



KIRYANDONGO WASH KNOWLEDGE, ATTITUDES, AND PRACTICES ENDLINE SURVEY 2022

A 2021 STUDY ON CURRENT COMMUNITY
KNOWLEDGE, ATTITUDES, PRACTICES TO WATER,
SANITATION AND HYGIENE IN KIRYANDONGO
REFUGEES SETTLEMENT IN KIRYANDONGO
DISTRICT

DECEMBER 2022

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I. ACKNOWLEDGEMENTS

In a very special way, WMU will wish to thank all partners (IPs and Ops) for this opportunity to contribute to the creation of new knowledge in the WASH sector in the Kiryandongo Refugee Settlement. This study comes at a crucial time in Kiryandongo. A time when UNHCR has declared her strategic intention to embark on long-term development activities within the settlement in the strategic 2023 road map. We believe that the findings of this study contribute to other studies to provide the basis for measuring and comparing progress in the WASH sector.

WMU in Kiryandongo operation sees this as a great landmark to celebrate and appreciates all those whose efforts contributed to the production of this survey. In a very special way WMU would like to thank UNHCR, OPM, and Kiryandongo District through its various units that contributed to the survey notably the DWO, DHO, and ACF who provided the support we needed to conduct this study. Additionally, we appreciate and thank all interviewees, RWCs, and communities who facilitated our work.

Finally, we thank the baseline survey team for their commitment and dedication in getting this done in good time.

II. ABBREVIATIONS AND ACRONYMS

KAPs	Knowledge Attitude and Practices
DWO	District Water Officer
WHO	District Health Officer
WASH	Water sanitation and hygiene
WTWG	Wash Technical Working Group
UNHCR	United Nations High Commissioner for Refugees
MHM	Menstrual Hygiene Management
HH	House Holds
OPM	Office of the Prime Minister
POCs	Persons of Concern
RWC	Refugee Welfare Councils.

III. EXECUTIVE SUMMARY

INTRODUCTION

Uganda is hosting over 1 million refugees (Uganda Refugee Response, UNCHR, and 2022) with about 64,362 (UNHCR 1st September 2022) of them settled in the Kiryandongo refugee settlement. This rapid influx of refugees has put pressure on key facilities and services including shelter and WASH infrastructure.

In addition, the influx also led to the destruction of systems, hence creating interventions to reconstruct them. To improve WASH service delivery efficiently and effectively in the settlement, there is a need for accurate and reliable information on which to base programmatic decisions. The settlement has had several 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 the settlement level, there has been a gap in the in-depth understanding of the situation at the household level and to account for disparities within the settlement to measure the impact of the interventions.

In consideration of the existing challenges, UNHCR in collaboration with government and WASH actors conducted end line KAP survey to understand the 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.

IV. METHODOLOGY

The survey mainly utilized 2 methods: A household questionnaire survey and documentary review. The survey covered all 7 zones of Kiryandongo settlement, with samples drawn from all the zones. The sample size for each zone was calculated using the UNHCR sample size determination tool. A sample of (only refugees) was interviewed using the household questionnaire survey. Reviewed documents included partners' periodic update and s, minutes of WASH meetings. Data was collected using Kobo data collection software and analysed using the Standardized UNHCR WASH KAP analysis tool, Advanced excel analyser, and SPSS data analysis software.

WASH INDICATOR PARAMETER

Parameter	Indicator
Water Supply	<p>Most of the households have access to improved water facilities. According to the survey findings as presented in figure 1 below, most of the households (68%) across all the reported public tap/standpipe as their main source of drinking water for members. At the ranch level, all the two ranches reported the highest they get their main drinking water from public tap/standpipe. This is an indication that the population in the Kiryandongo settlement are 65% satisfied with the quality of the water source they drink, and they get their drinking water from protected sources.</p> <p>Adult females (67%), adult males (6%), children (11-18 years) (25%), and children below (10 years) (2%) are responsible to fetch water for domestic use. Most of the households (95%) reported that water sources are within a 1040-meter radius a 15-minute walk distance. At least 96% of the population uses jerry cans for water collection and storage.</p> <p>Average litres of potable water/per person/per day collected at household level is above post-emergency standard at 18 L/p/d. At ranch level, Ranch1 stands at 18, Ranch 37 at 23, Generally, the water per capita is below the post-emergency standard of 20 L/p/d.</p> <p>According to findings as in figure 5, the percentage of households with at least 10 litres/per person of protected water storage capacity across all the zones stands at 45.02% compared to the baseline figure of 51%. The survey also revealed that, Host community (42%), Ranch 37, (42.88%), Ranch1 (50.88%). This was very low as compared to the post-emergency standard of over 200ltrs of the households though there is a drop by 6 % from the baseline. Since the storage capacity is very low, this can also affect the daily water consumption capacity and or increase the frequency of water collection per day from the water source.</p> <p>.</p>
Water treatment	<p>Most households (88%) were observed when pouring and dipping cups to scoop water from their drinking water containers, the result showed that there was no contact between the hands and water in the container hence no contamination as compared to 92% at the baseline. More sensitization is required for the (18%) regarding safe water chain.</p>
Sanitation	<p>Most household members (80%) defecate in the household latrine (this excludes children under 5years of age) compared to 93% of the households at baseline. Only a few (8%) use communal latrines while</p>

	<p>about (5%) practice open defecation in places where they stay. The survey also revealed that the percentage of households with access to latrine/toilet stands at 80%.</p> <p>Close to half of the households 55% reported that, the children under 5 years who have started walking always defecate in the household latrine while about 17% of the households reported that children under 5 years practice open defecation and about 15% of the households use plastic pots for the children under 5 years to defecate, while the rest 6% take their children to the nearby communal latrine to defecate and 1% use plastic bags, 6% others. For children under-5 who do not use a latrine, finding revealed that, all the households collect and dispose of their faeces in the latrine</p>
Waste management	<p>According to the survey, the percentage of households with access to solid waste disposal facilities stands at 56% as compared to the baseline survey of 67%. Much as there is a solid waste disposal facility in most of the households as shown in the figure, 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.</p> <p>Figure 23 revealed more than half of the households 56% dispose of domestic waste in the household pit, with 15% in designated and 9% in undesignated open areas, 9% burn domestic waste and 6% dispose of it in the communal pit ,1% bury it and 4% others. It was observed that 58% of the households had a clean courtyard with exception of only 42% where rubbish was seen littered on the compound.</p>
Hygiene	<p>The key times when people practice handwashing with soap include before eating (96%), after defecation (77%), and before cooking/meal preparation (59%). Other important key times on handwashing with soap registered very low such as before breastfeeding (28%), after handling baby faeces or diapers (27%), before feeding children (30%), Do not know/Didn't respond and (9%) others.</p> <p>Handwashing with soap and water is widely practiced as said by (57%) of the respondents, handwashing with water only is practiced by 63%, and in the absence of soap, 24% of the respondents use ash for proper handwashing, 3% use sand 3% others, and 6% use anything. The main reasons why people do not wash hands with soap are the Inability to afford soap (35%), Soap already used up (52%), and soap not available (9%).</p>

	<p>The observation from the survey also revealed that 22% of households who had hand-washing facilities did not have soap placed next to it while 78% had soap at the handwashing station. Furthermore, (77%) of households did not have water in the hand-washing device and 23% have water in the handwashing facilities.</p>
Health and hygiene messages	<p>The survey indicates the available common means to receive health and hygiene messages. The result revealed home visits from CHWs (40%) as the best common means followed by community meetings at 21%, radio at 27%, Focussed Group Discussions at 2%, SMS at 2%, printed flyers at 4% and others at 6%. Furthermore, figure 29 revealed that 45.95% of the households prefer receiving hygiene and health messages through home visits by hygiene promoters, 20.15% from community meetings, only 21.62% would prefer radio while 1.72% prefer either printed flyers or 2.92% Focus Group Discussions. The survey further asked the respondents if they had received a community health worker in their community in the last month, about 36% had received visits while 63% reported that they didn't and 1% Didn't know whether community health workers visited them or not with the health and hygiene messages as shown in the findings.</p>
Diarrhoea prevalence, knowledge, and health-seeking behaviours	<p>While interviewed, Close to half of the households 55% reported that, the children under 5 years who have started walking always defecate in the household latrine while about 17% of the households reported that children under 5 years practice open defecation and about 15% of the households use plastic pots for the children under 5 years to defecate, while the rest 6% take their children to the nearby communal latrine to defecate and 1% use plastic bags, 6% others. For children under-5 who do not use a latrine, finding revealed that, all the households collect and dispose of their faeces in the latrine.</p> <p>Respondents were also asked ways in which diarrhoea can be prevented as in figure 31 below. They mentioned the most common ways as washing hands with soap and water (77%), boiling or treating water or drinking clean water (71%), cooking food well (52%), cleaning cooking utensils (43%), washing fruits and vegetables at(39%), covering food (24%), and using latrine/toilet facility to defecate (32%). Other preventive measures include disposing of children's faeces in the latrine (17%), storing water safely for drinking (6%), bury faeces (8%), cleaning home with bleach (19%), others(1%), Don't know(2%) Breastfeeding babies (1%).</p>
Menstrual Hygiene management	<p>From the survey findings in the figure while being interviewed From the survey findings in the figure while being interviewed 53.2% gave their consent to be interviewed on the subject matter while 46.8% didn't give</p>

	<p>their consent and therefore they were not interviewed on the subject topic as shown in figure 35 below , while when reproductive age girls and women between the age of 12-48 were being interviewed on the material used during their last menstrual period the responded as followed, Most women and girls of reproductive age (67%) said they use disposable pads, (7%) said the use Re-usable pads, while (8%) said they use Re-useable Cloth, (7%) said they use Cotton and (3%) layers of underwear. 67% of the women interviewed recommended that kits should have to include Kitenge/clothes used to wrap around their waist during menstruation. This is to ensure that even if menstruation starts when they are not aware, they will not be worried about being embarrassed by leakage through their clothes. Most women expressed that this was the first time someone had talked to them about menstrual hygiene, and they were very grateful/happy with the education and information sessions provided. Many women did not know their basic anatomy and the reasons why they experience their monthly.</p> <p>According to the 2022 end line survey, most women and girls of reproductive age reported. that they change their menstrual hygiene products 81% said from latrine followed by 11% who said they change theirs from home and 8% reported that in other places, This, therefore, implicates that while constructing latrines there should be provision for the girls and women to have safe space to change their menstrual hygiene products as shown in figure 37, while in figure 38, the women and girls were asked where they dispose off their used up the pad and the following were their response as shown in figure 38, 85% said they dispose of them to the Latrine, 8% reported that they burn them and 2% wash and reuse them, 2% in the open,2% others,1% Trash.</p> <p>According to the 2022 end-line survey in figure 35 below, the most common Menstrual Hygiene management materials use before while interviewing the woman and girls of reproductive age they reported that(42%) were using disposable pads, (1%) reported that they were using cotton while (19%) reported that they were using re-usable clothe, (6%) were using a layer of underwear and (1%) reported they were using nothing but bleed in clothes, (1%) menstrual cup and (2%) others, while the issue of women of reproductive age bleeding in the clothes seems to be negligible it's a very critical issue which is very degrading and recommendation to restore the dignity for such women by availing them with sanitary pads, teaching them on how to make them bring a lasting solution to the girls and women of childbearing age</p>
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V. BACKGROUND AND CONTEXT

INTRODUCTION

Uganda is hosting over 1 million refugees (Uganda Refugee Response, UNHCR, and December 2021) with about 75,090 (UNHCR 30th December 2021) of them settled in the Kiryandongo refugee settlement. This rapid influx of refugees has put pressure on key facilities and services including shelter and WASH infrastructure. In addition, the influx also led to the destruction of systems, hence creating interventions to reconstruct them. To improve WASH service delivery efficiently and effectively in the settlement, there is a need for accurate and reliable information on which to base programmatic decisions.

Kiryandongo settlement has had several 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 the settlement level, there has been a gap in the in-depth understanding of the situation at the household level and to account for disparities within the settlement to measure the impact of the interventions. In consideration of the existing challenges, WMU in collaboration with government and WASH actors conducted end line KAP survey to understand the 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.

Uganda is one of the largest asylum countries worldwide and the largest in Africa, giving a tragic reminder of the fragility and conflict in the Great Lakes region. As of 30th September 2021, Uganda hosted an estimated 1,381,122 refugees spread over 30 refugee settlements across 12 districts. The main cause for the refugee influx Kiryandongo settlement is the crisis in South Sudan, which sharply deteriorated in mid-2016. Renewed fighting in South Sudan in July 2016 caused many South Sudanese to flee the country and seek safety in northwest Uganda. As of 30th December 2021, there were 75,090 refugees settled in the Kiryandongo refugee settlement. Displacement is expected to continue, as South Sudan's security situation has not improved although there is a reduction in the average daily arrivals of refugees.

The continued influx of people has created a 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 the household level and to account for disparities within Kiryandongo Refugees Settlement, WMU as the Implementing WASH partner commissioned an end line KAP survey in December 2021 whose results are highlighted in this report through a household survey with a sound sample size representing accurately the rest of the settlement.

VI. SURVEY OBJECTIVES

The main objective

The main objective of the end line survey is to track program results, impact, and long-lasting change of the Water, Sanitation, and Hygiene interventions in the Kiryandongo refugee settlement.

Specific objectives are to.

- Establish the Knowledge, Attitudes, and Practices (KAP) of refugees about WASH in the Kiryandongo settlement.
- Generate information regarding quality, access to, and effectiveness of WASH interventions in Kiryandongo refugee settlement.
- To gain a better understanding of and evaluate the current Knowledge, Attitudes, and Practices (KAP) of refugees about Water, Sanitation and Hygiene, and menstrual hygiene management

VII. METHODOLOGY

Survey area and sample frame

The KAP was conducted in the Kiryandongo settlement particularly in the 2 Ranches in Kiryandongo District. The sample sizes were determined using the UNHCR sample size determination tool, and samples were determined per zone.

The respondents from the household level were extracted from the OPM statistics of registered refugees in the Kiryandongo Refugee Settlement. This formed a sample frame from which the sample size was drawn. As seen from the table below.

Sampling size and methodology

Simple Random sampling was adopted to reflect and compare the experiences across the 2 ranches. Enumerators were instructed to go to the identified locations and interview the household closest to the location. The selection of respondents was done using systematic or simple random sampling. Each community was clustered based on the ranch. The number of respondents was then divided among the ranches. In each zone, the respondent was selected by skipping two households and considering the third household.

The table below shows the different zones and their respective sample sizes as well as several data collectors.

Sampling size

ZONES	POPULATION SIZE(HH)	SAMPLE SIZE(HH)
Ranch 1	6,137	208
Ranch 37	5,383	183
Host Community	3474	117
Total	15,055	508

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 the 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 Kobo collect data collection software. The questionnaire logic was integrated into the Kobo collect 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 1.

Modification of the instruments was done based on the feedback for example some optional questions that were not needed for the survey were skipped. The pre-testing team's issues on data gathering were discussed and addressed accordingly in preparation for the actual data collection. In addition, the questionnaire was meant to generate results to address the following key indicators.

Parameter	Indicator	Questionnaire Section
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 a solid waste disposal facility	Section E
Diarrhoea prevalence,	%HHs with access to Diarrhoea prevalence, knowledge, and health-seeking behaviours	

knowledge, and health-seeking behaviours		
Menstrual Hygiene management	%HHs who are satisfied with Menstrual Hygiene management	

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 enumerators 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 the quantitative data collection process emphasizing 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 were 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 to improve the questionnaire.

Recruitment and training

A total of 35 enumerators were recruited from the ranches within the settlement after the temporary positions were advertised and successful enumerators shortlisted and interviewed. The enumerators were then trained for 3 days on the actual data collection exercise. 4 supervisors selected from WMU staff helped to monitor and support the enumerators during data collection.

Data collection and quality control measures

The enumerators received 1 day of training and administered the questionnaire on tablets and mobile phones. In principle, the team is composed of at least a male and a female enumerator, to ensure quality, gender-sensitive interviews. 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 and 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 WMU M&E Officer for inconsistencies. Each household survey took approximately 60 minutes to administer the questioner. Exact times vary depending on the responses from the household heads and whether there were identified people to respond to survey questions.

Data analysis plan

All quantitative data collected was fully reviewed and consolidated into a single dataset for all 2 Ranch. By 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 to elicit further meaning (e.g. location, age, gender). Statistical tests were then run for selected variables to establish correlation factors.

Specifically, descriptive analyses using multivariate analysis statistical hypothesis tests (χ^2 for variance, independence, regression analyses, etc.) were used 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 were analysed using the standardized UNHCR WASH KAP analysis tool, advanced excel analysis, and SPSS data analysis software.

VIII. KEY RESULTS AND FINDING
SUMMARY OF KEY PARAMETER INDICATORS

Parameter	Indicator	Host community	RANCH1	RANCHE37	Overall Jan baseline 2022	Overall end Dec line 2022
Water Quantity	Average litres of potable water/per person/per day collected at HH level	14l/p/d	18l/p/d	23l/p/p	16l/p/d	18l/p/d
	% HHs with at least 10 L/p protected water storage capacity	42%	41.12%	50.88%	50%	45.02%
Water Access	Maximum distance [m] from household to potable water collection point	1489M	872M	759M	672M	1040M
Water Quality	% HHs collecting drinking water from protected/treated sources	42	74%	89%	100%	68%
Sanitation	% HHs with family latrine/toilet	73%	79%	89%	87%	80%
	% HHs reporting defecating in a toilet/latrine	76.4	92.9%	89.4%	93%	87.2%
	% HHs having access to a bathing facility	61%	76%	67.9%	68.18%	68.3%
Hygiene	% HHs with access to soap	66%	66%	66%	82%	57%

	% HHs with access to a specific hand-washing device	28%	39%	43%	34.67%	37%
	% Respondents knowing at least 3 critical moments when to wash hands	79%	77.0%	76.0%	95.13%	77%
Solid Waste	% HHs with access to a solid waste disposal facility	50%	57%	70%	67%	59%
Diarrhoea prevalence, knowledge, and health-seeking behaviours	% Diarrhoea prevalence, knowledge, and health-seeking behaviours	73%	79%	88%	76%	80%
Menstrual Hygiene management	% Women Who are satisfied with Menstrual Hygiene management material	43%	60%	58%	29.03	52%

WATER SUPPLY

The main source of drinking water

According to the survey findings as presented in figure 1 below, most of the households (61%) across all the reported public tap/standpipe as their main source of drinking water for *members*. At the zonal level, all the four zones reported the highest they get their main drinking water from public tap/standpipe. This is an indication that the population in Kiryandongo settlement are 61% collecting their drinking water from the public tap stands /standpipe, and they get their drinking water from protected sources

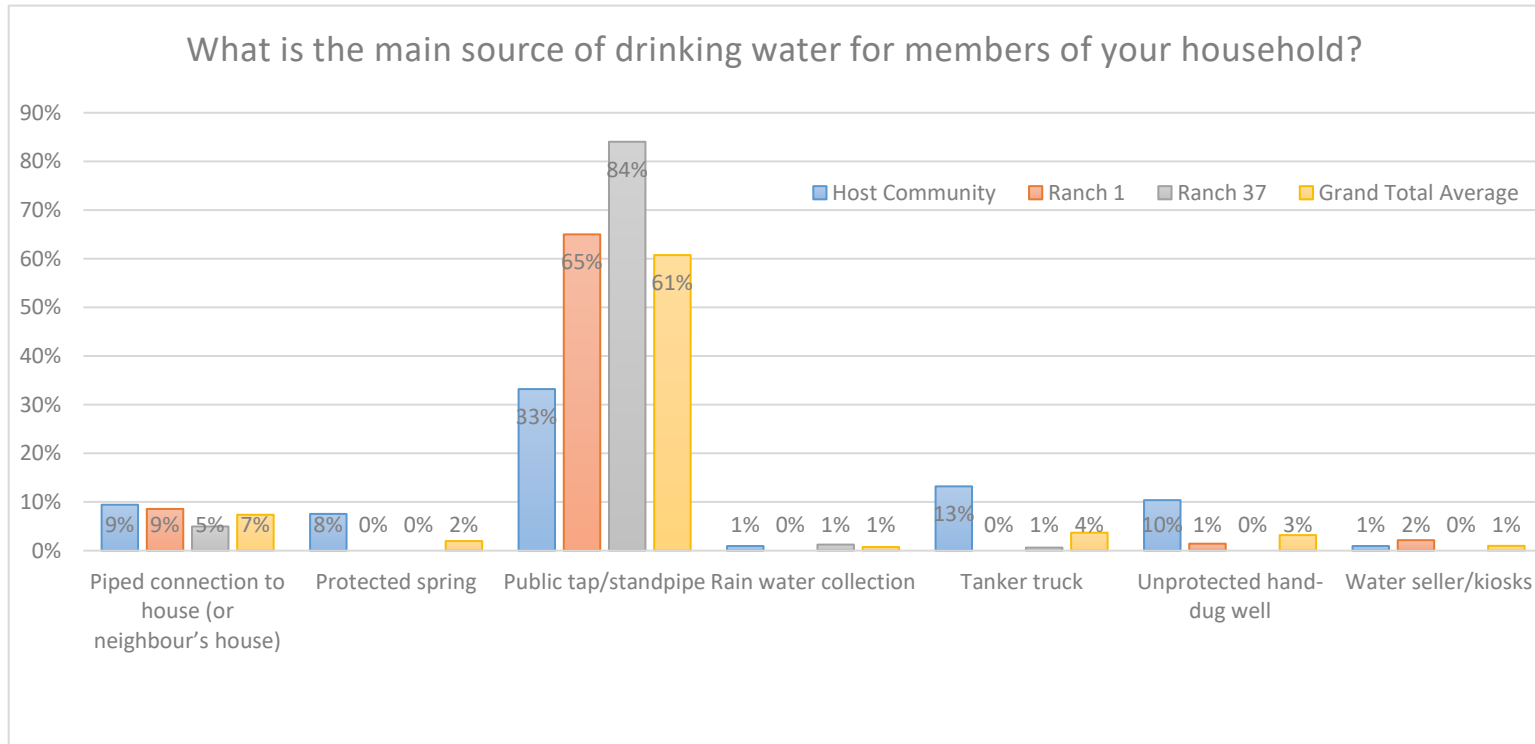


Figure1

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 the figure below revealed that less than half of the households across all zones use handpump/borehole as their main alternative water source at (40%) while about 7% of the households did not collect water from any other source apart from their main source of water which is public tap/standpipe.

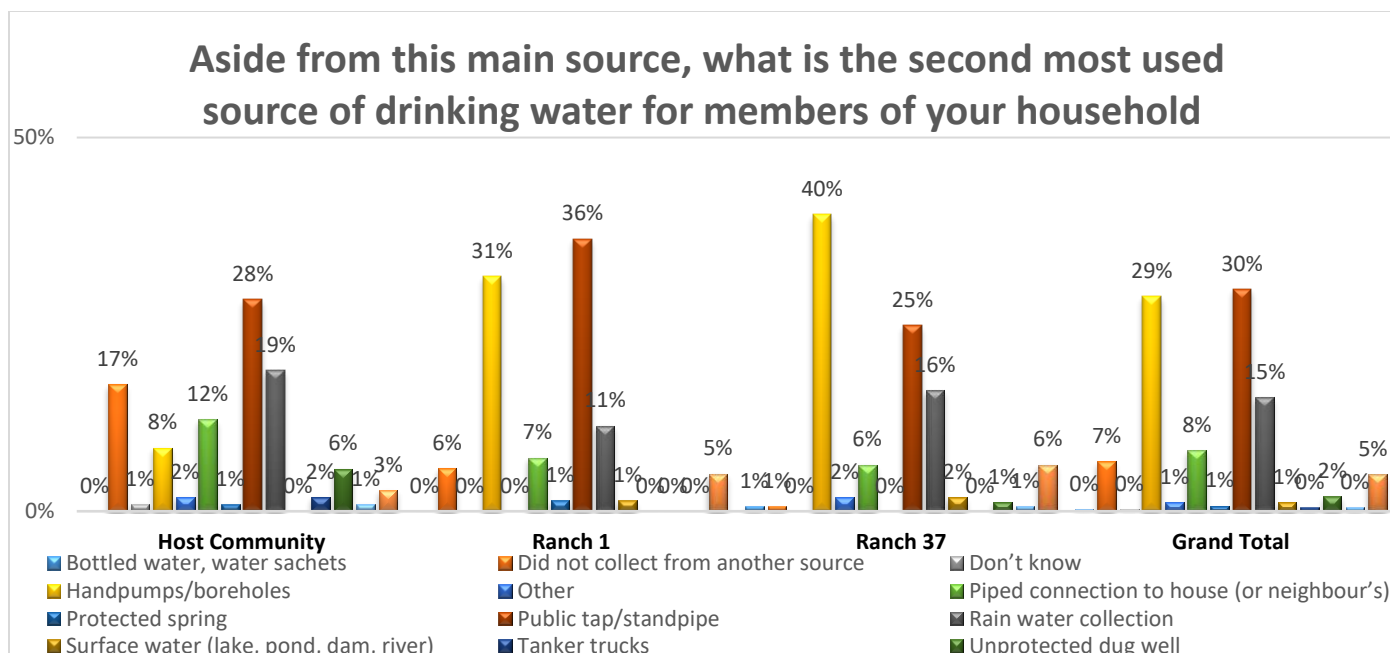


figure2

Sources of water for other activities

The survey sort to find out the sources of water the households use for other activities like gardening, bricklaying, animal consumption, and others as in figure 3 below. The results revealed that (24%) Households use public tap/standpipe for other activities in the household, while (35%) hand pumps/boreholes for their house hold activities,(1%)of the households who use unprotected hand-dug well for other domestic activities while others use Surface water (lake, pond, dam, river) (3%), handpump/borehole (38%), unprotected spring (2%), Piped collection (6%), Rainwater collection (15%), Tanker truck (4%) and others

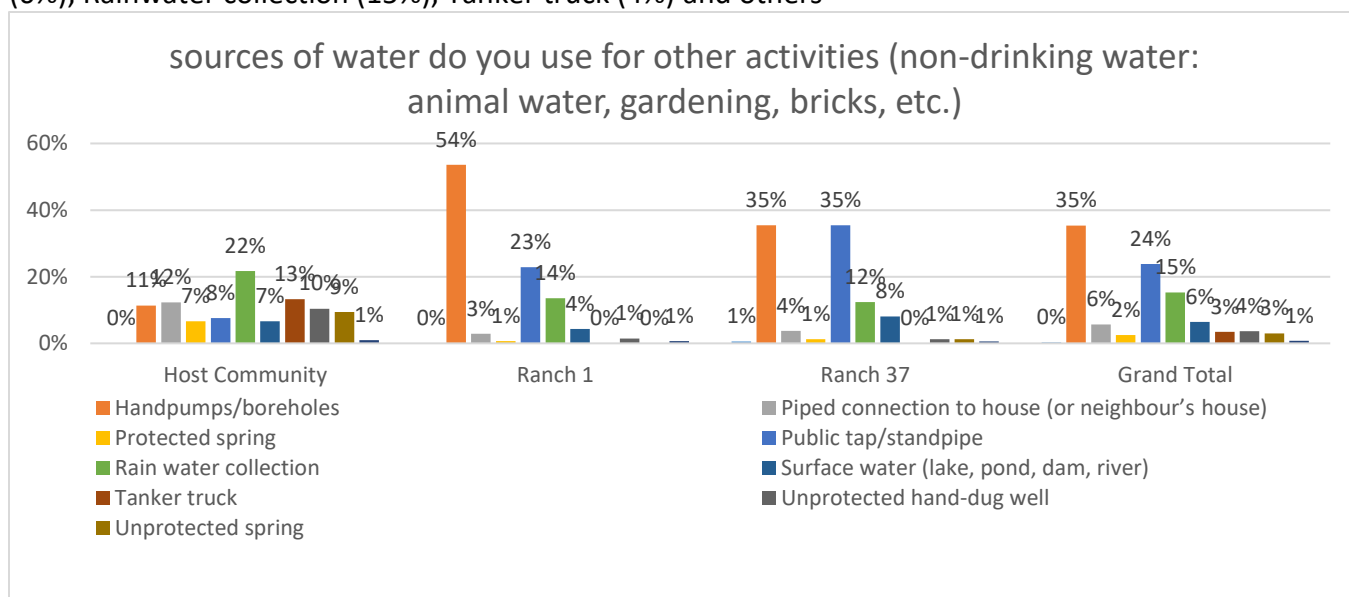


Figure 3

Water per capita per zone

According to the findings from the survey, the average litres of portable water/per person/ per day collected at the household level across all the zones stand at 18 compared to 16 at baseline. The findings from the survey revealed at Ranch level that, Host community from the settlement is 14l/p/d, Ranch 37 had a better per capita at 23 l/p/d and Ranch, 18 l/p/d reported. The per capita across all the zones is below the emergency standard of 20 l/p/d, this could be because of a routine systems breakdown and inadequate storage containers as shown in figure 4.

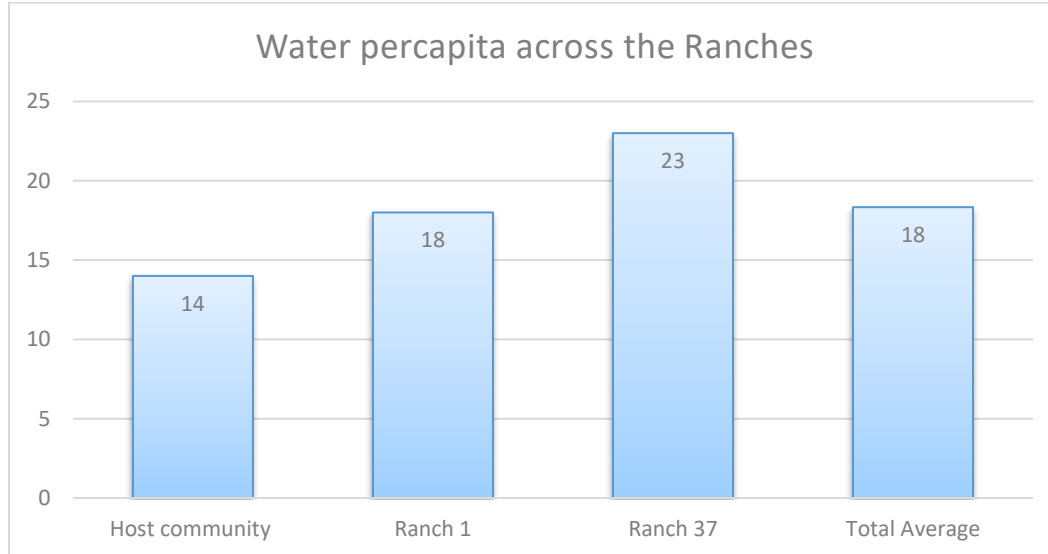


Figure 4

Protected water storage container.

According to findings as in figure 5, the percentage of households with at least 10 litres/per person of protected water storage capacity across all the ranches(cluster) stands at 33% compared to the baseline figure of 51%. The survey also revealed that Host Community (23%), Ranch 37, (42%), Ranch1, (23%). This was very low as compared to the post-emergency standard of over 200ltrs of the households though there is a drop by 18 % from the baseline. Since the storage capacity is very low, this can also affect the daily water consumption capacity and or increase the frequency of water collection per day from the water source.

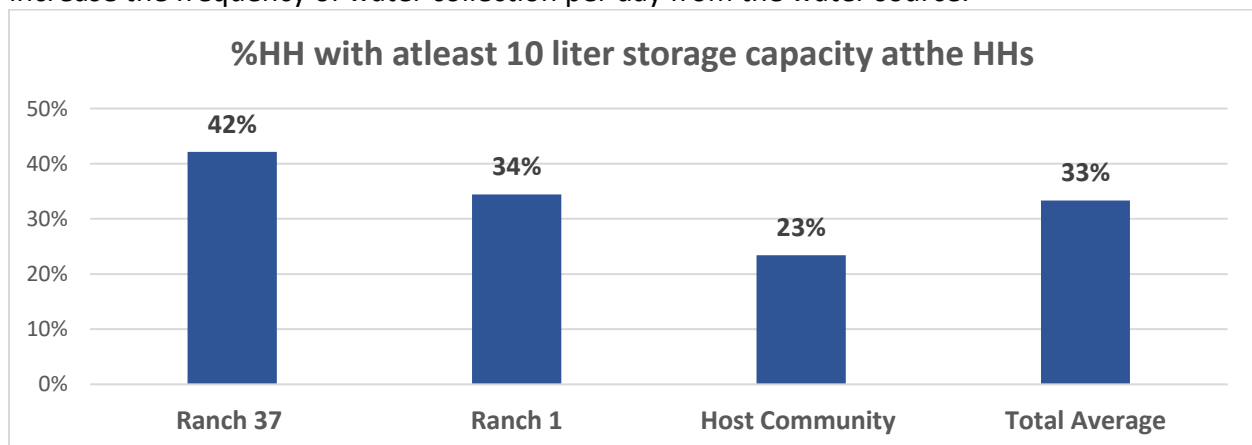


Figure5

Distance to the nearest water point

From the survey findings, household members' overall average walking distance to the nearest water point was 333 meters compared to the baseline figure of 476 meters. Further findings from the survey revealed that, in the settlement, most households walk a maximum distance of about 1489M from the host and 872M(refugees)from their households to portable water collection point especially when the nearest source is broken down with the minimum distance as short as 759 meters. The survey revealed that, at Zone1 and Zone 3, most households walk as far as over 1040 meters to get water this is beyond post emergency standards of 250M..

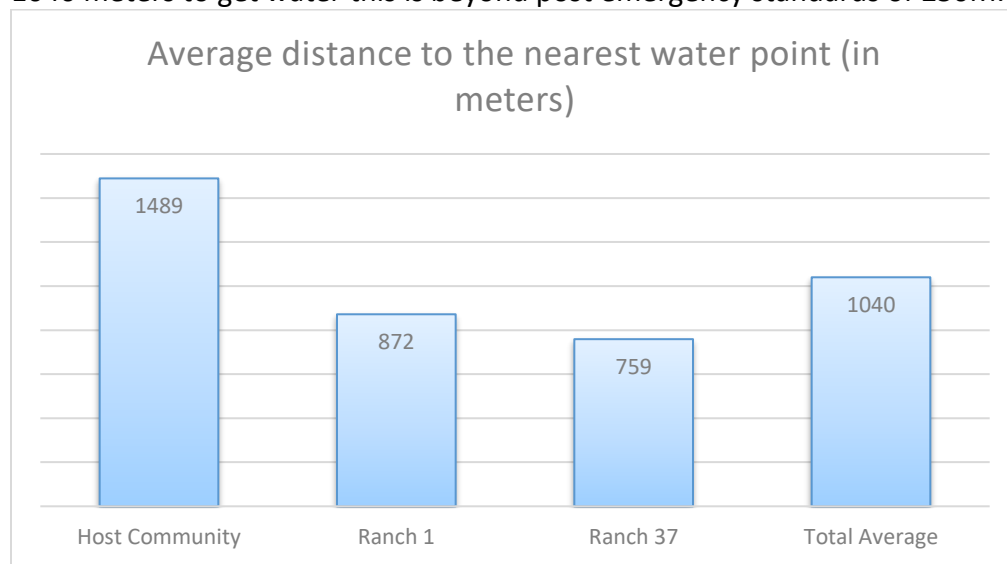


Figure 6

Amount of water collected for households' needs and reasons why households don't collect enough water

The survey looks at whether households collect enough water to meet their needs. The response indicated (51%) of the households reported that they collect enough water for their household need except for (48%) of the households who do not collect enough water for their households and 1% have other reasons. Among the reasons as to why households do not collect enough water to meet their needs as presented in figure 8 below, most households reported that they do not have enough storage containers for collecting water (20%); this was followed by households who reported water shortages (27%). The rest of the households gave other reasons such as, waiting time at water point being too long (15%), water being too far (26%), and limitation of the volume of water that can be collected at the water point at (2%), Can't afford to buy water (5%) , its too dangerous to get water and others (3%) as shown in figure 7 and 8 below.

Whether water collected meets all your households needs



Figure 7

Reasons for not collecting enough water

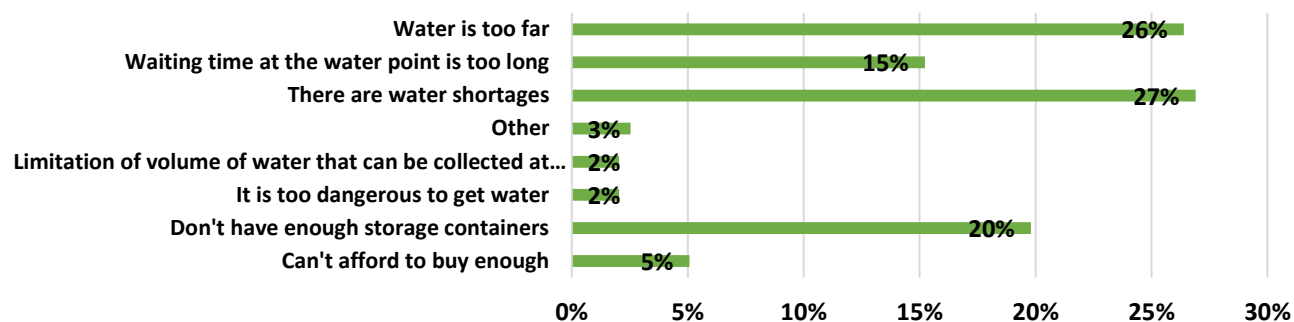


Figure 8

Persons who collect water for the household

The survey findings in figure 9 show the member of the household who usually collects water for the households, most of the households (67%) reported that it is adult females who usually collect water for the household, followed by children aged 11-18 years at (25%) and adult male at (6%) and (1%) Children (10 years or below)

Persons who collect water for households

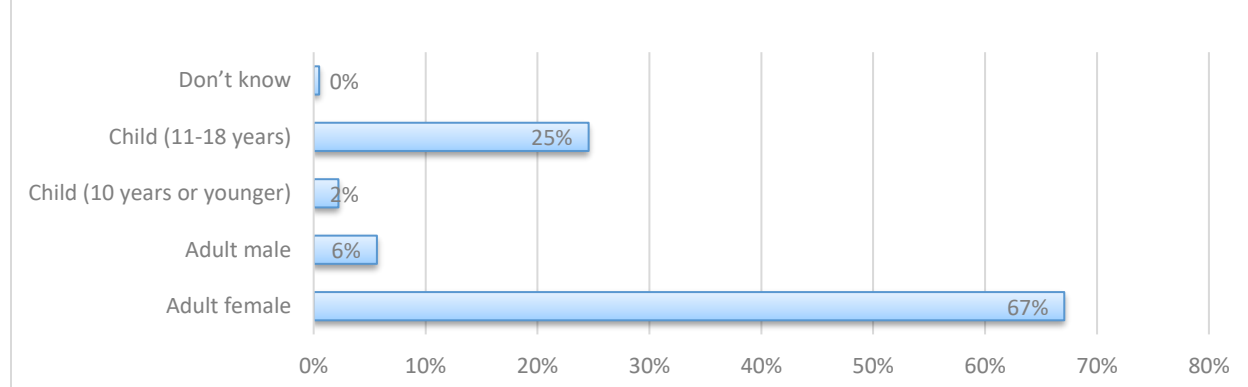


Figure9

Period for Cleaning drinking water containers and how the containers are cleaned

The households were asked how frequently they clean their drinking water containers, the response indicated in figure 10 below showed that (39%) clean their containers at least once a week, followed by (43%) of the households who clean their containers every time they use . The other (15%) clean their containers once a month, (1%) clean their containers once a year, and (1%) never less than a year and (1%) others. On how households clean their drinking water containers, (18%) households reported in figure 11 that, they wash their containers using rocks/sand while shaking, less than half of the households (56%) wash their containers with a specific product like omo detergent, soap powder, etc. while about (8 %) wash their containers with a piece of tissue/sponge and (14%) just rinse them with water only and (3%) use other things. The respondents were also tested on safe water chain at the household level, the result revealed that the majority 89% of the households were seen to observe safe water chain at their households while the rest 11% did not observe safe water chain as shown in figure 10 and 11.

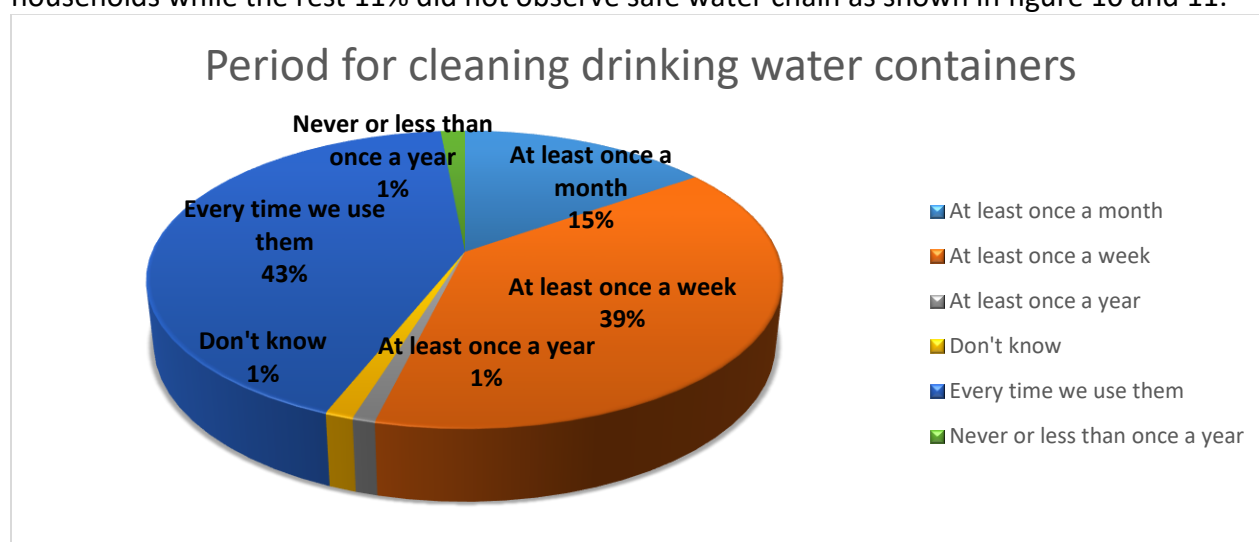


Figure 10

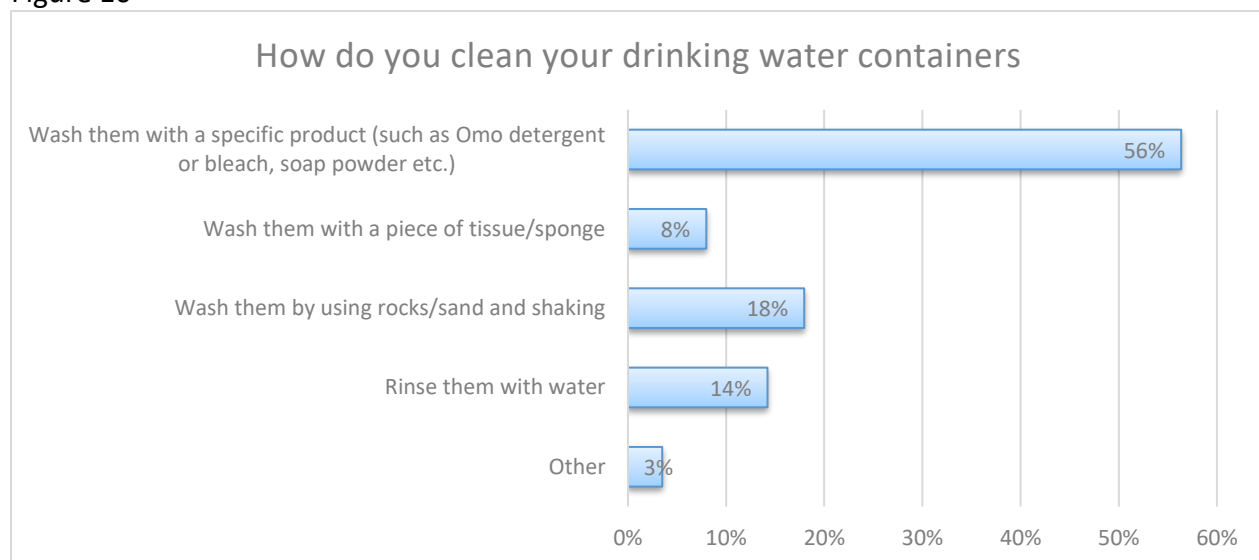


Figure 11

Water treatment

Most households (83%) were observed when pouring and dipping cups to scoop water from their drinking water containers, the result showed that there was no contact between the hands and water in the container hence no contamination as compared to 88% at the baseline. More sensitization is required for the (17%) regarding safe water chain.

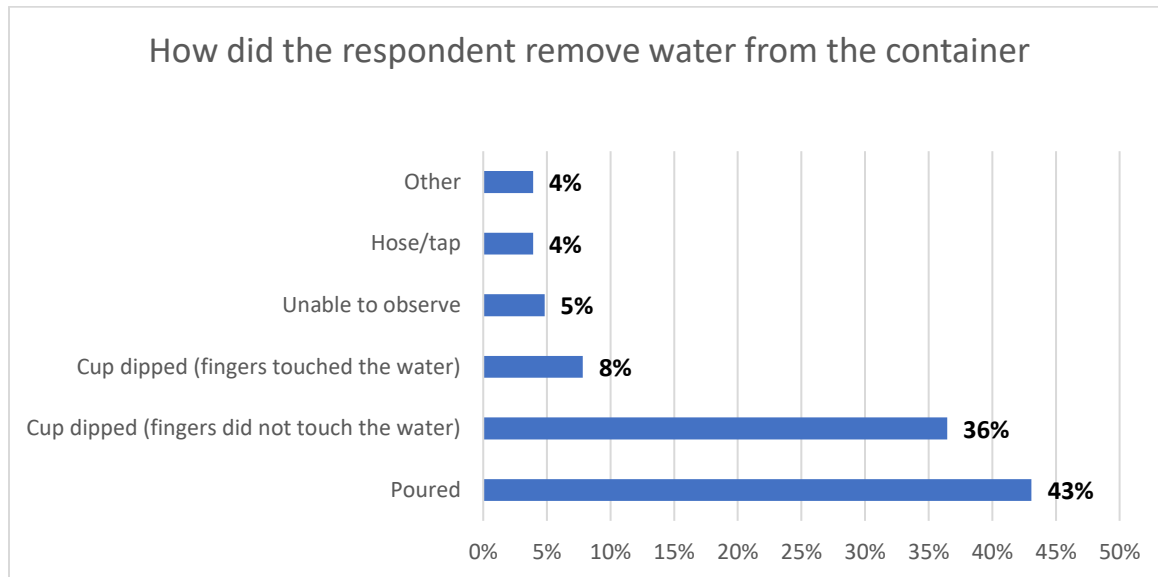


Figure 12

Hygiene

Presence of soap at the household level, the source, and what to use in the absence of soap

The survey revealed the percentage of households with access to soap (**figure 13**) at (57%) while (43%) had no soap available. Most households (72%) reported that by the time of the survey they had run out of soap while (16%) of households could not afford soap and (12%) gave other reasons for soap is not available to buy. (**Figure 14**).

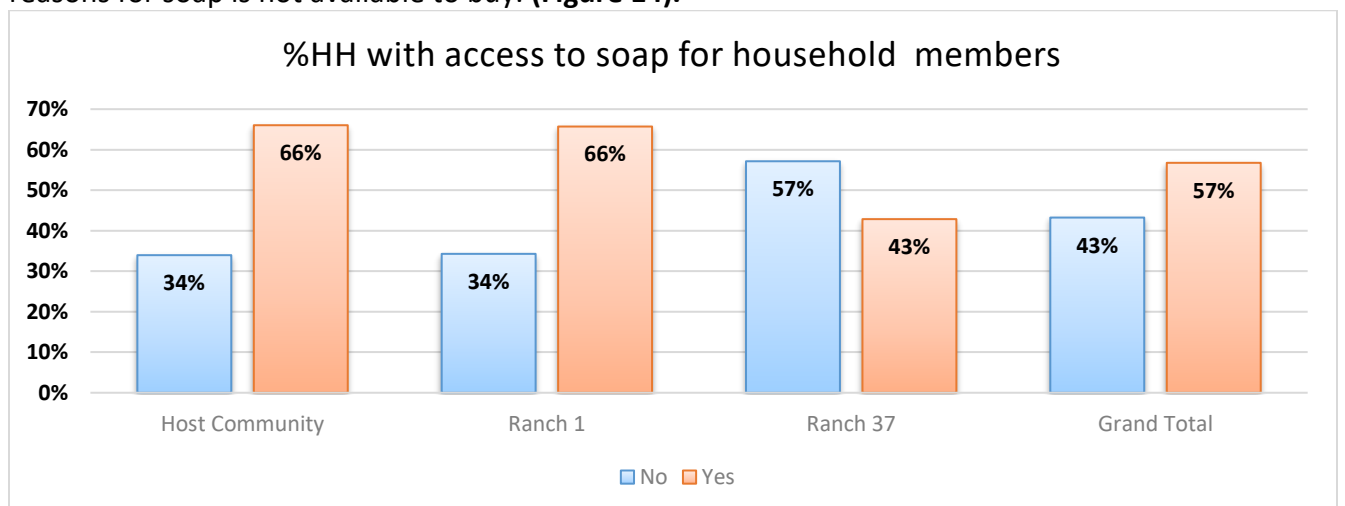


Figure 13

Further analysis revealed that most of the households (3%) got soap through distribution by NGOs while (82%) purchased soap and the rest (3%) were gifted soap and (3%) were traded and other sources. Finally in, (figure 15) of the households (62%) revealed that they would use water only in absence of soap, (24%) would use Ash, (3%)use sand, and the rest(6%) and don't use anything and(3%) use others when there is no soap at the household. While respondents were asked the reasons why they don't have soap in (figure15) analysis revealed that most of the

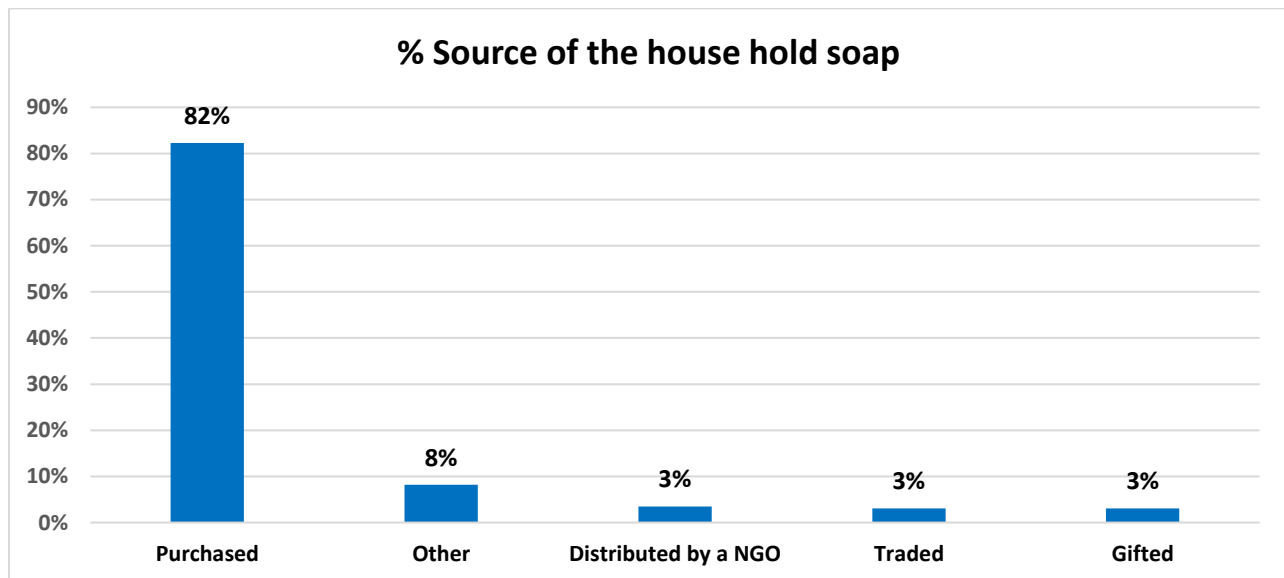


Figure 14

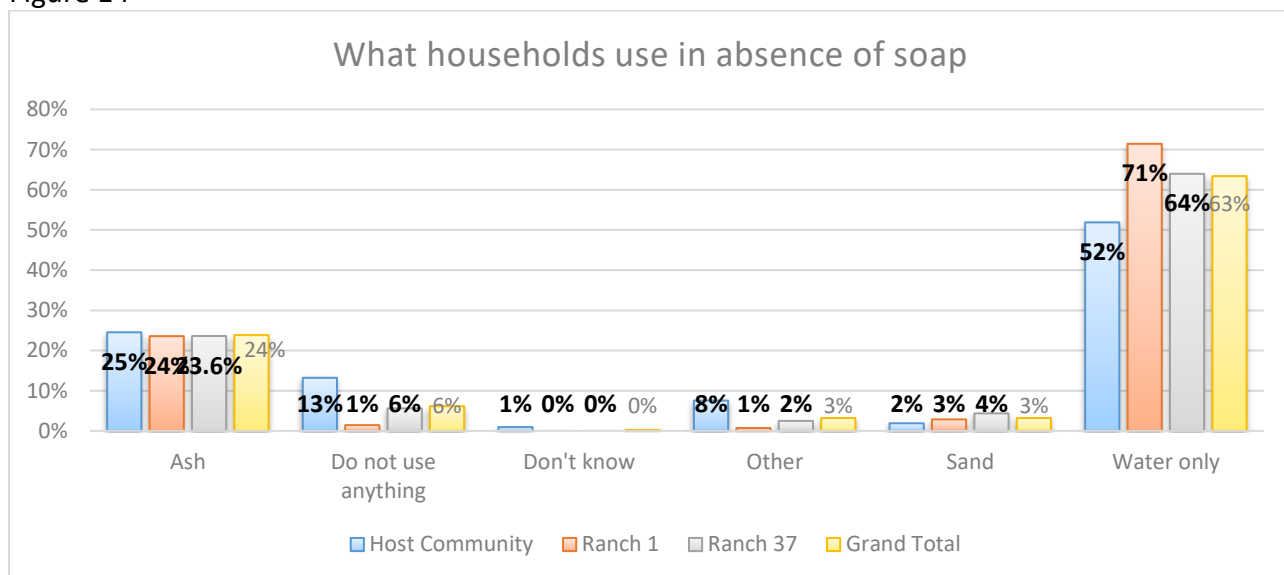


Figure 15

Critical handwashing moments

The households were asked to name at least 3 of the most important times when someone should wash their hands. The survey revealed as in (figure 16) below that most household members stated the 3 moments as before eating, after defecation, and before cooking/meal preparation (77.3%) this, therefore, implies that they are knowledgeable about the three critical

moments of washing hands while (22.7%) mentioned others which portrays that they are not knowledgeable about critical handwashing moments.

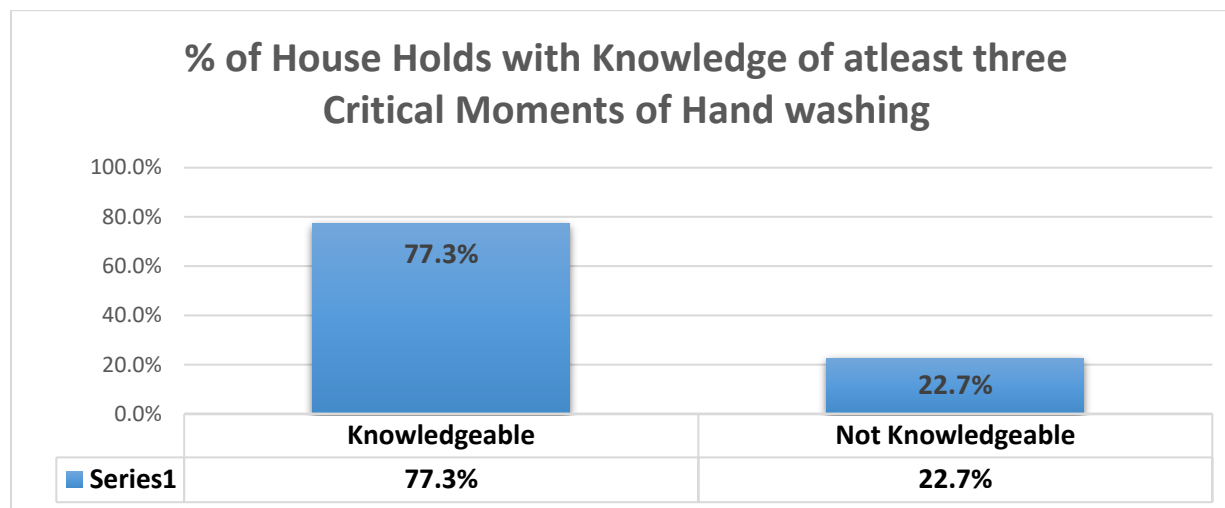


Figure 16

Specific handwashing device/station at household

The survey also assessed the presence of a handwashing facility in the household. The result revealed as, in figure 16 below that, (37)% of the household had handwashing devices/stations in their households while the rest (63%) did not have a handwashing facility in their household. From the observations carried out, (77.2%) of households with handwashing devices had water in them and the rest (22.8%) 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 76% of households who had hand-washing facilities had soap placed next to it while 22% had no soap at the handwashing station and (2%) had others.

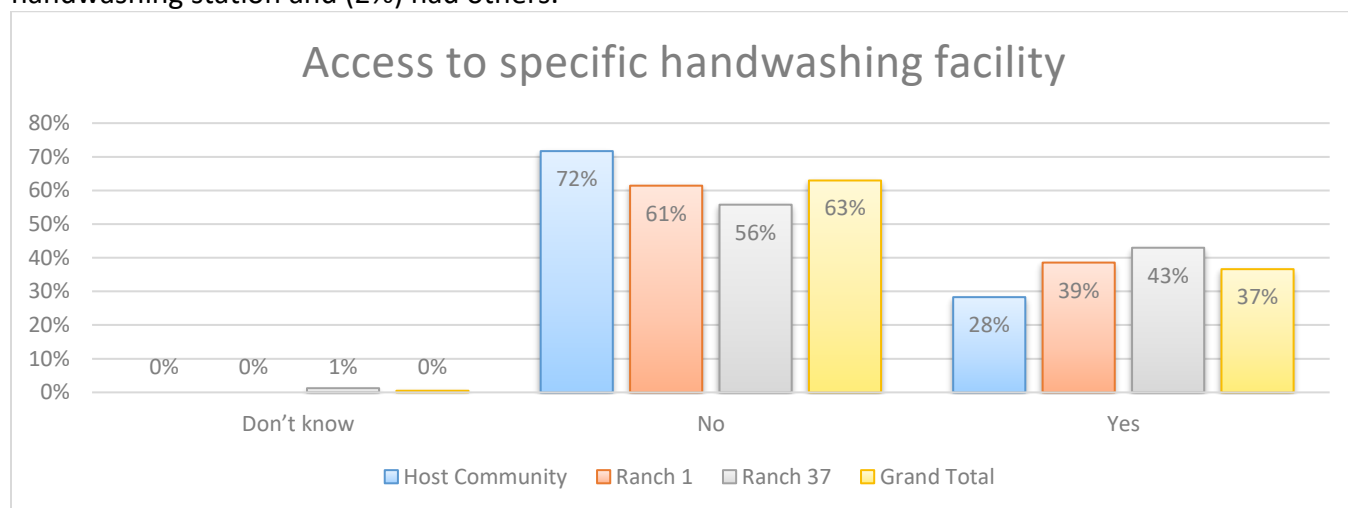


Figure 17

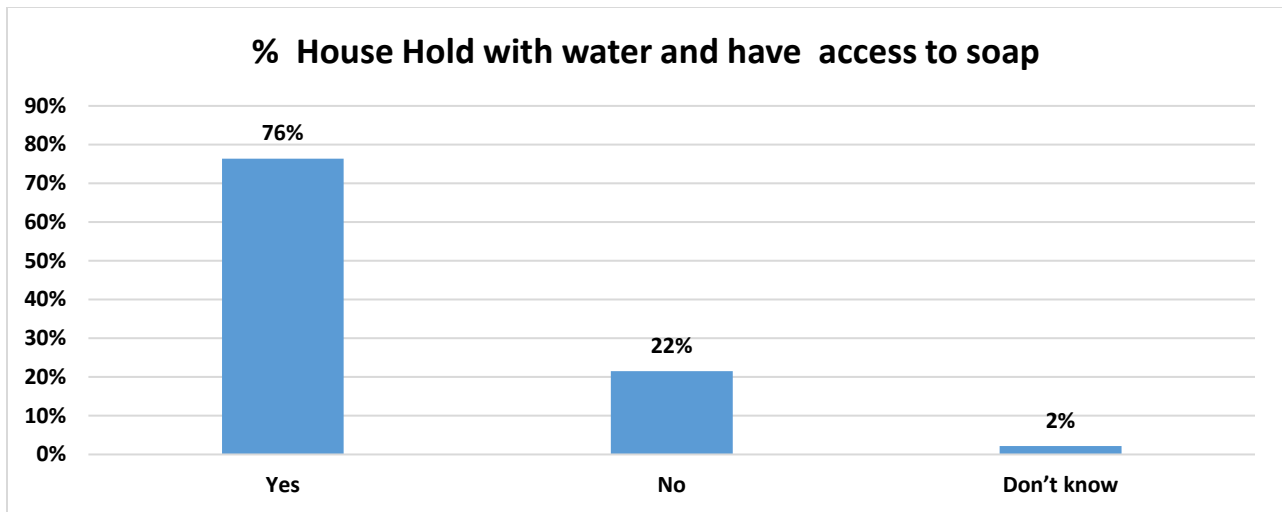


Figure 18

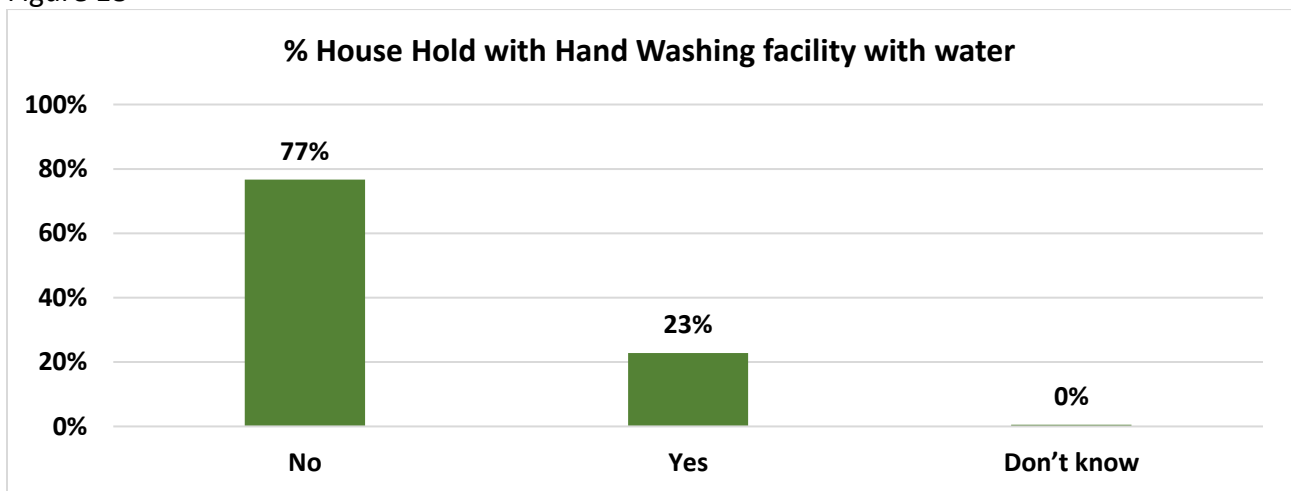


figure 19

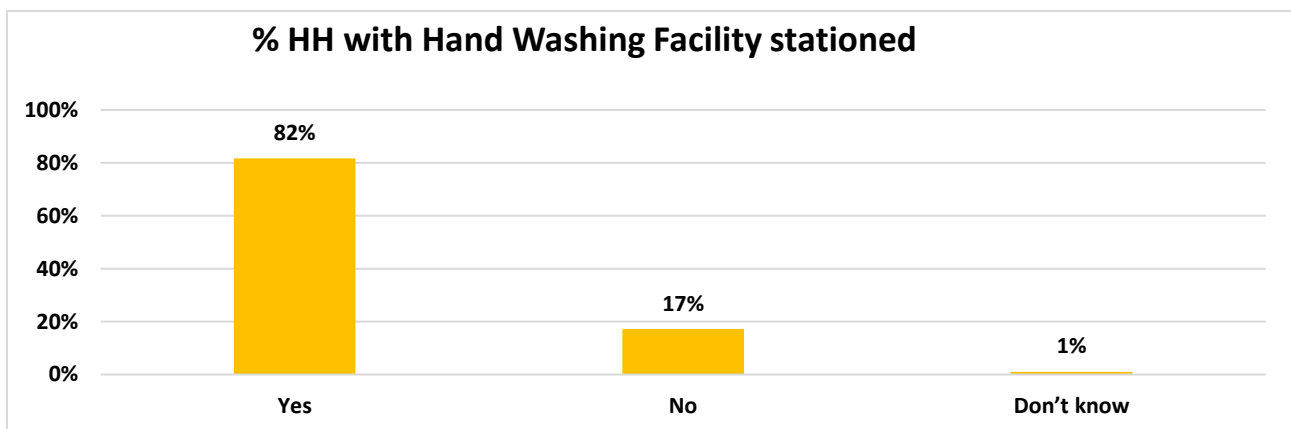


Figure 20

Sanitation

Where household members excluding children under 5 defecate

According to the survey findings as in figure 21, most household members (80%) defecate in the household latrine (this excludes children under 5 years of age) compared to 93% of the households at baseline. Only a few (8%) use communal latrines while about (5%) practice open defecation in places where they stay, Plastic bags(1%). The survey also revealed that the percentage of households with access to latrine/toilet stands at 94%.

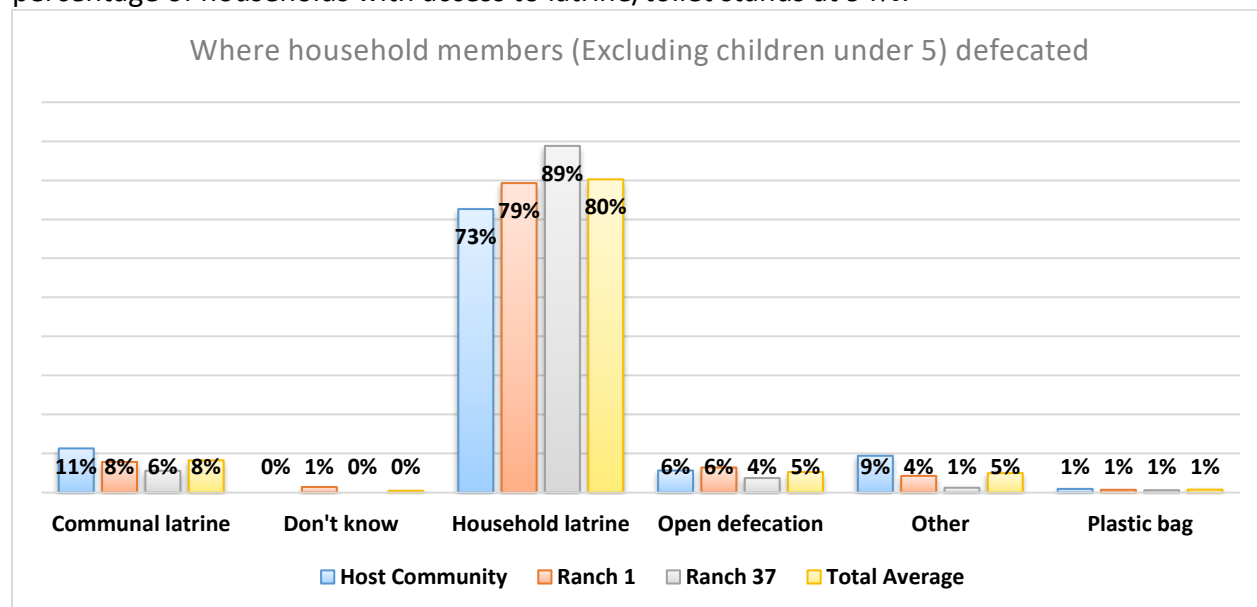


Figure 21

Where children under 5 living in the household defecate

From the findings as in figure 22 below, close to half of the households (55%) reported that, the children under 5 years who have started walking always defecate in the household latrine while about 17% of the households reported that children under 5 years practice open defecation and about 15% of the households use plastic pots for the children under 5 years to defecate, while the rest 6% take their children to the nearby communal latrine to defecate and 1% use plastic bags, 6% others. For children under-5 who do not use a latrine, finding revealed that, all the households collect and dispose of their faeces in the latrine

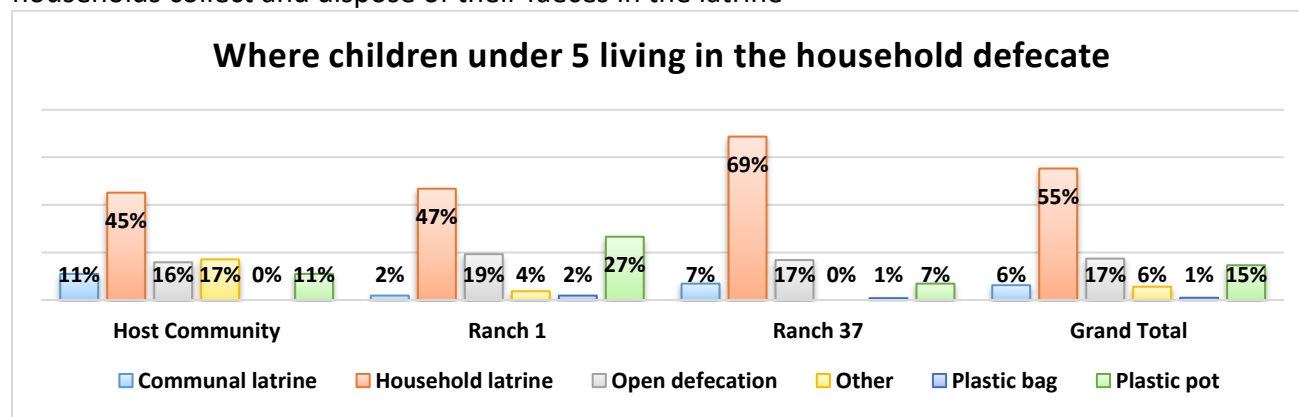


Figure 22

The practice of open defecation among adult members of the household

The survey also revealed as, in figure 24 and 25 below that, about 11.3% of adult members in the household defecate in the open especially at night compared to (11%) at baseline and they gave a reason for no latrine in the household (28%), the reason for open defecation latrine is too far (26%) and too dark at night (15%) and (30%) (10% too tired, (7%) Don't know /Sure and 12 others).

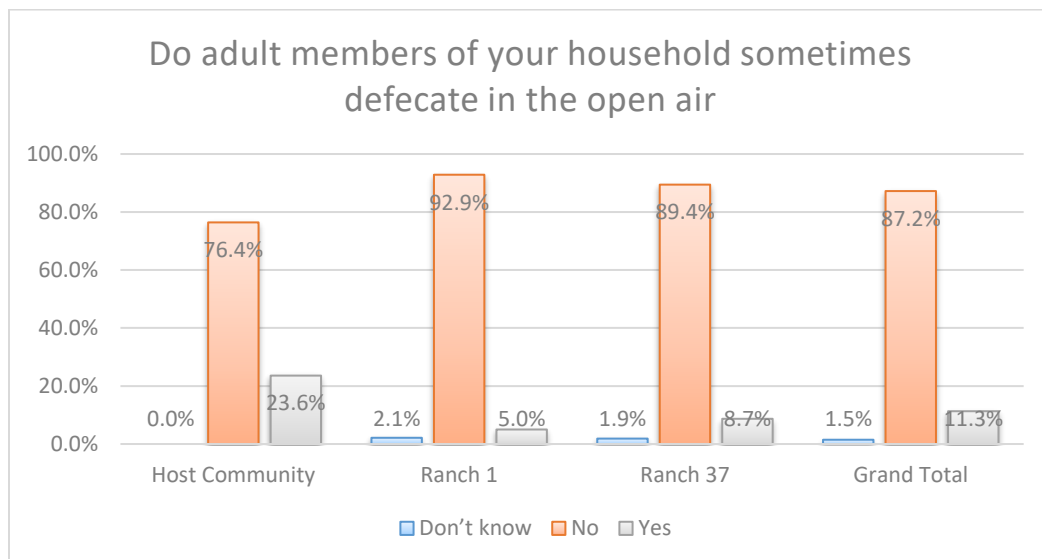


Figure 23

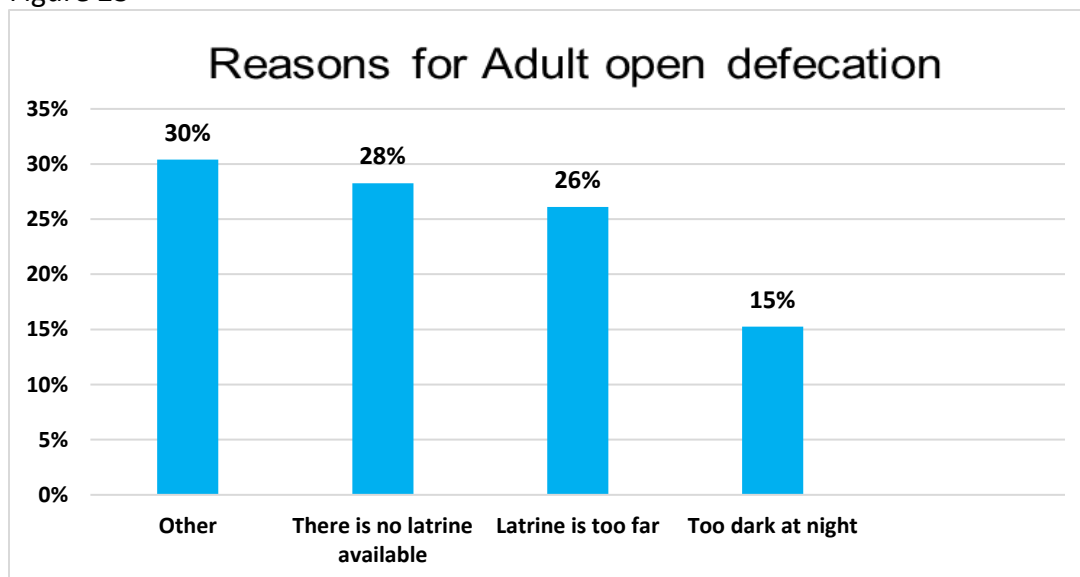


figure 24

Presence of bathing facility for the households

The survey revealed as, in Figures 25 and 26 below, that most households (68.3%) have a designated shower/bathing facility except 29% of the households with no bathing facility as was observed in the households during the survey and (3%) Don't observer cant . It was also observed

that 90% of households cover their food when it is kept for another person and 10% Didn't cover their food.

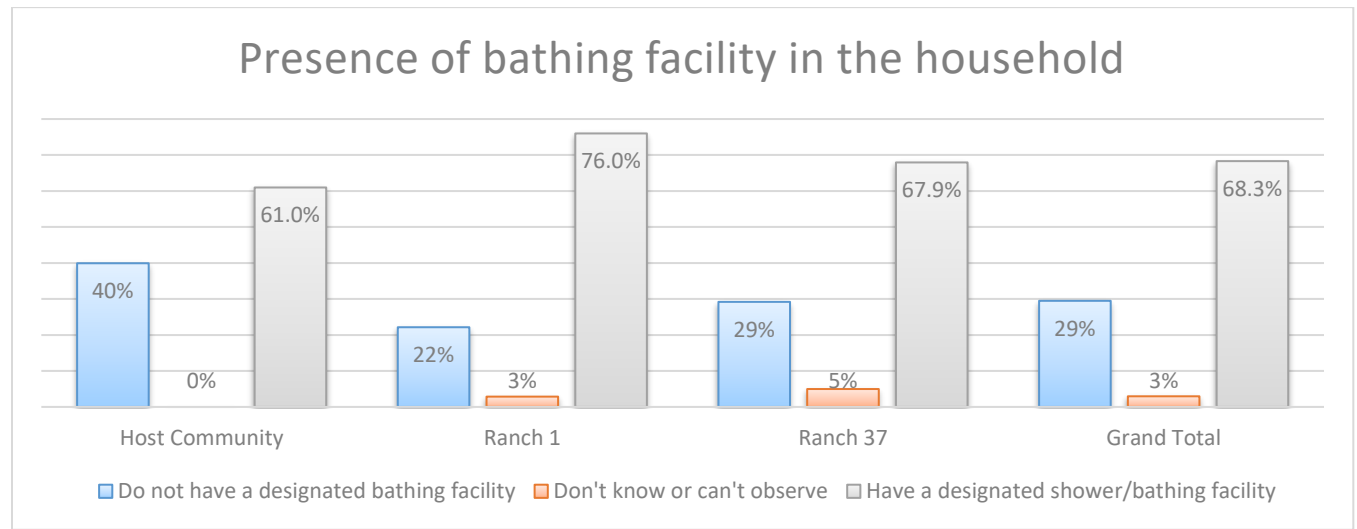


Figure 25

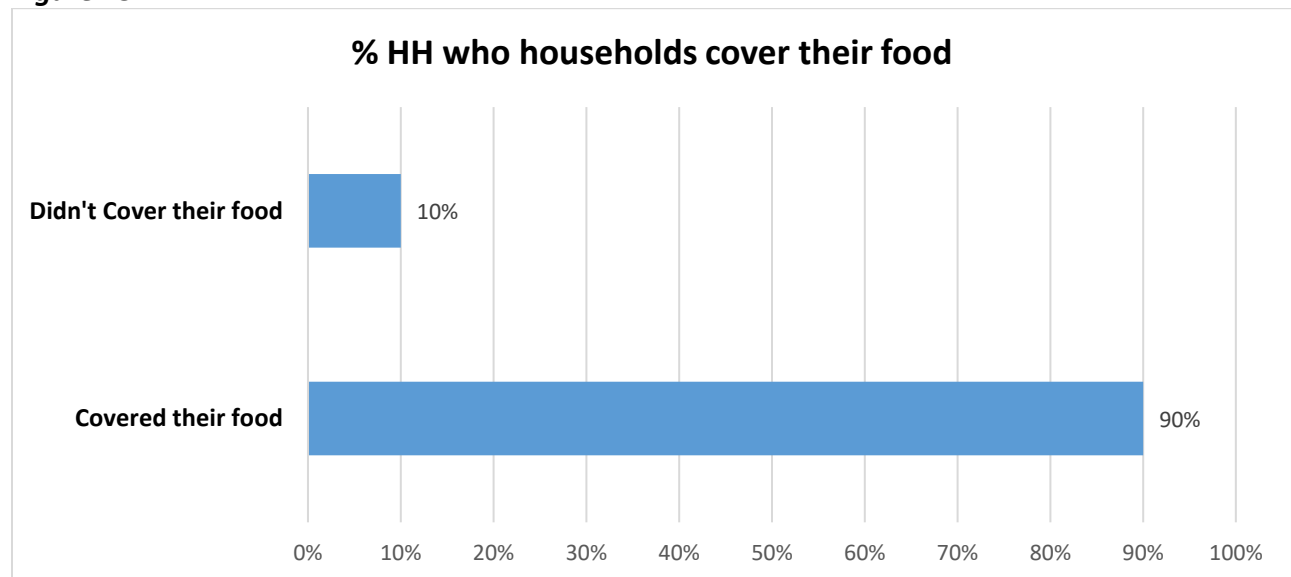


Figure 26

Waste management

Where households dispose of their waste

According to the survey, the percentage of households with access to solid waste disposal facilities stands at 56% as compared to the baseline survey of 67%. Much as there is a solid waste disposal facility in most of the households as shown in the figure, 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. Figure 27 revealed more than half of the households 56% dispose of domestic waste in the household pit, with 15% in designated and 9% in undesignated open areas, 9% burn domestic waste and 6% dispose of it in the communal pit, (1%) bury it and (3%). It was observed that 65% of the households had a clean

courtyard with exception of only 33% where rubbish was seen littered on the compound and (2%)Don't know.

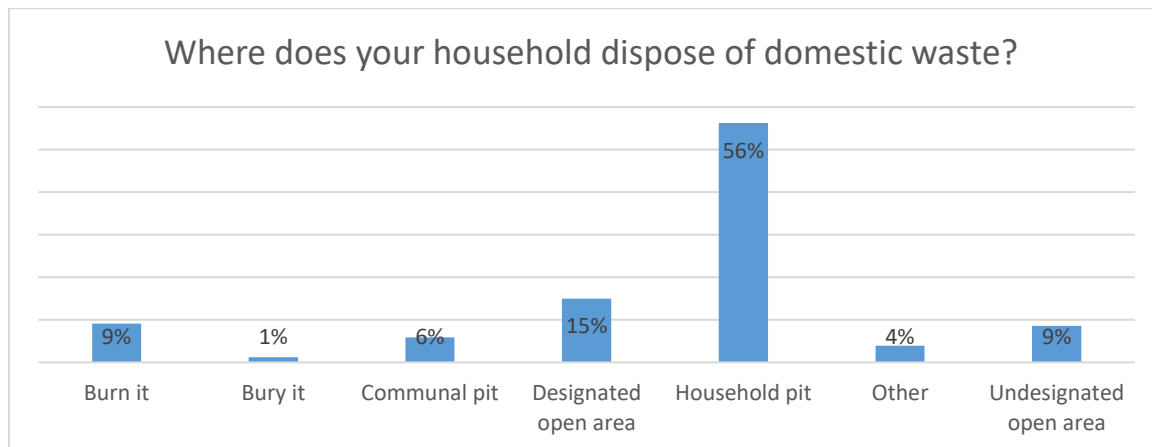


Figure 27

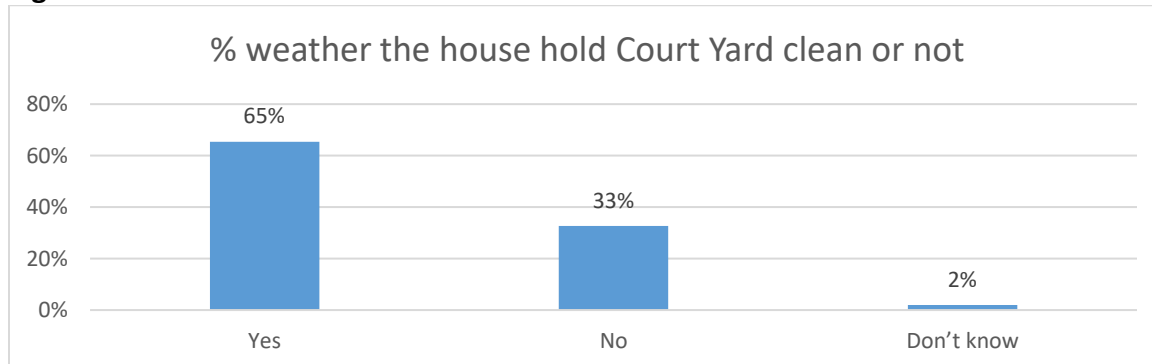


Figure 28

Presence of abnormal vector near the household

According to the 2022 end line survey, the most common abnormal vector reported by households were mosquitoes at 37% followed by cockroaches at 22%, flies were reported by 20% of the households while Rodents were reported by 19% of the households. About all households did observed abnormal presence of vectors at their homes and 2% were others which was a negligible percentage.

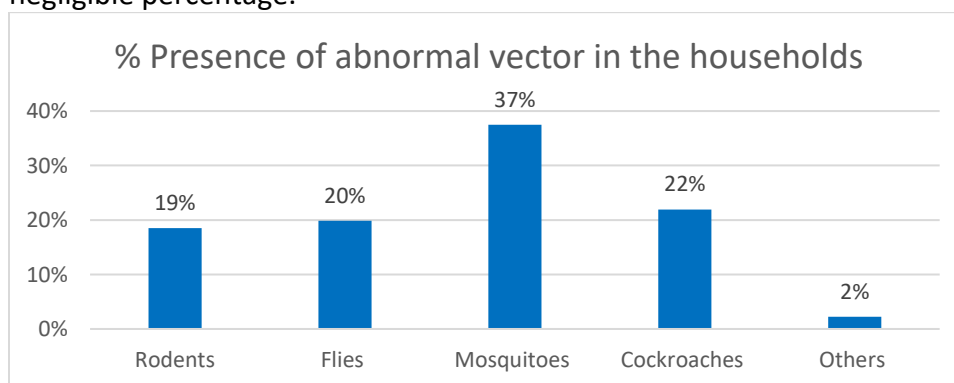


Figure 29

Messaging

Best communication means being available to receive hygiene and health messages

Respondents in figure 30 were asked to indicate the available common means to receive health and hygiene messages. The result revealed home visits from CHWs (40%) as the best common means followed by community meetings at 21%, radio at 27%, Focussed Group Discussions at 2%, SMS (2%) printed flyers (4%) and others at 4%. Furthermore, figure 31 revealed that 70% of the households prefer receiving hygiene and health messages through home visits by hygiene promoters, 15% from community meetings, only 12% would prefer radio and 4% prefer either printed flyers or Focus Group Discussions. The survey further asked the respondents if they had received a community health worker in their community in the last month, about 56% had received visits while 42% reported that they didn't and 2% Didn't know whether community health workers visited them or not with the health and hygiene messages as shown in the findings in figure 32 below.

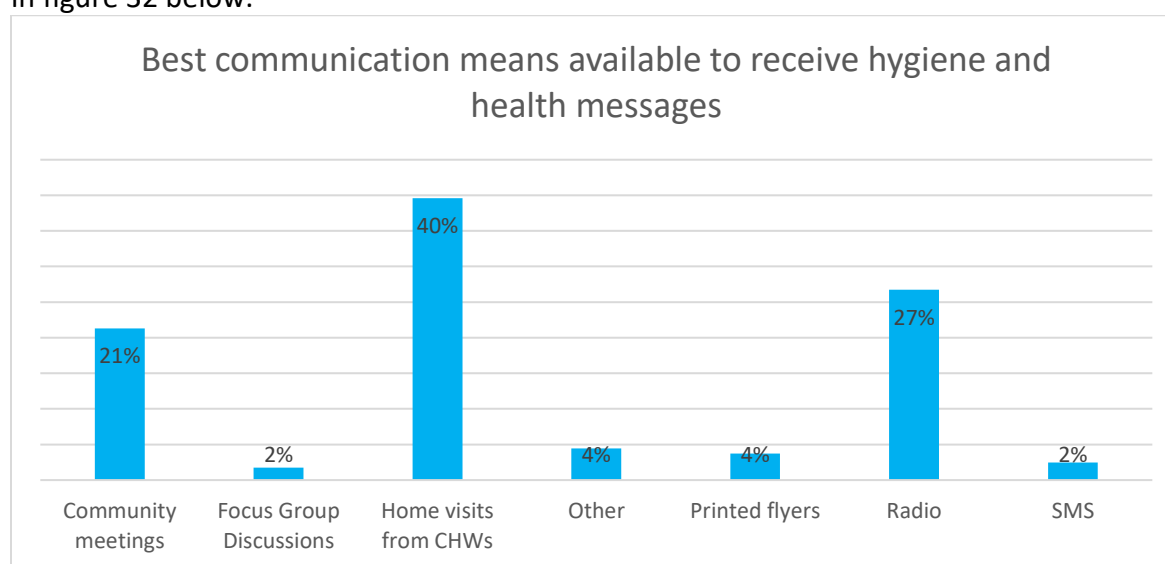


Figure 30

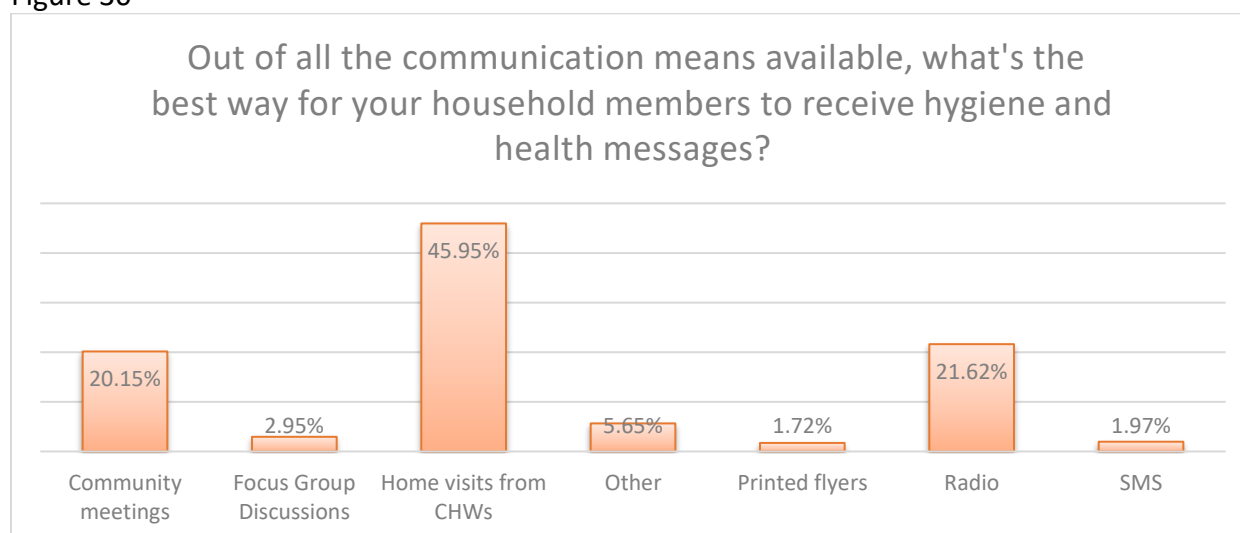


Figure 31

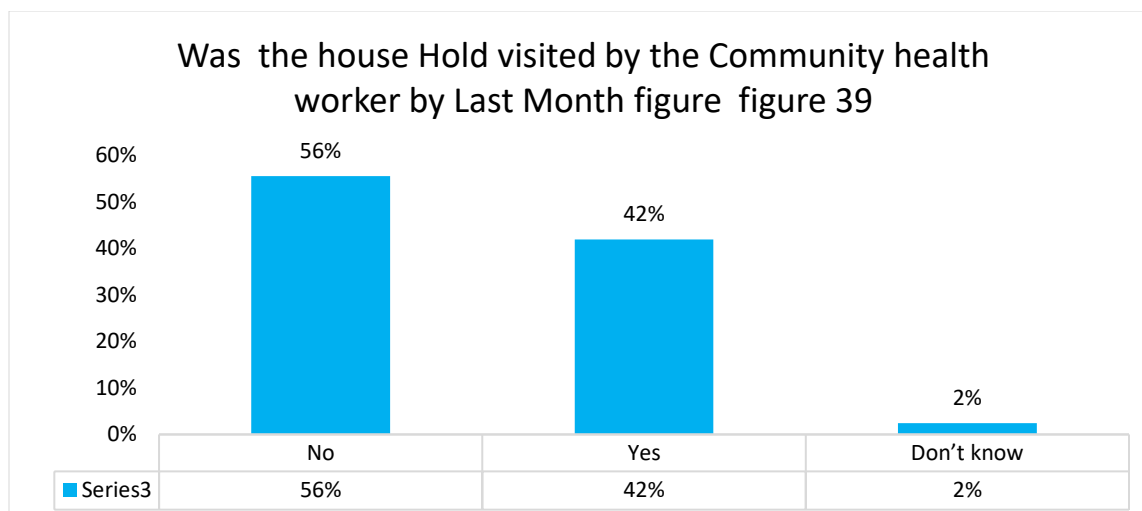


Figure 32

Knowledge of Diarrhoea prevention, and health-seeking Behaviour

From the survey, among children under 5 years was at 30% while among 5 years and above was at 13%. The household members mentioned the most common possible causes of diarrhea as drinking contaminated water (80%), eating contaminated or undercooked food (74%), flies (65%), unpleasant odor at (16%), and contact with someone sick with (19%)diarrhoea spondents also mentioned some uncommon ways such as through swimming/bathing in surface water (11%) while about (3%) of the households don't know the ways that people can get diarrhoea (8%) say others. This result means that most household members have good knowledge and understanding of health-related issues because of several health education sessions conducted by hygiene promoters/community health workers as shown in figure 33.

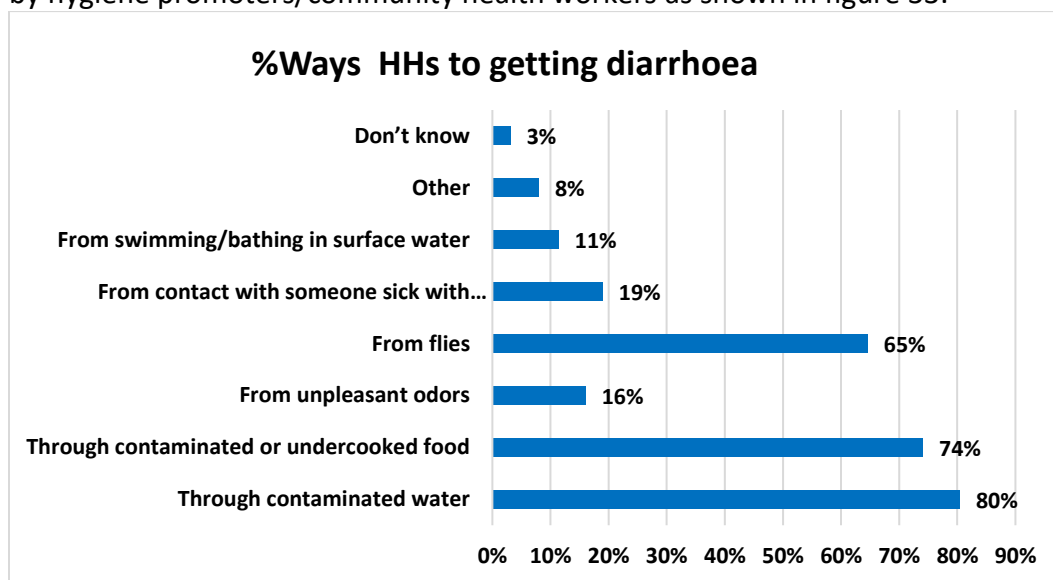
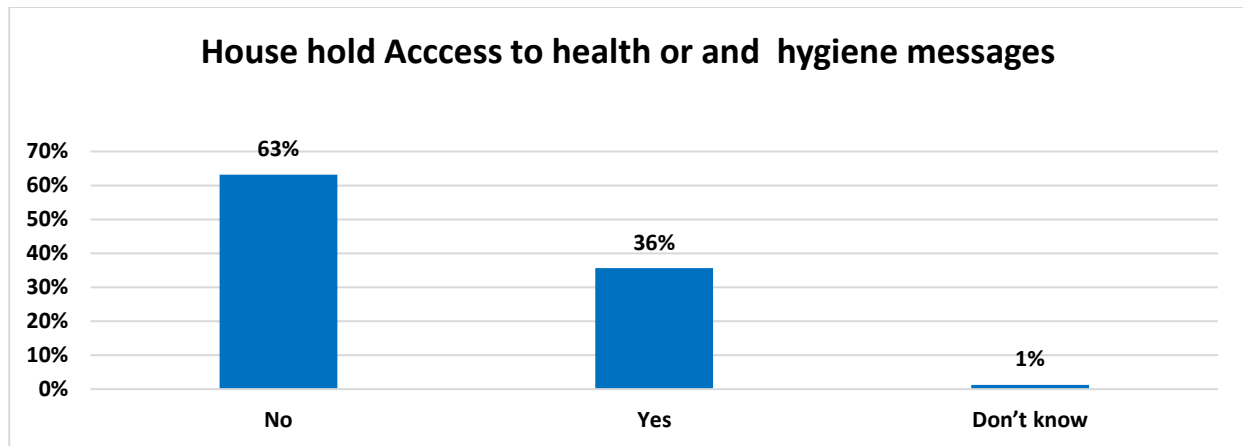


Figure 33



The ways of preventing diarrhoea at the household level

Respondents were also asked about ways in which diarrhea can be prevented as in figure 34 below. They mentioned the most common ways as washing hands with soap and water (71%), boiling or treating water or drinking clean water (77%), cooking food well (52%), cleaning cooking utensils (43%), washing fruits and vegetables at (39%), covering food (34%), and using latrine/toilet facility to defecate (32%). Other preventive measures include disposing of children's feces in the latrine (17%), storing water safely for drinking (6%), bury feces (8%), cleaning the home with bleach (19%), Store water safely (6%), Breastfeeding babies (1%) Don't know (2%), other (1%).

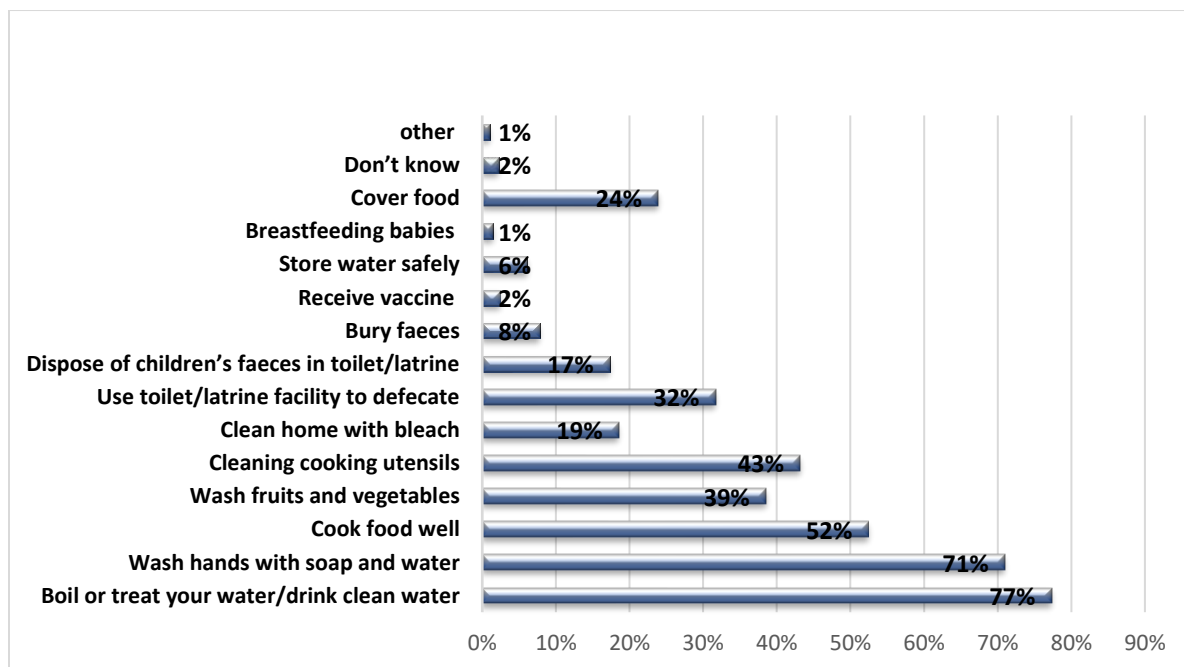


Figure 34

Menstrual hygiene management

Materials used in the last menstrual period

From the survey findings in the figure while being interviewed 53.2% gave their consent to be interviewed on the subject matter while 46.8% didn't give their consent and therefore they were not interviewed on the subject topic as shown in figure 35 below, while when reproductive age girls and women between the age of 12-48 were being interviewed on the material used during their last menstrual period the responded as followed, Most women and girls of reproductive age (67%) said they use disposable pads, (7%) said the use Re-usable pads, while (8%) said they use Re-useable Cloth, (7%) said they use Cotton and (3%) layers of underwear. 67% of the women interviewed recommended that kits should have to include Kitenge/clothes used to wrap around their waist during menstruation. This is to ensure that even if menstruation starts when they are not aware, they will not be worried about being embarrassed by leakage through their clothes. Most women expressed that this was the first time someone had talked to them about menstrual hygiene, and they were very grateful/happy with the education and information sessions provided. Many women did not know their basic anatomy and the reasons why they experience their monthly

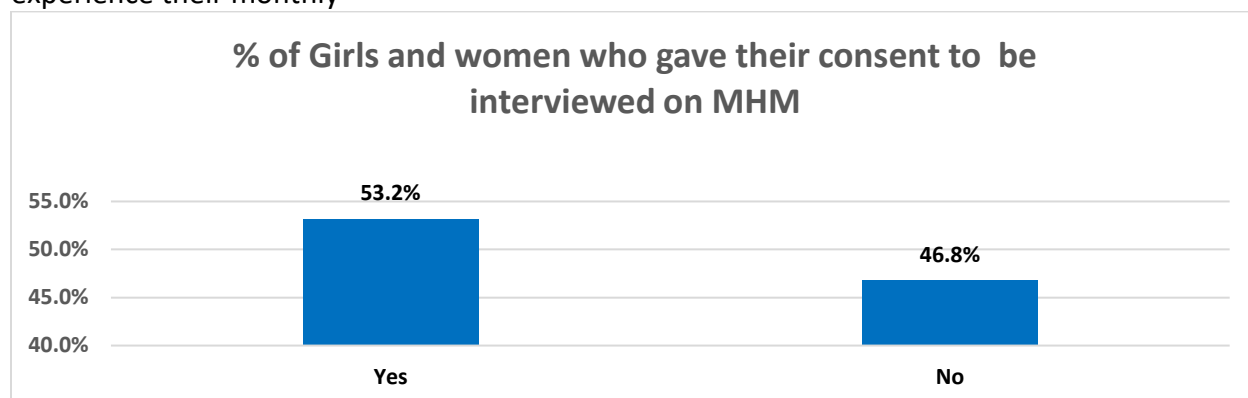


Figure 35

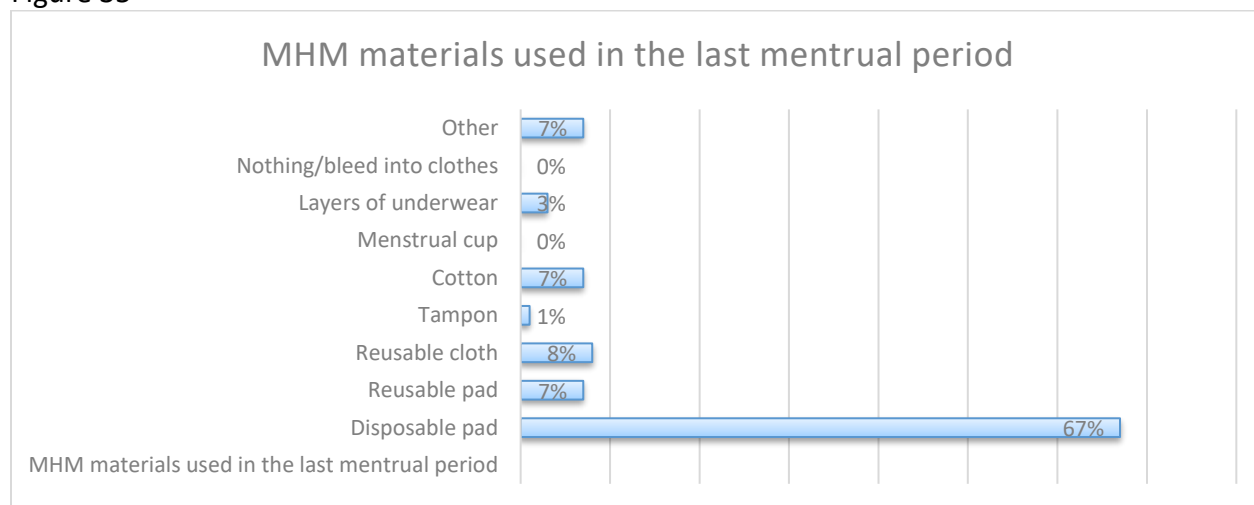


Figure 36

Where women in the households change menstrual hygiene products and Where women dispose of menstrual management products

According to the 2022 end-line survey, most women and girls of reproductive age reported that they change their menstrual hygiene products 81% said from a latrine followed by 11% who said they change theirs from home and 8% reported that in other places, This, therefore, implies that while constructing latrines there should be provision for the girls and women to have safe space to change their menstrual hygiene products as shown in figure 37, while in figure 38, the women and girls were asked where they dispose of their used up the pad and the following were their response as shown in figure 38, 85% said they dispose of them to the Latrine, 8% reported that they burn them and 2% wash and reuse them, 2% in the open, 2% others, 1% Trash.

Where do the women of the household change their menstrual hygiene management products?

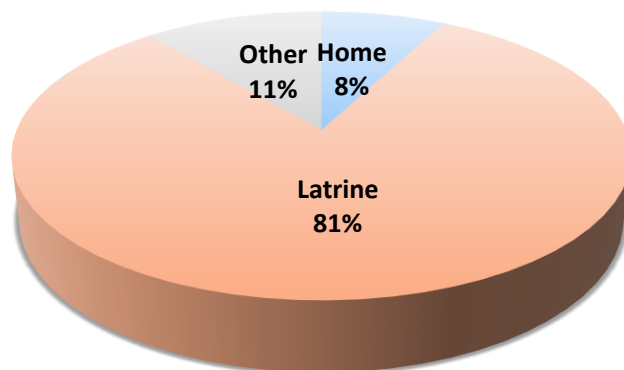


Figure 37

How do the women in this household dispose of their menstrual hygiene management products?

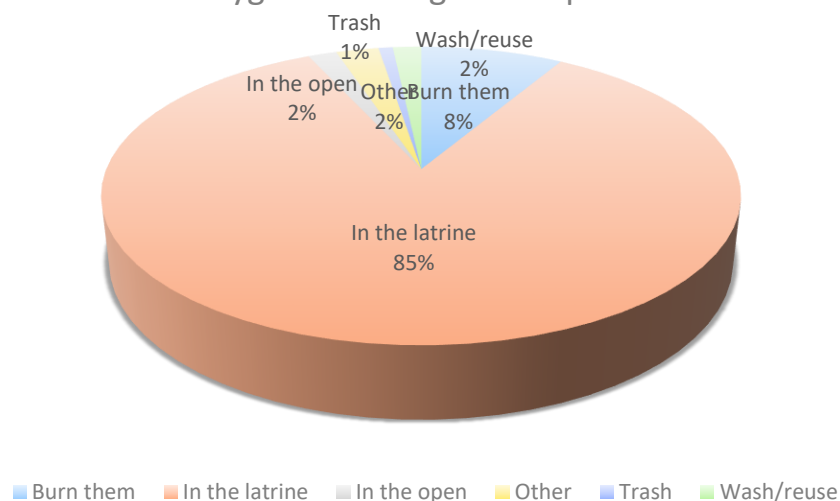


Figure 38

Menstrual hygiene management products women used before coming to the refugee settlement.

According to the 2022 end-line survey in figure 35 below, the most common Menstrual Hygiene management materials use before while interviewing the woman and girls of reproductive age they reported that(42%) were using disposable pads, (1%) reported that they were using cotton while (19%) reported that they were using re-usable clothe, (6%) were using a layer of underwear and (1%) reported they were using nothing but bleed in clothes, (1%) menstrual cup and (2%) others, while the issue of women of reproductive age bleeding in the clothes seems to be negligible it's a very critical issue which is very degrading and recommendation to restore the dignity for such women by availing them with sanitary pads, teaching them on how to make them bring a lasting solution to the girls and women of childbearing age.

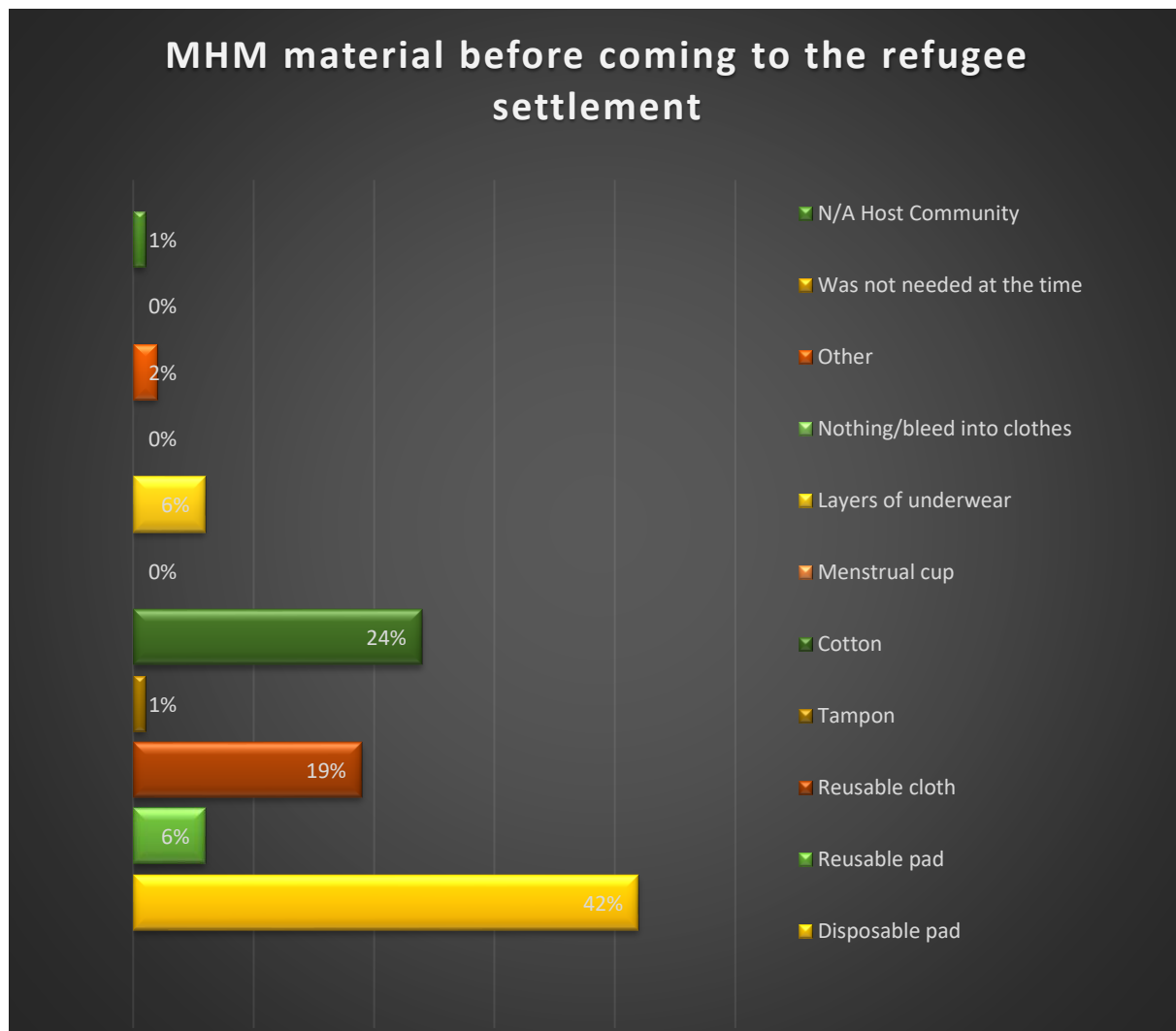


Figure 39

Level of satisfaction with the materials used for MHM

According to the 2022 end-line survey in figure 35 below, the most common Menstrual Hygiene management materials use before while interviewing the woman and girls of reproductive age reported that (52%) said No they were not satisfied while (48%) were satisfied

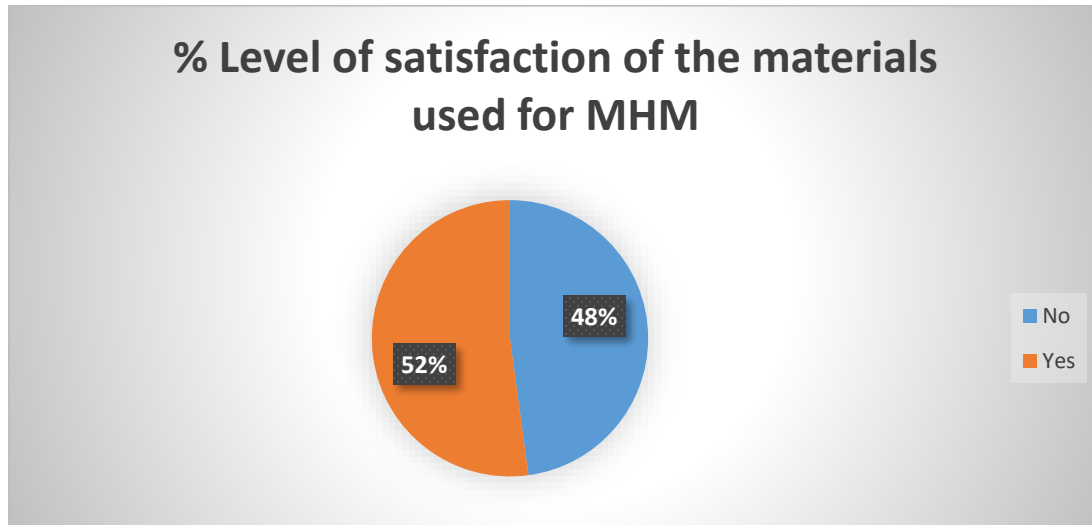


Figure 40

Limitations, challenges, and lessons learned

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 (projects) have resulted from these surveys.
- Other community members even exaggerated their condition/situation to elicit sympathy.
- To triangulate what they were told, field teams had to verify some concerns like verifying the storage containers of water, hand washing facilities, Household latrines, and bathing shelter.
- Mobile data-collecting gadgets (Phones & tablets) were not enough and some had weak batteries, some data collectors had to use their phones to collect data this was not sustainable as the cell phone batteries were weak and some gadgets kept freezing, hence delaying the whole process.
- Some respondents especially women were shy responding to menstrual hygiene questions administered in the presence of male family members.

Lessons learned

- The hiring of local and community-based data collectors who understand the local context facilitated the work and helped create community acceptance and made the.
- For Future funding for Surveys, partner organizations should invest in mobile data collection gadgets (cell phones & tablets) to ease data collection.
- Some communities have high knowledge of hygiene, but this does not translate into practice which leads to poor hygiene.
- Water quality is a high concern at household level and water gets contaminated while transporting and storing due old and wear up Jerricans

CONCLUSION

Given the above indicator findings, this KAP survey acknowledges that partners have done a tremendous job in improving the living conditions of the refugees regarding Water, hygiene, and Sanitation compared to the baseline 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 have dropped with average liters per capita at 18 l/p/d compared to 16l/p/d as at the baseline survey. A 10 liter per person protected water storage capacity is still low at 25% compared to the baseline figure of 45%. Though the survey found out that the major source of water across the settlement was public tap/standpipe (67%), the proportion of households collecting water from protected sources has greatly improved which is at 67% and this conforms to the post-emergency standard. This implies that the current water supply systems have greatly improved in the settlement. The sanitation situation in terms of open defecation is still bad since although open defecation has increased from 4 to 5 as % opposed to 4 % as of baseline and much work needs to be done to nail the final nail in the coffin of open defecation and bring it to zero and this, therefore, calls action through distributing latrine digging kits and encouraging households to dig latrines. Regarding reports from the Water supply technical working group and WMU monthly reports, some 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 a 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.

IX. RECOMMENDATIONS

Water

- There is a need for continuous maintenance and rehabilitation of water supply systems and tap stands 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 across all four zones.
- WMU as the lead WASH partner responsible for undertaking the operation and maintenance of the water supply system should ensure that the systems remain functional to guarantee the water per capita does not drop below the current and that households continue to get water from protected/treated sources. Sustainable operation and maintenance mechanisms should be put in place by setting up community management structures and livelihood options.
- Massive rehabilitation of boreholes and fixing broken taps should be prioritized to improve the water supply situation, especially 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 the post-emergency phase, partners need to encourage households to venture into sanitation marketing with a focus on cash-based interventions like livelihood projects to boost community members' demand for sanitation products including latrine construction materials as the road map to move to Gulper approach is being adopted into WASH intervention.
- 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, 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/latrines so that cases of open defecation can either disappear or reduce. More so, WMU needs to continue distributing latrine digging kits across all the zones and encourage household members to dig latrine holes.
- Sanitation activities should target the elimination of open defecation by adults and safe disposal of children's feces since the cases continue to be high in the settlement most especially in the Tika zone and households should be encouraged to construct bathing facilities since the access to these facilities.

Hygiene

- There is a 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 households. This is likely to increase the per capita consumption of water since most respondents (54.8%) didn't have water storage containers less than 10L compared to the

baseline of 34 this may be an indication that storage containers have been old and need to acquire new ones.

- Women of reproductive age 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 of sanitary pads in latrines this leads to faster filling up of the latrines.
- There is a need for intensive hygiene promotion activities across all the zones with a particular focus on the Tika zone since the situation there is not fine and more interventions to improve hygiene awareness within the community should be generated.

Messaging

- Information Education and Communication (IEC) materials on WASH, especially handwashing with soap at critical times should be intensified the study found out, the practice of handwashing is only at 66% in the Kiryandongo refugee settlement.
- There is a need for refresher training to equip the VHT as we move to the VHT approach, 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).

Menstrual Hygiene Management

- According to the 2021 end-line survey in figure 35 below, the most common Menstrual Hygiene management materials use before while interviewing the woman and girls of reproductive age reported that(69.97%) said No they were not satisfied while (29.03%) were satisfied therefore there's need to review the materials given out to the women and girls of reproductive age.

X. Annexes

Annex 1: Questionnaire



2a - Standard WASH
KAP Questionnaire.do

Annex 2: KAP Survey work plan

Field Activity plan to conduct KAP survey in Kiryandogo settlement

No.	Activity	Associated Tasks	Days	Date	Output
Stage 1: Inception/Preparatory Phase					
1	Develop survey instruments and sampling design	Review and revise the draft questionnaire and develop a detailed sample design	2 days	3-4 December 2022	KAP questionnaire and sample design (plus FGD questionnaire)
2	Review of methodology and tools	Inception Report (including questionnaire, sample design, and work plan) to be reviewed by UNHCR and WASH TWG	2 days	5-6 th 2022 December	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	6-7 December 2022	Database in Kobo collects tools to facilitate easy data collection.
Stage 2: Recruitment & Training of Enumerators and Pre-Testing					
1	Recruitment of the staff	Identification of potential candidates from the former staff Recruiting enumerators Conducting planning meeting with field team	1 day	8 December 2022	Contacted and recruited Supervisors, Data Collectors and Encoders
2	Writing of ToR for staff	Drafting of the Terms of references for 2 kinds of staff	1Days	9 December 2022	TORs for Survey Supervisors, Data Collectors
3	Signing of Contracts & Briefing		1Days	10 December 2022	Briefing on expected activities

4	Training of field staff	Orientation and training of all field staff (supervisors, and enumerators) on research objectives, questionnaires, and techniques	1Days	11 December 2022	Field staff trained (The supervisors will mentor and guide the data collectors at the field level)
5	Pre-testing of the instruments and review/adapt tools for the survey	Identification of pilot areas and conducting pre-test	1 day	13 December 2022	Revised Instruments and techniques
Stage 3: Fieldwork					
1	Data collection	Implementation of data collection exercise in agreed sampling areas	4 days/ zone	14-17December 2022	Completed baseline KAP surveys
		Field supervision and quality control. The supervisors must ensure that the Kobo collect tool's questionnaires are properly filled up and identified gaps are addressed.			Properly filled up questionnaires and gaps addressed.
2	Submission of output and review of field data	Upload all field records onto the Kobo collect server.	1 day	18 December 2022	Completed questionnaires
Stage 4: Data cleaning and Analysis					
1	Data transfer from mobile equipment to Kobo collect server	WMU M&E Officers will transfer all data from all the mobile devices into the Kobo collect database	1 Day	19 th December 2022	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.	2 days	20-21 st December 2022	Completed databank with accurate data and information.

3	Data Analysis and Interpretation	Cleaned data will be analyzed using UNHCR KAP survey analyzer, SPSS, and Excel Analyzer	10 days	4 th -13 January 2023	Analysis of baseline indicators
Stage 5: Report Making & Dissemination					
1	Develop a draft of the Final Report for comment	Develop and submit Final Report for review by UNHCR and WTWG	10days	16 nd -25 th January 2023	Draft report
2	Review of draft KAP Survey report	Review of the draft KAP survey report by UNHCR and WTWG	2days	26-27 January 2023	Feedback on the draft report
3	Integration of comments	While doing the modification of the report, send an invitation to the Consortium and relevant government agencies	1 day	27 January 2023	Comments integrated
4	Presentation of the Findings	Follow up the invitees	1 day	28 January 2023	Feedback on the findings
5	Develop Final Baseline Report	Develop and submit Final Report and dissemination materials; PowerPoint presentation and 2 page summary of findings	2 days	29-30 January 2023	Final Report submitted