





CITIZENS' SCORE CARD.

Consumer perceptions on water, hygiene and sanitation service delivery in Kamwokya Parish, Kampala Central Division and Kansanga Parish, Makindye Division.



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TABLE OF CONTENTS

ACKNOWLEDGEMENT				
MESSAGE FROM EXECUTIVE DIRECTOR				
1.	ABOUT WATER SANITATION AND HYGIENE PROJECT (SUSWASH)	1		
2.	BACKGROUND TO THE SURVEY AND METHODOLOGY	1		
3.	STUDY FINDINGS	2		
3.1 DEMOGRAPHIC FINDINGS				
3.2 WATER KEY FINDINGS				
	3.2.1 Equity in access and use of water	4		
	3.2.2 Reliability of water system	9		
	3.2.3 Location of water source	. 10		
	3.2.4 Capacity of the institution to improve access to water	. 11		
	3.2.5 Political commitment to improve access to water	. 11		
	3.2.6 Satisfaction on water access	. 12		
	3.2.7 Challenges	. 12		
	3.2.8 Recommendations on water	. 13		
3.3 SANITATION KEY FINDINGS				
	3.3.1 Human waste disposal	. 14		
	3.3.2 Drainage system	. 17		
	3.3.3 Regulations on sanitation	. 20		
	3.3.4 Enforcement of national and local laws on sanitation	. 20		
	3.3.5 Budget for improved sanitation	. 21		
	3.3.6 Capacity of the institution to improve sanitation	. 21		
	3.3.7 Political commitment to improve sanitation	. 21		
	3.4 HYGIENE KEY FINDINGS	. 22		
	3.4.1 Food hygiene	. 22		
	3.4.2 Menstrual hygiene in schools	. 22		
	3.4.3 Solid and liquid waste management	. 23		
	3.4.4 Satisfaction on garbage management	. 26		

4.	REFERENCES	. 38
4.	CONCLUSION	. 36
	3.5.5 Recommendations for knowledge, attitude and practise for WASH	. 35
	3.5.4 Challenges on knowledge, attitude and Practise of WASH	. 35
	3.5.3 Knowledge, attitude and practice about hygiene	. 33
	3.5.2 Knowledge, attitude and practice about sanitation	. 30
	3.5.1 Knowledge, attitude and practice about safe water	. 28
3	.5 KNOWLEDGE, ATTITUDE AND PRACTICE FINDINGS	. 28
	3.4.7 Capacity of the institution to improve hygiene	. 27
	3.4.6 Recommendations on garbage management	. 26
	3.4.5 Challenges on garbage management	. 26

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MESSAGE FROM EXECUTIVE DIRECTOR

Environmental Alert in partnership with Water Aid is implementing a 3-months project on Water Sanitation and Hygiene project titled Sustainable WASH (SusWASH) project. It aims to apply the learning and evidence generated from the SusWASH project to support Urban WASH policy processes as well as inform sector capacity development initiatives towards sustainability of water and sanitation services. It is being implemented in two parishes namely Kamwokya in Central division and Kansanga in Makindye division, Kampala. One of the objectives of the project is, *'to know the levels of community WASH services sustainability and user satisfaction aiming at improving accountability.'* Based on this Environmental Alert conducted a participatory assessment and documentation of WASH service sustainability monitoring and documentation (score card) in Kamwokya and Kansanga parishes.

In this regard, I take this opportunity of presenting to you the findings of the study exercise in Kamwokya parish Central division and Kasanga parish in Makindye division where 197 households were interviewed in the five zones of Kifumbira, Church Zone, Maso ana, and Simbwa. It is important to note that these are community views in relation to water, hygiene and sanitation service delivery majorly focusing on issues of water accessibility and water quality, drainage status, garbage management, human waste disposal and their knowledge, attitude and practice on water, hygiene and sanitation. The findings have been simplified into a Citizen's Score Card, which will be used as an advocacy tool for engagements targeted at influencing decision, policy formulation and implementation for improved water, hygiene and sanitation in the community. Furthermore, it provides a basis for evidence-based advocacy for the affected communities and the related service providers like the policy makers. Thus, it presents key issues and related recommendations for consideration by duty bearers.

Therefore, Environment Alert is optimistic that the findings will inform subsequent development intervention by WASH sector duty bearers and other development actors to deliver better services to the community. I hope you find the reading both informative and interesting.

Yours Sincerely,

Dr. Joshua Zake (Ph.D.), Executive Director Environmental Alert.

1. ABOUT WATER SANITATION AND HYGIENE PROJECT (SUSWASH)

Environmental Alert in partnership with Water Aid is implementing a 3-months project on Water Sanitation and Hygiene project titled Sustainable WASH (SuWASH) project. The project supports Kampala City Council Authorities (KCCA) directorates for Health, Education and Strategic Planning to include elements that strengthen the sustainability of WASH services within their current plans.

The aim of the SuWASH project is to apply the learning and evidence generated to support Urban WASH policy processes as well as inform sector capacity development initiatives towards sustainability of water and sanitation services. The project shall be carried out in Kampala in two selected parishes of Kamwokya and Kansanga in Central and Makindye divisions respectively.

Project objectives

- *I.* Institutions mandated to provide and maintain WASH in schools are strengthened
- II. Capacity development of schools for inclusive and sustainable WASH
- *III.* To determine the current levels of WASH services sustainability and user satisfaction to improve accountability and conditions.

Further information about Environmental Alert is available in Box 1.

2. BACKGROUND TO THE SURVEY AND METHODOLOGY

According to objective three of the project which is about the levels of community WASH services sustainability and user satisfaction determined to improve accountability; Environmental Alert hired the services of a consultant to conduct a participatory assessment and documentation of WASH service sustainability monitoring and documentation (score card) in Kamwokya and Kansanga parishes. The specific objectives of the study are:

- I. To establish the status of Water, Hygiene and sanitation in Kamwokya and Kansanga parishes;
- II. To assess community Knowledge, Attitudes and Practices around WASH and community perceptions in respect to WASH services by duty bearers in Kamwokya and Kansanga parishes; and
- *III.* To determine the community's level of satisfaction regarding WASH service delivery.

The study was conducted in Kansanga and Kamwokya parish where a total of 187 households were interviewed by the survey. These included the 77 households generated using the Krejcie & Morgan's sampling table and the 110 households from the focus group discussions. Eight focus group discussions were conducted with 2 groups comprising of 10 local leaders drawn from each of the parishes of Kansanga and Kamwokya. Six focus women and youth groups were also conducted with each zone represented by one youth and one women group. A total of 90 participants were involved (48 women and 42 men) that is 15 participants per focus group discussion. The group discussions aimed at capturing specialized information on how the WASH situation affects these different types of categories. Purposeful sampling was used to select the villages/zones in which household interviews were conducted which were Kifumbira and Church Zone in Kamwokya Parish and Lukuli Nganda, Maso ana and Sibwa Zone in Kasanga. This was further subjected to Radom sampling. Key informants were also selected through purposeful sampling. These among others included local leaders, chairpersons of public toilet user committees, head teachers, teachers heading WASH/Environment Clubs in selected schools, KCCA and NWSC staff.

The survey used both quantitative and qualitative (participatory approaches) data collection methods. Both primary and secondary data was collected from identified respondents from the field

and available literature respectively. The approaches for the survey included: inception meeting, literature review, use of Enumerators, planning/orientation meetings, pre-testing the questionnaire, key Informant Interviews, focus group discussions, door to door discussions and observation. The generated data was analyzed using Statistical Package for Social Scientists (SPSS) from which a draft report which EA provided input and guidance before its validation from which a final report was report. The produced detailed report has been summarized into this Score Card

3. STUDY FINDINGS

3.1 DEMOGRAPHIC FINDINGS

a) Composition of the respondents

The study found that 44% of the respondents were men while 56% were women. This is attributed to the fact that it was mainly women who were found at household while the men were more in the public places such as the markets and public toilets.

b) Number of people in the household

The study found that 10% of the respondent households had eleven people and above, 13% had between 7 to 10 people, 30% had 4 to 6 people and 47% had 1 to 3 people as shown in Figure 1. By comparison, Kamwokya Parish has 52% Of the households with between 7-10m people while Kansanga has only 37% of the households with the same household size. Additionally, Kansanga Parish has 19% of the households with 11+ people as shown in **Figure 1**. These household sizes have a bearing on WASH services.



Figure 1: Overall Size of respondent households, (N=187).



Figure 2: Respondent Household size in Kansanga and Kamwokya Parishes, (N=187).

c) Status of household

The study found that 64% of respondents are tenants while 36% are landlords. There were no caretakers of households that belonged to organisations. Kamwokya parish had more respondents who were tenants (79%) than Kasanga Parish that had 46% of the respondents who were tenants. Kansanga Parish on the other hand had more landlords that were respondents (54%) as compared to Kamwokya Parish that had 21%.

d) Duration of the stay

The study found that:

- i. 28% of the respondents had stayed in Kamwokya for a period of 1-3 years, 31% had stayed for 4-7 years, 28% had stayed for 8-10 years and 7% had stayed for 11 years above.
- *ii.* In Kansanga Parish, 8% of the respondents had stayed in the parish between 1-3 years, 8% between 4-7 years, 21% between 8-10 years and 63% for 11 years and above.
- iii. The study found that Kansanga had a bigger percentage of household heads that had stayed for a longer time and this is attributed to the higher numbers of the respondent households being Landlords.

e) Education level

The study found that:

- i. 30.2% of the respondents attained primary school level of education
- ii. 47.2% stopped at secondary school
- iii. 1.9 % stopped at tertiary level
- iv. 9.4% at university level
- v. 11.3% of the respondents never went to school

In Kamwokya parish, the biggest number of the respondents that is 57.4% never went to school compared to 4.4% of the respondents that had never gone to school at all in Kasanga Parish. Kansanga parish had more respondents (7.7) that were at university level than Kamwokya which had 3.3% of the respondents. This is attributed to the presence of over two universities in Kansanga including Kampala International University and Islamic University of Uganda.

3.2 WATER KEY FINDINGS

3.2.1 Equity in access and use of water

a) Source of satisfaction of water needs

The study found that 60% of respondents' source of water is the standpipe, 5% uses rain water, 10% use vendors and 15% use spring wells especially when there are water interruptions or shortages. In Kansanga Parish, the respondents use water from spring wells which is unsafe and heavily contaminated. This is mainly since these communities reside in low-lying areas with their latrines being upstream and not lined. The parish has four water springs serving Simba, Heritage, Kigandu, Ssebagala and Katego zones. Respondents said that KCCA recommended closure of the spring wells, but this was not implemented due to lack of adequate alternative water sources. The spring wells serve the community all the time and are more useful when pipe/tap water gets cut off on certain days. One of the respondents said" Our spring water is the only one we have in the area and most people that cannot afford to buy water at 200/- per jerrycan from tap owners access water from the spring. When we get water supply interruptions all the people flock to the spring and a lot of chaos happens as you can imagine. The water source has been around for some time and we can't know whether it's a safe source or not". Figure 3 shows spring water sources in Maso Ana Village in Kansanga Village in Makindye Division



Figure 3: Some of the spring water sources in Maso Ana village in Kansanga Parish, Makindye Division.

Ten percent (10%) of the respondents' source of water is the prepaid meter water system. Each person pays UGX 15,000 at NWSC for the key and is given water worth UGX 5,000 equivalent to 200 jerrycans of 20 liters in advance. A 20 litre jerrycan of water in this respect costs UGX 25/=. A total of 9 prepaid water tanks were installed in Church area Zone in Kamwokya Parish and only 7 were operational by the time of data collection. In Kansanga parish, the study found one pre- paid meter water system. The taps are located on private land which is acquired through an agreement between the landlord and National Water and Sewerage Corporation (NWSC). The land owner has privilege to easy access to water since it is in his or her compound. He/she has an opportunity to sell water residents who do not have keys at UGX 100 only. Each area has a water agent who helps resident to load the money for water or this can be done in Kisenyi NWSC offices. One of the study respondents said, *"There are no big issues with it since its working well maybe when users lose their keys, but most people got 2 keys each at the start and when battery gets issues it replaced in time."* The only challenge about pre- paid meter water systems is that the landlords sometimes tend to lock the citizens from accessing them freely. Some enclose them in their fences while others put locks on them for security purposes and protection against vandalism.



Figure 4: A sample key for prepaid water taps.



Figure 5: Residents from Church Zone in Kamwokya Parish, Central Division, accessing water from a pre-paid metre water tap.

b) Payment for water

The study found that:

- i. 67% of the respondents paid for water at the source
- ii. 33% did not pay for water at the source.
- iii. 2% of the respondents pay 25shs per 20 litre of jerrycan
- iv. 25% pay 100shs
- v. 2% pay 150Shs
- vi. 71% pay 200shs and above.

In Kamwokya Parish, 50% of the respondents paid 200shs and above for a 20-liter jerry can while in Kansanga Parrish, 73% of the respondents paid 200shs and above for the 20 litre jerrycan. Kansanga respondents said that in most cases they buy a 20 litre jerry can between 200shs to 500shs and in times of water interruptions or cut off, the same jerrycan goes for 1,000shs a cost which is too high for them to manage and so they end up collecting water from the spring wells which are contaminated and very far from their residential areas. "The basic pocket money which I get per semester cannot enable me to buy a 20litre Jerry can of water at 500shs" Says one of the university students at Kampala International University. When there are shortages especially in Kansanga Parish, the respondents said that they access a 20 litre jerrycan between 500 to 1,000 shillings.

The 2% of the respondents who were accessing a 20 litre jerrycan at 25shs was due to the presence of the pre- paid metre system. They were using the pre- paid metre cards which they accessed through registration at Kisenyi National Water and Sewerage Cooperation offices in Kisenyi III. Water from the prepaid water taps is cheap with a Jerrycan costing UGX 25 only while at the private water taps it sold between UGX 200 and 500 which is not affordable for the poor slum households. During the focus group discussions for the women, they said that they can now save more money on water because just 200/= where they used to get one 20 litre jerrycan of water, now they get 160 litres of water which are 4 20 litre jerrycans of water. They use the saved money for other household needs.

The respondents said that the challenges they have with the prepaid water taps are:

- i. Frequent breakdown and people get cut off from water supply
- ii. Land lords are not willing to offer space for the prepaid water taps where the community can access water use
- iii. There is a lot of bureaucracy involving demands for photographs, National Identity Card as conditions for accessing prepaid water key.
- iv. There are no nearby agents for the prepaid water services; one must move to Kisenyi to access the key.

c) Distance in Kilometers from home to the water source

The study found that overall 98% of the respondents walked between 0 to 600 meters from their homes to the water source. However, key to note is that 72% of the respondents from Kansanga Parish move long distances of 1-2km to access water especially when there are water interruptions/shortages. This helps the women to catch up with their colleges, share their marriage challenges for ideas as well as get abreast of any developments within their area, however on the other hand, it constraints them in terms of spending more time collecting water which they would have used for other productive work. Others must forego other necessities so that to buy the expensive water.

d) Time taken to fill a 20 litre jerrycan and speed of water flow

The study found that:

- i. 83% of the respondents spend 1-3 minutes to fill a 20 litre jerrycan
- ii. 9% spend 4-7 minutes
- iii. 8% spend 11 minutes and above. The results are illustrated in figure 6.



Figure 6: Time taken to fill a 20 litre jerrycan and speed of water respectively, (N=172).

e) Time spent during collection of water

The study found that 88.7% of the respondents spend less than an hour while collecting water, 7.5% spend 1 hour, 1.9% spend two hours and 1.9% spend more than two hours. However, when there are water interruptions, the communities especially those that collect water from the spring well spend more than an hour to collect water because usually the que is very long.

f) Time spent queuing for water

The study found that:

- i. 60% of the respondents spend between 5 minutes to 10 minutes queuing for water from their water source
- ii. 5% said spend between 10 to 20 minutes
- iii. 35% spend between 20 minutes to one hour especially during scarcity of water where they must line up at the spring wells in Kansanga parish.

g) Connection to water mains

- i. 70% of the respondents were not connected to the water mains because its expensive to be connected and others said that they are tenants who do not have ownership of the land which is a pre- requisite for connection.
- ii. 30% of the respondents that were connected to the water mains are mainly landlords.

Kamwokya Parish had more respondents that were connected to water mains (38%) as compared to respondents from Kasanga parish who were 20%. On the other hand, Kansanga had more respondents who were not connected to the water mains (80%) compared to the respondents of Kamwokya that were 62%. This is because majority of the respondents are tenants who are mobile in nature and also do not have the pre-requisites for connection to the water mains.

h) Water quality

- i. 71% of the respondents said that the quality of water is good
- ii. 15% said that it is poor
- iii. 12% said that it's very good
- iv. 2% of the respondents said that its very poor. According to the women group; the water from the pipe water well is clean and people drink without boiling it.

However sometimes when there has been interruptions or water shortages, the water from the taps sometimes turns brown indicating that it is dirty. The water from the spring wells especially in Kansanga Parish is not of good quality and yet majority of the respondents especially those that cannot afford paying for water use it and the others use it when there are water interruptions and shortages. One of the study respondents said "Water quality in the area is good. We don't have a problem. We have several taps and as for me I pay 100/- per jerrycan though it can be expensive for some people, but they fetch from the well and they are fine". The above is illustrated in **Figure 7** below:



Figure 7: Respondents grading of the quality of water sources, (N=172).

i) Smell of water

- I. 79% of the respondents experienced a smell in their water.
- II. 21% of the respondents said that there is no smell in their water and so they thought that it's safe for drinking which is not ideally the case.

j) Preservation of water

The study found that 64% of the respondents preserved their household water in jerrycans, 14% in fridges, 11% in pots, 3% in drums and fridges, 3% in jerrycans and fridges, 2% in source pans 1% in pots and 1% in drums as illustrated in figure 8 below. The study found that very few respondents use water tanks as a mechanism of preserving water. This is attributed to the fact that there is no enough space where tanks can be installed, its expensive to install a water tank and there are less occurrences of water interruptions or shortages that might necessitate the need for water tanks.



Figure 8: Respondents responses on how mechanisms for preservation of water, (N=172).



Figure 9: Water preservation mechanisms at household level in Kifumbira Zone in Kamwokya Parish.

3.2.2 Reliability of water system

a) Water interruptions and its regularity

The study found that 55% of the respondents did not experience any water interruptions while 45% of the respondents had water interruptions/stoppages. Out of the 45% respondents that had interruptions, 13% had it daily, 36% had it once a week, 28% twice a week and 23% 3 times and above a week. Water scarcity affects women more than men because they have many responsibilities that require water such as bathing children, cooking, washing and cleaning.

b) Water bills

- I. 86% of the respondents receive water bills monthly
- II. While 14% of the respondents were not so specific of when they receive water bills. This could have been attributed to change of their phone numbers and had not yet updated the new ones to NWSC data base while others were rarely at home so could not receive the hard copies of the water bills by NWSC staff.

c) Water billing /supply complaint

The study found that 43.5% have ever reported a water billing or supply complaint of which 77.6% said that they reported the issue to NWSC who took relatively some time to respond. A case in point is that NWSC would respond faster if there is leakage of their water such as the pre- paid meter water taps leaking water than when it's another mechanical problem. One of the respondents said "My national water meter was stolen, and this is a problem since on the same day many other people also lost theirs. When we reported to NWSC, the staff said that they do not know who is responsible for this and yet they are the only people mandated to supply these meters to the public. Water bills still come and I am expected to pay and yet I now use spring water, this is not fair".

3.2.3 Location of water source

The study found that the risk of contamination of water source from garbage dump sites and toilets/latrines is very high and it was ranked at 10 which was the highest rank. A case in point is the spring well in Masoana zone in Kansanga Parish which the communities said that it was tested by NWSC who found it contaminates. The spring well is surrounded by a school and its near toilets as well as dumping sites of rubbish. Pupils fetch, drink water and others wash clothes from the same water source. The distance of the water source is just 2 meters from the dumping site a situation that exposes it to contamination. Most of the toilets are located up streams the water source and when it rains, the owners of the toilets empty them rudimentary by opening them thus causing open contamination. The study found that 60% of the toilets are latrines which are not lined and thus causing contaminating the acquirers where the spring water passes.

Conta Africa in Kisenyi 1 in Kamwokya parish has a spring that is in the lower spring were houses are above up the spring with pipes passing through wall fences that dispose of waste water in the small drainage as seen in figure 9 below. The spring well is being used by people who come various areas in Kamwokya parish such as Conta Africa, church area and Kisenyi especially when there are water interruption or shortages at the piped water sources.



Figure 10: On the left is a Spring well in Conta Africa Kisenyi I Kamwokya parish, Central Division surrounded by drainages and waste water from homes upstream and on the right is a Drainage in Ssimbwa Zone near KCCA primary school in Kansanga Parish, Makindye Division.

The green valley spring in Kifumbira village, Kamwokya parish is downstream whereas houses and drainages are located up the stream with some being only 5 metres from the water source. The drainage has no exact place where it connects to but as illustrated in figure 20 ends up pouring in the spring and entering people's houses. Nabutiti water spring is in the lower stream near a drainage system that is 2 meters from it and houses are in the upper stream as seen in **Figure 11** below:



Figure 11: The green valley spring in Kifumbira village, Kamwokya parish Central Division is downstream and upstream is a drainage that pours directly into the spring well.

3.2.4 Capacity of the institution to improve access to water

a) Human resource

In terms, of existence of human resource with required skills and competences, the study found that there is adequate staff in KCCA and the two parishes of Kasanga and Kamwokya that are skilled in safe water management. The study found that there is at least one PhD staff, two master's in civil engineering staff, two officers with a degree, 8 Diploma holder staff in WASH related disciplines

b) Strategic plans and budgets

The study found that improvement of access to water is included in the Kampala District strategic plan and budget with clear roles of the mandated institutions. The mandate of piped water supply in the city lies with National Water and Sewerage Cooperation (NWSC) and this exists in the NWSC strategic plan whereas KCCA's strategic plan focuses on promoting rainwater harvesting especially in institutions such as schools

3.2.5 Political commitment to improve access to water

The study analyzed three manifestos of three-party politics for the recently conducted election campaigns of 2016-2021 namely the one of National Resistance Movement (NRM), Forum for Democratic Change (FDC) and Uganda People's Congress (UPC)

Out of these manifestos, it's only the FDC's manifesto that had mentions of elements of water as described below:

- a) Increase access to safe drinking water from the present National average of the 70% to 100 % by 2021.
- b) Increase funding to the water sector and prioritize the provision of water and sanitation in Rural and slum areas.
- c) Involve the private sector in extending water supply at subsidized rates to the poor and most of our people in slums.

3.2.6 Satisfaction on water access

The study found that 44% of the respondents were satisfied with the water access. These were mainly landlords that were connected to main water pipes and those tenants that had access to the prepaid meter water taps either by buying from the landlords at 100 shilling or using their coins at 25 shillings per 20 litre jerrycan.

66% of the respondents were not satisfied with the water access because of the high cost of water which is between 200 to 500 shillings per 20 litre jerrycan of water, others said that their land lords lock the prepaid meter taps while others have enclosed them in their fences, an aspect that hinder their easy access and be at the mercy of the landlords. When there are water shortages, the respondents said that they buy water very expensively that is between 500 to 1000 shillings per 20 litre jerrycan because there are no water tanks/ reservoirs in the area. Majority end up walking long distances to the nearby spring wells whose water is heavily contaminated and not fit for domestic use. The landlords connected to water mains are not satisfied with the water billing system. They said that National Water and Sewerage System sometimes over bills them while others said that NWSC just make their own estimates which forms a basis of their charging.

3.2.7 Challenges

- a) Some landlords who agreed to host the prepaid water taps have built fence walls around making it difficult for the residents to access water at any time.
- b) There are delays repairing spoilt prepaid water taps by KCCA.
- c) The demand for prepaid water taps is not commensurate to their supply.
- d) The few landlords with the water taps sell water expensively which is too high for the communities to afford enough water for their daily usage.
- e) Women especially those from Kansanga Parish walk long distances in search of water from the springs wells due to the high cost of water and water shortages.
- f) High incidences of waterborne diseases such as Cholera and typhoid in Kansanga and Kamwokya parishes especially among the youth/students who cannot afford to the costs of electricity bills or charcoal to boil water for drinking.



Figure 12: Focus group discussions with youth and women groups in Kamwokya Parish, Central Division respectively.

3.2.8 Recommendations on water

To improve access to quality water, the study recommends the following:

- a) NWSC needs to provide more public water taps to facilitate easy access of water by the communities especially the women and children.
- b) NWSC should install more pre- paid meter water systems which are cost effective to the urban poor communities.
- c) There is need to advocate for increased access to safe, accessible and affordable water for the marginalized and vulnerable people within Kansanga and Kamwokya Parish.
- d) KCCA should enforce the laws against use of contaminated spring wells as it partners with NWSC on how to provide prepaid metre water taps alongside the closed spring well.
- e) Civil Society Organizations in partnership with NWSC need to construct water tanks or reservoirs to support the communities and public schools that have water bore toilets to access water during the water shortages and interruptions.
- f) Civil Society Organizations and NWSC need to sensitize communities on the dangers of using unsafe water and the safe water chain.

3.3 SANITATION KEY FINDINGS

3.3.1 Human waste disposal

3.3.1.1 Mechanisms for disposal of human waste

- i. 60.5% of the respondents used toilets/latrines as a mechanism of disposal of their human waste.
- ii. Out of the 60.5%, only 8% of the toilets/latrines are in good condition, while 90% are in very bad condition with walls built out of polythene. About 3% of the landlords do not have pit latrines and so make agreements with their fellow landlords to use their latrines who are may not necessarily be close neighbors. So, the tenants must walk long distances to reach such toilets/latrines were also said to be in poor conditions.
- iii. 27% of the respondents use polythene bags (kavera) as a mechanism of disposing off their human waste
- iv. 6.2% use drainage channels
- v. 4.1% of the respondents use other mechanisms such as the metallic drums dug a few feet in the soil.

The respondents from Kansanga use more of polytene bags as a mechanism of human waste disposal as compared to the respondents. One of the respondents from Kamwokya parish said that "people who stay in the upper part of Kifumbira 1 Zone throw garbage and human waste in the channel and when it rains, it slopes down and those of us who stay in the lower areas are usually affected by the smell and the dirty water from the resulting floods".

According to the discussions from women group, several households defecate in buckets and polythene bags which are emptied in drainage channels. To keep the filled buckets and polythene bags for some time in the residential houses; they are staffed with paraffin and omo to counteract the smell. The women reported that some people dispose feaces tied in polythene bags and pampers by throwing them on other people's roofs at night. Worse still, the same roofs are used for collecting rain water for home consumption without boiling it.

3.3.1.2 Status of ownership of latrine/toilet facility

Majority of the respondents had pit latrines except for Kansanga KCCA Seed School which had a toilet while the rest Ninety percent (90%) of the respondents said that their latrines/toilets were owned by landlords, 7% said that the toilet they use are owned publically, 2% of the respondents said that their toilet is owned by the school and 1% by KCCA as shown in figure 14 below. One of the respondents in Kasanga Parish around the market area in Maso Ana Zone said "The only public toilet we have around was built in 1996 and no emptying has ever been done. It has 4 rooms and no bathroom and is being used by over 50 people. The lady that donated the land to KCCA for the site where the toilet is lives near it and is the one who volunteers to clean it. KCCA cannot account for this public toilet, may be because it's not in their records¹ and this needs to be followed up. But we also need more modern public toilets to be built in the area".

The study found out that in some cases, some landlords especially those with latrines that were found to be filled up, go into arrangements with their fellow land lord to allow tenants use the same

¹ The toilet is said to have been written off

latrines facilities on payment of some little user fees as compensation. Sometimes such latrine/toilet facilities are not within the immediate neighborhood, so tenants must walk some distance to access them. This situation is so inconveniencing, shameful. One of the study respondents said "There are some landlords that do not have toilets for their tenants, and you end up finding a single toilet nearby being used by over 20 households in additions to its ever dirty and very poor physical conditions. I think every landlord should have a latrine for their tenants".



Figure 14: On the left is the toilet/latrine ownership status, (N=135); on the right is a latrine structure in Church Zone Kamwokya parish.

3.3.1.3 Payment for human waste disposal

- i. 83% of the respondents in the two parishes of Kamwokya and Kansanga do not pay for human waste disposal
- ii. 17% pay for it especially those in the market places and other public places such as the boda boda stages. Some few landlords especially those without latrines for their tenants, also paid for human waste disposal to their landlord neighbors to enable their tenants use the latrines. 69% out of the respondents that pay for human waste said that they paid 100 shillings per visit especially for short visit while 31% said that they pay 200/= and above especially when making a long visit. For the landlord to land lord, payments varied depending on the number of tenants, negotiation capacity and the relationship between the landlords.

3.3.1.4 Access to public toilets/latrines

- I. 17% had access to public toilets.
- II. 83% of the respondents did not have access to public latrines. There are few public latrines which are only located in the market places and a few others which were constructed during the LGDP fund outlived their lifespan. Most of them are in a very bad situation and this prompts residents to rather improvise than use them. Figures 15 and 16 show some of the old LGDP public toilets in Kamwokya and Kansanga Parishes respectively.



Figure 15: An old LGDP public toilet in Church Zone in Kamwokya Parish, Central Division.



Figure 16: Public Market Toilet in Simbwa zone in Kansanga Parish, Makindye Division.

3.3.1.5 Satisfaction with human waste disposal

The study found that 40% of the respondents were satisfied with the human waste disposal and these were mainly the landlords who had their own toilets/latrines. However, 60% of the respondents were not satisfied with the human waste disposal. The tenants said that most of their landlords have toilets/latrines that are in a dilapidating state which are being shared by over 20 households (that is one stance being used by 5 households). Others said that they do not have toilets/latrines of their own. Their landlords have improvised and agreed with their fellow neighboring landlords for the tenants to use their toilets. One of the woman respondent said that this situation is very inconveniencing because sometimes they must frequent the latrines more often in a day especially when they are in their periods or have children below 5 years of age. This has made them uncomfortable because sometimes they are counted the number of time that they have visited the toilets. The respondents also said that there are no access roads to facilitate easy access of the cesspool emptiers to their toilets.

3.3.1.6 Challenges of human waste disposal

The following are the key challenges related to human waste disposal which were identified by the study respondents

a) Frequent breakdown of sewer lines from Kololo and Mulago all which flow into the drainage channels in Kifumbira zone in Kamwokya Parish causing a horrible smell all the time in the area and risk of disease outbreaks

- b) Land lords-built rentals without toilet/latrine facilities, which provides un favorable environment for the tenants and surrounding households including the high risk of acquiring hygiene and sanitation related diseases
- c) Due to the slum conditions, there are no access roads, and this makes it impossible for cesspool emptiers to reach some homes to empty the latrines.
- d) People open toilets during rainy days producing a very terrible smell and increasing the levels of contamination.

3.3.1.7 Recommendations for human waste disposal

- a) KCCA needs to strengthen the enforcement of law on human waste disposal such as on landlords that do not have up to date latrines/toilets for their tenants.
- b) KCCA and other stakeholders such as CSO's need to construct more public toilets in public places for usage by the community.
- c) The Ministry of Water and Environment NWSC and KCCA should expand the current sewer line in Kampala Capital City Authority to match with the current population.
- d) Civil Society Organizations and WASH related private sector entities should create awareness to the communities on need for proper sanitation.

3.3.2 Drainage system

3.3.2.1 Type of drainage

- i. 35% of the respondents have un lined drainages
- ii. 25% with lined drainages, 20% have drainages that are full of garbage
- iii. 8% with very narrow drainages
- iv. 8% with drainages that are full of stagnant water
- v. 4% with drainages that are poorly constructed.

It was observed in certain cases that a community could have a mx of two or more of the parameters described above. The drainage system in Kansanga has never been built. The flow of water is so limited, and this coupled with disposal of garbage in the drainage system contributes to limited water flow resulting into floods that affect the people operating in the market and residents in the low-lying areas. Figure 17 shows that state of drainage systems in Kamwokya and Kansanga Parishes at the time of the study.



Figure 17: The state of drainage systems in Kifumbira Zone, Kamwokya parish on the left, Church zone, Kamwokya Parish in the middle and Maso Ana Zone, Kansanga parish on the right.

3.3.2.2 Responsibility of drainage channels

In the study findings, respondents distributed the responsibility for drainage channels to NGOs Local authorities and citizens as illustrated in figure 18. This is summarized in the following text.

- i. 2% said that it is the role of NGO's
- ii. 2% said it's the role of others.
- *iii.* 84% of the respondents said that the responsibility of cleaning and maintaining the drainage especially the big drainage channels is the role of the Local authorities *One of the respondents said that*" *I live near a big drainage channel full of garbage and my main concern is that i have never seen any local council or even KCCA officials coming to work on the channel to remove the garbage. A lot of empty plastic bottles and other garbage can be seen in the stagnant water in the channel*".
- iv. 12% of the respondents said that it's the role of the local citizens or themselves to ensure that the drainage is clean. People at times mobilize themselves and clean the drainage as one of the respondents had just done with her family at the time of field visit. The drainage channel passes in front of their house and they said if they just leave it dirty with full of garbage, it is them who will get sick from the un hygienic conditions. They therefore requested the LC leadership to provide more support to facilitate regular cleaning of the drainage channels.

The study found that in Kansanga Parish, the community gets involved in general cleaning once every month. In Maso Ana zone, general cleaning takes place every Saturday with support from a volunteer, Mr. Katerega who offers his truck which is fueled by the community to transport the garbage to Kitezi dumping site.



Figure 18: Respondents' perception on the responsibility for maintaining drainage channels in Kamwokya and Kansanga Parishes, (N=172).

3.3.2.3 Flood incidences and their impacts on residents

Forty five percent (45%) of the respondents said that they had suffered from floods due to the poorly constructed narrow drainage channels which are usually clogged with garbage. Floods have contributed to loss and destruction of property as well as high incidences of diseases related to poor hygiene. 55% of the respondents who said that they had not been affected by floods were not residents of the low land areas of Kansanga and Kamwokya parishes such as Church Zone and upper Kifumbira zone in Kamwokya Parish which experience floods every time it rains especially if drainage is not cleaned.

3.3.2.4 Satisfaction with the drainage

The study found that 45% of the respondents were not satisfied with the state of drainage system in Kamwokya and Kansanga parishes. The built drainage system around Kifumbira zone was built sometime in 2000 and has for a long time not been maintained by KCCA to the extent that the drainage walls and the floor have been greatly eroded. Houses for people built near the drainage found to be sinking in and in some areas the drainage channels are as wide as swimming pools. Drainage channels that do not share a common border with people's residencies are in a very poor state and their maintenance level is 0%. 55% of the respondents expressed satisfaction with the drainage system. Most drainage channels in Kamwokya Parish are well built except for the main Kyebando drainage channel.

There are also smaller drainage channels which are built and maintained by the residents. The respondents said that KCCA has been able to maintain drainage channels up to about 75%. There is a hygiene and sanitation programme in KCCA called "Weyonje" which targets un lined small drainage with participation of the residents to carry out general cleaning twice every month. This programme requires each resident to participate physically and those who for some reason are not able to participate, contribute UGX 2000 for cleaning. This programme has reduced on poor garbage disposal mechanisms and improved on the drainage system.

3.3.2.5 Challenges of drainages

Below are challenges identified by the study respondents:

a) Inadequate and frequent maintenance of the drainage channels by KCCA.

- b) The drainage channels have become dumping ground for garbage and sewage channels from broken sewer lines. People with wall fences just connect pipes to the drainage channels and release dirty water and urine to the channel due to lack soak pits
- c) The local community are not willing to participate in cleaning the drainage channels including those created by themselves along their plots of land/rented premises.
- d) Some of the unlined drainages are acting as narrow walk ways for the communities. So, when it rains the running water from upper areas forces itself in the walk way thus affecting passage of communities.
- e) Some drainages are maintained by LCs who remove the rubbish but because they do not have where to deposit it, it is left on the banks of the drainage channel and later it finds its way back into the drainage channel.

3.3.2.6 Recommendations for drainage

- a) KCCA should finalize construction of the key remaining drainage channels
- b) Where possible KCCA, Civil Society Organizations and private sector should construct drainages that are covered as a mechanism of preventing communities from easily throwing garbage into them. This will also create more walk ways in the slummy areas of Kamwokya and Kasanga Parishes.
- c) KCCA needs to strengthen its enforcement on drainage management.
- d) Civil Society Organisations together with other stakeholders should increase awareness to the communities on how to manage and maintain the drainages around them and the dangers that might arise due to poor management.

3.3.3 Regulations on sanitation

The study found that 63.5% had received sensitization on garbage ordinance, WASH and its importance. However, through observation, the communities were still throwing garbage in the drainages and majority were not yet aware that they are supposed to segregate their waste at source. One of the study respondents said "In Lubaga division where I used to stay before coming to Kamwokya, sanitation was key, and people would deal with you if they found you throwing garbage in un-designated places, and this helped to keep the area clean. In Kamwokya the reverse is true, when you talk about anyone asking why they are throwing garbage in a wrong place, they abuse you or ask you whether you are KCCA or LC or landlord. So, people's attitude towards WASH here is negative and we need more sensitization for them from authorities".

3.3.4 Enforcement of national and local laws on sanitation

a) Awareness and sensitization campaigns

Much as during the interviews, the study found that some households or community members had been sensitized on the importance of sanitation and proper hygiene, it was hard to clearly find out how many awareness and sensitization campaigns had been conducted especially in a specified period.

b) Nuisance notices issued and compliance levels

The study could not find out the number of nuisance notices that had been issues and their compliance levels.

3.3.5 Budget for improved sanitation

The study found that sanitation has a budget line though very small. About 0.06% which is 600 million per year of the Kampala district budget is allocated for WASH excluding solid waste management and mainly for public toilet management and clearing of water bills. For the previous financial year which is 2018/19, there were no funds allocated for sanitation. However, under the CWISE project and other development partners, investments in sanitation are about 2Billion shillings per year on average in the last three financial years.

3.3.6 Capacity of the institution to improve sanitation

Considering substantive appointment, only 50% staff of required positions are filled in the sanitation department. Improving sanitation is included in the strategic plans and budgets of Kampala especially the strategic plan under development for the period 2020/21 – 2025/26.

3.3.7 Political commitment to improve sanitation

The study analyzed three manifestos of three-party politics for the recently conducted election campaigns of 2016-2021 namely the one of National Resistance Movement (NRM), Forum for Democratic Change (FDC) and Uganda People's Congress (UPC). Out of these manifestos, it's only the FDC's manifesto that had mentions of elements of sanitation namely increase funding to the water sector and prioritize the provision of water and sanitation in Rural and slum areas.

3.4 HYGIENE KEY FINDINGS

3.4.1 Food hygiene

The study found that the ppercentage of food handlers medically examined in the area are below 10% and the percentage of food handlers with medical fitness certificates are below 10%. Eating houses/places with premise suitability certificates are below 10%. Existence of up to date food handlers' databases at various municipal and parish levels is below 50%.

3.4.2 Menstrual hygiene in schools

a) Menstrual hygiene knowledge

The study found that the number of sensitization/outreach activities conducted in a year by the authority/municipality/town council are less than two and percentage of schools that have had awareness campaigns in a year are below 20%. Only 79 which are public primary schools out of 600 primary schools received sensitisation/outreach activities.

b) Existence of functional sanitary disposal management system

The study found that three out of the four schools that were visited had functional sanitary disposal management system though some of it needed to be improved on. Mirembe primary school Lukuli Nnaganda and Kansanga Seed Secondary School in Makindye Division have well-established incinerators as seen in **Figures 19** and **20** below:



Figure 19: An Incinerator at Mirembe Primary School Lukili Naganda in Makindye Division where pads are disposed off.



Figure 20: On the left is an Incinerator in Kasanga Seed Secondary School where pads are disposed off and on the right is one of the buckets in Dream Africa Primary School in Kifumbira Zone, Kamwokya Parish where girls drop their used pads.

c) Budgetary allocation to menstrual hygiene

There are no funds allocated to menstrual hygiene in by city authorities, municipalities and town councils. However, with support from GIZ under 'Sanitation for millions' project and CWISE, sensitization meetings in communities and schools are done.

3.4.3 Solid and liquid waste management

a) Disposal mechanisms for household garbage

- I. 19% of the respondents dispose off garbage using KCCA vehicles
- II. 15% in the drainage channel
- III. 20% burn it
- IV. 13.8% in sacks
- V. 9.2% did not disclose how they dispose off their garbage
- VI. 23% with private collectors such as Home Klin, Nabugabo Updeal Garbage collection companies for Kansanga and Kamwokya Parishes respectively.

The respondents said that most of the communities because of their low-income status, do not have the capacity to pay for garbage and so they mainly dispose it off into the drainage channels at night or when it rains. This was further elaborated by a respondent Hajji in Kamwokya Parish who said: "Our Kifumbira 1 zone is a very dirty place as you have seen with your eyes; people throw garbage all over the place and this is mostly done at night and in drainage channels; they also do open defecation. I think the local council should start doing patrols at night to catch and apprehend the people involved, we are surely badly off" said respondent Hajji.

The general secretary Sebagala zone in Kansanga parish said that pampers and other garbage are being deposited in the drainage channel and at the time of the study, it could not be seen because it had rained heavily the day before and people had to wake up and throw the garbage in the drainage for it to be transported by running water. The problem is that, it all goes downstream where spring water is located thus contaminating the water which majority of the community especially those from Kansanga Parish use for drinking and other domestic purposes.



Figure 21: Garbage disposal problems around Households in Kifumbira Zone, Kamwokya Parish and Maso Ana zone, Kansanga Parish.

b) Payment for garbage collection

- i. In Kamwokya parish 88% pay for garbage collection while 21% do not pay
- ii. In Kansanga parish, 71% of the respondents pay for garbage while 29% do not pay.

Overall 84% of the respondents pay between 1,000/= to 5,000/= per month, 12% pay between 5,000/= to 10,000/= per month, 2% pay between 10,000/= to 20,000/= per month and 2% of the respondents pay beyond 20,000/= per month. The respondents said that HomeKlin company is over charging households for garbage collection (10,000/= per month instead of the 3000 per household) compared to what was agreed upon in the agreement.

c) Regularity of collecting garbage

- i. 51% of the respondents said that garbage is collected once a week
- ii. 18.3% said it is collected twice a week
- iii. 8.3% said its once a month
- iv. 6.7% said its daily
- v. 15.7% said that it's hard to know when garbage is collected because the garbage collection companies just come abruptly without a clear collection roaster. However, interaction with garbage collection companies that is HomeKlin and Nabugabo updeal showed that they have clear schedules for collection of garbage.

d) Databases on solid and liquid waste

The study found that there is a data base of solid and liquid waste as stipulated in the National Environment (Waste Management) regulations, S.I 153-2). The regulations have a list of licensed waste handlers that is companies/persons licenses to transport wastes or own/operate waste treatment/disposal facilities which was issues as of 15th October 2018 and is valid for a period of one year. The list was issued by the Technical Committee on Pollution Licensing, in exercise of the

powers conferred on it by the National Environment (Waste Management) Regulations, S.I 153-2, in its 22nd and 23rd sitting. The study however could not get the exact solid and liquid waste collected from the study area from the garbage collecting companies. The study found that Kifumbira village in Kamwokya parish has 400 to 500 households out of which, 300 households are defaulters. For the month of January 2019, the list of defaulters made Nabugabo up deal the garbage collection company to lose around two million shillings as per the statement from the Nabugabo focal point person for Kamwokya Parish.

e) Partnerships in solid and liquid waste management

The Kampala City Council Solid Waste Management Ordinance of 2000, mandates KCCA and its agents to ensure that solid waste in Kampala is collected and conveyed to treatment installations to satisfy both public health and environmental conservation requirements. The Ordinance also mandates KCCA to contract services of private parties (as delegated agents) to invest and undertake business operations along the waste management chain. The study found that Nabugabo Updeal was responsible for collecting garbage in Kamwokya Parish and HomeKlin Uganda for Kasanga Parish. The study further found out that KCCA extended contracts of the 3 solid waste concessionaires for 12 months effective June 2019 to June 2020. The initial contracts lasted four years ending June 2019.

Table 1; showing concessionaires/companies awarded tenders by KCCA for zones under the studyarea Kamwokya and Kansanga parish

Zone	Concessionaires/Company
2	M/s Kampala Solid Waste Management Consortium
3 and 4	M/s Home klin (U) Limited
5 and 7	M/s Nabugabo Updeal Joint Venture



Figure 22: On the left is a map zoning the lincenced garbage collecting companies and on the right is garbage collecting vehicle taking garbage to Kitezi Landsite.

² https://www.kcca.go.ug/Waste-Collection-and-Transportation

3.4.4 Satisfaction on garbage management

Thirty percent (30%) of the respondents said that they were satisfied with the way KCCA and the garbage collection companies that is Home Klin and Nabugabo updeal are managing garbage. They are happy of the fact that KCCA privatized garbage collection because they had failed to manage the KCCA skips that they used to put alongside the roads where they would live the garbage to become a nuance to the neighboring households.

However, 70% of the respondents said that they are not satisfied at all. The non-satisfaction is because of the garbage collection companies sometimes taking long without collecting garbage from the paid-up residents, a situation that makes them frustrated with the smelling garbage. Some end up paying individual people to take the garbage which is a double payment while others are forced to throw it in the drainages especially when it rains. The respondents also said that the regularity of collecting garbage which is once in a week and in some areas twice a week is not practical. The respondents further said that there is weak enforcement by KCCA regarding the households that are not paying for their own generated garbage or those that throw it in the trenches/drainages. Some of the respondents said that their garbage is never collected despite their royalty in paying because Nabugabo updeal justified with them that they cannot collect garbage from their homes. They must take it to the truck and yet they are never at home when the truck arrives to collect garbage.

3.4.5 Challenges on garbage management

These are challenges generated from household interviews and key informant interviews:

- a) There are few access roads which makes it difficult to collect the garbage within the community.
- b) Some households are not willing to pay for their own generated garbage and therefore prefer dumping it in the drainage channels.
- c) The garbage collecting companies have limited capacity in terms of personale and vehicles to collect the garbage from the communities for example, they collect garbage only once in a week.
- d) The communities do not have cleaning tools such as hoes, spades, wheel barrows because their 25% revenue plough back which used to help in such developments was stopped by KCCA.
- e) There is no provision for vehicles to take away removed silt from drainage channels during general cleaning. Such rubbish finds its way back into the drainage channels.

3.4.6 Recommendations on garbage management

Below are recommendations based on the findings from the study:

- a) Nabugabo updeal and HomeKlin should ensure to collect garbage at least twice a week from each household.
- b) KCCA should explore more innovative mechanisms of managing garbage such as the use of the youth in garbage collection, promotion of garbage recycling initiatives and decentralization of garbage tendering at the parish level.
- c) All stakeholders involved in sanitation and hygiene in Kampala Capital City (private sector, KCCA, CSO's and academia) should embark on conducting intensive community sensitization on garbage management and the garbage ordinance (which clearly stipulates

the roles and responsibilities of each stakeholder including the community on garbage management in Kampala City).

- d) KCCA and other stakeholders such as CSO's should provide tools/equipment such as wheelbarrows, speeds, gloves and Gumboots to each zone to facilitate garbage collection on selected days by the communities.
- e) KCCA should intensify its law enforcement mechanisms towards garbage disposal and management.

3.4.7 Capacity of the institution to improve hygiene

The study found that there are adequate staff that are skilled in all aspects of hygiene food hygiene, menstrual hygiene and solid and liquid waste management and these are included in the strategic plans and budgets of Kampala Capital City Authority (KCCA).

3.5 KNOWLEDGE, ATTITUDE AND PRACTICE FINDINGS

3.5.1 Knowledge, attitude and practice about safe water

The study assessed several parameters regarding the knowledge, attitude and practice on safe water as discussed below:

a) Drinking un boiled water can cause diseases

The study found that 85% of the respondents strongly agreed that drinking unboiled water can cause diseases because it is not safe and contaminated with germs as illustrated in figure 23 below. The university students from Kampala International University on the other hand said that much as they are aware that drinking un boiled water is unsafe, they are taking it daily especially spring water which was tested to be 99% contaminated. They do not have enough money to pay for electricity/yaka to boil water and their parents or guardians would not find it easy to give them more money for electricity bills. However, they said that on several occasions, they have gotten sick of typhoid and it has been easier for them to ask for money for treatment from their parents. As illustrated in figure 23, 11% of the respondents strongly dis agreed that drinking un boiled water causes diseases. They argued that for some years they drunk un boiled water and yet they have never fallen sick. Others on the hand said that water purifiers such as water guard can make water safe for drinking even without boiling it. One of the study respondents said, "Some people drink boiled water while others say spring water looks safe to drink and so they just drink direct from jerrycan and they are ok".



Figure 23: Respondents attitude towards drinking un boiled water, (N=159).

b) Very clean/colorless water is safe for drinking even if not boiled

- 1. 35% of the respondents strongly agreed that very clean or colorless water is safe for drinking even if not boiled especially if one used water purifiers such as safeguard tablets.
- II. 10% agree
- III. 26% disagree
- IV. 29% strongly dis agreed that very clean/colorless water is safe for drinking even if not boiled. They said that water being clean does not mean that its safe for drinking, it could be having some small invisible microorganisms which when taken in water are dangerous and risky to their lives. However, in practice some respondents testified that

they were taking such water even when it is not boiled. The findings are illustrated in figure 24.



Figure 24: Respondents attitude towards safety of drinking un boiled very clean boiled, (N=131).

c) Germs can die when put in the fridge

Eight percent (8%) of the respondents strongly agreed that germs can die when put in the fridge because they believed that the too much coldness would kill the germs. Four percent (4%) agreed, 39% disagreed and 49% strongly disagreed that germs can die when put in the fridge. They said that the germs just weaken or sleep off and the moment they would be exposed to a warmer environment, their life will rejuvenate as well. These discussions are further illustrated in figure 25 below:



Figure 25: Respondents attitude towards safety of refrigerated water, (N=135).

d) Water made safe for drinking by boiling it to 100 degrees centigrade

The study found that 67% of the respondents strongly agreed that water is made safe for drinking by boiling it to 100 degrees centigrade though they confessed that it's hard to know that it has reached the 100 degrees. What they use to measure is the bumbles. 20% of the respondents agreed, 8% disagreed and 5% strongly disagreed. Key to note is that it hard for a community member to know that the water has boiled up to 100 degrees centigrade as seen in figure 26 below.



Figure 26: Respondents attitude towards boiled water, (N=135).

e) Can see germs in the water by your eyes

Twelve percent (12%) of the respondents strongly agreed that they can see germs in the water by their own ideas and 12% agreed. However, key to note is that they could only see those germs that are not so small. 45% of the respondents disagreed, 31% strongly dis agreed that they can see germs in the water by their own eyes as shown in **Figure 27** below.



Figure 27: Respondents perceptions on visibility of germs in water with naked eyes, (N=135).

3.5.2 Knowledge, attitude and practice about sanitation

a) All feaces must be disposed off in the latrine

- i. 21% of the respondents strongly agreed that all feaces must be disposed off in the latrine
- ii. 13% agreed
- iii. 43% disagreed
- iv. 23% strongly disagreed. The respondents that disagreed and strongly disagreed said that some feaces especially those of babies and pregnant women should not be disposed off in the latrine due to some culture beliefs and practices.

b) Children/baby faeces is not disposed in the latrine

The respondents that strongly agreed (55%) and agreed (23%) said that feaces are feaces irrespective of whether they are for babies or old people and they equally have the same risks of

transmitting diseases. The respondents who disagreed (10%) and strongly dis agreed (12%) based their argument on several issues such as culture of some tribes that discourages throwing babies' feaces into the toilet/latrine because it's a taboo and might lead to bad consequences. Other respondents especially those with toilets that flush said that in most cases the baby's feaces are in pampers that cannot be flushed. But also, those respondents with pit latrines said that throwing pampers into the latrines would make the latrines to fill up very first thus incurring costs for regular emptying.

c) Open defecation likely to lead to sickness

- I. 57% of the respondents strongly agreed that open defecation is likely lead to sickness especially cholera when the flies that have fallen on the feaces go unto the food which the person is eating. Nine percent
- II. 9% of the respondents agreed
- III. 21% disagreed
- IV. 13% strongly disagreed.

However, through observation, it was noted that the practise of open defecation was rampant in both parishes though in a modernised way. The respondents would defecate in the buckets and polythene bags which they would then throw on roofs of their neighbours and in drainage channels at night or when it rains.

d) Animal and baby feaces do not cause diseases

Thirty four percent of the respondents strongly agreed that animal and baby's feaces do not cause diseases, 8% agreed, 34% disagreed and 24% strongly disagreed that baby's feaces do not cause diseases. They said that feaces whether for humans or animals can have microorganisms that transmit various diseases.

e) Not cleaning toilet/latrine daily does not cause diseases

The study found that 34% of the respondents strongly agreed that not cleaning the toilet/latrine daily does not cause diseases while 66% strongly disagreed that not cleaning the toilet daily does not cause diseases. From observation the study confirmed that most households were not cleaning their toilets daily. Figure 28 shows some of the filthy toilets observed in Kifumbira Zone Kamwokya Parish.



Figure 28: Some of the filthy toilets observed during the study in Kifumbira Zone in Kamwokya Parish, Central Division.

f) Bath shelters should have soak pits

Thirty four percent of the respondents agreed that bath shelters should have soak pits while 66% of the respondents strongly agreed on the same. They complained about the households with wall fences who connect pipes to the drainage channels and release dirty water and urine to the drainage channels because they don't have soak pits to manage this. One of the respondents from Kasanga Parish said' "Other households do not cover their soak pits connected to their bathrooms and yet chairman has warned them, and they are not acting on it and this is also dangerous since children may fall in the pits".



Figure 29: Bath shelters without soak pits in Maso Ana Zone in Kasanga Parish, Makindye Division.

g) Garbage should be stored in separate containers before disposal

The study found that 66% of the respondents strongly agreed that garbage should be stored in separate containers before disposal due to various reasons such as the garbage ordinance that promotes garbage sorting, the well sorted garbage can be a source of income in form of selling plastics and banana peelings. However, 34% of the respondents strongly disagreed. They said that even though they sort the garbage, there is no difference because the garbage collecting companies still mix the whole garbage while putting it into the collection trucks. To them it's a waste of time and manpower. The findings are illustrated in figures 30 and 31 below.



Figure 30: Respondents attitudes and practices on garbage sorting, (N=135).



Figure 31: Un sorted garbage piled in sacks in Church Zone in Kamwokya Parish awaiting collection by garbage companies.

h) Disposal of your own generated garbage should be paid for

During the study, 42% of the respondents strongly agreed that own generated garbage should be paid for though they were not comfortable with the amount they need to pay monthly to the garbage collecting companies. They were also not comfortable with the inconsistencies in the garbage collection schedules by the garbage collection companies. 58% of the respondents strongly disagreed that own generated garbage should be paid for because they do not have money to pay for it and besides, they already pay a lot of taxes to KCCA which should be used for collection of garbage. They therefore recommended that the garbage collection should revert to KCCA as it was before. The study respondents have limited knowledge about the garbage ordinance.

3.5.3 Knowledge, attitude and practice about hygiene

a) Washing hands with soap at critical times

- I. 83% of the respondents strongly agreed that hands should be washed at critical times
- II. 17% just agreed. This is because it's a healthy practise but also helps to remove the germs and reduce the level of contamination.

Key to note is that most of the respondents focussed on washing hands but without soap. Some of the critical times that the respondents identified included after visiting the toilet, before and after eating food and before breastfeeding the baby (which was mainly said by the women). Other respondents highlighted the need to wash all fruits before eating them as good practise. Figure 32 illustrates respondents' perception and hand washing tap at Kansanga Seed School.



Figure 32: Respondent perceptions on hand washing (N=135), (Left); Hand washing tap at Kansanga Seed Secondary School.

b) Food must be eaten hot and covered when left over

The study found that 85% of the respondents strongly agreed and 15% agreed that all food must be eaten hot and covered when left over to avoid germs that cause diseases such as typhoid from touching it.

c) Bathing the body daily

98% of the respondents strongly agreed that a person should bath his or her body daily to avoid bad smell, feel and look fresh as well as avoid getting hygiene skin related diseases such as mice in the hair. The women respondents said that there is no way a woman should not bath daily especially when she is in her periods. Some of the men said that they could occasionally forego bathing and would ensure that the next day they bath.

d) Utensils (Plates, cups) should be used when dry

Forty five percent of the respondents strongly agreed that utensils should be used when dry as a good practise but also to avoid any bacteria that might be on the wet surface. However, 55% of the respondents disagreed because they have been using utensils such as cups and plates when not dry and nothing has so far happened to them.

e) Brushing teeth at least twice a daily

Seventy percent of the respondents said that it's healthy to brush their teeth at least twice a daily. They said that the brushing helps them to remove bacteria in their mouth that might damage the gums and cause tooth decay, to remove bad breath and to remove teeth stains. However, the respondents said that in practise most of them brush their teeth only once a day and that is in the morning because the tooth paste is expensive for them to maintain the two times of brushing. The study found that a few women especially the married ones or those with partners were the ones brushing their teeth twice a day, the second being before going to bed.

f) Keeping the compound clean reduces the chances of getting diseases

25% of the respondents strongly agreed that keeping their compounds clean can reduce the chances of getting diseases because you would have removed all dust materials that would have caused spread of diseases.

3.5.4 Challenges on knowledge, attitude and Practise of WASH

Below are the challenges from the study respondents:

- a) Much as averagely the study respondents were knowledgeable about water, hygiene and sanitation behaviours, the practise seemed to be wanting.
- b) Kamwokya and Kasanga parishes have people from diverse regions and cultures from within and outside Uganda with diverse beliefs, behaviours and practises that do not favour the promotion of WASH good practises.
- c) The respondents are sometimes constrained with resources such as money to practise some of the hygiene and sanitation behaviours. Such include constructing bath shelters, up to standard latrines, cooking water for drinking and buying enough soap to be used while washing hands at critical times.
- d) Inadequate community sensitization and enforcement of sanitation standards.

3.5.5 Recommendations for knowledge, attitude and practise for WASH

- a) Need for intensive sensitisation and awareness on behavioural change practises of the communities in relation to promoting water hygiene and sanitation.
- b) KCCA needs to strengthen the enforcement of law such as penalising those communities without soak pits, those sharing animals in the same roof and those without toilets/latrines.

4. CONCLUSION

The study was about conducting a participatory assessment and documentation of wash service sustainability monitoring (score card) in Kamwokya and Kansanga parishes. It was commissioned by Environmental Alert and summarizes findings and recommendations under each chapter. The study focused on the status of Water, Hygiene and sanitation in Kamwokya and Kansanga parishes; community Knowledge, Attitudes and Practices around WASH, community perceptions WASH services by duty bearers; and community's level of satisfaction regarding WASH service delivery.

In terms of water access, the study found that communities have accessed water mainly from National Water and Sewerage cooperation through stand pipe kiosks/taps and pre- paid meter water taps. Water accessed from pre- paid metre water taps (at 25/= and 100/= per 20 litre jerrican for those who have access coins and those without respectively) is cheaper and affordable for those communities from Kansanga and Kamwokya Parishes. The study found that water being accessed by community members from landlords between 200/= to 500/= per 20 litre jerry can is relatively expensive. The price sometimes goes higher when there are water interruptions because there a few households with water reservoirs. Despite the continuous sensitizations about the dangers of taking un boiled water and use of spring well water especially in Kansanga Parish, the communities are still practicing the unsafe water practices, a situation that has exposed them to water borne related diseases such as typhoid and cholera.

The sanitation practice within the communities that were interviewed is still very bad and appalling. Landlords do not have pit latrines and so make agreements with their fellow landlords to allow their tenants use their latrines. The study found that sometimes the tenants are not necessarily be close to the toilets. The toilets themselves are not in good condition. Apart from a few communities that are using proper sanitation disposal mechanisms, incidences of defecating in polythene bags (kavera) and depositing in drainage channels at night or when it rains and use of metallic drums dug a few feet in the soil are still common. There is limited access to public latrines which are only located in the market places and a few others that have outlived their lifespan. The drainage channels whether lined or not are not being used well. There are practices of dumping garbage and sometimes human waste and liquid into the drainages especially when it rains a situation that exposes the community to high risks of sanitation and water related diseases. The current sewer line in Kampala Capital City is not matching with the current population and therefore it needs to be rehabilitated and upgraded. The hygiene situation is also not equally very good. Apart from a few schools that have some proper hygiene disposal facilities especially for the sanitary pads of the girl child, majority still face poor hygiene and sanitation conditions. There is no specific data on all the eating joints in the study area regarding the nuisance certificates and even those that have them are very few.

In terms of knowledge, attitude and practice, averagely community respondents are aware of some of the good practices. The behavior and attitude towards WASH is not bad. The challenge though is that the study area has people that come from different cultures and backgrounds with different beliefs and behaviors. This has affected harmonization of some of the WASH practices. However, the other category of community that is aware of the best practice and behavior is constrained in terms of resources such as soap for effecting the necessary WASH improvements. In terms of human resource, KCCA has adequate staff with the right qualifications and competences in WASH. The challenge is that the staff is not adequately facilitated to effectively and efficiently deliver on their mandate.

Access to water and sanitation is included in the Kampala District strategic plan and budget with clear roles for NWSC and KCCA. NWSC is mandated to supply piped water in the city lies. KCCA's mandate is to promote rainwater harvesting especially in institutions such as schools, promoting hygiene and sanitation together with other stakeholders such as the garbage collecting companies where it privatized garbage collection.

In terms of political commitment to improve access to water and sanitation, the study analyzed three manifestos of three-party politics for the recently conducted election campaigns of 2016-2021 namely the one of National Resistance Movement (NRM), Forum for Democratic Change (FDC) and Uganda People's Congress (UPC). Out of these manifestos, it's only the FDC's manifesto that had mentions of elements of water and sanitation as described below:

- Increase access to safe drinking water from the present National average of the 70% to 100 % by 2021.
- Increase funding to the water sector and prioritize the provision of water and sanitation in Rural and slum areas.
- Involve the private sector in extending water supply at subsidized rates to the poor and most of our people in slums.

Overall, WASH services in Kamwokya and Kansanga Parishes in Kampala Central and Makindye Division respectively are still inadequate. This therefore requires concerted efforts by all stakeholders including local communities, Local leaders, KCCA, NWSC, civil society organizations and private sector to work together and address the overwhelming WASH situation.

5. REFERENCES

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Box 1. About Environmental Alert

Environmental Alert was founded in **1988** and in **2018** marked **30 years** of contribution to improved livelihoods and development in Uganda through several interventions in sustainable agriculture, environment, natural resources management, water, sanitation and hygiene. Environmental Alert is officially registered with the Non-Governmental Organizations (NGO) Registration Bureau as a Ugandan non-governmental organization, incorporated as a company limited by guarantee. Environmental Alert is governed by an independent Board that is responsible for providing strategic oversight of the organization including ensuring its integrity as a voluntary service organization.

Environmental Alert is a 1st prize winner of the Energy globe award for environmental sustainability-2005 under the category, earth.

Environmental Alert is a member of the International Union for Conservation of Nature (IUCN) and a Member of The IUCN National Committee for Uganda.

Environmental Alert **envisions**, '*Resilient and dignified communities, managing their environment and natural resources sustainably.*'

Environmental Alert's mission is to, '*Contribute to improved livelihoods of vulnerable communities by enhancing agricultural productivity and sustainable natural resources management'*

Program and institutional Components:

- 1. Environment and Natural resources management;
- 2. Food security and Nutrition;
- 3. Water, Sanitation and Hygiene;
- 4. Finance and Administration;
- 5. Resource mobilization and Investment.

Scale of Implementation:

Environmental Alert operates in selected districts for generation of evidence to inform policy engagements on agriculture, environment and natural resources at National and International levels. Currently EA's operations are in 20 districts across the country. EA undertakes area wide targeted awareness on selected issues in agriculture, environment and natural resources engagements

Environmental Alert is a Secretariat for following networks:

- a) The Network for Civil Society Organizations in Environment & Natural Resources Sector (ENR-CSO Network) http://enr-cso.org/;
- b) Uganda Forestry Working Group (UFWG)- http://ufwg.envalert.org/;
- c) The Standards Development Group (for promotion of Sustainable Forest Management in Uganda);
- d) Promoting Local Innovation in ecologically oriented agriculture and natural resources management (PROLINNOVA-Uganda Network) http://www.prolinnova.net/uganda;
- e) The Renewable Energy Civil Society Organizations Network.

Further information about Environmental Alert is available at: http://envalert.org/

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Websites for Networks: Uganda Forest Working Group (UFWG): i. Website: http://ufwg.envalert.org/ ii. Twitter: @UFWG_UG iii. Face book: Uganda Forestry Working Group

Environment and Natural Resources Civil Society (ENR-CSO) Network:

Website: http://enr-cso.org/ Twitter: @ENRCSO Face book: ENR-CSO Network