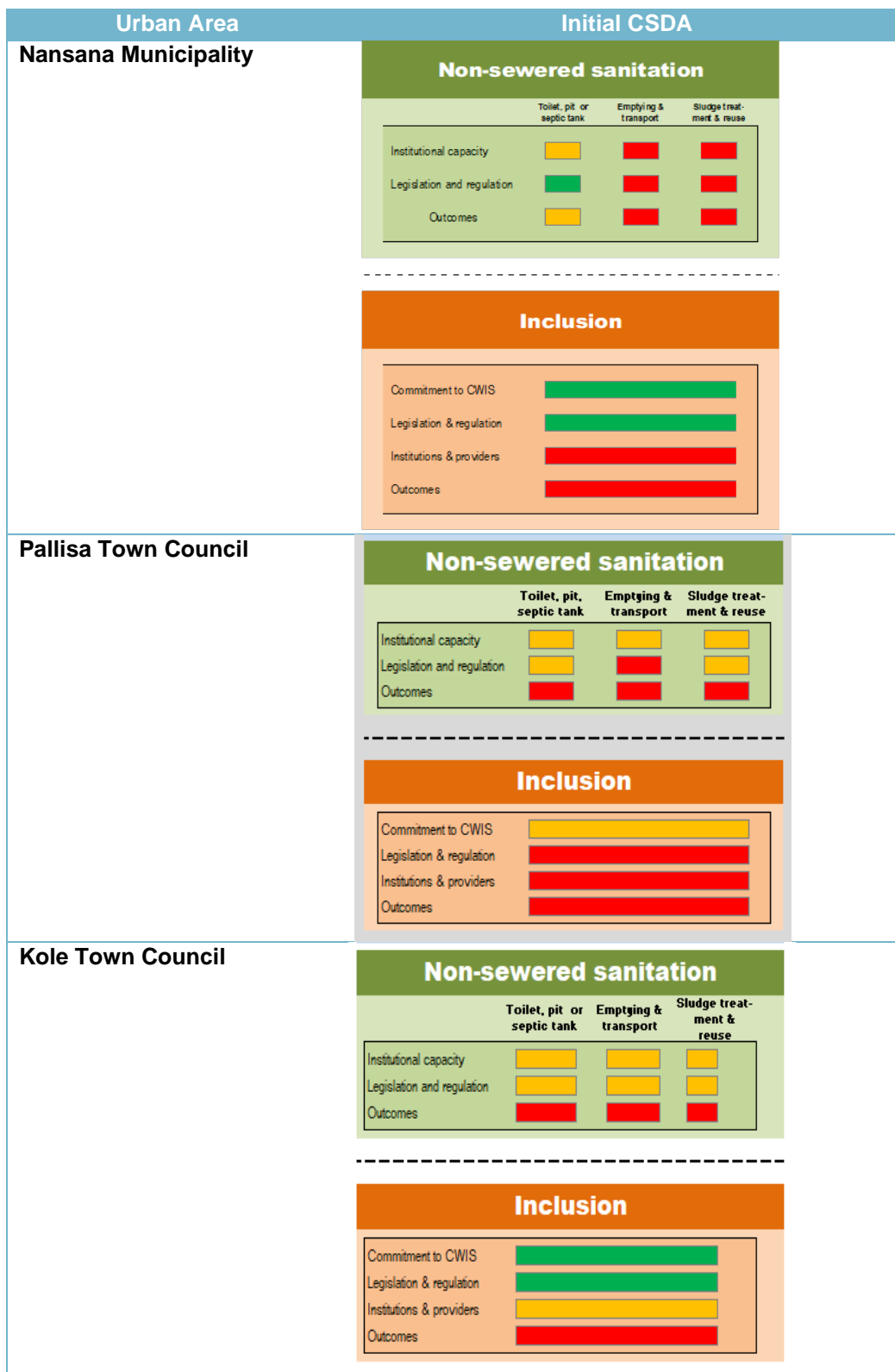


Figure 7: Initial CSDA graphics for Nansana, Kole and Pallisa town councils

3.0 Market Based Sanitation Implementation Tools and Approaches

3.1 General Overview

The investment effort required to deliver access to improved sanitation in urban areas of Uganda grossly exceeds the capacity of public financing mechanisms. It is therefore becoming increasingly essential to structure urban sanitation service delivery systems focusing on private sector development to take a leading role in mobilising financing, toilet construction, FS emptying and transportation, and operation of municipal FS/wastewater treatment systems, among others.

According to USAID¹², in the context of onsite sanitation in which households are not connected to centralized wastewater collection and conveyance, market-based sanitation (MBS) (Figure 8) interventions—through which private sector actors supply toilets and related services to individual households—are a promising approach to addressing the global sanitation challenge sustainably and at scale.

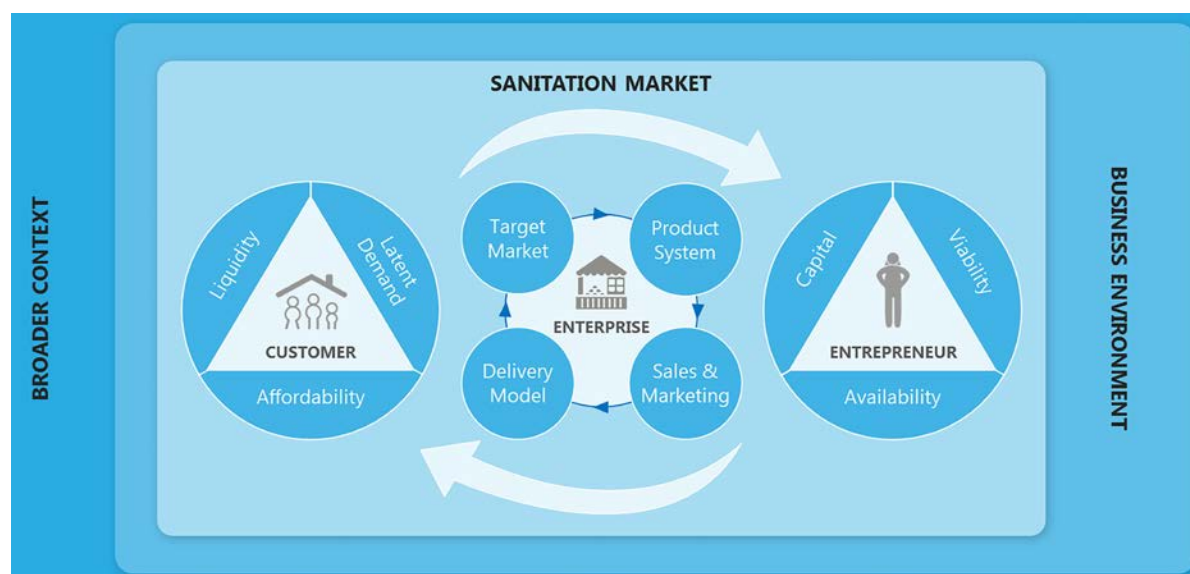


Figure 8: The Sanitation Market System – Framework for MBS (USAID 2018)

Market based sanitation (MBS) (UNICEF 2020¹³), is a development approach to improve sanitation by building the sanitation market of goods and services for which the customer makes a full or partial monetary contribution (with savings and/or cash equivalents) toward the purchase, construction, upgrade, and/or maintenance of their toilet from the private sector. This is achieved through strengthening domestic private sector supply of and stimulating and activating customer demand for sanitation goods and services. Some of the key approaches for implementing MBS include structuring or shaping of the sanitation market, sanitation business development (promoting sanitation as a business), and demand creation through sanitation marketing. From a theoretical perspective, MBS should¹²:

- i. provide customers with products that they want and for which they are willing to pay;
- ii. be financially sustainable—a sanitation enterprise earns profits by delivering products;
- iii. be cost-effective and scalable; and

¹² USAID, 2018. Scaling Market Based Sanitation: Desk review on market-based rural sanitation development programs. Washington, DC., USAID Water, Sanitation, and Hygiene Partnerships and Learning for Sustainability (WASHPaLS) Project

¹³ *Guidance on Market-Based Sanitation*. New York: United Nations Children's Fund (UNICEF), 2020

- iv. make households more likely to derive the benefits of sanitation (e.g., improved health, privacy, dignity) through the use and maintenance of toilets that they value.

Overall, the objective of MBS is twofold: to (i) enhance uptake and sustained use of basic sanitation by all, and (ii) increase local availability of basic sanitation products and services. The key principles of MBS are:

- i. Demand-driven
- ii. Households choose what they want to build
- iii. No direct hardware subsidies to households
- iv. Intervenes at both the community AND individual household scale
- v. Gets people on basic (or limited) step of the sanitation service ladder
- vi. Attention to equity
- vii. Explores financing interventions to reach very poor households, and sustained social subsidies for the poorest of the poor
- viii. Engages government AND private sector as key partners
- ix. Builds market capacities and household investment to ensure sustainability

The MBS approach follows a basic project management cycle practices as summarized in Figure 9 and described in a detailed guide developed by UNICEF.¹⁴



Figure 9: Market Based Sanitation Approach

This section covers some of the MBS approaches and tools used during the implementation of a pilot MBS project in Nansana Municipality, Kole and Pallisa town councils. A simple description of business development and demand creation tools and approaches is provided to guide the practical implementation of similar projects or programs in municipalities and small towns across the country.

3.2 Business Development

The key business development related objectives of the pilot project included:

- i. Undertaking a detailed market assessment to provide an accurate understanding of the whole FSM environment, from which market-based solutions can be developed
- ii. To promote the establishment and development of market-based pit emptying business and private sector participation in FS plant management

¹⁴ *Guidance on Market-Based Sanitation*. New York: United Nations Children's Fund (UNICEF), 2020

3.2.1 Market Analysis

This focusses on analysing factors that could negatively impact business success. The template is based on Porter's 5 Forces model (Table 5), to capture existing and potential threats. It allows an entrepreneur to create a realistic marketing strategy that considers external factors beyond his or her control.

Table 5: Porter's 5 Forces model

Market Analysis- Porter's				
Porter's 5 Forces				
Buyer Power	Alternative solutions	Existing Competitors	New Rivals	Partner Leverage
Analysis of current and projected population of the target market or urban area	Outline of products and services to provide market solutions to the target urban area	A description of existing products and services and mode of service delivery	A description of potential and opportunities for new entrants	An outline of existing and potential partnerships for business development: Municipal/Town council, NGOs, MWE etc.

3.2.1 SWOT Analysis

The Marketing SWOT analysis helps to identify the strengths, weaknesses, opportunities, and threats. This facilitates the assessment of the sanitation services and products and the overall marketing approach. Figure 10 shows an example of the SWOT analysis for an FS emptying services in Pallisa Town Council.

<p>Strengths</p> <ul style="list-style-type: none"> The sanitation entrepreneurs are located within the area/ Town that needs the emptying service. They are near the treatment plant. We expect the transportation charge to be considerably low. They have a long tradition of emptying toilets. They do it with passion. Gulping is very good for emptying pit latrines where sludge is quite thick. Nansana has poorly planned settlements where in some places Cess pool trucks can't reach and gulpers can. 	<p>Weaknesses</p> <ul style="list-style-type: none"> Sanitation businesses currently don't have own transport; they hire, and it is expensive. They are not yet equipped with Personal Protective Gears (PPGs) and this can expose them risks like diseases. They are new in the business of safe & modern emptying.
<p>Opportunities</p> <ul style="list-style-type: none"> The Pallisa population is big enough; 144,490 (2014) people and currently projected at 210,900 people. This presents a market opportunity. The training and capacity building programme by Water For People in business, emptying & safety, among others. The availability of FS treatment plant within the Town Council. 	<p>Threats</p> <ul style="list-style-type: none"> Most pit latrines are not lined which make it difficult for thorough emptying. Presence of some unsensitised population about the benefits of emptying. The poor road network and unplanned population settlement; makes transportation a little bit hard and sometimes expensive.

Figure 10: Marketing SWOT Analysis for Pallisa Town Council

3.2.3 Positioning strategy

This helps to capture the business vision and mission. Articulates the unique value of the services and products provided and the challenges it solves. It keeps the business product and service preposition messaging consistent and helps the marketing team develop campaigns and content that resonate with the desired target customers. A sample of the Positioning strategy for Nansana Municipality is illustrated in Figure 11.

Positioning Strategy		
Vision		
A dignified population with right sanitation services		
Mission		
To provide accessible & affordable sustainable sanitation services to Nansana Division through a market-led approach		
Category		Tagline
Growing urban population (Households, institutions)		Clean Pit Services.
Customer Challenge #1	Customer Challenge #2	Customer Challenge #3
Pit Emptying is very expensive in Pallisa with an average of 200,000 per stance.	Pit emptying services are not readily available. The existing ones make the exercise disgusting!	People do empty and bury on site or abandon full pits with its effects
Company differentiator #1	Company differentiator #2	Company differentiator #3
We reach households settlements where cess pool cannot reach.	We charge per drum full of sludge removed and we empty according to what our client can afford. We can even remove 4 drums!	We understand the whole Sanitation Chain actors and how we interrelate.
Product differentiator #1	Product differentiator #2	Product differentiator #3
Unique value creating characteristics of your product We empty using a pump; gulper	We charge per drum of sludge removed and according to what you can afford.	Unique value creating characteristics of your product We leave the latrine/ toilet cleaner.

Figure 11: Example of a Gulping Emptying Business Positioning Strategy

3.2.4 Marketing Mix

This involves the 10Ps of marketing. It is a useful way to describe the attributes that make up the overall business marketing mix, such as price, place, promotion, people, and product. Capturing this information in one place lets the business show how each element contributes to the marketing approach. A sample of gulper business marketing mix is illustrated in Table 6.

Table 6: Example of a Marketing Mix for Gulper Services in Nansana

Marketing Mix		
Product	Price	People
Pit Emptying	40,000 per drum (Septic), 30,000 per drum (Latrine)	<ul style="list-style-type: none"> The core team for each business will market the service. These will be supported by VHTs, LC1s. The core Team shall operators to do actual emptying and marketing team.

		<ul style="list-style-type: none"> The people here should be knowledgeable about the details of emptying and sanitation value chain.
Process	Promotion	Programs
<ul style="list-style-type: none"> Site visit for assessment. Quotation. Signing Service Contract. Service delivery. Invoice. Receipt. 	<ul style="list-style-type: none"> Channels to use to communicate about our product. Use Radio program, adverts. Branding & merchandizing the businesses- uniforms, posters, fliers, tear drops, banners, identity cards. 	<ul style="list-style-type: none"> Involving Town Council Authorities and local leaders; LC1s, Religious Leaders, Politicians. Conduct door-door marketing campaigns. Offer subsidized emptying season
Place	Physical Evidence	Partners
<ul style="list-style-type: none"> Use point contacts as VHTs, LCs, Religious Leaders. Use Point of service; Office to serve as Call Centre. Owned & hired fleet for marketing & service delivery. 	<ul style="list-style-type: none"> All sanitation businesses will get unique colour, brand, and uniform. Point of service to be located and properly branded. Make our Team presentable including the tools in use to denote quality service. 	<ul style="list-style-type: none"> MWE to receive & treat the sludge and offer affordable dumping rates. Water For People to capacity building of entrepreneurs and linkages. Pallisa Town Council to enact relevant by-laws, enforce, and above all sensitize the community on the benefits of good sanitation.

3.2.5 Competitor Analysis

This helps to visualize the market landscape. It allows you to identify competitors and rank them based on their strengths and weaknesses. By understanding the alternatives available to your customers and where you fit in the overall market, you can define strategies that address the needs of your target market better than your competitors. A competitor analysis sample for gulper business is illustrated in Table 7.

Table 7: Gulping Business Competitor Analysis

Benchmark	Company Gulping entrepreneurs	Company Cess pool 2,000-4,000 litres	Company Cess Pool 10,000 litres
Product	Emptying		
Price	30,000-40,000 @ drum	130,000- 150,000	220,000- 250,000
Place/ Distribution	Thinly distributed- do when called upon.	Thinly distributed- do when called upon.	Very traditional and usually immobile.
People	6	2	3
Physical evidence	Well branded	Well branded	Well branded
Partners to leverage	MWE Treatment	MWE Treatment	MWE Treatment
Promotion			
Level of investment	54,000,000	70,000,000-75,000,000	180,000,000

Technology Options for Pit Emptying

The cesspool trucks are common pit emptying technologies, however, Water For People developed the Gulper as another option of pit emptying. It is a simple piece of equipment that

can be carried by hand. It is usually made of polythene pipe, with a system of non-return valves within the pipe to ensure single direction flow of the pumped sludge.

Until recently, emptying unlined latrines was virtually impossible because they are in areas where a vacuum tanker cannot pass. Now, with the development of the hand-carried and hand-powered Gulper, the waste can be pumped into 200 litre drums and taken in a pickup to the disposal site. People are willing to pay UGX 25,000 – 30,000 per 200 litre drum, so with 6 drums on the back of a pickup an entrepreneur could be earning more than UGX180,000 per load.

How the Gulper Works:

There are five stages to the emptying a pit:

1. *Preparation.* After chlorinating the pit, all the rubbish (such as plastic, rags, bags, old shoes) is removed from the pit using a hooked rod. This may make up to 25% of the pit content and it may be necessary to add water to soften the sludge for ease in gulping.
2. *Emptying.* Using the Gulper, the semi liquid sludge is pumped out of the pit into a 30-litre bucket placed beside the latrine. The quantity to be emptied at each pit will depend either on how far the Gulper can reach or on how much the latrine owner can afford. Within around three minutes, the gulper can fill a 30-litre bucket, which takes around 12 pumping strokes.
3. *Transfer.* The contents of the buckets are tipped into 200-litre drums. This may either be done at the pit or taken to the roadside using a trolley or the buckets are carried to the roadside and tipped there. Up to 6 drums are then loaded onto the pickup and transported to the disposal site at treatment plant.
4. *Disposal.* After paying a fee, the contents of these large drums are tipped into the disposal area for treatment.
5. *Disinfecting.* The Gulper, rod, buckets, and drums, as well as the emptiers' dry protective wear (like gumboots, gloves, mouthpiece, and goggles) and the pickup are disinfected right at the disposal site.

The Business Model

To start you will need to buy a Gulper, some second-hand drums and a few tools, a total expenditure of under UGX1,600,000. You will also need to employ a couple of operators. With this you can provide a latrine emptying service to householders and make good use of your pickup or hire one. You will earn money from charging fees for the service.

3.2.5 Business Modelling for individual businesses

The model tool (CANVAS) was designed by Business Model Foundry AG www.businessmodelgeneration.com/canvas. This simple tool is what was used to develop the pit emptying business model for individual businesses. It describes the attributes that make up the overall business model outlook. Business model structure (Figure 12) includes:

- i. Partners
- ii. Key activities and resources
- iii. Value proposition
- iv. Customer relationships
- v. Customer segments
- vi. Cost structure
- vii. Revenue streams

The Business Model Canvas

Designed for:
Fire Sanitation Services Ltd

Designed by:
Water For People

Date:
13 October 2020

Version:
V1

<p>Key Partners</p> <p>Who are our Key Partners? Water For People- Trainings, Funding & linkages. MOWE- Manages the FS Treatment Plant. MOH. Nansana Town Council- Enforcing standards of latrine constructions, Manage call Centre for managing clients with need, ensure compliance with Sanitation Safety Plan. Banks- Centenary & Post-Bank- Credit facility and managing finances Who are our key suppliers? Hardware Shop-- Which Key Resources are we acquiring from partners? Which Key Activities do partners perform? W4P- Does identification and training of entrepreneurs, supports to equip them (Entrepreneurs), plays the linkage role. MOWE- Deal with treatment of sludge at Lubigi</p> <p>MOTIVATIONS FOR PARTNERSHIPS Optimization and economy Reduction of risk and uncertainty Acquisition of particular resources and activities</p>	<p>Key Activities</p> <p>What Key Activities do our Value Propositions require?</p> <p>Our Distribution Channels? 1-Engaging Village Health Teams (VHTs) to reach out to households and generate demand for entrepreneurs. 2-Engage LC1s to mobilize households to empty their toilets by liaising with the entrepreneurs. 3-Establish call Centres to connect clients to service providers. 4-Training entrepreneurs on marketing & general customer care. 5-Train on book keeping (Record management) 6-Run door to door drives with Town Council Authorities. 7-Run radio advert/ messages for good sanitation. Support branding and merchandizing; Log</p> <p>Key Resources</p> <p>What Key Resources do our Value Propositions require? Labour (Strategic and tactical work) Transport (Motor-)vehicle Gulpers Drums Personal Protective Gears (PPGs) Our Distribution Channels? Customer Relationships? Revenue Streams?</p> <p>TYPES OF RESOURCES Physical Intellectual (brand patents, copyrights, data) Human Financial</p>	<p>Value Propositions</p> <p>What value do we deliver to the customer? We offer excellent pit emptying services to households in places that are hard to reach by Cesspool trucks. We empty the Toilet according to household's ability to pay; Pay Pa drum! Which one of our customer's problems are we helping to solve? Improving sanitation in the homestead. Our services can reach out to households with poor or no road access by the cesspool trucks. We Follow standards when emptying- We dont do unsafe emptying and burials. We offer affordable services-our prices are relatively cheap. We charge pa drum. We transport the waste to the treatment plant and we leave the environment clean.</p> <p>What bundles of products and services are we offering to each Customer Segment? Offer pit emptying services. Transportation of sludge to the treatment Toilet upgrade</p> <p>Which customer needs are we satisfying?</p> <p>CHARACTERISTICS Newness Performance Customization "Getting the Job Done" Design Brand/Status Price Cost Reduction Risk Reduction Accessibility Convenience/Usability</p>	<p>Customer Relationships</p> <p>What type of relationship does each of our customers?</p> <p>Establish call centres at the municipal and division levels. Establish a common whatsapp number to be used. Establish points of contacts through VHTs and LC1s</p> <p>Channels</p> <p>Through which Channels do our Customer Segments want to be reached? Door to door advertisement (Drive) Advertisement through radio. Using VHTs & LC1s. Using referrals. Re-visiting/ Direct Marketing Establish points of contacts How are we reaching them now?</p> <p>How are our Channels integrated? Which ones work best?</p> <p>Which ones are most cost-efficient? How are we integrating them with customer routines?</p> <p>CHANNEL PHASES</p>	<p>Customer Segments</p> <p>For whom are we creating value? Households from hard to reach areas by cesspool trucks. The urban poor Who are our most important customers? Segmented Households with Pit latrines. Line Pits Septic Tanks</p>																																		
<p>Cost Structure</p> <p>What are the most important costs inherent in our business model?</p> <table border="0"> <tr><td>Transport Charges.....</td><td>50,000</td></tr> <tr><td>Treatment.....</td><td>20,000</td></tr> <tr><td>Welfare/ Meals.....</td><td>20,000</td></tr> <tr><td>Cleaning charges.....</td><td>20,000</td></tr> <tr><td>Dumping fees.....</td><td>35,000</td></tr> <tr><td>Labour.....</td><td>40,000</td></tr> <tr><td>Total operating costs.....</td><td>185,000</td></tr> </table> <p>Which Key Resources are most expensive?</p> <table border="0"> <tr><td>Gulping equipment.....</td><td>1,000,000</td></tr> <tr><td>Motorvehicle.....</td><td>54,000,000</td></tr> <tr><td>Drums (12) @ 75,000.....</td><td>900,000</td></tr> <tr><td>Personal protective Gears (PPGs).</td><td></td></tr> <tr><td> Helmnet.....</td><td>10,000</td></tr> <tr><td> Gloves.....</td><td>10,000</td></tr> <tr><td> Overalls.....</td><td>45,000</td></tr> <tr><td> Nosemask.....</td><td>5,000</td></tr> <tr><td> Gumboots.....</td><td>30,000. (4) @ 100,000.....</td><td>400,000</td></tr> <tr><td>Total capital investment.....</td><td>56,300,000</td></tr> </table> <p>Which Key Activities are most expensive?</p>		Transport Charges.....	50,000	Treatment.....	20,000	Welfare/ Meals.....	20,000	Cleaning charges.....	20,000	Dumping fees.....	35,000	Labour.....	40,000	Total operating costs.....	185,000	Gulping equipment.....	1,000,000	Motorvehicle.....	54,000,000	Drums (12) @ 75,000.....	900,000	Personal protective Gears (PPGs).		Helmnet.....	10,000	Gloves.....	10,000	Overalls.....	45,000	Nosemask.....	5,000	Gumboots.....	30,000. (4) @ 100,000.....	400,000	Total capital investment.....	56,300,000	<p>Revenue Streams</p> <p>12 drums @ 30,000= 360,000</p> <p>Net Profit....=175,000</p> <p>Long term source of finance Sale of shares @ 20,000 Asset usage/ vehicle hiring-out..... 120,000 Grant.....? Loan.....?</p>	
Transport Charges.....	50,000																																					
Treatment.....	20,000																																					
Welfare/ Meals.....	20,000																																					
Cleaning charges.....	20,000																																					
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Nosemask.....	5,000																																					
Gumboots.....	30,000. (4) @ 100,000.....	400,000																																				
Total capital investment.....	56,300,000																																					

Figure 12: Example of a Business Model developed by Water For People

3.2.6 The Entrepreneur Stage–Gate Tool

The Entrepreneur Stage-Gate tool tries to assess the various stages of development the business goes through. The tool has been used by Water For People in monitoring of businesses. It depicts the Product Life Cycle (PLC). The tool shows three (3) stages (i.e., the introduction phase, growth phase, and consolidation phase).

The tool tries to answer the puzzle always faced by management to gauge the amount of funds or assistance that should be extended to the entrepreneur at a given time. The tool further answers whether the business is most vulnerable or sustainable. At the consolidation phase, we assume the business is sustainable and can run on its own. No donor would wish to keep supporting businesses that do not show signs of take-off and sustainability. The tool can help guide our likely interventions to make such businesses sustainable and how long it takes.

The tool has a number of variables taken to be critical in each of the stages and members can always contribute more if found critical too. It is a live tool and changes can always be made to suit prevailing business conditions. It is a monitoring & evaluation tool used by Water For People but it can also be administered by the business owner.

The tool shall motivate entrepreneurs because for every intervention or innovation, there is a score which moves the business in a positive direction. It is still to evaluate staff in terms of performance and gaps. The tool can be administered every after three (3) months or six (6) months. The results and status should be communicated to the entrepreneurs for corrective action.

Name of the Entrepreneur				
Nature of business	Private Company limited by Guarantee			
Office Location	Nansana, Block 3. Ochieng Zone			
Email address	info.sy4din@gmail.com			
Telephone contact	0705261423/0706896649			
Indicator Variable	Indicator	Response	Score	Comment/Data Source
	Introduction phase			
Entrepreneur's experience	Working experience of the entrepreneur in the area of sanitation.	In progress	2	1year
Establishment of the enterprise	Is the business registered?	Yes	5	On 14-02-2013
Business ownership	Ownership of the business is clearly stated. Ownership of the land on which the business is carried out.	In progress	2	Certificate of Incorporation; Tenant
Banking	Status of bank Account-current or savings, active or not active.	Yes	5	Active Current Account in UBA
Enterprise registration	The business is registered & complies to tax obligations.	In progress	2	Registered; Ignorant about taxes
Proper record keeping	The business has books of accounts; stock of goods sold and bought; credit sales etc.	In progress	2	Few records; Needs Accounts consultancy
Technical competence	Categories of staff employed: Manager, artisans, masons, marketeers, accounts officer. Is the chain of command clear and known?	Yes	5	Managers and operators
Equipment & tools	Are there necessary tools to run the sanitation business?	In progress	2	Honey comb, Drier machine, Lacks some machines

	Introduction phase Sub Total		25	
	Growth phase			
Technical competence	Are business staff trained or orientated in sanitation business? Yes/No	In progress	2	More training on stakeholders
Technical competence	The staff are aware of the technical designs for different sanitation products (e.g., DuraSan design).	In progress	2	Participatory relationship
Market reputation	Is there a marketing strategy being used by the company?	In progress	2	Door to door; Informal
Market reputation	Is the company branded?	Yes	5	Well branded, Logo, Co. Name
Market reputation	Is the company linked to the local government, district, municipality, or city?	In progress	2	As a CBO with Rubaga Division
Financial Healthy	Does it have a business or strategic plan?	No	0	No
Market reputation	The catchment area known and defined, chain players known and prices for various products known.	In progress	2	Kampala, Wakiso, & Mukono; Not Documented
Quality adherence	Did you receive vaccination against Hepatitis	No	0	No
Quality adherence	Did you receive any training on use of safety gear	No	0	No
Quality adherence	Do you have the safety gears?	Yes	5	Gloves, Gumboots
Quality adherence	Quality parameters are known to staff and customer satisfaction surveys are done onto existing clients.	Fair	2	Not documented
	Growth Phase Sub Total		22	
	Consolidation phase			
Financial Health	What is the debt-equity ratio? Debt/Equity.	below 2	0	No Debt Employed
Financial Health	Is there inventory to meet orders for at least 10 clients at a time?	0-5	1	5 clients
Financial Health	What is the return on investment/capital employed? Net profit/Capital Employed (Net Assets)	30% & above	5	71%; Highly profitable
Financial Health	What is the ratio of current assets to current liabilities? Current Assets/Current liability.	2 & above	5	6:1, Highly liquid
Business linkages	Are you officially known or connected to relevant Health & government Authorities?	No	0	No
Business linkages	Linkages with brick manufacturers, hardware or players in the industry and can access materials on credit; sand, aggregate, wire mesh etc...	In progress	2	San hub in Nyanama
Innovations	Is there any innovation in the sanitation business being undertaken?	In progress	2	Briquettes, Brooding Kits
Advocacy	The Company is a member to an Association or forum doing similar or related work.	No	0	No
Business diversification	The business has variety of products sold to suit customer preference.	In progress	2	Brooding Kits, Energy saving stoves, Ovens
	Consolidation phase Sub Total		17	
Grand Total			64	

Figure 13: The Stage-Gate Tool Scorecard Template

3.3 Demand Creation

Demand creation normally follows a well-structured sanitation supply system based on existing service delivery assessment, diagnostics and baselines. Undertaking key market characteristics based on market research and product system design are critical to inform the content of communication messages, and identification of the best ways to reach and persuade target customers to invest in improved sanitation and purchase of the new product system offerings¹⁵. Other crucial interventions include identification of local actors to support demand activation, development of direct sales, marketing activities and materials to raise awareness, as well as helping focal point businesses to reach, promote and sell their products and services directly to households. Key phases of the sanitation consumer demand creation are illustrated and described in Figure 14.

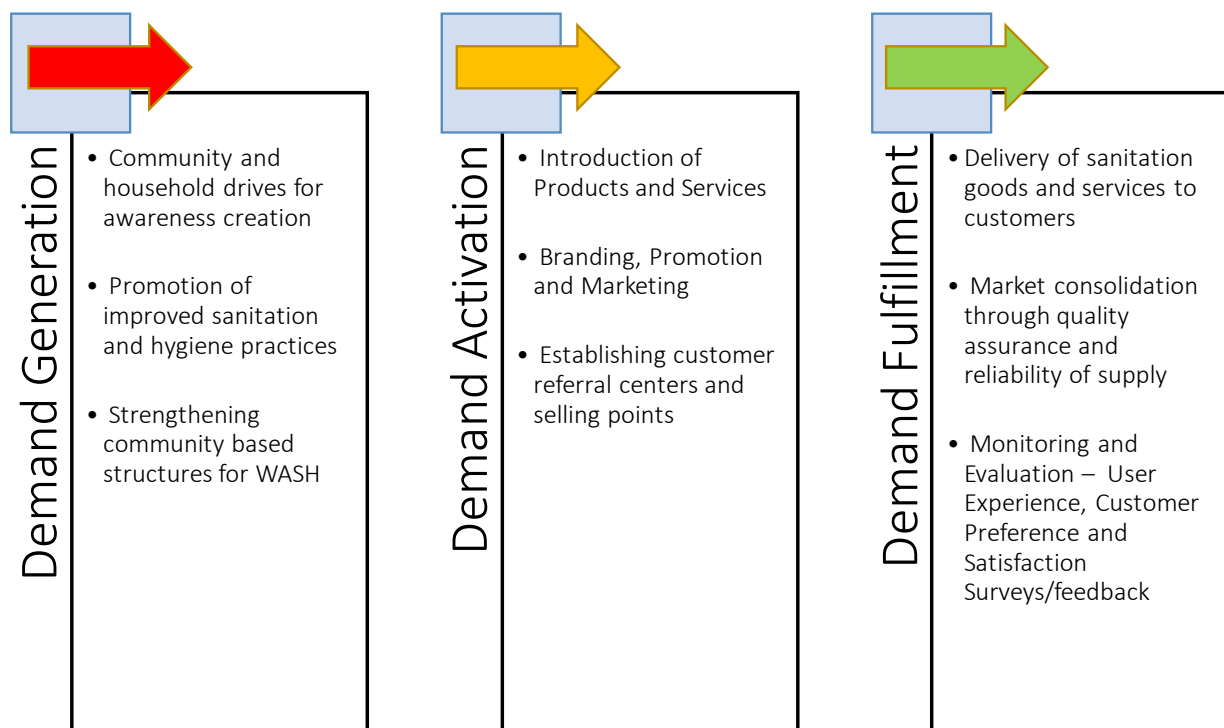


Figure 14: Structured Sanitation Demand Creation Process

From the Market-Based Sanitation (MBS) perspective, demand creation addresses three key objectives¹⁶, that include to:

- i. Reinforce community approaches to total sanitation messages to stop open defecation (OD)
- ii. Motivate household investment in a durable hygienic toilet.
- iii. Raise customer awareness of new product system offerings and support sanitation businesses to promote and sell them.

Under the project context, the overall goal of demand creation activities was to create awareness of the services provided by pit emptying business in Nansana municipality, Kole and Pallisa town councils. These pit emptying businesses were developed and supported by Water For People using the approaches and tools described in **Section 3.3**. The demand creation process focussed

¹⁵ *Guidance on Market-Based Sanitation*. New York: United Nations Children's Fund (UNICEF), 2020

¹⁶ *Guidance on Market-Based Sanitation*. New York: United Nations Children's Fund (UNICEF), 2020

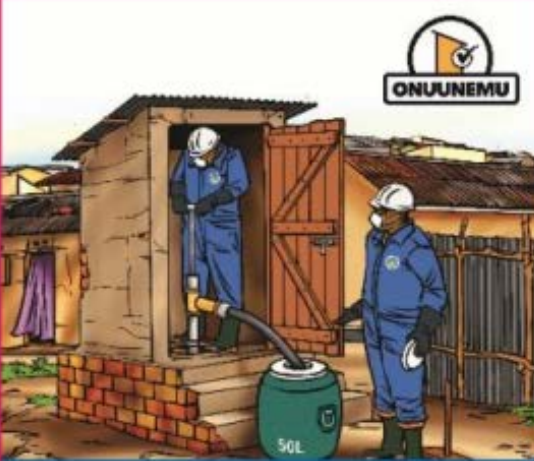
on identifying, developing and promotion of improved pit emptying services using specific messages and delivery approaches.

The demand creation activity was implemented through a systematic pit emptying marketing campaign development approach which involved:

- i. Identification of target market segments/audiences
- ii. Implementation of demand creation activations (Figure 15)
- iii. Development of local tailored pit emptying messages (Figure 16)
- iv. Monitoring the impact of the campaign - Campaign Reach




Figure 15: Demand Activation Drives in Nansana Municipality

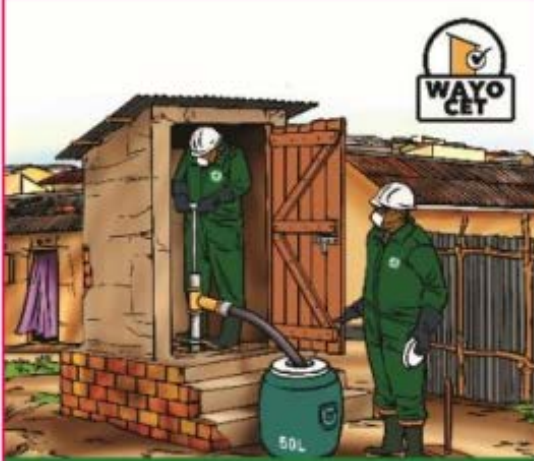


ONUUNEMU

ONUUNEMU!

Ofulumya kitono, Tukwanguyizya, ate obba mugumu okozesa empeererya yaisu.


 **0788 000 328 (Francis)**

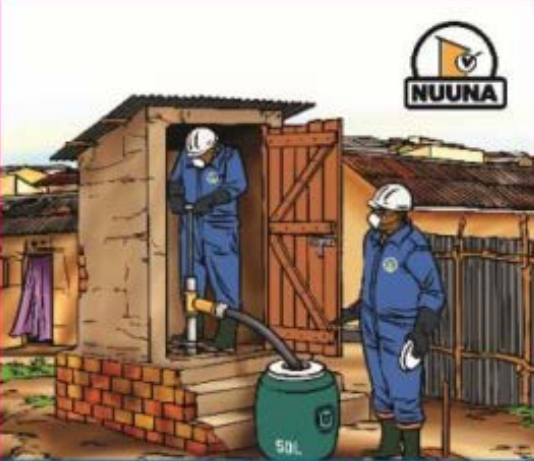


WAYO CET

WAYO CET!

En wel mere yot, dok tye oyotoyot, dok ber me tic ked wa.


 **0774 611 442 (Joan)**

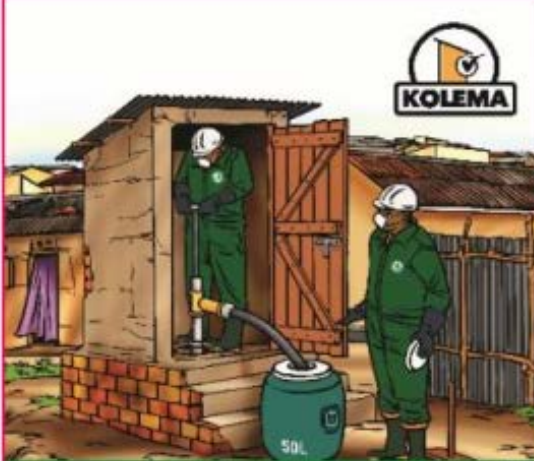


NUUNA

NUUNA!

Ofulumya kitono, tukwanguyiza, ate obeera mugumu, bw'okozesa empeereza yaffe.

 **0782 582 214 (Musa)**



KOLEMA

KOLEMA!

Edit etiai, Epol esipiidi, eyawura aitosoma eiswamae kosi.


 **0787 066 154 (Peter)**

Figure 16: Pit Emptying Messages developed for Nansana, Kole and Pallisa Towns

4.0 Peer to Peer (P2P) Learning

4.1 General Overview

Peer to Peer (P2P) Learning focuses on providing opportunities to exchange knowledge and experience on service delivery reforms for both private and public sector institutions. This approach primarily facilitates collective action learning of individuals from different institutions/organisations as “peers” who through sustained engagement, exchange knowledge and experience leading to mutual learning on how to deal with the most pressing challenges of common interest¹⁷. Figure 17 summarises the P2P learning cycle stages and processes.

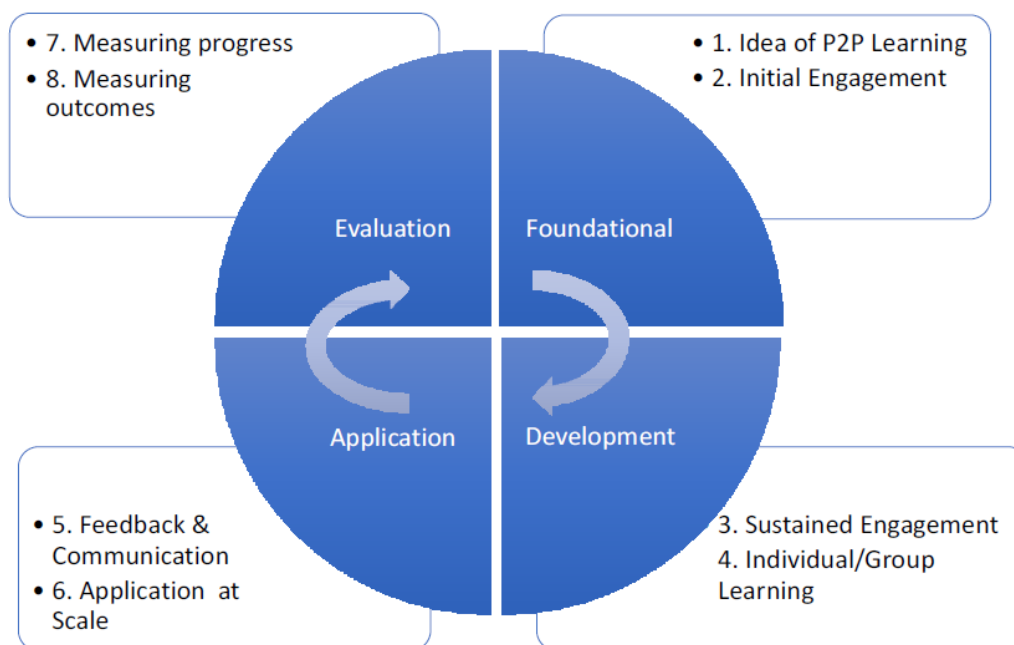


Figure 17: The P2P learning Cycle¹⁵

Based on the peer-to-peer (P2P) learning manual¹⁵ there are four (4) stages involved in this approach: (i) the *foundational phase* in which clear engagement objectives, learning outcomes, selection of participants and initial engagements are carried out; (ii) the *development phase* that includes sustained exchanges resulting in learning by individuals and groups; (iii) the *application phase* in which peers take the learning back to their organization and apply it at scale; and (iv) the *evaluation phase* that includes measurement of the process, progress, and outcomes to provide feedback on program effectiveness.

In the urban sanitation project context, peer-to-peer learning was designed to facilitate exchange of knowledge, skills, solutions and innovations for sanitation and FSM improvement in the targeted towns and municipalities. The P2P learning approach involved participatory approaches such as training workshops, technical dialogues, field excursions etc., which allowed for exchange of knowledge, experience, skills, and best practices. The rationale for this approach was based on the fact that it provides a strong foundation for urban authorities to learn about developing inclusive sanitation services from their peers – who are confronting and trying to provide solutions to similar challenges. The learning approach provided multiple opportunities for participating staff from towns and municipalities (Nansana, Kole and Pallisa) to learn on real life examples and the

¹⁷ Peer to Peer Learning – An Alternative Development Approach for South-South Cooperation. 6 November 2017

direct exchange of experience with KCCA. In this way urban authorities benefited from discussing their implemented and planned solutions to common problems including developing new ideas for adaptation and implementation in their local contexts.

4.2 Objectives of P2P Learning on Urban Sanitation

As is the case for water utilities, municipalities, and town councils responsible for providing sanitation services are under increasing pressure to rapidly increase service coverage and quality to the population under their jurisdiction. Therefore, the need for transparent and standardized information with which to compare and track performance is increasingly becoming critical for accountability.

Under the project scope, the overall objective of the P2P learning activities between the selected towns and Kampala city was to facilitate knowledge sharing on governance, policy, legal, financing, and technical aspects for advancing urban sanitation planning, development, and management. The P2P learning was also envisaged to provide learning, innovation and sharing of best practices for delivering inclusive sanitation services to urban poor communities. The specific learning objectives included:

- I. *Leveraging effect.* Strengthening Governance, Institutional and Regulatory systems to enhance integrated urban sanitation services.
- II. *Developing sustainable urban sanitation financing mechanisms* for targeted sanitation infrastructure improvement and accompanying software measures.
- III. *Structuring private sector service delivery systems* for municipal waste and faecal sludge management.
- IV. *Driving incremental improvements* in waste management, water, sanitation, and hygiene practices at a local level.
- V. *Inspiration through Active Learning.* Taking innovative ideas to scale through field practices and models (selected field visits to innovative sanitation service delivery approaches).

4.3 Delivery Methodology and Approach

The following approaches were used to implement the benchmarking activities:

- I. **Field Visits:** Selected sites and projects were visited to explore innovations, best practices, and challenges of delivering on-site sanitation in compact rapidly urbanizing environments. Some of these included selected household sanitation solutions in informal settlements, inclusive WASH facilities schools, public toilets in markets, FS treatment plant, etc.
- II. **Peer to Peer Learning and Knowledge Exchange Sessions:** These included short technical presentations, Q & A, Group work reflection activities and action planning sessions. The sessions were coupled with field visits to deepen the discussions and action planning based on practical evidence.
- III. **Strategic Dialogues:** These were designed to provide a platform for discussing specific policy, institutional, governance or technical aspects with selected representatives of the benchmarking teams. Some of these included meeting with public health teams, mayors, school headteachers, private operators, and ministry of water and environment officials.



Figure 18: Team at the Biogas Toilet



Figure 19: Team at the Wash A Lot



Figure 20: Nansana Team during break away session



Figure 21: Pallisa Team during break away session



Figure 22: Kole Team during break away session

4.4 Key Implementation Lessons from the Urban Sanitation P2P Learning Approach

From the urban FSM/sanitation project context, the following lessons can be drawn for potential scaling up of the P2P approach:

- i. Clear learning objectives, implementation approaches and outcomes need to be discussed and agreed upon through a participatory process by the beneficiary municipalities and town councils.
- ii. Selection of the participating municipalities and town councils needs to be well structured and systematically guided using matching criteria.
- iii. The participating municipalities and towns need to provide authority and empower members for peer engagement, learning, and application.
- iv. The process requires a relatively long (minimum 1 year) period of engagement and commitment among peers.
- v. Multiple engagement (in-person meeting, distant communications, shared work, site visits, events, etc.) approaches need to be used to maximize the benefits of the program.
- vi. Throughout the learning process, feedback and communication to the organization needs to happen continuously.
- vii. Performance measurement to track progress, learning outcomes, and its effective implementation at scale.
- viii. Provision of external facilitators to engage with and support stakeholders for effective implementation.

5.0 Town Sanitation Planning (TSP)

Urban Sanitation Plans provide a framework for systematic and strategic alignment of policies, laws, institutional arrangements, financing mechanisms, development and sustainability systems and processes to facilitate time based and costed sanitation improvement programs, projects and activities in a city, municipality or small town. In the context of inclusive urban sanitation, the plan covers the entire service chain including infrastructure and accompanying software measures. Although each urban area is different, sanitation services should be developed based on a common set of principles. Services must be comprehensive and continuously accessible to all residents. The entire urban area should have sanitation services suited to its needs, allowing all residents to enjoy the benefits of improved sanitation.

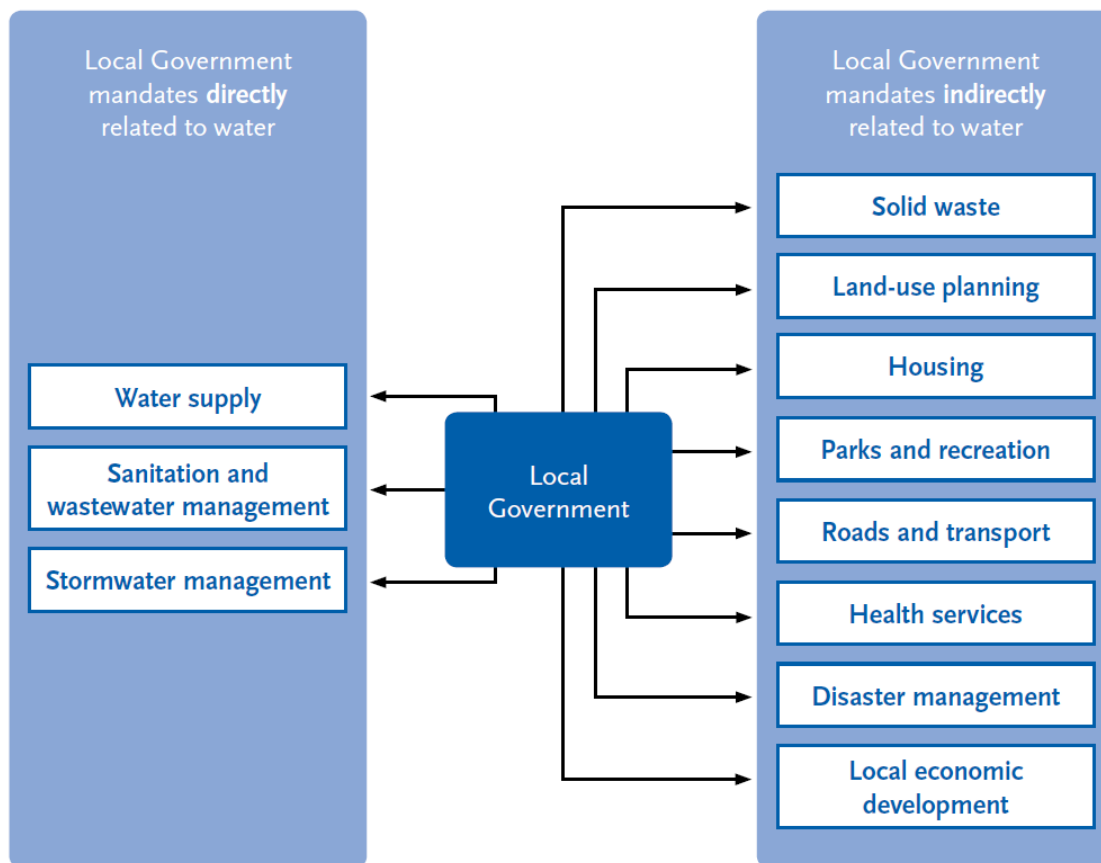


Figure 23: Sanitation related services delegated to local authorities.

Responsibility for delivering sanitation and associated services (Figure 23) at the town or municipal level is usually assigned to the local urban authorities and they must therefore be at the centre of any strategic sanitation planning process. Whereas in Uganda, the power to set budgets and to determine policy, spending priorities and institutional arrangements, lies with the central government, local governments (town councils and municipalities) have decentralized roles for generation of local revenue and appropriation through the local/urban councils. This provides these urban authorities with some level of flexibility to make reasonable fiscal commitments to priority areas including FSM and sanitation services. Consequently, decisions taken locally can make a real difference to the quality of sanitation services. Those operating at the municipal level face some constraints, but existing laws and procedures often provide sufficient flexibility to enable committed individuals to go at least some way to overcoming these constraints.

The objectives of the town sanitation planning phase included to provide strategic framework:

- i. to deliver on a set short, medium to long- term sanitation aspirations, objectives, and targets in the towns in an integrated and sustainable manner;
- ii. for developing a sanitation investment portfolio in the towns; and
- iii. to service provision interventions along the sanitation chain in an incremental, integrated and coordinated manner.

An integrated approach to town sanitation planning was adopted:

- i. Multi-sectorial
- ii. Multi-departmental
- iii. Multi-stakeholder

The town/municipal council took lead in the planning process in coordination with relevant stakeholders. The planning process involved a typical project management cycle approach including:

- i. Phase 1 – Initiation (Stakeholder engagement, formation of sanitation task force and stakeholder forum)
- ii. Phase 2 – Assessment (Baseline assessment and diagnostic studies)
- iii. Phase 3 – Planning (Defining goals, objectives, activities, targets, and timelines)
- iv. Phase 4 - Implementation & monitoring (Resource mobilisation, multistakeholder coordination and incremental implementation of the plan)
- v. Phase 5 - Evaluation and reporting (Review and sharing of progress with stakeholders)

Figure 24 shows an extract of a costed town sanitation plan (template) which can be developed and adapted for urban sanitation planning, budgeting, and routine progress monitoring.

Sanitation Improvement Strategic Area	Priority Strategic Areas	Activities	Estimated Budget (UGX)	Short Term (2020-2022)	Medium Term (2022-2025)	Long Term (2025-2030)
ENABLING ENVIRONMENT (To build adequate capacity of town councils for efficient sector planning, financing, service provision, monitoring and regulation)	Policy, Regulation and Enforcement	Develop town council sanitation byelaws and minimum standards structured around the protection of public health & environment				
		Establish and operationalize local enforcement structures and mechanisms for public health and environment protection				
		Popularization of the sanitation byelaw and minimum standards through sanitation marketing and hygiene promotion				
		Enforcement of byelaw with express penalties, prosecution, fines, community service, imprisonment or a combination of the above				
	Institutional Capacity Development	Design a capacity building plan for all town councils in areas of: Physical planning and development control; urban sanitation planning, development and regulation; municipal waste management etc.				

Figure 24: Example of a Town Sanitation Planning Template

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