KYANGWALI WASH KAP SURVEY 2019

A 2019 Study on current community access to and practices on Water, Sanitation and Hygiene in Kyangwali Settlement in Kikuube District
November 2019

UNHCR
The UN Refugee Agency

Contents

I.   Acknowledgements

UNHCR wishes to thank all partners both Implementing Partners (IPs) and Operating Partners (Ops) for their contribution to the assessment of WASH sector in Kyangwali Refuge settlement and the host community. This study comes at a crucial time in Kyangwali when UNHCR has declared her strategic intention to embark on long-term development activities within the settlement. We believe that findings of this study contribute to other conducted studies to provide the basis for measuring progress in the WASH sector. UNHCR and specifically the Kyangwali operation sees this as a great landmark to celebrate the efforts contributed by all partners in one way or the other in process of the production of this survey report.

We thank WASH sector for the opportunity and the financial support to carry this out.

UNHCR acknowledges government support specifically OPM, Kikuube District local government through its various units that contributed to the success of the survey notably the DWO, DHO and your representation.

To all interviewees, RWCs and communities who facilitated our work, we are thankful.

Finally, we thank the baseline survey team for their commitment and dedication in getting this done in good time. UNHCR will like to acknowledge the contribution of IOM, AAH, URCS, LWF, ACF, CRS, NRC and other Humanitarian Support Personnel on Public Health Promotion for taking up this challenge, for preparing the whole survey and for, provision of survey tools and equipment, participation and facilitation of the data collection, analysis, report writing and reviews.

Through your collective efforts we have a joint baseline survey report that will inform our ongoing and future response in the settlement and host community.

29th November 2019

II.   Abbreviations and Acronyms

ACF   Action Contre la Faim

DWO   District Water Officer

DHO   District Health Officer

DRC   Democratic Republic of Congo

HH   Household

IP   Implementing Partner

IOM   International Organization for Migration

KAP   Knowledge, Attitude and Practices

Lpd   Litres per person per day

LWF   Lutheran World Federation

MHM   Menstrual Hygiene Management

NRC   Norwegian Refugee Council

OP   Operating Partner

OPM   Office of the Prime Minister

POCs   Persons of Concern

RWCs   Refugee Welfare Councils.

UNHCR   United Nations High Commissioner for Refugees

URCS   Uganda Red Cross Society

WASH   Water and Sanitation Hygiene

WTWG   WaSH Technical Working Group

Introduction

Uganda is hosting over 1 million refugees with about 114,716 (OPM Nov 2019) of them settled in Kyangwali refugee settlement. This rapid influx of refugees has put pressure on basic social services including education, food, shelter and WASH infrastructure.

In late December 2017, the North-Eastern Ituri province of Democratic Republic of Congo (DRC) experienced an inter-ethnic violence which resulted into displacement of tens of thousands of civilians crossing border to Uganda. About 60,000 refugees arrived at Kyangwali settlement in few months' time creating a humanitarian emergency which was aggravated by the outbreak of cholera in February 2018. In addition, with the sudden increase of more than 100% of existing refugee population, the existing WASH facilities could not support the surge and this called for a number of WASH agencies to begin operating in the settlement in response to the emergency and with objective to improve access to potable water supply and improved hygiene and sanitation facilities. Currently, 8 agencies are implementing WASH activities in the settlement and these include; NRC, LWF, Uganda Red Cross Society, IOM, IAS, CRS, LWF, ACF and AAH as the UNHCR implementing partner.

In order to efficiently and effectively improve WASH service delivery in the settlement, there is need for accurate and reliable information on which to base programmatic decisions. Kyangwali settlement has had a number of interventions by different partners, and in as much as there were access indicators obtained regularly by the partners that provide extremely useful average figures at settlement level, there has been a gap in the in-depth understanding of the situation at household level and to account for disparities within the settlement so as to measure the impact of the interventions.

In consideration of the existing challenges, UNHCR in collaboration with government and WASH actors, conducted KAP survey to understand progress made through the established /provided WASH services in comparison with acceptable standards as well as assessing existing gaps to facilitate evidence based planning of future programs.

Methodology

The survey mainly utilized 2 methods: Household questionnaire survey and documentary review. The survey covered all the five zones of the settlement, with samples drawn from all the villages in the different zones. Sample sizes for each zone were calculated using the UNHCR sample size determination tool. A sample of 403 (only refugees) was interviewed using household questionnaire survey administered through Kobo collect and Open Data Kit (ODK) tool. Reviewed documents included: partners periodic updates, minutes of WASH meetings. Data was collected using Open Data Kit (ODK) data collection software and analysed using the Standardized UNHCR WASH KAP analysis tool, Advanced excel analyser and other statistical analysis tool (SPSS)

Key findings (UNHCR Standard Indicators)

Parameter	Indicator	KAP survey findings for the settlement	Post Emergency Standard
Water Quantity	Average litres of potable water/per person/per day collected at HH level	13	≥20
	% HHs with at least 10 L/p protected water storage capacity	17%	≥80%
Water Access	Maximum distance [m] from household to potable water collection point	549	≤200m
Water Quality	% HHs collecting drinking water from protected/treated sources	85%	≥95%
Sanitation	% HHs with household latrine/toilet	80%	≥85%
	% HHs reporting defecating in a toilet/latrine	92%	≥85%
	% HHs practicing open defecation. **Includes defecating in the bush at night and children under 5 years of age	28%	0%
	% HHs having access to a bathing facility	53%	≥85%
Hygiene	% HHs with access to soap	81%	≥90%
	% HHs with access to a specific hand-washing device	26%	≥85%
	% respondents knowing at least 3 critical moments when to wash hands	81%	≥90%
Solid Waste	% HHs with access to solid waste disposal facility	52%	≥90%

Other WASH related indicators

Parameter	Indicator
Water Supply	The majority of the households (85%) fetch water from a protected source such as handpump/bore hole, public tap/stand pipe and protected spring. Most of the of the households (64%) reported hand pumps/borehole as their main source of drinking water for members in the household compared to (38%) who reported public tap/stand pipe. Adult females (61%), children (11-18 years) (30%), adult male (6%) and children (10 years or younger) (3%) are responsible to fetch water for domestic use. Average litres of potable water/per person/per day collected at HH level is still below standard at 13 L/p/d. only zone A at 21 l/p/d is above the required standard of about 20l/p/d, while zone E at 10 l/p/d has the lowest water per capita. Zones B, C and D are also below standard of 20 L/P/d at 17, 13 and 12 respectively. The low percapita at zone E was mainly because of the temporary water system breakdown at Kavule 1 that is already being restored while 4 boreholes were not functional at zone B, C and D by the time of the survey, so this affected the average water percapita for the settlement. Only 17% of the respondents had at least 10 L/p protected water storage capacity, and zone A has the lowest proportion (only 11%) of respondents with at least 10L/p storage containers while zone B had a bigger proportion at 29%. The low protected water storage capacity is mainly because most households (44%) do not have enough protected water storage containers. Most of the water points are not at acceptable post emergency distance of 200 meters from households. The average walking distance to the nearest water point was at 549 meters for the majority of the respondents Over half of the households (61%) clean their containers every time they use them, followed by (36%) of the households who clean their containers at least once in a week. The rest 3% clean their containers once in a month.
Sanitation	Majority of the households (80%) have access to household latrine. About 12% use communal latrine and open defecation among adults stands at 8%. Most of the households (48%) reported that children under-5 living in the households usually defecate in an open space. Meanwhile, 36% reported that children under-5 are usually supported to defecate in the household latrine. About 10% defecate in the plastic pot and 5% are supported to defecate in communal latrine.

	For children under-5 who do not use a latrine, the majority 96% of the households collect and dispose of their faeces in the latrine, 4% collect and dispose of elsewhere or bury it. Only a very few adult members (8%) in the household defecate in the open especially at night. They gave a reason of no latrine in the household, too dark at night, latrine too far, too tired to go to the latrine at night and other households have other reasons as to why they defecate in the open. Over half of the households (53%) have a designated shower/bathing facility with exception of only 47% of the households that do don have one.
Waste management	Majority of households 52% have access to solid waste disposal facility. Close to half of the households (44%) dispose of domestic waste in the household pit. With 14% in designated open area, 35% at the undesignated open area, 3% burn domestic waste, 4% dispose in communal.
Hygiene	The key times when people practice hand washing with soap include before eating (97%), after defecation (92%) and before cooking/meal preparation (55%). Other important key times on hand washing with soap registered very low such as after handling baby faeces or diapers (18%), before feeding children (16%) and before feeding children (10%). Hand washing with soap and water is widely practiced as claimed by 55% of the respondents, though hand washing with water only is practiced by 50%, and in the absence of soap 42% of the respondents use ash for proper handwashing. The main reasons why people do not wash hands with soap is the Inability to afford soap, Soap already used up, and household cannot find soap. The observation from the survey also revealed that, 45% of households who had hand-washing facility did not have soap place next to it while 55% had soap at the hand washing station. Furthermore, 33% of households did not have water in the hand-washing device.
Health and hygiene messages	Less than half (or 26%) of the surveyed communities has access to health and hygiene messages especially through visits from Community Health Workers. Messages vary and the most common ones include hand washing with soap, use of mosquito nets, latrine use, cleaning and covering water containers, covering food and cleanliness around water points.

	The most preferred channels for receiving hygiene messages are home visits (40%), community meetings (36%). Other preferred means include; radio (4%), printed flyers/SMS at 3% and Focused Group Discussions at 2%.
Diarrhoea prevalence, knowledge and health seeking behaviour	Respondents believe that the causes of diarrhoea include eating contaminated or uncooked food (65%), drinking contaminated water (60%), flies (58%). Other less common causes of diarrhoea mentioned include; unpleasant odour (17%), contact with someone sick with diarrhoea or someone who died with diarrhoea (6%), others (10%) while 8% of the households don't know the possible causes of diarrhoea. They believe that diarrhoea can be prevented through washing hand with hand soap and water (60%), cooking food well (51%), boiling or treating water/ drinking clean water (48%), cleaning eating utensils (26%) and using toilet/latrine to defecate (17%) among other measures.
Menstrual hygiene	People view menstruation as a normal natural process. There is no known taboo about this but women and girls are hesitant to publicly discuss the subject. The most common practices for managing menstrual menses include the use of disposable pads (52%), reusable pads (11%) and reusable cloth (10%) while 1% of the women bled into their clothes. The majority of women (89%) dispose of their menstrual hygiene management products in the latrine, other women (9%) wash and reuse the products and the remaining (2%) burn them.

IV. Background and context

Uganda is one of the largest asylum countries worldwide and the largest in Africa, giving a reminder of the tragic and conflicts in the Great Lakes' region.

Kyangwali refugee settlement, located in Mid-West Uganda is home to about 114,716 refugees (OPM figure for 31st October 2019). The settlement was established in the early 60's with refugees from Rwanda which many of whom were later self-repatriated by 1993; but then followed by the 1994 Rwanda genocide which resulted in a huge influx of refugees. The settlement also received refugees from Eastern Congo in 1997 and 2008. Between 2002 and 2004, around 10,000 South Sudanese refugees were relocated to Kyangwali from Northern Uganda settlements. The total population in the settlement remained below 35,000 till November 2017 when a huge influx arrived from DRC. The sudden outbreak of inter-ethnic violence between Lendu and Hema communities in Ituri in mid-December 2017 forced close to 60,000 civilians cross the border from DR Congo, bringing the total number of refugees in the settlement to around 114,716 to date.

The continued influx of refugees has created demand for a range of social services, including water, sanitation and hygiene services and put pressure on existing infrastructure.

One of the critical needs in post-emergency is accurate and reliable information on which to base programmatic decisions. However, to be able to know what the situation is at household level and to account for disparities within Kyangwali Refugees Settlement, WASH partners commissioned a baseline KAP survey in November 2019 whose results are highlighted in this report through household survey with a sound sample size representing accurately the rest of the settlement.

V. Survey objectives

The main objective of the baseline survey is to track programme results, impact and long-lasting change of the Water, Sanitation and Hygiene interventions in Kyangwali refugee settlement.

Specific objectives are to;

- Establish the Knowledge, Attitudes and Practices (KAP) of refugees in relation to WASH in Kyangwali refugee settlement.

- Generate information regarding quality, access to and effectiveness of WASH interventions in Kyangwali refugee settlement.

- To gain a better understanding of and evaluate the current Knowledge, Attitudes and Practices (KAP) of refugees in relation to Water, Sanitation and Hygiene

VI.   Methodology

Survey area and sample frame

The KAP was conducted in entire Kyangwali settlement from zone (A-E). The sample size was determined using the UNHCR sample size determination tool, and samples were determined per zone and households picked at village level. The respondents from household level were extracted from the OPM statistics of registered refugees in Kyangwali Refugee Settlement. This formed a sample frame from which sample size was drawn. This is presented in the table below:

zone	Total population size	Households	Required sample size
Zone A	11,601	2,987	29
Zone B	17,941	6,722	64
Zone C	11,839	4,592	44
Zone D	11,599	3,323	32
Zone E	61,736	24,452	234
TOTAL	114,716	42,076	403

Sampling size and methodology

Simple Random sampling was adopted to reflect and compare the experiences across the 5 zones by interviewing one household after every 4 household plot.

Enumerators were instructed to go to the identified locations and interview the household closest to the location. Each community was clustered based on villages. The number of respondents from the households were then picked from the villages. In each village, the respondent was selected by interviewing one household after every 4 household plot this is because in some zones households are densely populated.

The table below illustrates the different zones and their respective sample sizes picked at village level.

Zone	Villages	Number of Households sampled
A	Kasonga	6
A	Kyebitaka	17
A	Nyambogo	5
A	Ngurwe	1
B	Kinakyeitaka	10
B	Kirokole	2
B	Kagoma	22
B	Munsisa A	4
B	Mukarange	26
C	Munsisa B	5
C	Rwenyawawa	9
C	Nyampindu	30

D	Kentomi	13
D	Malembo	3
D	Malembo A	4
D	Malembo B	1
D	Malembo C	1
D	Mukunyu	1
D	Mukunyu A	3
D	Mukunyu B	1
D	Nyamiganda	5
E	Kavule	43
E	Maratatu A	32
E	Maratatu B	44
E	Maratatu C	21
E	Maratatu D	52
E	Mombasa	42

Indicators and questionnaire elaboration

The standard WASH KAP survey Questionnaire (see Annex 1) was designed by UNHCR to produce responses relating to the degree of access to different WASH services at the household and individual levels, as well as responses relating to the perceptions of barriers and to the solutions required to increase access to services.

The questionnaire was reviewed in WASH Working Group meeting to remove some optional questions. The tool was then transformed into an electronic questionnaire to be administered with tablets and mobile phones using the ODK data collection software. The questionnaire logic was integrated into the ODK software to ensure that the right questions were asked, and that enumerators did not have to manually skip irrelevant questions.

The questionnaire was pre-tested with the field staff in zone A Kasonga village. Modification of the instruments was done based on the feedback for example some optional questions that were not needed for the survey were skipped. Issues on data gathering faced by the pre-testing team were discussed and addressed accordingly in preparation for the actual data collection.

The questionnaire was reviewed to generate results for the following UNHCR key WASH indicators:

Parameter	Indicator	Section in the questionnaire
Water Supply	Average litres of potable water/per person/per day collected at HH level	Section B
	% HHs with at least 10 L/p protected water storage capacity	

	Maximum distance [m] from household to potable water collection point	
Water treatment	% HHs collecting drinking water from protected/treated sources	Section C
Hygiene	% HHs with access to soap	Section D
	% HHs with access to a specific hand-washing device	
	% respondents knowing at least 3 critical moments when to wash hands	
Sanitation	% HHs with family latrine/toilet	Section E
	% HHs reporting defecating in a toilet/latrine	
	% HHs practicing open defecation. **Includes defecating in the bush at night.	
	% HHs having access to a bathing facility	
Solid Waste	% HHs with access to solid waste disposal facility	Section E

Ethics and consent

Ethical considerations were considered from the inception of the research design and during the questionnaire administration. During the primary data collection process, the enumerators explained the survey's purpose, the collected data's intended use, and the personal data anonymization process. Additionally, the numerators also emphasized that participation in the survey was voluntary and that respondents could choose to stop the interview process at any time, or skip questions that they did not wish to answer.

The research teams then gained verbal consent from all household members for quantitative data collection process emphasising the issue of confidentiality and the security of the information they are providing. For successful management of expectations from household members, the enumerators clearly explained that participating in the survey would not lead to any direct benefits, nor could the enumerators provide diagnostic or individual case management support to each household visited.

The research objectives and implementation plan was discussed and shared with key WASH partners in the settlement including UNHCR, OPM and the district and this took place through WASH sector meetings and individual meetings with OPM and district officials. Stakeholder consultations were also conducted so as to improve the questionnaire.

Recruitment and training

A total of 15 enumerators were recruited from the villages within the 5 zones who were trained for 3 days on actual data collection exercise. 5 supervisors selected from WASH partners helped to monitor and support the enumerators during data collection.

Data collection and quality control measures

The enumerators received 3 days of training and administered the questionnaire on tablets and mobile phones. In principle, the team composed of at least a male and a female enumerator, in order to ensure quality, gender sensitive interviews.

Picture 1: Hands-on session during enumerators and supervisors training

Interpreters were not used during interview sessions because the enumerators were comfortable and well-versed with the language spoken in the areas where they worked.

For children in the households aged 0-17 years old, interviews were conducted chiefly with the mothers or primary caregivers. In these cases, interviews addressed household level questions, as well as individual questions concerning both the mothers or primary caregivers themselves and their children, carefully respecting ethical considerations and advice provided by UNHCR. For the individuals of 18 years or above, enumerators directly asked all the questions from all the sections of the questionnaire. Collected data was stored on a secure UNHCR Kobo server and checked daily by the 5 supervisors for inconsistencies. Each household survey took approximately 60 minutes to administer. Exact times varied depending on the responses from the household heads and whether or not there were identified person to respond to survey questions.

Data analysis plan

All quantitative data collected was fully reviewed and consolidated into a single dataset for all the 5 zones. In accordance with the analysis plan, thematic analysis was conducted based on the different sectors that appear as sections of this report, and using different types of disaggregation in order to elicit further meaning (e.g. location, age, gender).

Statistical tests were then run for selected variables in order to establish correlation factors. Specifically, descriptive analyses using multivariate analysis statistical hypothesis tests (chi² for variance, independence, regression analyses, etc.) were used in order to describe and compare the various groups considered by the study and validate the statistical relevance of findings. All the major statistical results in this report was analysed using the standardized UNHCR WASH KAP analysis tool, advanced excel analysis and SPSS data analysis software.
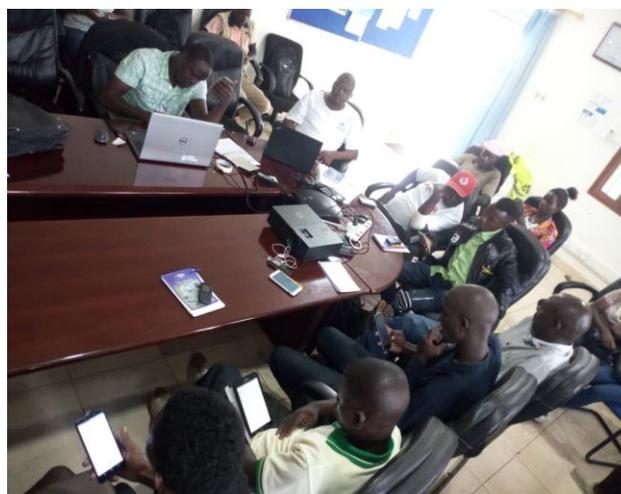
Challenges

There were challenges in this work especially during the data collection process. Below are some of the major obstacles that confronted the team.

- Some community members were reluctant to participate in the survey. They informed the field teams that there have been many surveys conducted in the past and no interventions (project) have resulted from these surveys.
- Other community members even exaggerated their condition/situation for example others said they do not have a single water collection and storage container in order to elicit sympathy. To triangulate what they were told, field teams had to verify some concerns like verifying the storage containers of water.
- Some respondents especially women were shy responding to menstrual hygiene questions administered by male data collectors.
- The area experience heavy rainfall during some data collection days. This hindered the whole data collection process because some roads were impassable and there were challenges in protecting data collection device from rain.

Lessons learnt

- The hiring of local data collectors who understand the local context not only facilitated the work but also helped in creating community acceptance and eased data collection process since the community members were familiar with the enumerators.
- Future funding for Surveys, partner organizations should invest in mobile data collection gadgets (cell Phones& tablets) to ease data collection and save time.
- Some communities have high knowledge on hygiene but this does not translate into practice.

VII. Key results and finding

Water Supply

Main source of drinking water

Figure 1: Main source of domestic drinking water for household members
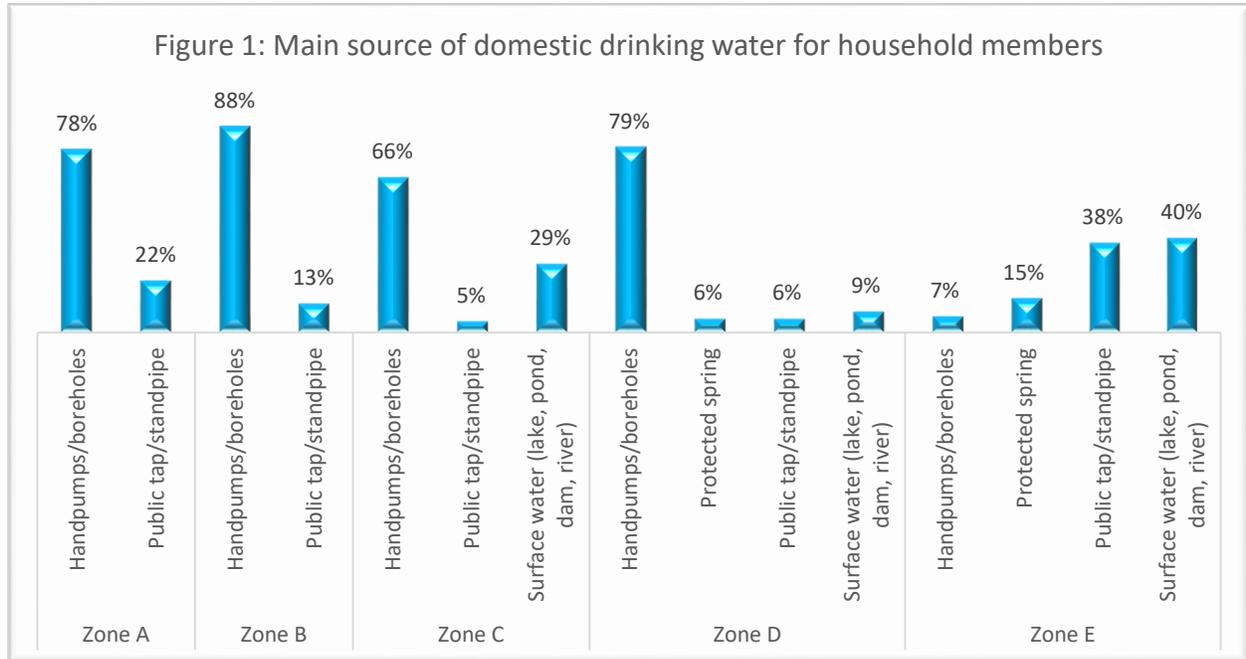
From the survey findings as presented in figure 1 above, majority of the households (64%) across all the zones reported hand pump/boreholes as their main source of drinking water for members in the household as compared to (17%) who reported public tap/standpipe. At the zonal level, Zone B reported the highest majority of households who get their main drinking water from hand pump/borehole (88%), closely followed by zone D with (79%), zone A had (78%), zone C at (66%) and zone E at only (7%) of the households. By the time of the survey, there was still existence of water supply system breakdowns especially at zone E where close to half of the households get water from lake, pond and river (40%).


Picture 2: Households fetching water from public tap/standpipe

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Second most used source of domestic drinking water

The survey also looked at finding out the alternative source of domestic drinking water for the households. The result as in figure 2 below revealed that, the majority of the households across all the zones did not collect water from other sources other than their main source (62%). A good number of households reported public tap/standpipe as their alternative source of domestic drinking water for their households at 25%. While about (10%) of the households across the zones still maintained hand pump/borehole as their only main source of domestic drinking water for household members. At zone level, the highest majority of households who reported public tap/standpipe as their alternative water source were found at zone D with (50%), followed by zone B and C with (31%) and 30% respectively.


Figure 2: Second most used source of domestic drinking water for household members
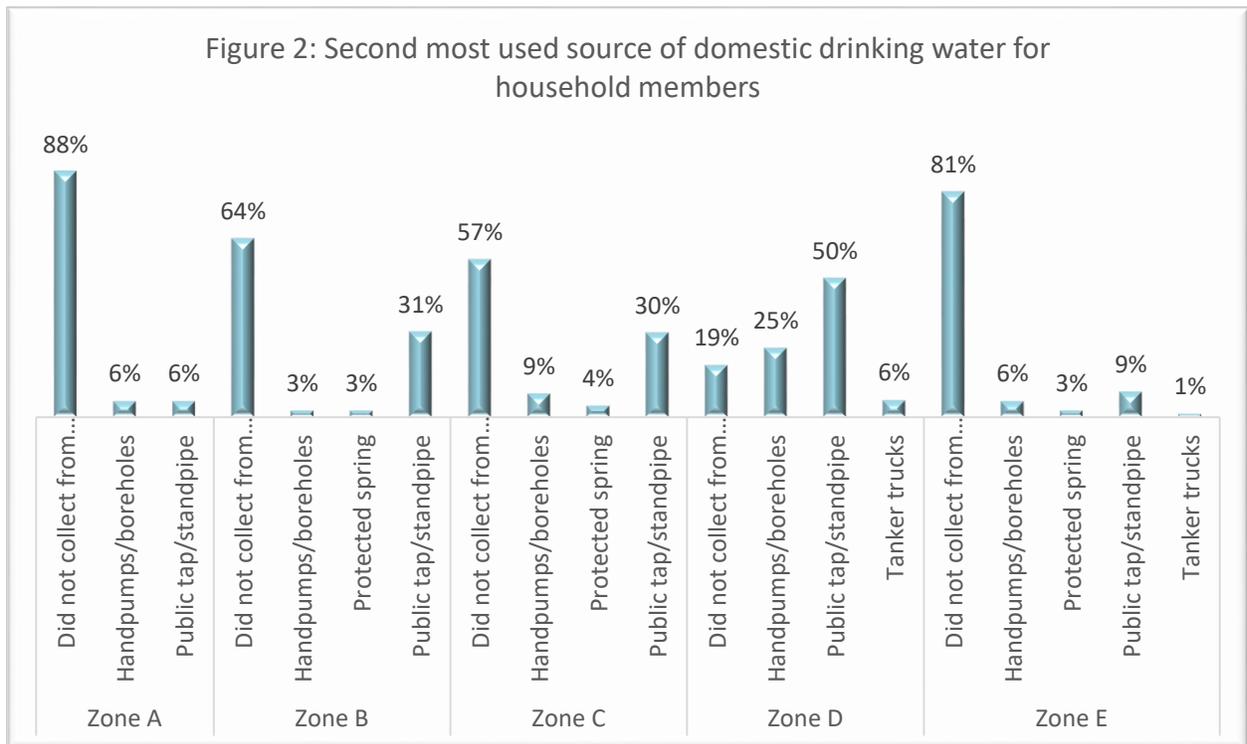
Sources of water for other activities

Figure 3: Source of water used for other activities
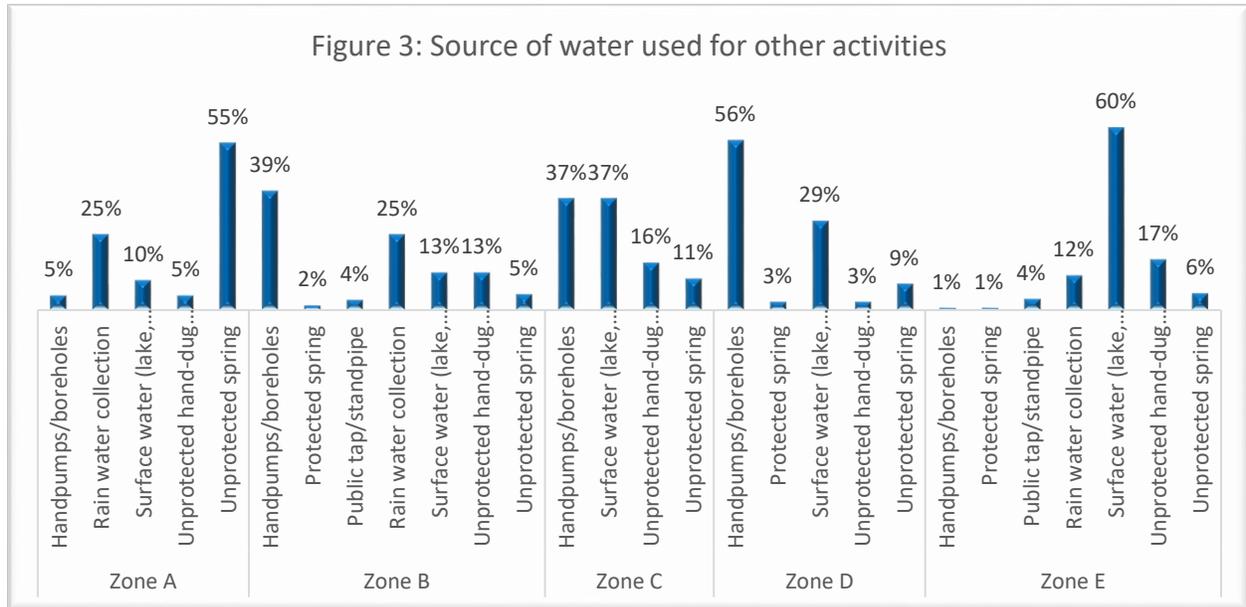
The survey asked about the sources of water the households use for other activities like gardening, brick laying, animal consumption and others as in figure 3 above. The results revealed that, a good proportion of households (30%) depend on surface water like lake, pond, river for other activities in the household and this is followed by about (28%) of the households who use water from hand pump/boreholes for other domestic activities while others use unprotected spring (17%) and rain water (10%).

Water per capita per zone

Figure 4 : Average litres of portable water/per person/per day for household members
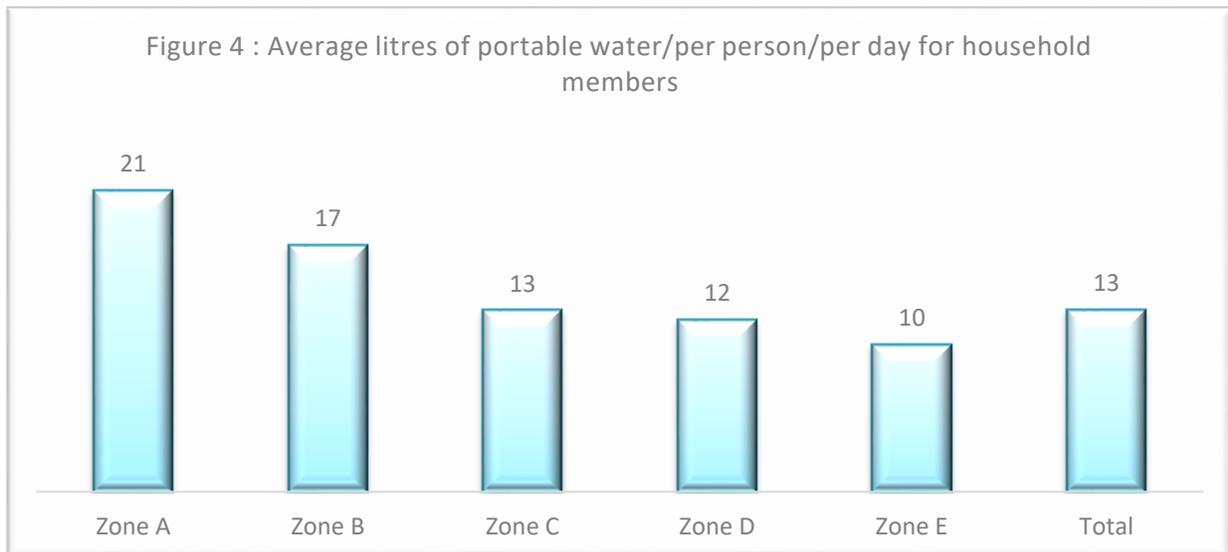
According to the findings from the survey, the average liters of portable water/per person/ per day collected at household level stands at 13 (with zone A at 21, zone B at 17, zone C at 13, zone D at 12 and zone E at 10). The water percapita at zone E was very low because of a temporary water system breakdown in the area forcing household members to get water from unsafe

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sources. Therefore, the overall average liters L/P/D for the whole of Kyangwali settlement stands at 13 which is below the emergency standard of 20 l/p/d though about 28% of the households across all the zones use water from tapstands and hand pumps for other activities other than domestic use. The low percapita at zone E was mainly because of the temporary water system breakdown at Kavule 1 that supplies zone E and system breakdown at Kentome water system that supplies zone D that is already being restored while 4 boreholes were not functional at zone B, C and D respectively by the time of the survey, so this affected the average water percapita for the settlement.

Protected water storage container

Figure 5 : Proportion of households by protected water storage capacity
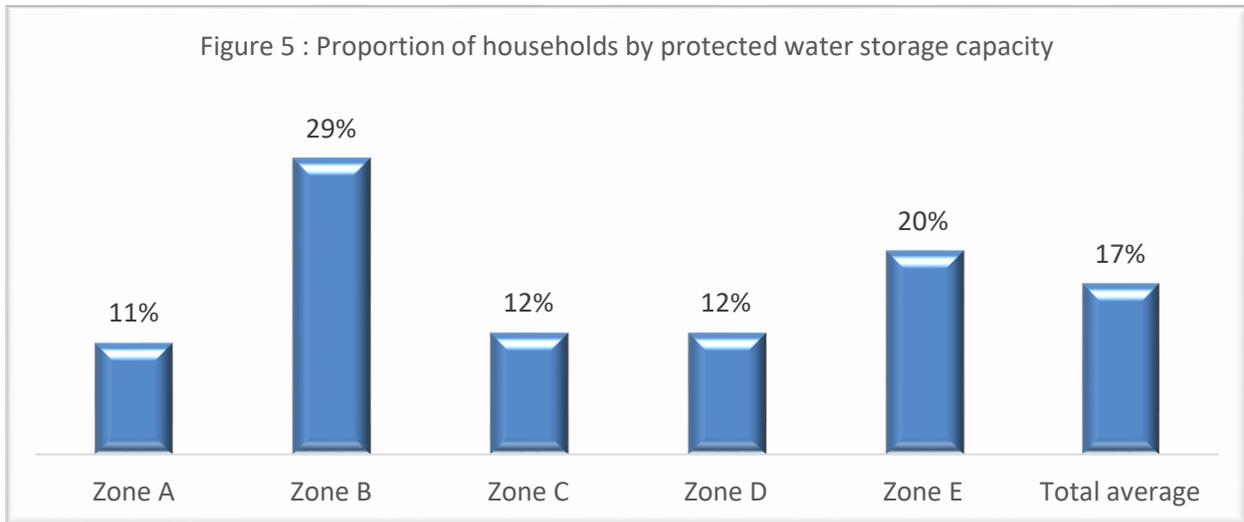
According to findings as in figure 5, the percentage of households with at least 10 liters/per person of protected water storage capacity stands as low as 17% for the whole settlement with zone B at 29%. zone E stands at 20%, zone C and D each at 12% and zone A was reported as low as 11%. This was very low as compared to the post emergency standard of over 80% of the households. Since the storage capacity is very low, this can also affect the daily water consumption capacity and or increase on the frequency of water collection per day from the water source. The low protected water storage capacity is mainly because most households (44%) do not have enough protected water storage containers.

Distance to the nearest water point

Figure 6 : Distribution of households by average distance to the nearest water point (meters)
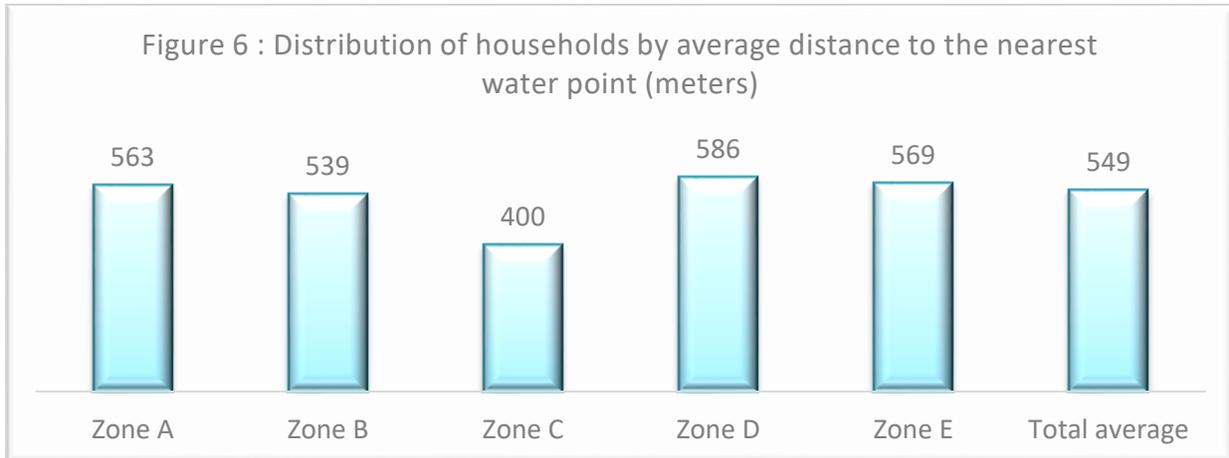
From the survey findings, the overall average walking distance by household members to the nearest water point was 549 meters. Further findings from the survey revealed that, in the settlement, most households walk a maximum distance of 586 meters from their households to portable water collection point as reported at zone D. While in zone A and zone E, most household members would walk a distance of about 563 and 569 meters to the nearest water collection point while at zone B and zone C household members would walk about 539 meters and 400 meters to collect water. The average walking distance to the nearest water point is very close to the standard average of 500 meters.

Amount of water collected for households' needs

Figure 7 : Proportion of households on whether they collect enough water to meet their needs
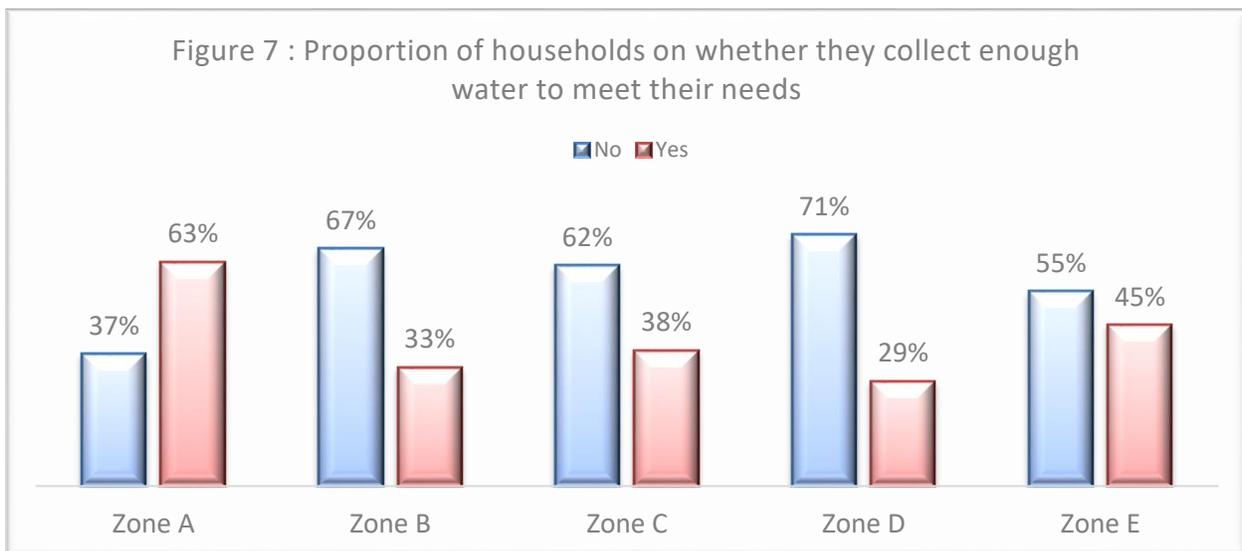
Reasons why HHs do not collect enough water

Figure 8: Reasons why households do not collect enough water for their households
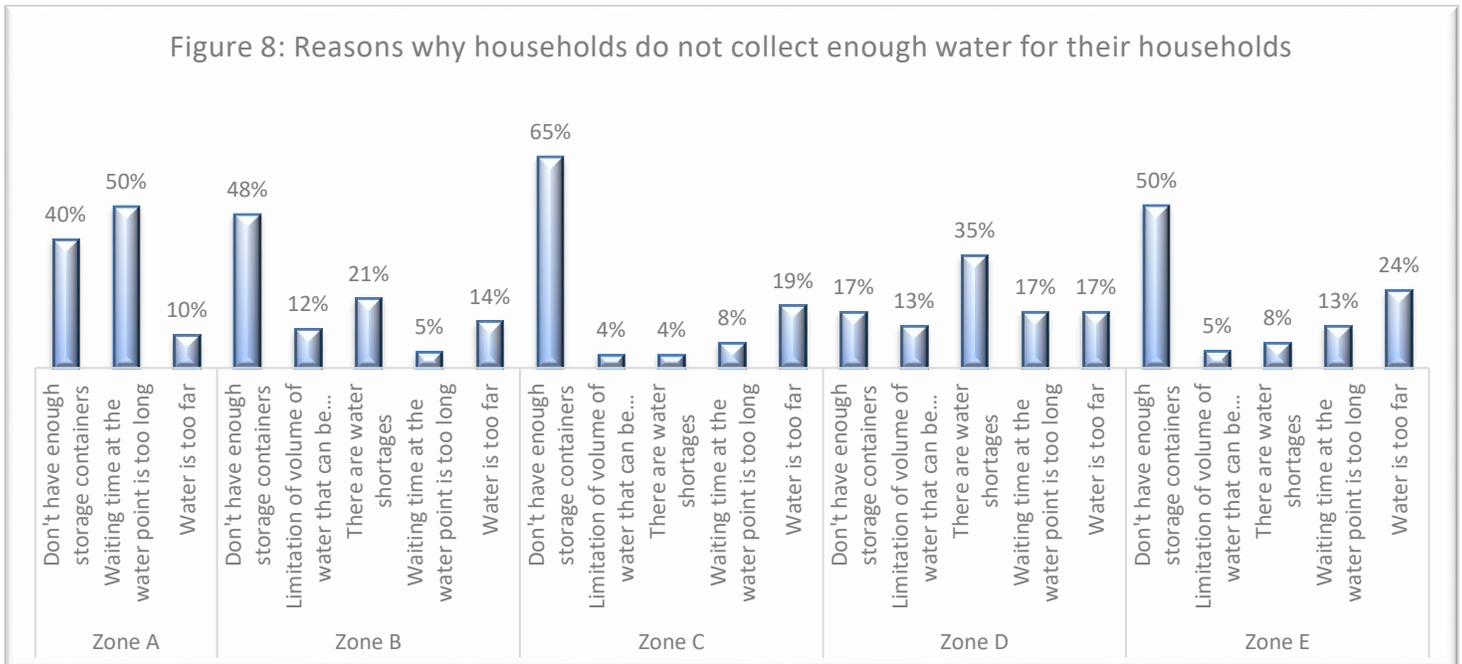
The survey looks at whether households collect enough water to meet their needs. The response indicated that over half of the households (58%) reported they do not collect enough water for their household needs with the exception of (42%) of the households who collect enough water for their households. Among the reasons as to why households do not collect enough water to meet their needs as presented in figure 8 above, most households reported that they do not have enough storage containers for collecting water (44%); this was followed by households who reported that the waiting time at water point was too long (19%). The rest of the households gave other reasons such as, water point too far from the households (17%), there are water shortages (14%) and limitation of volume of water that can be collected at water point (7%).

Persons who collect water for the household

Figure 9 : Persons who collect water for the household
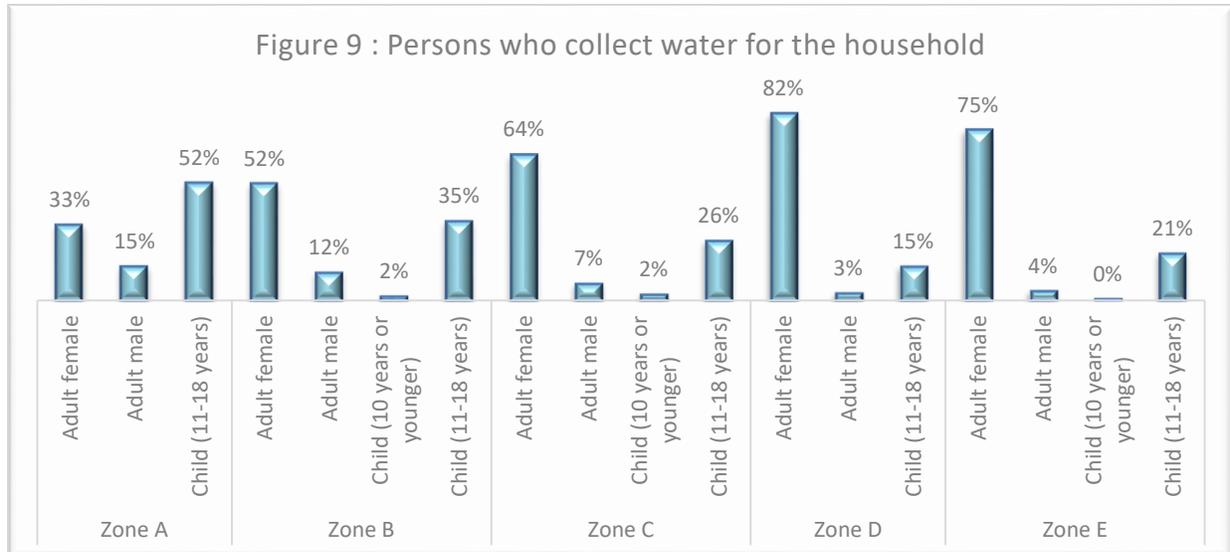
On who usually collect water for the households, the majority of the households (61%) reported that it is adult females who usually collect water for the household, followed by children aged 11-18 years at 30%. Only a few adult males (8%) and children (10 years or younger) (1%) participated in collecting water for the households.

The households were also asked how frequent they clean their drinking water containers, the response indicated that, over half of the households (53%) clean their containers every time they use them, followed by (41%) of the households who clean their containers at least once in a week. The rest 5% clean their containers once in a month.

Cleaning drinking water containers

Figure 10: Frequency of cleaning drinking water containers

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Presence of soap

Figure 11: Presence of soap for the households
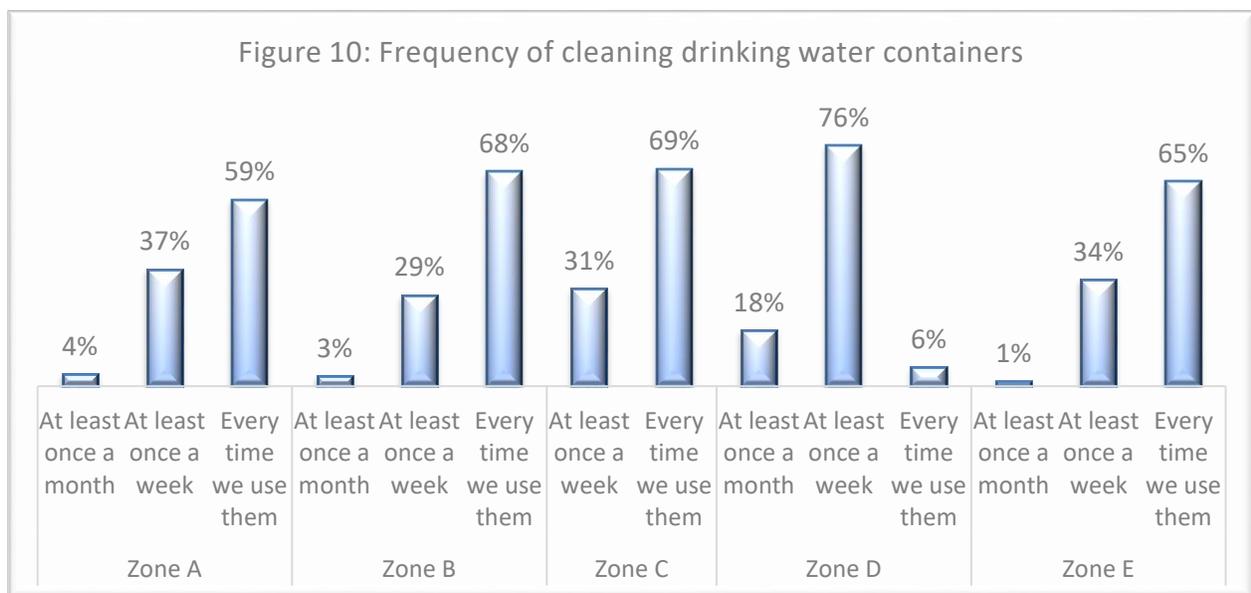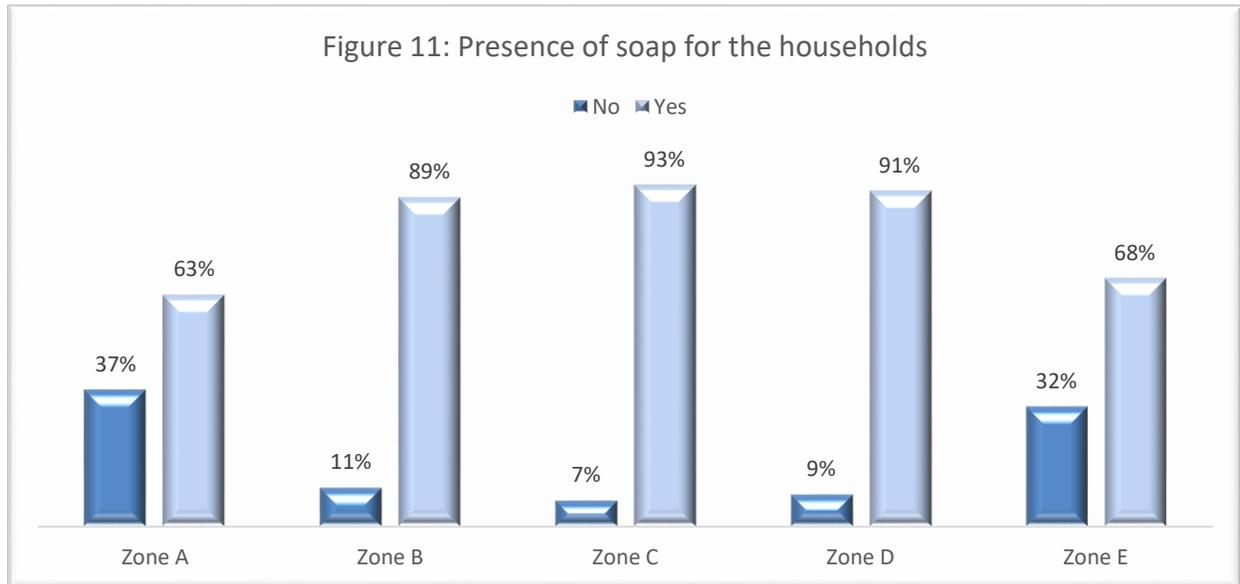
The survey revealed the percentage of households with access to soap at 81% (with zone A at 63%, zone B at 89%, zone C at 93%, zone D at 91% and zone E with 68%).

Further analysis revealed that, close to half of the households (49%) get soap through a distribution by Non-Governmental Organization. Followed by 39% of the households who reported that they purchase soap. 7% of the households exchange soap for other household items while only 3% receive soap as a gift. Among the reasons households provided for not having soap include: soap already used up (63%), household cannot afford soap (33%) and any other reason (4%). Furthermore, about half of the households (50%) revealed that they would use water only in absence of soap. 42% would use ash, 2% use sand and the rest 1% do not use anything when there is no soap at the household.

Critical hand washing moments

Figure 12: The 3 critical moments of hand washing at the households
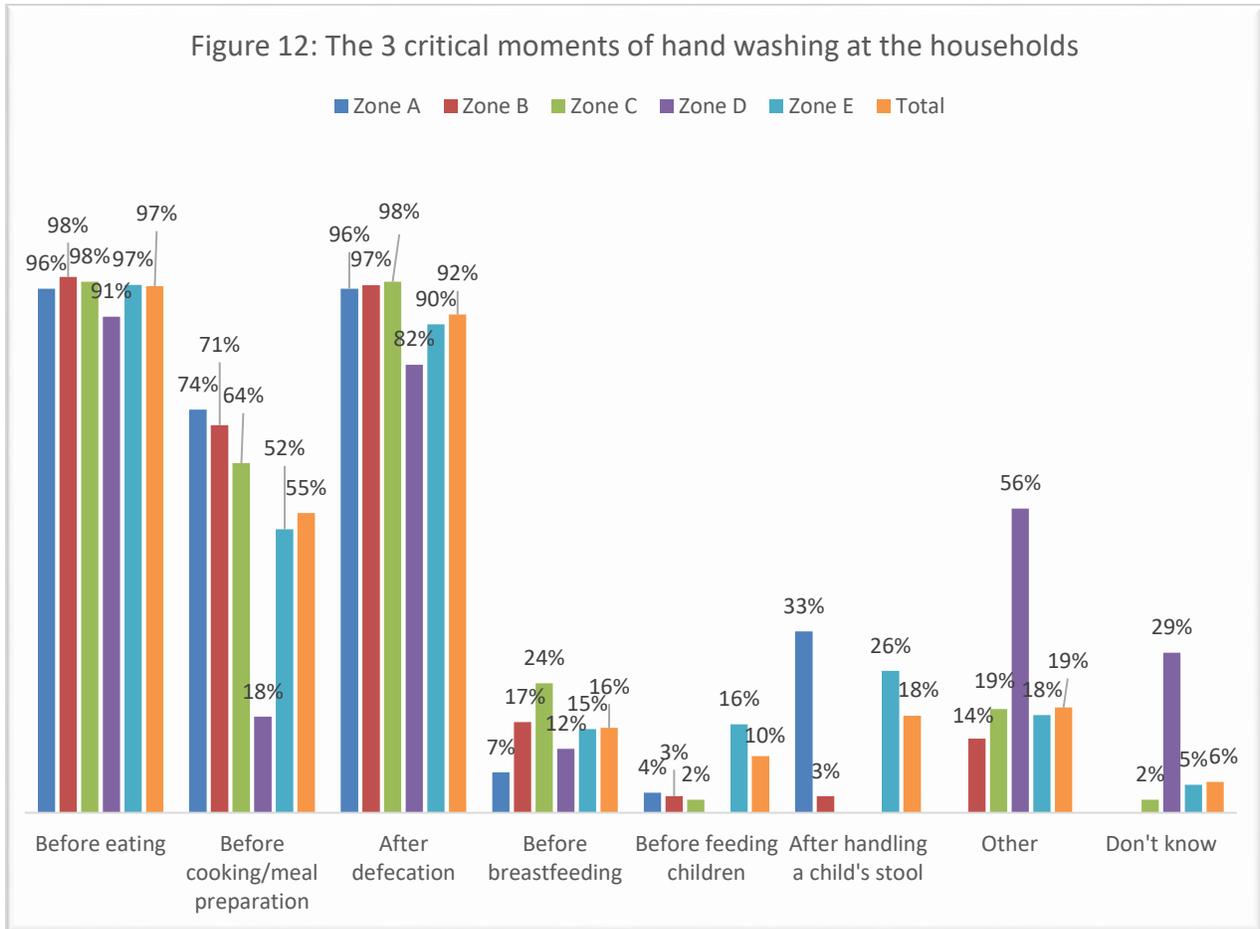
The households were asked to name at least 3 of the most important times when someone should wash hand. The survey revealed as in the figure 14 above that most household members (79%) stated the 3 moments as before eating (97%), before cooking/meal preparation (55%) and after defecation (92%). The rest of the households across all the zones also identified another set of 3 critical moment of hand washing as; After handling a child's stool (18%), before breastfeeding (16%), and before feeding children (10%).

Specific hand washing device/station at household

Figure 13: Presence of hand washing device/station for the households
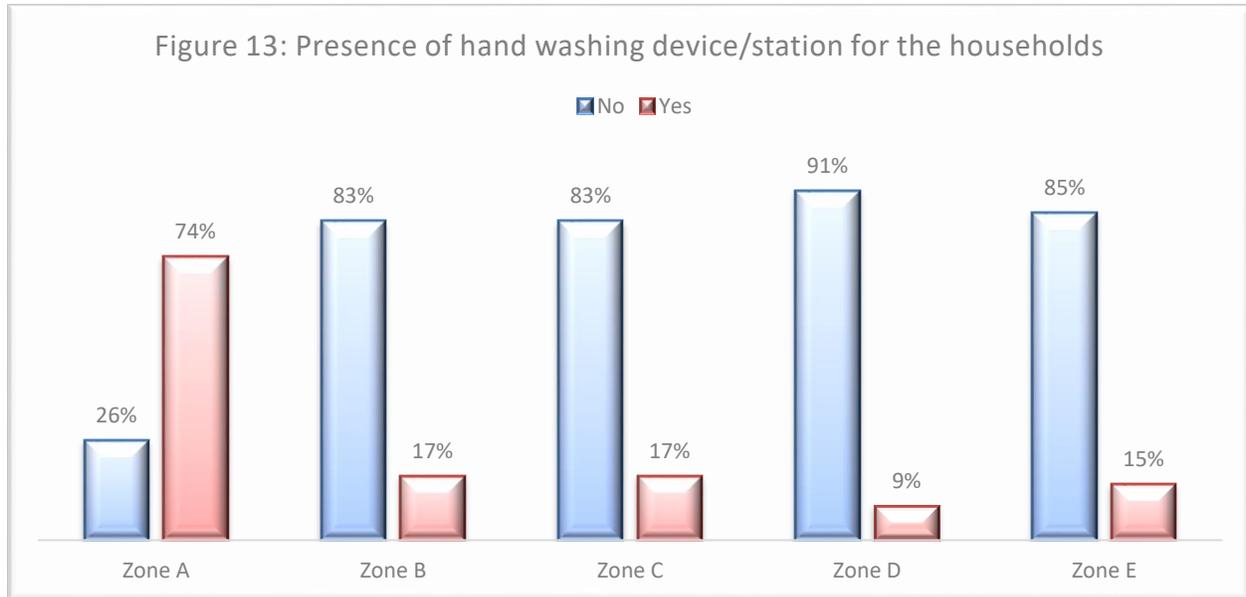
The survey also assessed the presence of hand washing facility in the household. The result revealed as in figure 15 above that, only 26% of the households across all the zones had hand washing device/station in their households while the rest (74%) do not have hand washing facility in their household. Further findings as in figure 16 below indicate that the majority of households with hand washing device had a tippy tap (55%) while (47%) of the households use basin or bucket as a hand washing device. From the observations carried out, 69% of households with hand washing device have water in it and the rest 31% did not have water meaning either the water got finished or the device is not being used. The observation from the survey also revealed that, 45% of households who had hand-washing facility did not have soap placed next to it while on 55% had soap at the hand washing station.

Type of hand washing device

Figure 14: Type of hand washing device
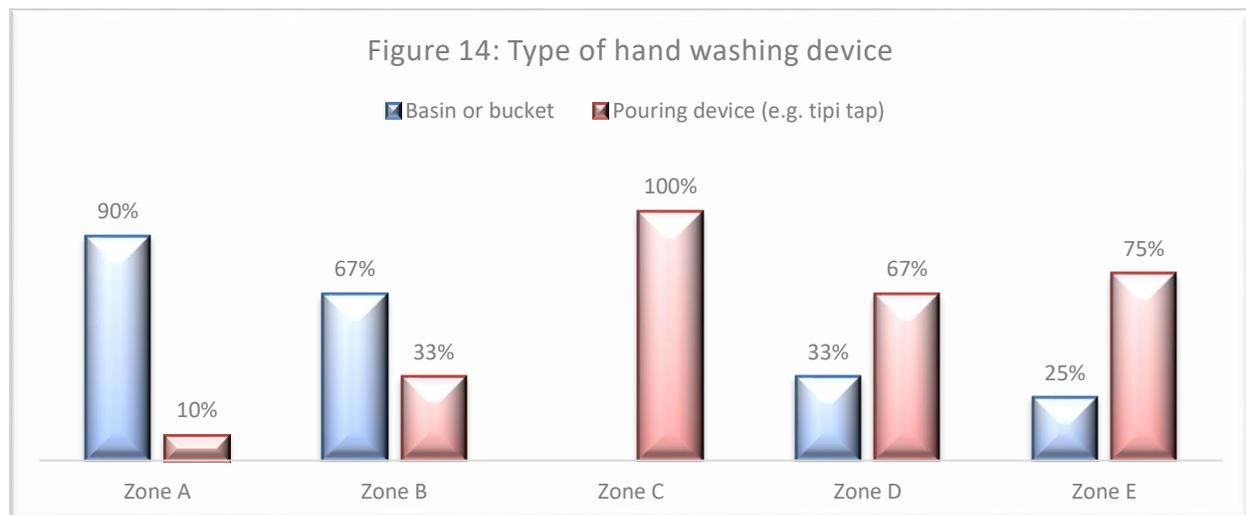
Sanitation

Where household members excluding children under 5 defecate

Figure 15: Where household members (excluding children under 5) defecate
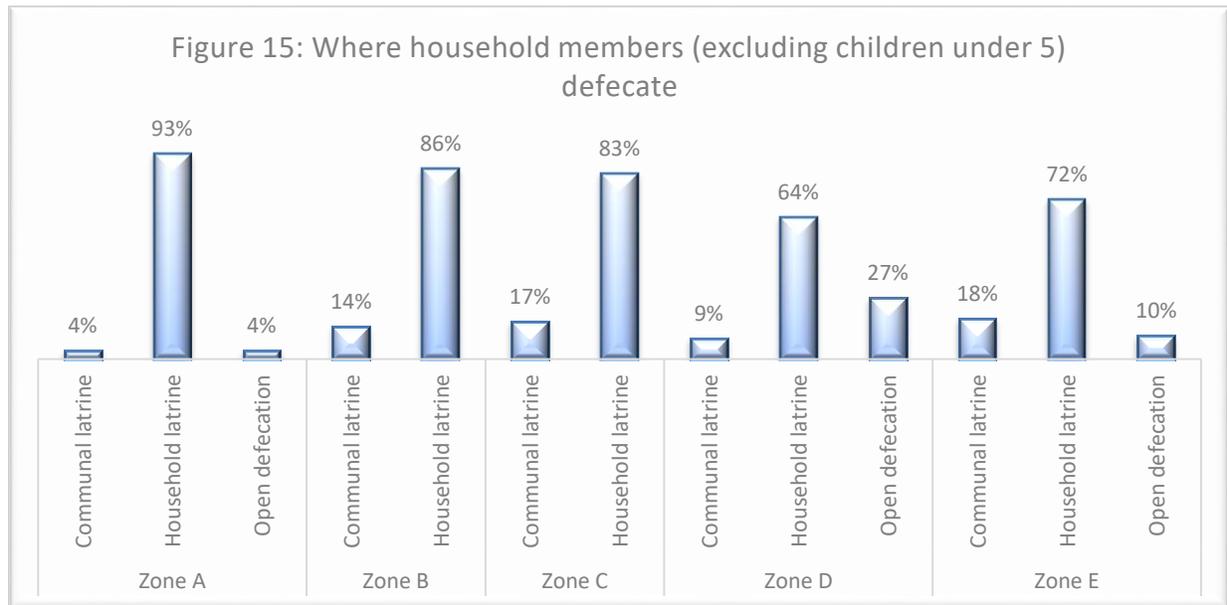
According to the survey findings as in figure 15 above, the majority of household members (80%) across all the zone defecate in the household latrine (this excludes children under 5years of age). With only a few (12%) who use communal latrine (new arrivals were considered to use communal latrine) while about (8%) practice open defecation in places where they stay. The survey also revealed that, the percentage of households with access to latrine/toilet stands at 92% (with zone A at 97% and zone B at 100%, zone C at 100%, zone D at 73%, and zone E at 90%).

Figure 16: Where children under 5 living in the household defecate
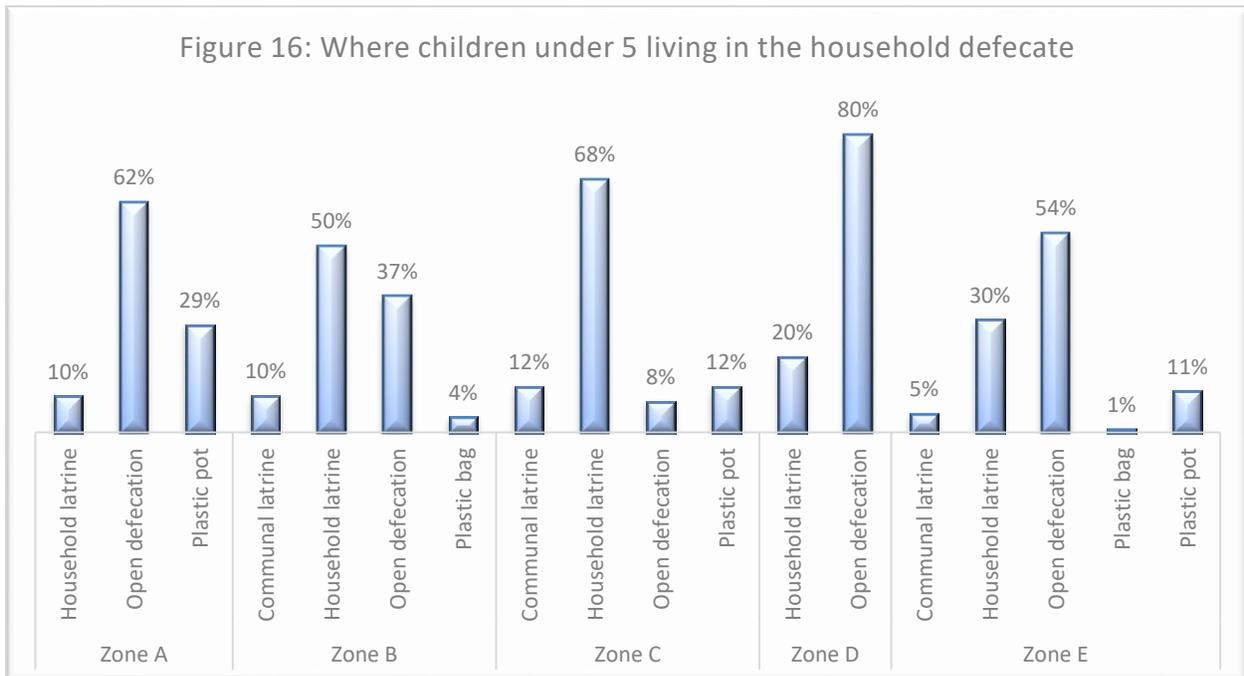
From the findings as in figure 16 above, close to half of the households across all the zones 48% reported that, the children under 5 years who have started walking always defecate in the open while about 36% of the households reported that children under 5 years are supported to defecate in household latrine and about 10% of the households use plastic pots for the children under 5 years to defecate with the rest 5% taking their children to the nearby communal latrine to defecate.

For children under-5 who do not use a latrine, finding revealed that, the majority (94%) of the households across all the zones collect and dispose of their faeces in the latrine, while about 6% of the households across all the zones do not do anything with the feaces but just leave it where the child has defecated.

The survey also revealed as in figure 17 below that, very few adult members in the household defecate in the open especially at night (8%) and they gave a reason of no latrine in the household (74%), too dark at night (13%), latrine too far (8%), too tired to go to the latrine at night (3%) and another 3% have other reasons as to why they defecate in the open.

Type of facility where household members defecate

Figure 17: Whether adult members of the household practice open defecation

21

Presence of bathing facility for the households

Figure 18: Presence of bathing facility for the household

■ Do not have a designated bathing facility   ■ Have a designated shower/bathing facility

Zone A: 44%, 56%
Zone B: 50%, 50%
Zone C: 52%, 48%
Zone D: 47%, 53%
Zone E: 41%, 59%
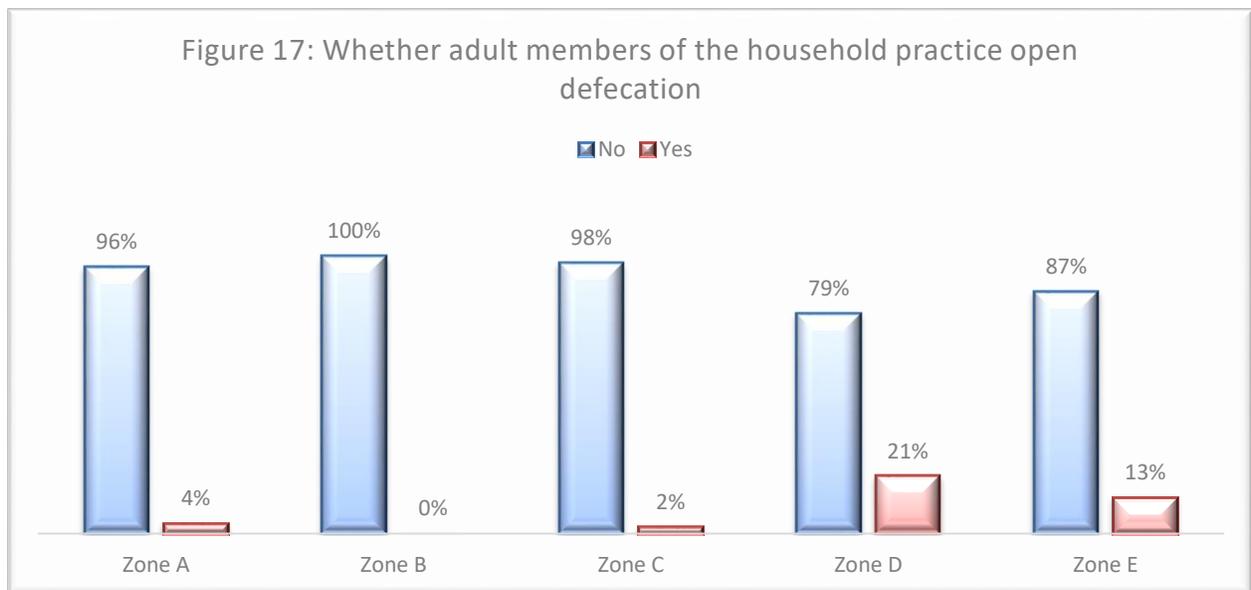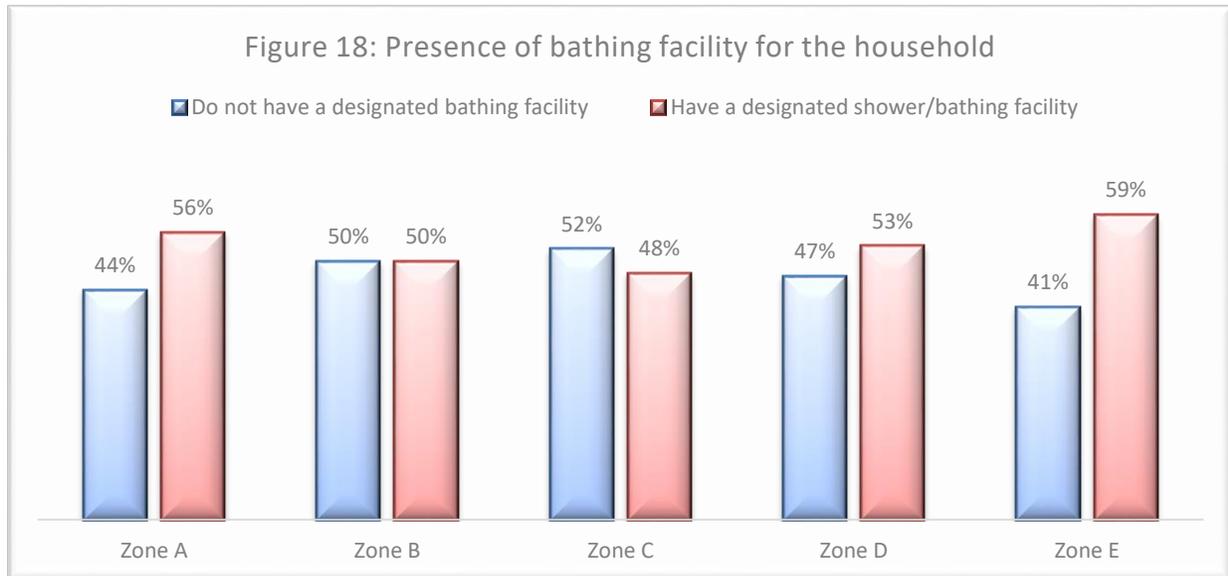
The survey revealed as in figure 18 above that, over half of the households (53%) across all the zones have a designated shower/bathing facility with exception of 47% of the households with no bathing facility as it was observed in the households during the survey.

Waste management

According to the survey, the percentage of households with access to solid waste disposal facility stands at 65% (with zone A at 48%, zone B at 72%, zone C at 45%, zone D at 21% and zone E at 74%). Much as there is solid waste disposal facility in most of the households, the practice of dumping waste in the facility remains poor with wastes visible near the households and on the compound as observed by enumerators during the data collection process.

The figure 19 below revealed that slightly less than half of the households 44% dispose of domestic waste in the household pit, with 14% in designated open area, 35% at the undesignated open area, 4% dispose in communal and 2% bury it.

Figure 19: Location where households dispose their domestic waste

Zone	Category	Value
Zone A	Burn it	4%
Zone A	Household pit	44%
Zone A	Undesignated open area	52%
Zone B	Bury it	3%
Zone B	Communal pit	3%
Zone B	Designated open area	12%
Zone B	Household pit	55%
Zone B	Street bin/container for...	2%
Zone B	Undesignated open area	26%
Zone C	Burn it	2%
Zone C	Bury it	2%
Zone C	Communal pit	2%
Zone C	Household pit	38%
Zone C	Undesignated open area	55%
Zone D	Designated open area	15%
Zone D	Household pit	6%
Zone D	Undesignated open area	79%
Zone E	Bury it	2%
Zone E	Communal pit	5%
Zone E	Designated open area	19%
Zone E	Household pit	48%
Zone E	Undesignated open area	26%

Messaging

Figure 20: The best way for households to receive health and hygiene messages

Zone	Category	Value
Zone A	Community meetings	26%
Zone A	Home visits from...	67%
Zone A	Radio	7%
Zone B	Community meetings	30%
Zone B	Home visits from...	50%
Zone B	Printed flyers	2%
Zone B	SMS	18%
Zone C	Community meetings	40%
Zone C	Focus Group...	8%
Zone C	Home visits from...	48%
Zone C	Printed flyers	3%
Zone C	Radio	3%
Zone D	Community meetings	91%
Zone D	Home visits from...	3%
Zone D	Radio	6%
Zone E	Community meetings	38%
Zone E	Focus Group...	3%
Zone E	Home visits from...	48%
Zone E	Printed flyers	5%
Zone E	Radio	6%
Zone E	SMS	1%

Respondents were asked to indicate the best way for the household members to receive health and hygiene messages. The figure 26 revealed that 40% of the households across all the zones prefer receiving hygiene and health messages through home visits by hygiene promoters, 36% from community meetings, 4% through the radio, 3% through printed flyers and SMS, and only 2 % would prefer Focused Group Discussions. The survey further asked the respondents if they had received a community health worker in their community in the last month. 74% had not received any visit while only 36% agreed to a community health worker visiting them.

Figure 21: Ways that people can get diarrhoea
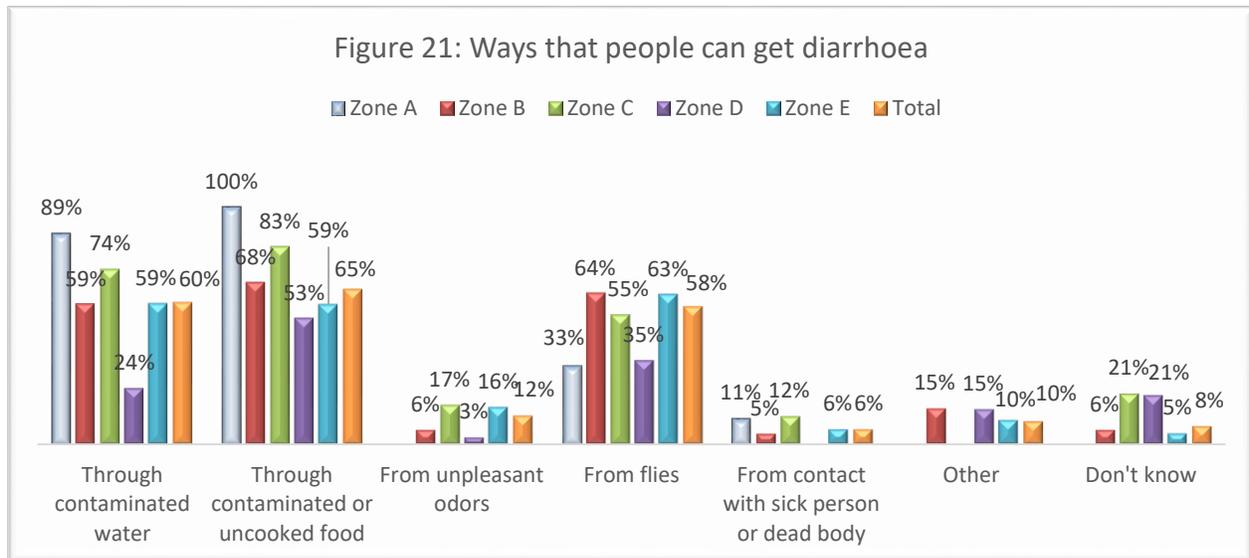
From the survey, the household members mentioned the most common possible causes of diarrhoea as: through eating contaminated or uncooked food (65%), through drinking contaminated water (60%) and from flies (58%). The respondents also mentioned some uncommon ways such as through unpleasant odour (12%) and from contact with sick person or dead body (6%). While about 8% of the households don't know the ways that people can get diarrhoea. This result means that most household members have good knowledge on health related issues because of several health education sessions conducted by hygiene promoters/community health workers.

Figure 22: Ways to prevent household members from getting diarrhoea
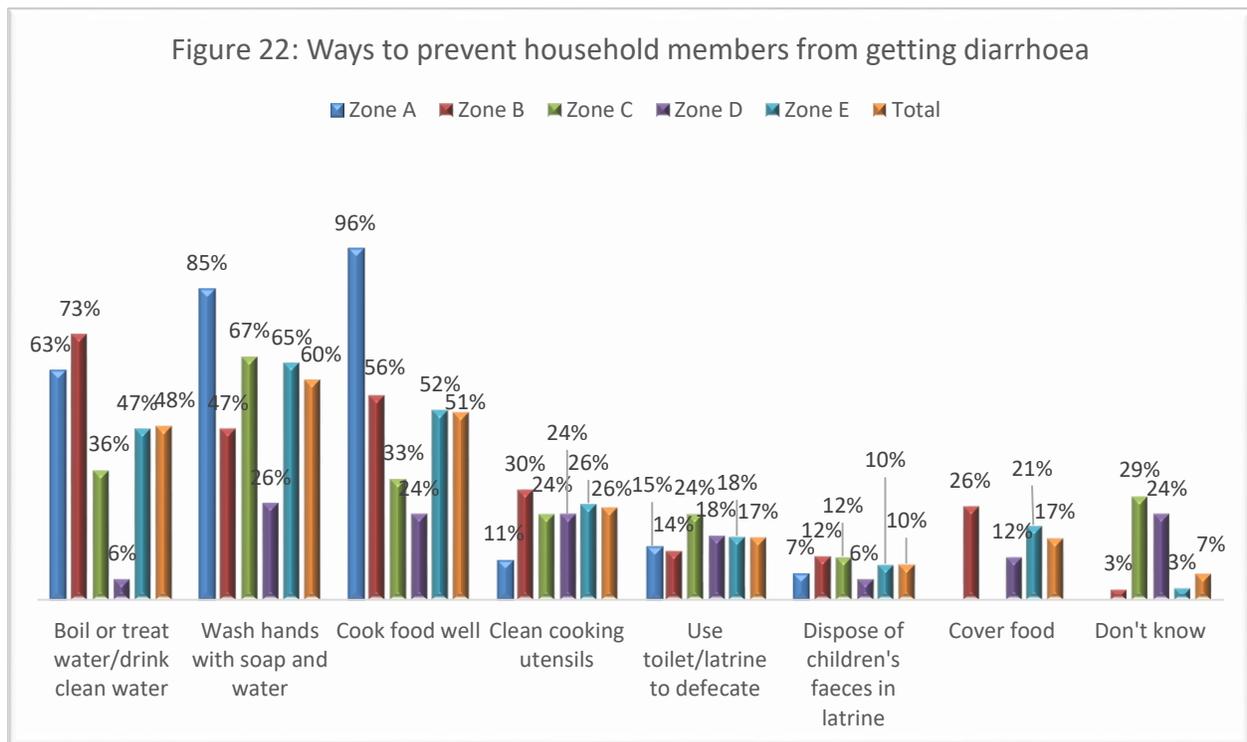
Respondents were asked ways in which diarrhoea can be prevented. They mentioned the most common ways as: washing hand with soap and water (60%), cooking food well (51%), boiling or treating water or drinking clean water (48%) and cleaning cooking utensils (26%). Other preventive measures include using toilet/latrine to defecate (17%), covering food (17%), and disposing children's faeces in latrine (10%). While about 7% of the respondents do not know the ways of preventing diarrhoea.

Menstrual Hygiene

People view menstruation as a normal natural process. There is no known taboo about this but women and girls are hesitant to publicly discuss the subject.

The women were asked to indicate the kind of materials they used during their previous monthly period. Among the materials majority of the women used include: disposable pad (52%) reusable pad (11%) and reusable cloth at (10%). Other women indicated that they had nothing to use and just bled into their clothes (1%).

Figure 23: Materials used during the last menstrual period
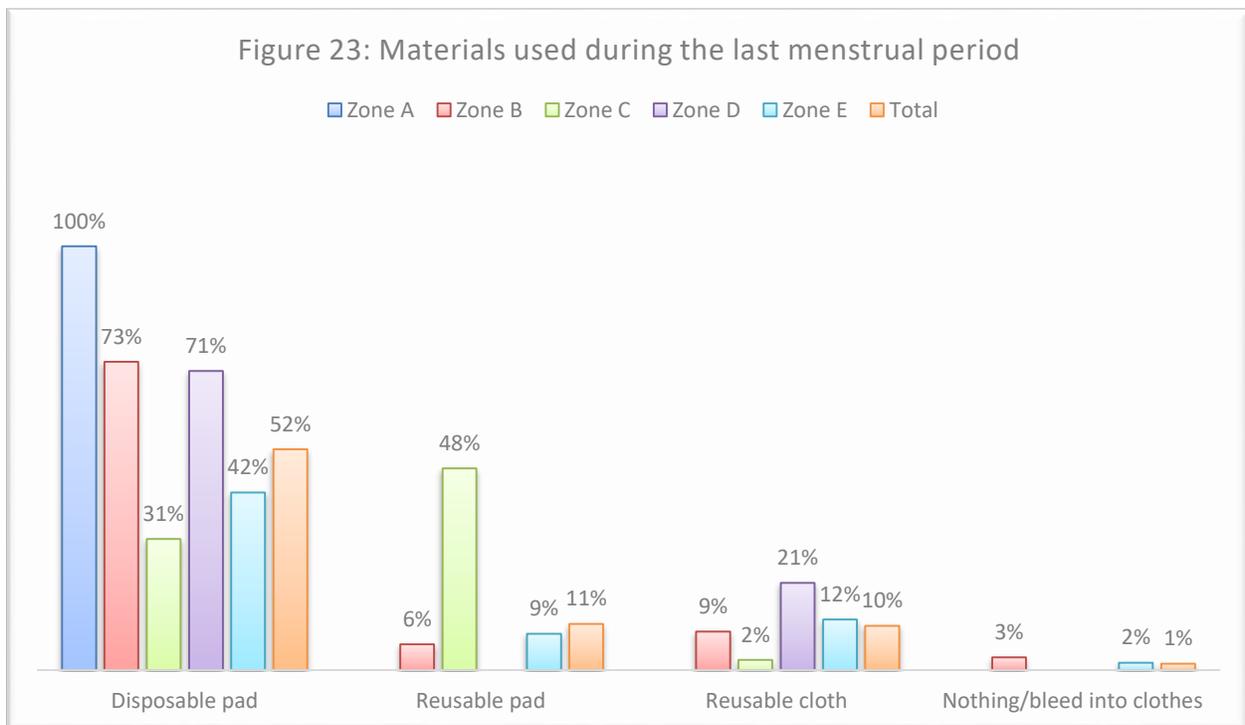
Further analysis was done and women were asked to indicate how they dispose of their menstrual hygiene management products. Most of the women (89%) reported disposing their menstrual hygiene products in the latrine, followed by those who wash and reuse (9%), burning reported at 1% and 1% either disposed in the open or did not know what was done to the used MHM products.

Figure 24: How women dispose of their menstrual hygiene management products
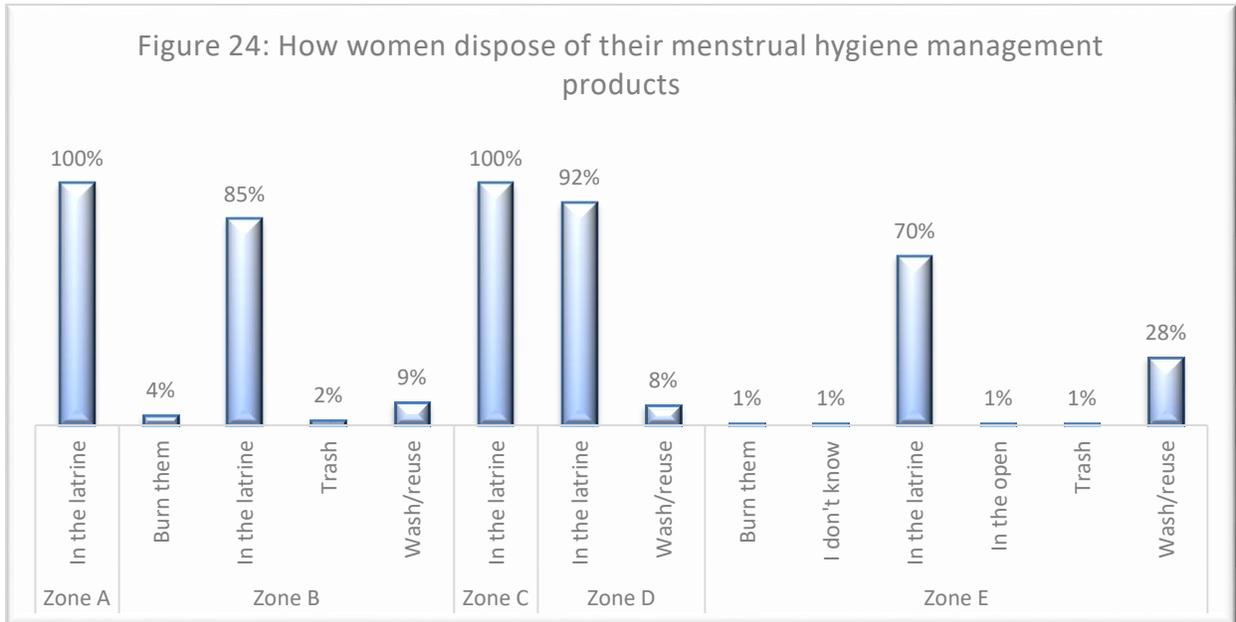
This survey is all about the study of refugees' knowledge, attitude and practices including their access to water, sanitation and hygiene in very specific geographical location and time. Any other sources of data and information may or may not have similar results with this KAP survey depending on time, location and spread of areas and the manner data are collected. Some studies are concerned with nationwide trends and patterns but others are localised. One needs to be cautious but also critical when equating or making a comparative analysis. It should be noted that this KAP survey was conducted in 403 households from 5 zones. Some of the key finding from the survey are as follow;

Water quantity, Access and Quality

The average liters of portable water/per person/ per day collected at household level stands at 13 (with zone A at 21, zone B at 17, zone C at 13, zone D at 12 and zone E at 10). The water percapita at zone E was very low because of a temporary water system breakdown in the area forcing household members to get water from unsafe sources. Therefore, the overall average liters L/P/D for the whole of Kyangwali settlement stands at 13 which is below the emergency standard of 20 l/p/d.

The percentage of households with at least 10 liters/per person of protected water storage capacity stands as low as 17% with the highest at zone B at 29%. zone E stands at 20%, zone C and D each at 12% and zone A was reported at 11%. This was very low as compared to the post emergency standard of over 80% of the households.

The overall average walking distance by household members to the nearest water point was 549 meters. Further findings from the survey revealed that, in the settlement, most households walk a maximum distance of 586 meters from their households to portable water collection point as reported at zone D. While in zone A and zone E, most household members would walk a distance of about 563 and 569 meters to the nearest water collection point while at zone B and zone C household members would walk about 539 meters and 400 meters to collect water. The average walking distance to the nearest water point is very close to the standard average of 500 meters.

The percentage of households collecting water from protected/treated sources stands at 85% with Zone A at 100%, zone B at 97%, zone C at 69%, zone D at 88% and zone E at only 50%.

Sanitation

The percentage of households with family latrine/toilet stands at 80% (with zone A at 93% and zone B at 86%, zone C at 83%, zone D at 64%, and zone E at 72%) while the percentage of households reporting defecating in a latrine/toilet stands at 92% (with zone A at 97%, zone B at 100%, zone C at 100%, zone D at 73% and zone E at 90%).

A very few adult members in the household defecate in the open especially at night (8%) and they gave a reason of no latrine in the household (74%), too dark at night (13%), latrine too far (8%), too tired to go to the latrine at night (3%) and another 3% have other reasons as to why they defecate in the open.

Over half of the households (53%) have a designated shower/bathing facility with exception of only 44% of the households that do don have one

Hygiene

The percentage of households with access to soap stands at 81% (with zone A at 63%, zone B at 89%, zone C at 93%, zone D at 91% and zone E with 68%).

The percentage of households with access to a specific hand-washing device stands at 26% across all the zones with zone A at 74%, zone B at 17%, zone C at 17%, zone D at 9% and zone E at 15%. This is way below the post emergency standard of over 90%.

The key times when people practice hand washing with soap include before eating (97%), after defecation (92%) and before cooking/meal preparation (55%). With the overall at 81%.

Solid waste management

The percentage of households with access to solid waste disposal facility stands at 52% (with zone A at (48%), zone B at (72%), zone C at (45%), zone D at (21%) and zone E at (74%). Much as there is solid waste disposal facility in most of the households, the practice of dumping waste in the facility remains poor with wastes visible near the households and on the compound during the data collection process.

Water

- There is need for partners to speed up the maintenance and rehabilitation water supply systems that broke down with close monitoring by the Water Supply Technical Working Group. This is to ensure that the partners and contractors adhere to the standards and thus lead to the attainment of the required per capita water consumption of 20l/c/d.

- The lead WASH partner responsible for undertaking the operation and maintenance of water supply system should ensure that the systems remain functional to guarantee the water per capita does not drop below the current and that household continue to get water from protected/treated source. Sustainable operation and maintenance mechanisms should be put in place by setting up community management structures and livelihood options.

- Massive rehabilitation of boreholes and drilling of new ones should be prioritized to improve water supply situation especially in zone D and E where the water situation is so bad.

Sanitation

- Appropriate technological options should be utilized to ensure the challenge of ever filling and collapsible pit latrines are averted.

- Since the settlement has reached post emergency phase, partners need to encourage households to venture into sanitation marketing with a main focus on cash based interventions like livelihood projects to boost community members' demand for sanitation products including latrine construction materials.

- In as much as most households have and use latrines, it is still imperative for partners to consider the fact that latrines would fill up (over how long), hence creating a need for support to construct others. Since the settlement has moved from an emergency to a post emergency phase, partners need to continue to encourage households to construct toilets/latrine so that cases of open defecation can either disappear or reduce.

- Sanitation activities should target elimination of open defecation by adults and safe disposal of children faeces since the cases continue to be high in the settlement and households should be encouraged to construct bathing facilities since the access to these facilities have remained low.

Hygiene

- There is need for partners to encourage household heads to provide more Non-Food Items such as soap, jerricans and hand-washing facilities such as tippy taps to HH. This is likely to increase the per capita consumption of water since most respondents 83% had water storage containers less than 10L.

- Women in reproductive ages should be trained on how to manufacture reusable pads as well as their proper disposal. This is because the findings found out that most women used disposable pads and disposed sanitary pads in latrines this leads to faster filling up of the latrines.

- There is need for more interventions to improve hygiene awareness within the community.

Messaging

- Information Education and Communication (IEC) materials on WASH, especially hand washing with soap at critical times should be intensified since the study found out, the access to hand washing facility at only 19% in Kyangwali refugee settlement.
- There is need for refresher training to equip hygiene promoters, Refugee welfare committees and Water User Committees on WASH promotion approaches as well as on monitoring of community health improvement strategies. The findings showed that, the most preferred way of receiving messages was through home visits by the community health workers (Hygiene Promoters).

X. Conclusion

In view of the above indicator findings, this KAP survey acknowledges that partners have done a tremendous job in improving the living conditions of the refugees in relation to Water, hygiene and Sanitation compared to the 2018 KAP survey findings. However, there are still challenges under the different thematic areas to ensure that the standards are met. Access and use of safe water is still a challenge with average litres per capita at only 13 l/p/d, only with exception of zone A at 21 l/p/d which is slightly above the required 20l/p/d. A 10 litre per person protected water storage capacity is still very low at 20% across all the zones. Though the survey found out that the major source of water across the settlement was hand pump/borehole (64%), the proportion of households collecting water from protected source is still below the 85% standard at only 67%. This only implies that the current water supply systems are either not adequate or they are not optimally and efficiently operated to meet the water demand in the settlement. In reference to reports from the Water supply technical working group, most of the systems have challenges, they are faced with continuous breakdowns; therefore, this survey recommends among other things that the technical working group should not only stop at reviewing and approving designs, but should also follow up on the implementation of the approved designs to avoid variations between proposed and as built designs.

Annex 1: Questionnaire

2a - Standard WASH
KAP Questionnaire.do

Annex 2: KAP Survey work plan

No.	Activity	Associated Tasks	Days	Date	Output
Stage 1: Inception/Preparatory Phase					
1	Develop survey instruments and sampling design	Review and revise draft questionnaire and develop detailed sample design	2 days	4-5 Nov 2019	KAP questionnaire and sample design (plus FGD questionnaire)
2	Review of methodology and tools	Inception Report (including questionnaire, sample design and workplan) to be reviewed by UNHCR and WASH TWG	1 day	6 Nov 2019	Data collection tools reviewed
3	Development of the database.	Select M&E committee will develop and program a database using Kobo collect to conduct mobile data collection	3 days	6-8 Nov 2019	Database in Kobo collect tool to facilitate easy data collection.
Stage 2: Recruitment & Training of Enumerators and Pre-Testing					
1	Recruitment of field staff	Identification of enumerators from each village and supervisors from partner staff	2 days	11-12 Nov 2019	Contacted and recruited Supervisors, Data Collectors and Encoders
2	Writing of ToR for survey team	Drafting of the Terms of references for survey team	1 day	13 Nov 2019	TORs for Survey Supervisors, Data Collectors
3	Signing of Contracts & Briefing		1 day	14 Nov 2019	Briefing on expected activities
4	Training of field staff	Orientation and training of all field staff (supervisors, and enumerators) on research objectives, questionnaire and techniques	3 Days	18-20 Nov 2019	Field staff trained (The supervisors will mentor and guide the data

					collectors at the field level)
5	Pre-testing of the instruments and review/adopt tools for the survey	Identification of pilot areas in Zone 1 and 2	1 days	20 Nov 2019	Revised Instruments and techniques

Stage 3: Fieldwork					
1	Data collection	Implementation of data collection exercise in agreed sampling areas	5 days/ zone	21-22, 25-27 Nov 2019	Completed baseline KAP surveys
		Field supervision and quality control. The supervisors must ensure that questionnaires are properly filled up in the Kobo collect tool and identified gaps are addressed.			Properly filled up questionnaires and gaps addressed.
3	Submission of output and review field data	Submission of the mobile data collection equipment to partner offices.	3 days	28-29 Nov 2019	Completed questionnaires

Stage 4: Data cleaning and Analysis					
1	Data transfer from mobile equipment to Kobo collect server	Partner M&E Officers will transfer all data from all the mobile device into the Kobo collect database	2Days	28-29 Nov 2019	Data entry completed
2	Data Cleaning and merging	Implement successive rounds of data cleaning to detect and correct any data entry errors and to check the accuracy and consistency of the data.	5 days	2-6 Dec 2019	Completed databank with accurate data and information.

3	Data Analysis and Interpretation	Cleaned data will be analyzed using UNHCR KAP survey analyzer and Excel Analyzer	5 days	2-6 Dec 2019	Analysis of baseline indicators
Stage 5: Report Making & Dissemination					
1	Develop draft of Final Report for comment	Develop and submit Final Report for review by UNHCR and WTWG	5 days	2-6 Dec 2019	Draft report
2	Review of draft KAP Survey report	Review of draft KAP survey report by UNHCR and WTWG	3 days	9-11 Dec 2019	Feedback on draft report
	Integration of comments	While doing the modification of the report, send invitation to the Consortium and relevant government agencies	2 days	12-13 Dec 2019	Comments integrated
3	Presentation of the Findings	Follow up the invitees	1 day		Feedback on the findings
4	Develop Final Baseline Report	Develop and submit Final Report and dissemination materials; Power Point presentation and 2 page summary of findings	5 days	9-13 Dec 2019	Final Report submitted

Annex 3: Communities covered in the KAP survey

Enumerator	Zone	Villages	Number of HH
Abbey Kabegambire (1)	A	Kasonga	6
	A	Kyebitaka	17
	A	Nyambogo	3
	A	Ngurwe	1
Linda Mirindi (2)	A	Nyambogo	2
	B	Kinakyeitaka	10
	B	Kirokole	2
	B	Kagoma	13
Poshia Batamuriza (3)	B	Kagoma	9
	B	Munsisa A	4
	B	Mukarange	14
Abdu Bigirwenkya (4)	B	Mukarange	12
	C	Munsisa B	5
	C	Rwenyawawa	9
	C	Nyampindu	1
Irene Kobusinge(5)	C	Nyampindu	27
Atai Phiona (6)	C	Nyampindu	2
	D	Kentomi	13
	D	Malembo	3
	D	Malembo A	4
	D	Malembo B	1
	D	Malembo C	1
	D	Mukunyu	1
	D	Mukunyu A	2
Ivan Kusiima (7)	D	Mukunyu A	1
	D	Mukunyu B	1
	D	Nyamiganda	5
	E	Kavule	20
Isaya Nguna(8)	E	Kavule	23
	E	Maratatu A	4
Lumbala Lenge(9)	E	Maratatu A	27
Dieme Melesi (10)	E	Maratatu A	1
	E	Maratatu B	26
Rehema Imani(11)	E	Maratatu B	18
	E	Maratatu C	9
Mpeti Rehema(12)	E	Maratatu C	12
	E	Maratatu D	15
Benjamin Basebanya(13)	E	Maratatu D	27

	E	Maratatu D		10
Jimmy Hitimana(14)	E	Mombasa		17
Erabu Enoch(15)	E	Mombasa		25

Annex 4: Community contact persons

No.	Name	Designation	Zone	Telephone no.
1				
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Annex 5: KAP survey team

S/N	Name	Sex	Villages	Role	Contact
1	Abbey Kabegambire	M	Kasonga	Enumerator	0786459499
2	Linda Mirindi	F	Kasonga	Enumerator	0781977267
3	Poshia Batamuriza	F	Kasonga	Enumerator	0781192537
4	Abdu Bigirwenkya	M	Kasonga	Enumerator	0782726354
5	Irene Kobusinge	F	Kasonga	Enumerator	0777243145
6	Atai Phiona	F	Kasonga	Enumerator	0779613154
7	Ivan Kusiima	M	Kasonga	Enumerator	0771977301
8	Isaya Nguna	M	Maratatu	Enumerator	0781768834
9	Lumbala Lenge	M	Kasonga	Enumerator	0779504060
10	Dieme Melesi	M	Maratatu	Enumerator	0780730412
11	Rehema Imani	F	Maratatu	Enumerator	0786982957
12	Mpeti Rehema	F	Kasonga	Enumerator	0781606444
13	Benjamin Basebanya	M	Kyebitaka	Enumerator	0787903018
14	Jimmy Hitimana	M	Kagoma	Enumerator	0775580408
15	Erabu Enoch	M	Kasonga	Enumerator	0789058943
16	Baliraine George	M	URCS	Supervisor	0775267099
17	Ayesiga Jackline	F	LWF	Supervisor	0782670595
18	Ogang Brian Hivan	M	AAH	Supervisor	0774629700
19	Musiimenta Doreen Onest	F	ACF	Supervisor	0778560507
20	Kiloyi Emma	M	AAH	Supervisor	0778671490
21	Baguma P Godfrey	M	UNHCR	WASH Focal person	0771892195
22	Agondeze Hillary Winyi	M	KDLG	DWO	0702430129
23	Kiirya Joseph	M	KDLG	Health Assistant	0775286696