

RHINO CAMP WASH KNOWLEDGE, ATTITUDES PRACTICES ENDLINE SURVEY 2022

A 2022 STUDY ON CURRENT COMMUNITY
KNOWLEDGE, ATTITUDES, AND PRACTICES ON
WATER, SANITATION, AND HYGIENE IN RHINO CAMP
REFUGEE SETTLEMENT IN MADI OKOLLO & TEREKO
DISTRICTS

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 Rhino Camp Refugee Settlement. This study comes at a crucial time in Rhino Camp. 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 Rhino Camp 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 OPM, Madi Okolo District through its various departments notably the DWO, DHO, WVI, URS Oxfam who provided the support required to carry this out additionally appreciate and thank all interviewees, RWCs and communities who facilitated our work.

Through your collective efforts, we have an end-line survey done and we thank you for this.

II. ABBREVIATIONS AND ACRONYMS

KAPs	Knowledge Attitude and Practices
DWO	District Water Officer
DHO	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.
FDG	Focus Discussion Group

III. EXECUTIVE SUMMARY

INTRODUCTION

Uganda is hosting over 1 million refugees (Uganda Refugee Response, UNCHR, and 2022) with about 131,766 (UNHCR 1st January 2022) of them settled in Rhino Camp 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. Rhino Camp 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.

METHODOLOGY

The survey mainly utilized 2 methods: A household questionnaire survey and a documentary review. The survey covered all 7 zones of the Rhino Camp 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 2,364 (only refugees and 30% host community) was interviewed using the household questionnaire survey, focus group discussions, and scientific reviews. Reviewed documents included partners' periodic updates and minutes of WASH meetings. Data was collected using Kobo data collection software and analyzed using the Standardized UNHCR WASH KAP analysis tool, Advanced excel analyser, and SPSS data analysis software.

WASH INDICATOR PARAMETERS

Parameter	Indicator
Water Supply	<p>Most of the households have access to improved water facilities. Most of the households (90%) reported public tap/standpipe as their principal source of drinking water for members in the household compared to (90%) who reported hand pump/boreholes and (7%) had piped water connection to their households, water selling Kiosk(2%) and Hand Pump/Boreholes (1%).</p> <p>Adult females (84%), adult males (4%), and children (11-18 years) (112%) are responsible to fetch water for domestic use. Most of the households (95%) reported that water sources are within a 500-meter radius a 6-minute walk distance. At least 75% of the population uses jerry cans for water collection and storage.</p> <p>The average liters of potable water/per person/per day collected at the household level is above post-emergency standard at 23 L/p/d. At the zone level, Host community is 24l/p/d Ocea stands at 23 l/p/d, Siripi at 18 l/p/d, Eden at 26 l/p/d, Tika at 19 l/p/d, Odobu at 22, Ofua at 27 l/p/d, and Omugo at 24. l/p/d. Generally, the water per capita is above the post-emergency standard of 20L/p/d.</p> <p>About (13%) of the households had at least 10 L/p protected water storage capacity while the rest (87%) had less than 10 L/p storage capacity. Most of the water points are at acceptable distances from households, the average distance to the nearest water point was 737 meters. The minimum distance to the nearest water point was 110 meters while the maximum at 1247 meters. Slightly less than half of the households (43%) clean their containers once a week while less than half of the households (45%) clean their containers every time they use them. The rest 11% clean their containers once a month and (1%) clean their container once or Never clean their containers.</p>
Water treatment	<p>Most households (79%) 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. More sensitization is required for the (21%) regarding safe water chain this therefore translated into water contamination at the household level according to the scientific bacteriological water quality analysis (60%) household level, 44% at tap stands and C15%) at the water system level. Action plans to ensure issues of water quality are including not limited to tank cleaning, sensitization on p, pipe cuts and Jerrican cleaning and need to advocat for new jerricans.</p>

Sanitation	<p>About (27%) reported that children under 5 living in households usually defecate in the open. Meanwhile, (49%) reported that children under 5 years are always introduced to the household latrine (this applied to only children who can walk and squat), (14%) use plastic pot, and (7%) use communal latrine for their children, (3%) use plastic bags and (2%) use others. For children under-5 who do not use a latrine, all the households collect and dispose of their faeces in the latrine.</p> <p>A very few adult household members (10%) defecate in the open, especially at night. They gave a reason of no latrine in the household (67%), latrine too far (13%), and it is too dark at night (20%). Most of the households (90%) use a single household facility, 10% have shared facilities used by several households. The majority of the households (72%) have a designated shower/bathing facility with exception of only (26%) of the household can't observe the (2%).</p>
Waste management	<p>Most households (58%) have access to solid waste disposal facilities. Most households (58%) dispose of domestic waste in the household pit. With (20%) in designated open area, (14%) at the undesignated open area, (1%) bury it, (1%) dispose of in the communal and (5%) burn it. It was observed that (74%) of the households had courtyard with exception of only (26%) of the household.</p>
Hygiene	<p>The key times when people practice handwashing with soap include before eating (95%), after defecation (92%), and before cooking/meal preparation (75%). Other important key times on handwashing with soap registered very low such as before breastfeeding (38%), after handling baby faeces or diapers (22%), and before feeding children (29%), Other (2%) and don't know or no response (1%) .</p> <p>Handwashing with soap and water is widely practiced as according to the 59% of the respondents, though handwashing with water only is practiced by 81%, and in the absence of soap 41% of the respondents use ash for proper handwashing. The main reasons why people do not wash hands with soap are the inability to afford soap (11%), Soap already used up (79%), and other reasons (10%).</p> <p>The observation from the survey also revealed that (32.81%) of households who had hand-washing facilities did not have soap placed next to it while (67.19%) had soap at the handwashing station. Furthermore, (20%) of households did not have water in the hand-washing device.</p>
Health and hygiene messages	<p>Less than half (46%) of the surveyed communities have access to health and hygiene messages because more than half have access to the community health and hygiene messages. Messages vary and the most common ones include handwashing with soap, use of mosquito nets,</p>

	<p>latrine use, cleaning and covering water containers, covering food, and cleanliness around water points.</p> <p>The most preferred channels for receiving hygiene messages are home visits (59%), community meetings (23%), radio (14%), FGD(2%), and printed flyers each at (2%), (1%) others and (1%) SMS.</p>
Diarrhea prevalence, knowledge, and health-seeking behavior	<p>Diarrheal cases were reported by (21%) of the surveyed households especially among children less than 5 years while for 5 years and above it was reported at (10%)</p> <p>Respondents believe that the most common causes of diarrhoea include transmission by drinking dirty water (93%), eating dirty or undercooked food (90%), and through flies (77%).</p> <p>They believe that diarrhoea can be prevented through, washing hands with soap and water (78%), cooking food well (82%), boiling or treating water/ drinking clean water (73%), cleaning eating utensils (50%), covering food properly (17%), washing fruits and vegetables before eating (45%) and using toilet/latrine facility to defecate (41%) , Dispose children’s faeces in the toilet/latrines(26%), water safely (17%), Bury Faeces, (16%)Clean home with bleach(12%) ,Receive vaccine (6%) and Breastfeed babies(4%) among other measures.</p>
Diarrhoea prevalence, knowledge, and health-seeking behavior	<p>Diarrhoea cases were reported by (4%) of the surveyed households especially among children less than 5 years while for 5 years and above it was reported at (3%)</p> <p>Respondents believe that the most common causes of diarrhoea include transmission by drinking dirty water (76%), eating dirty or undercooked food (80%), and through flies (69%).</p> <p>They believe that diarrhoea can be prevented through, washing hands with soap and water (68.9%), cooking food well (72.25%), cleaning eating utensils (46.43%), covering food properly (30.77%), washing fruits and vegetables before eating (40.93%) and using toilet/latrine facility to defecate (12.9%), Dispose of children’s faeces in toilet/latrine (12.91%), Bury faeces (10.71%), store water safely (13.46%), clean home with bleach (13.19) among other measures.</p>
Menstrual Hygiene management	<p>According to the 2022 end-line survey,(72%) of women of production age were satisfied with the material and 28% were not Satisfied while they were asked about the most common Menstrual Hygiene management materials used before they came to the settlement, the woman and girls of reproductive age reported that(50%) were using disposable pads, (3%) reported that they were using cotton while, (20%) reported that they were using re-usable clothe and (2%) were using a layer of underwear and (1%)</p>

reported they were using a menstrual cup, and 2% were using nothing and bleed in clothes, while the issue of women of reproductive unsafe menstrual management 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.

While the women and girls of reproductive age were asked where they dispose of their used menstrual Products, the highest respondent said (74%) they dispose of their used-up products in the latrine, this is followed by (11%) burning they've used up products and (14%) wash and reused them and (1%) trash them.

And when women and girls of reproductive age were asked where they change their menstrual hygiene products from, (83%)of the productive age girls and women said latrine, followed by (16%) who said they change them from home and (1)% 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.

IV. BACKGROUND AND CONTEXT

INTRODUCTION

Uganda is hosting over 1 million refugees (Uganda Refugee Response, UNHCR, and January 2022) with about 131,766 (UNHCR January 2022) of them settled in Rhino Camp 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.

Rhino Camp 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 1st January 2022, Uganda hosted an estimated 1,381,122 refugees spread over 30 refugee settlements across 12 districts. The main cause for the refugee influx in Rhino Camp 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 September 2020, there were 131,766 refugees settled in the Rhino camp 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. There were over 50,000 new refugee arrivals in 2020 and continuous influx in 2021 and 2022 and so on.

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 Rhino Camp 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.

V. SURVEY OBJECTIVES

Main objective is to:

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 Rhino Camp refugee settlement.

Specific objectives are to:

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

VI. METHODOLOGY

Survey area and sample frame

The KAP was conducted in Rhino Camp settlement particularly in the 7 zones in Arua 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 Rhino Camp 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 7 zones. 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 zones. The number of respondents was then divided among the zones. 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.

Sample size

ZONES	POPULATION SIZE(HH)	SAMPLE SIZE(HH)
Zone 1	2,685	35
Zone 2	3,732	48
Zone 3	1,003	13
Zone 4	2,420	31
Zone 5	2,193	28
Zone 6	6,665	87
Zone 7	12,250	159
Host Community	9284	121
Total	40,232	522.6

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 the Ocea zone. 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.

SUMMARY OF KEY INDICATOR PARAMETERS

Parameter	Indicator	Questionnaire Section
Water Supply	Average liters 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
Solid Waste management	% HHs with access to a solid waste disposal facility	
Health and hygiene messages	% HHs with access to Health and Hygiene messages	
Diarrhoea prevalence, knowledge, and health-seeking behaviour	% HHs with access to Diarrhoea prevalence, knowledge, and health-seeking behaviour	
Menstrual Hygiene Management	% level of satisfaction of Reproductive age women and girls with MHM material used	Section F

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 and 3 Research Assistants were recruited from the zones 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 2 days 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. 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 7 zones. 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 (chi² 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.

VII. KEY RESULTS AND FINDING

KEY INDICATOR PARAMETER SUMMERY

Parameter	Indicator	Host	Ocean	Siripi	Eden	Tika	Odobu	Of	Omugo	Baseline 2021	End line 2022
Water Quantity	Average liters of potable water/per person/per day collected at HH level	24	23	18	26	19	22	27	25	17	23
	% HHs with at least 10 L/p protected water storage capacity	10%	8%	9%	19%	14%	11%	14%	15%	14%	13%
Water Access	Maximum distance [m] from household to potable water collection point	624	326	1151	1247	838	595	110	1002	473	737
Water Quality	% HHs collecting drinking water from protected/treated sources	90%	95%	98%	85%	76%	97%	100%	81%	100%	90%
Sanitation	% HHs with family latrine/toilet	81%	95%	98%	70%	70%	74%	91%	79%	95%	82%
	% HHs reporting defecating in a toilet/latrine	86%	78%	94%	96%	72%	86%	96%	94%	96%	88%
	% HHs practicing open defecation. **Includes	10%	8%	4%	4%	28%	14%	4%	6%	8%	10%

	defecating in the bush at night.										
	% HHs having access to a bathing facility	69%	50%	82%	93%	61%	80%	54%	86%	80%	72%
Hygiene	% HHs with access to soap	30.5 %	22.5 %	49%	18.5%	30.4 %	28.6 %	60.7 %	22.2%	81%	32.8%
	% HHs with access to a specific hand-washing device	34%	36%	58%	35%	26%	45%	47%	41%	52%	41%
	% Respondents knowing at least 3 critical moments when to wash hands	87	68%	89%	95%	88%	89%	93%	93%	99.5%	87%
Solid Waste	% HHs with access to a solid waste disposal facility	70%	50%	54%	47%	54%	59%	72%	58%	74.8%	58%
Diarrhoea prevalence, knowledge, and health-seeking behaviour	% HHs with access to Health and Hygiene messages	44%	50%	35%	52%	65%	30%	46%	30	65%	
Menstrual Hygiene Management	% HHs with access to Diarrhoea prevalence, knowledge, and health-seeking behaviour										

WATER SUPPLY

The main source of drinking water

According to the survey findings as presented in figure 1 above, most of the households (90%) across all the reported public tap/standpipe as their main source of drinking water for members in the household as compared to only (1%) who reported handpumps/boreholes and only (7%) who reported piped connection to the household. At the zonal level, Ocea zone reported the highest majority of households who get their main drinking water from public tap/standpipe, Host Community (90%) Ocea Zone 1 (95%), Siripi Zone 2 (98%), and Eden zone 3 (85%), Ofua Zone 6 (100%), Tika Zone 4 (76%), Omugo Zone 7(81%) and Odoibu Zone 5 (97) respectively. The survey revealed a drop in public tap/standpipe water supply by 6% from baseline. This is a result of the breakdown of Odoibu water system break down zone 5.

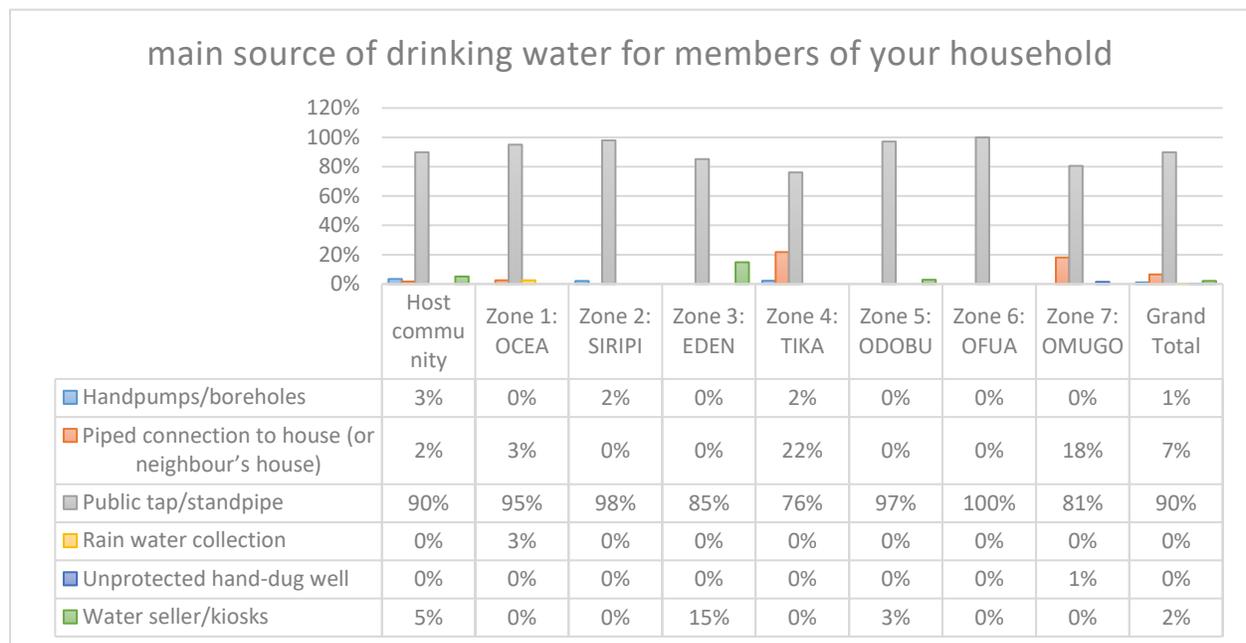


Figure1

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 figure 2 below revealed that, less than half (35%) of the households across all zones use handpump/borehole as their main alternative water source at (35%) while about 5% of the households did not collect water from any other source apart from their main source of water which is public tap/standpipe. Piped connection to the household was reported at the neighbouring host community (8%) Tika (57%) and Ofua Zone6 (8%), Omugo Zone 7(3%),Ocea Zone 1(7) and Odoibu zone 5(3%) as shown in figure 2 below.

Second most used source of drinking water for members of your household

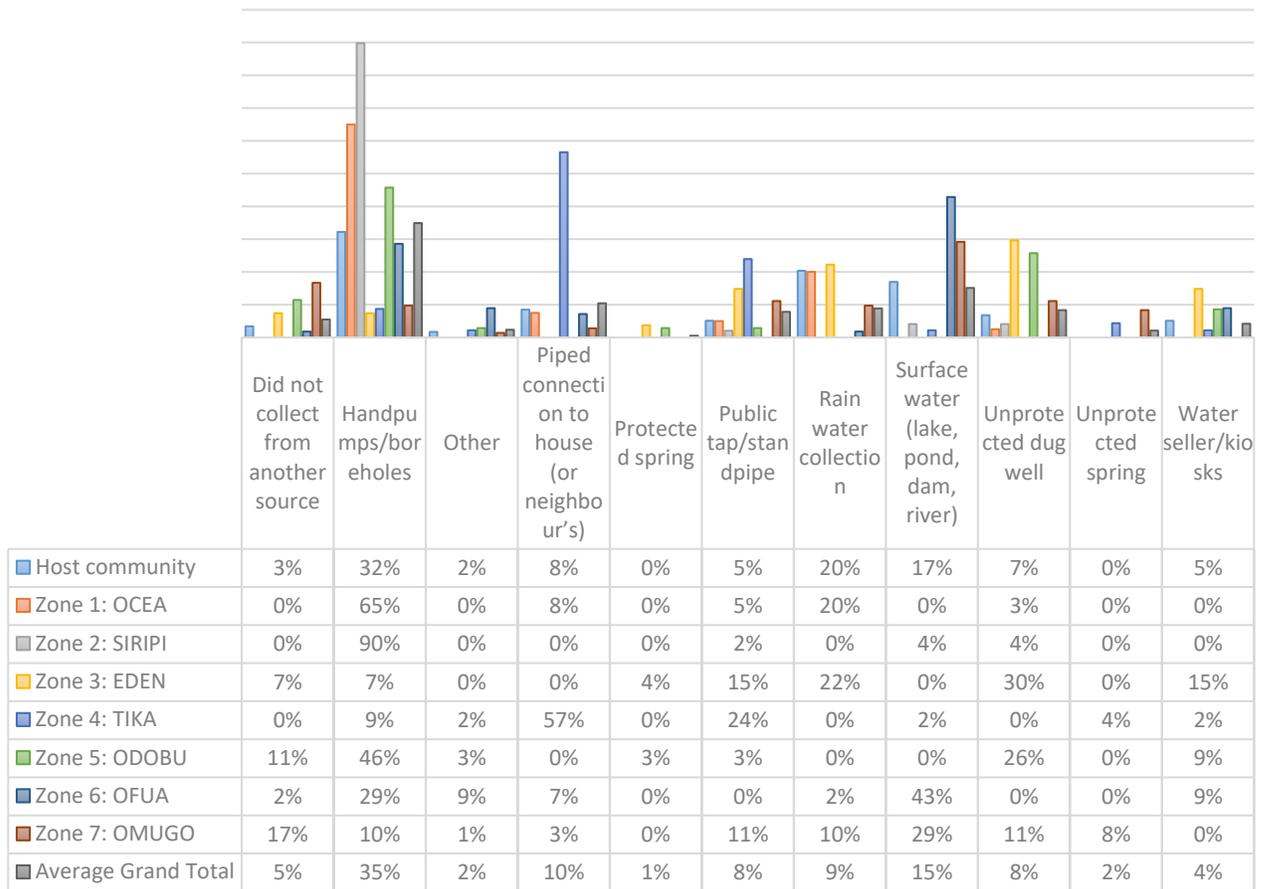


Figure2

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 above. The results revealed that over half of households (40.8%) use public tap/standpipe for other activities in the household and this is followed by about (24%) of the households who use unprotected hand-dug well for other domestic activities while others use Surface water (lake, pond, dam, river) (16.2%), handpump/borehole (8%), unprotected spring (3.5%) while piped connection to the household was reported at 2% as seen in figure 3 below.

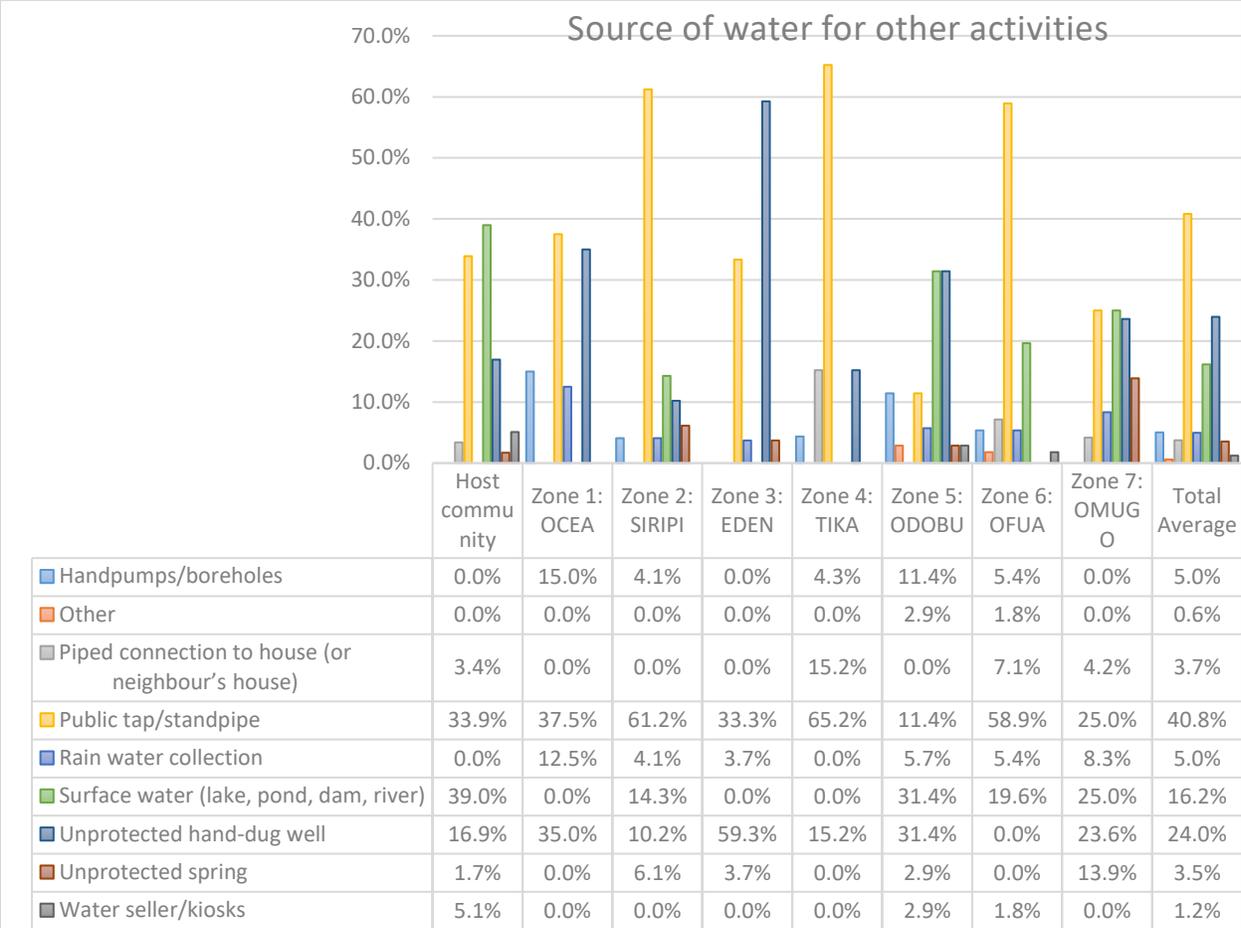


Figure3

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 23 compared to 24 at baseline. The findings from the survey revealed at zone level that, Host Community (24l/p/d) Ocea Zone1 (23 l/p/d, Siripi zone2 (18l/p/d), Eden Zone3 (26 l/p/d) each while Tika Zone4 (19l/p/d), Ofua zone6 (27 l/p/d) , Omugo Zone7 (25l/p/d), and reported. The per capita across all the zones is above the emergency standard of 20 l/p/d, this could be because of a routine repair of one of water systems as shown in figure 4 below.

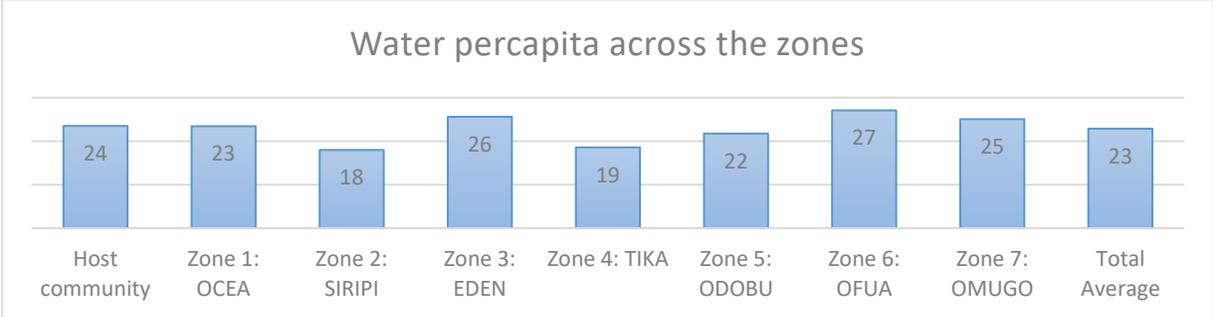


Figure4

Protected water storage container.

According to findings as in figure 5 below, the percentage of households with at least 10 liters/per person of protected water storage capacity across all the zones stands at 14.3% compared to the baseline figure of 13%. The survey also revealed that Host community (10%), Siripi (9%), Omugo (15%), Ocea (8%), Odobu (11%), Eden (19%) and Tika (14%), while Ofua, had (14). This was very low as compared to the post-emergency standard of over above 200Ltr of the households there is a drop from 37%- to 13% 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.

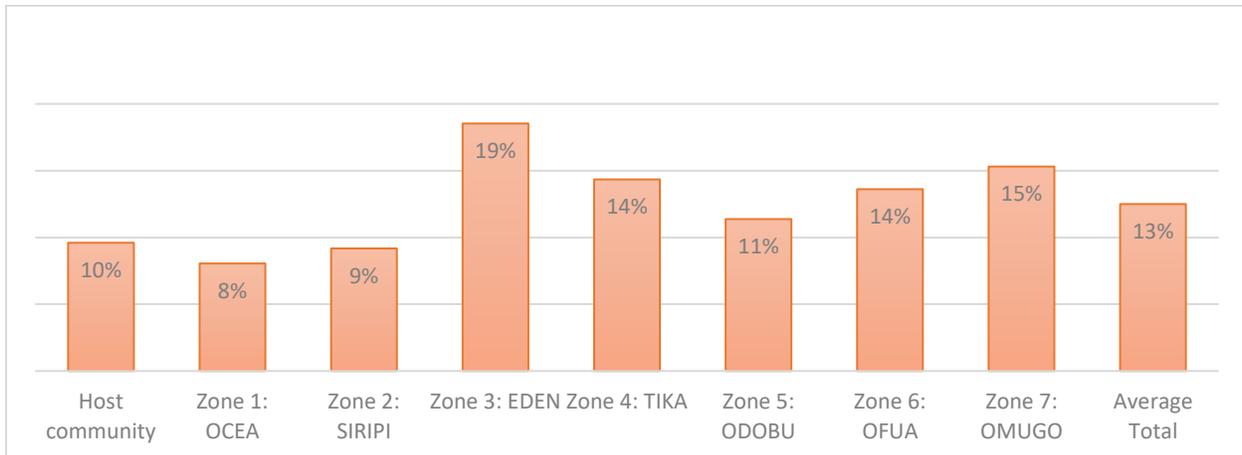
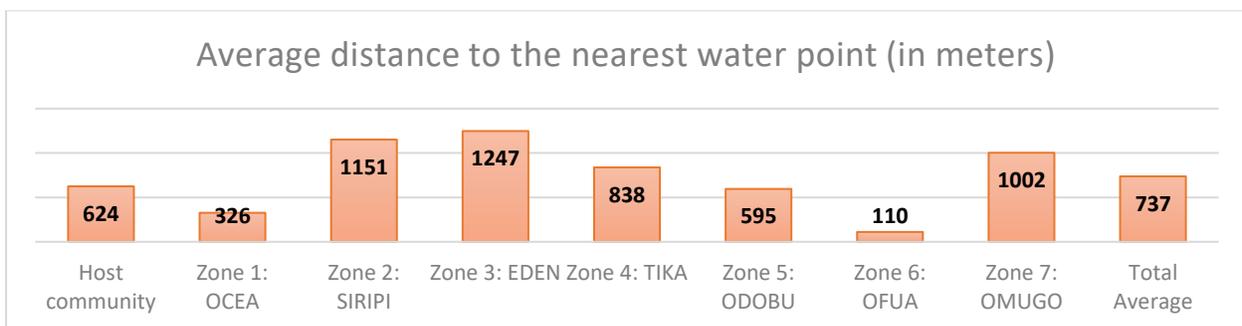


Figure 5

Distance to the nearest water point

From the survey findings, the overall average walking distance by household members to the nearest water point was 737 meters compared to the baseline figure of 337 meters. Further findings from the survey revealed that, in the settlement, most households walk a maximum distance of about 1247 meters from their households to portable water collection point especially when the nearest source is broken down with the minimum distance as short as 110 meters. The survey revealed that, at Host Community(624Meters), Siripi Zone 2(1151Meters), Edenzone3(1247Meters), Ocea Zone1(326Meters),Tika Zone4(838Meters),Ofua zone6(110Meters), Odobu zone5 (595Meters) and Omugo zone7 (1002Meters) most households walk as far as over 737 meters to get water with households from Eden walking 493 meters.



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 (68%) of the households reported that they collect enough water for their household needs compared to (32%) at baseline with the an exception of (31%) of the households who do not 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 figure7 below, most households reported that they do not have enough storage containers for collecting water (41%); this was followed by households who reported water shortages (34%). The rest of the households gave other reasons such as, waiting time at water point being too long (10%), water being too far (6%), Cant afford to buy enough(3%),and limitation of the volume of water that can be collected at the water point at (6%) as shown in figure below in figure 6 and 7.

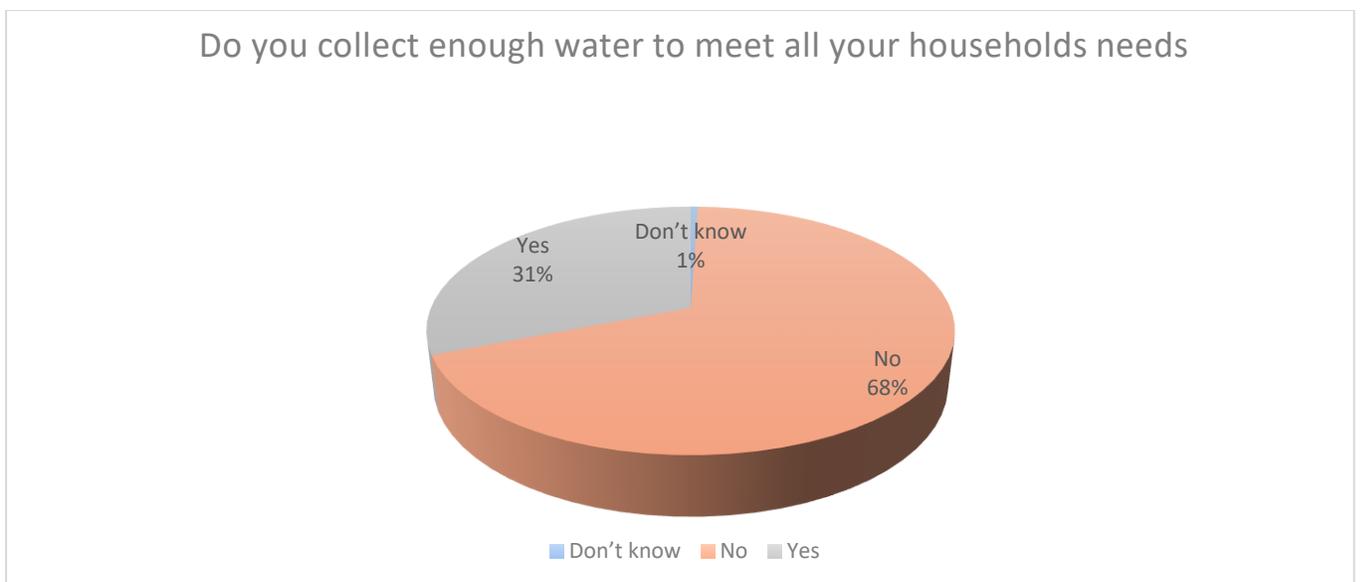


Figure6

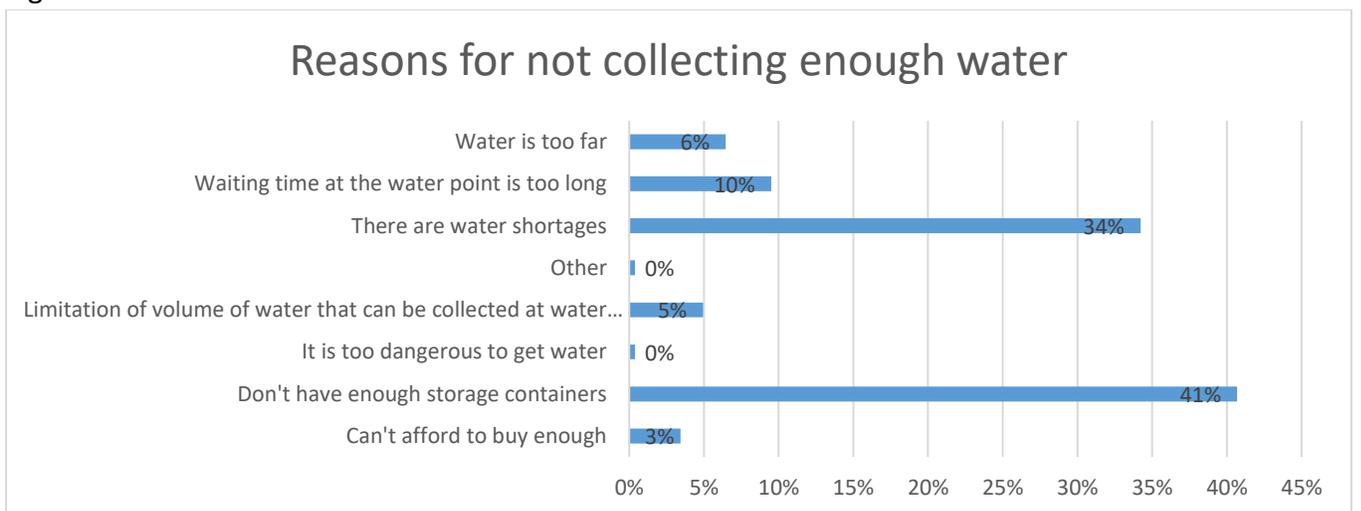


Figure 7

Persons who collect water for the household

The survey findings in figure 8 show the member of the household who usually collects water for the households, most of the households (84%) reported that it is adult females who usually collect water for the household, followed by children aged 11-18 years at (12%) and adult male at 3% Adult men.

Persons who collect water for house.

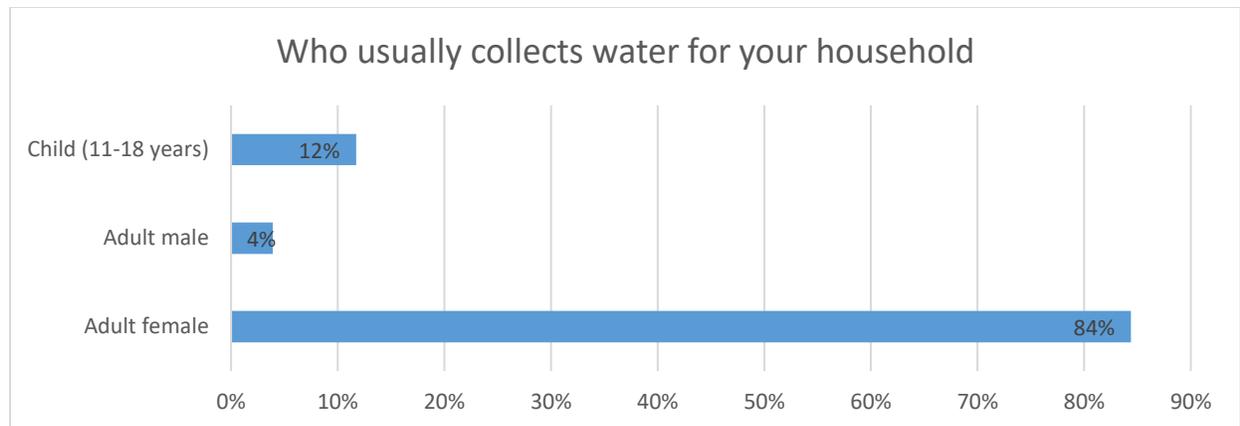


Figure 8

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 that less than half of the households (43%) clean their containers at least once a week, followed by (45%) of the households who clean their containers every time they use them. The (11%) clean their containers once a month and (1%) Never clean or clean less than once in a year. On how households clean their drinking water containers, close to half of the households (40%) reported that they wash their containers using rocks/sand while shaking, less than half of the households (38%) wash their containers with a specific product like omo detergent, soap powder, etc. while about (8%) either wash their containers with a piece of tissue/sponge or (14%) just rinse them with water respectively. The respondents were also tested on safe water chain at the household level, the result revealed that the majority (90%) of the households were seen to observe safe water chain at their households while the rest (10%) did not observe safe water chain as shown in figure 9 and 10.

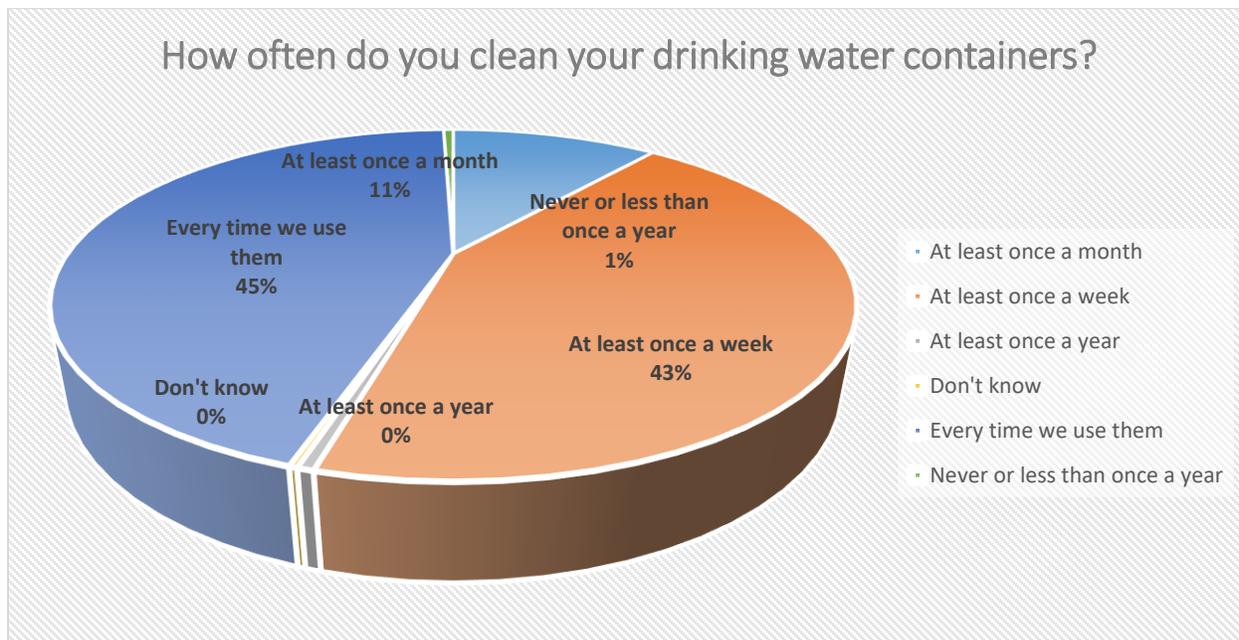


Figure9

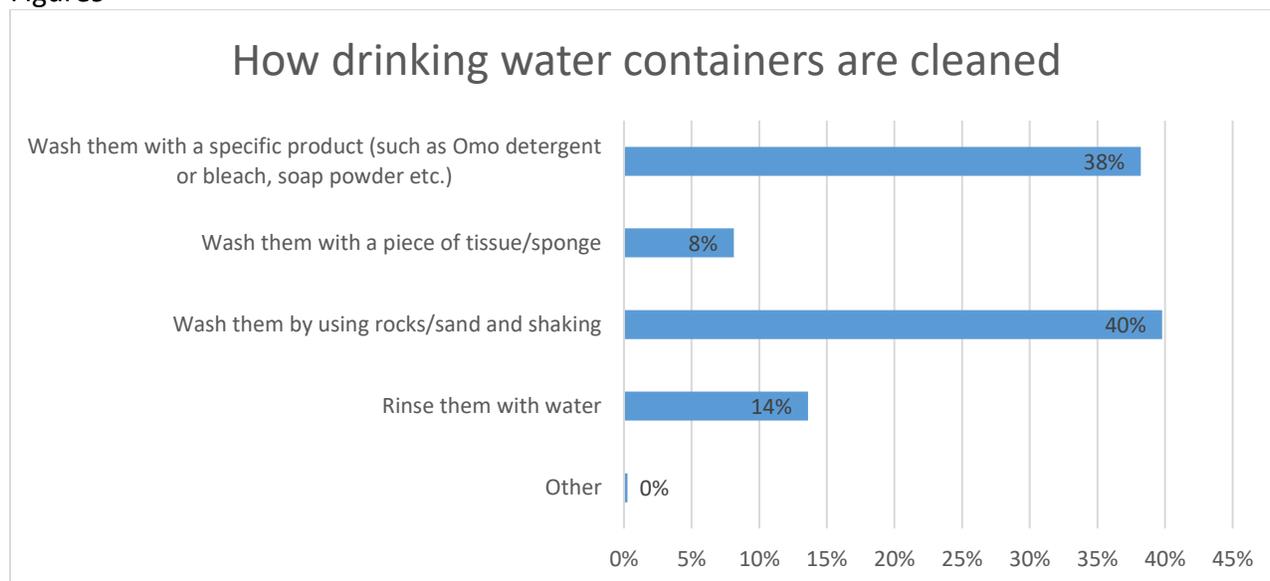


Figure10

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 11) is at 77.8% compared to the baseline figure of only 87% while (22.2%) reported that they did not have soap. Mos households (64%) reported that by the time of the survey they had run out of soap while (30%) of households could not afford soap and (5%) soap is unavailable and (1%) gave a reason of soap is unnecessary . **Figure 13** Further analysis revealed that most of the households (55%) purchase their soap while (41%) get their soap through distribution by NGOs , Gifted (2%) and were gifted soap and (2%) were traded and other sources. Furthermore, (**figure 13**) Less slightly than a half of the households (49%) revealed that they would use Ash in absence of soap. 41%

would use water only, 7% use sand and the rest 3% and don't use anything and 1% use others when there is no soap at the household.

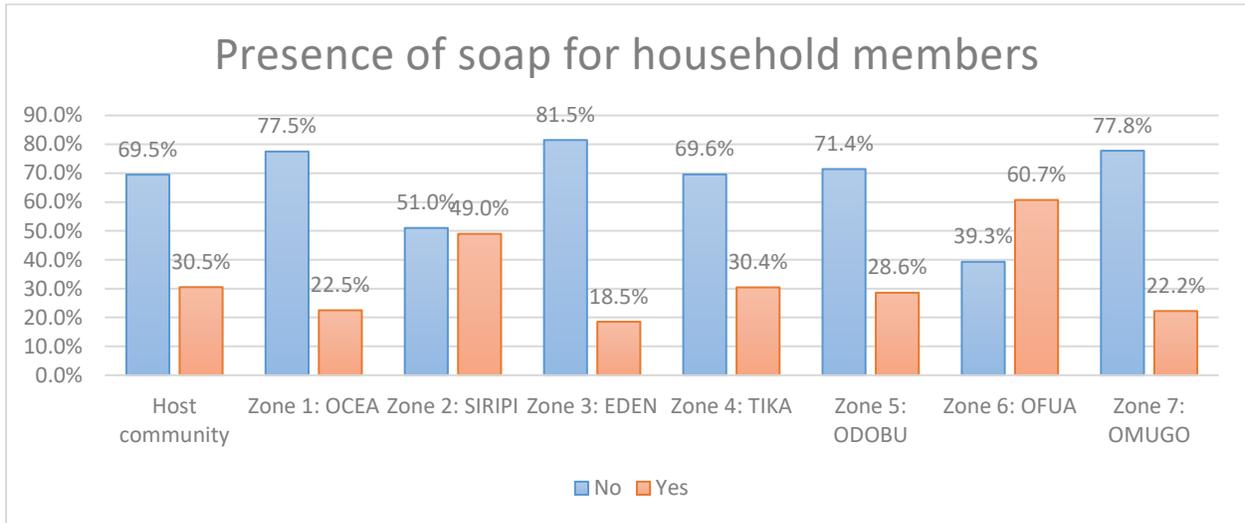


Figure11

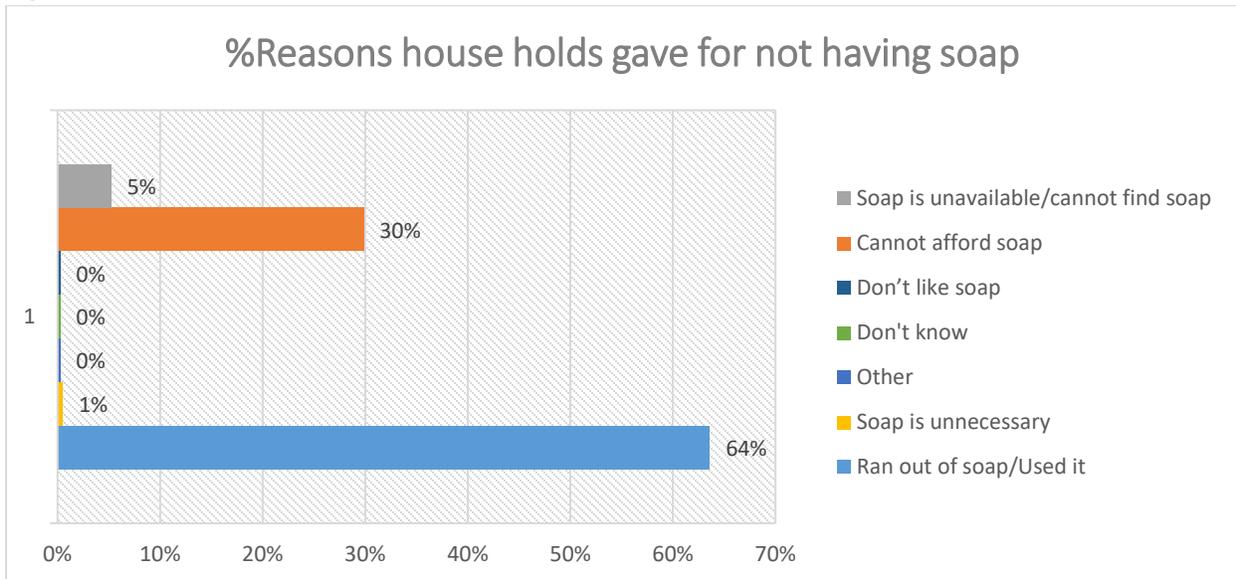


Figure12

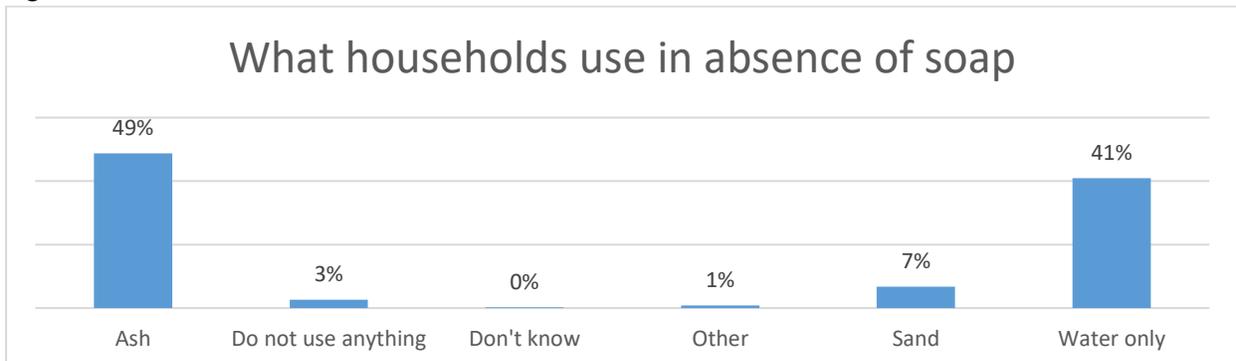


Figure 13

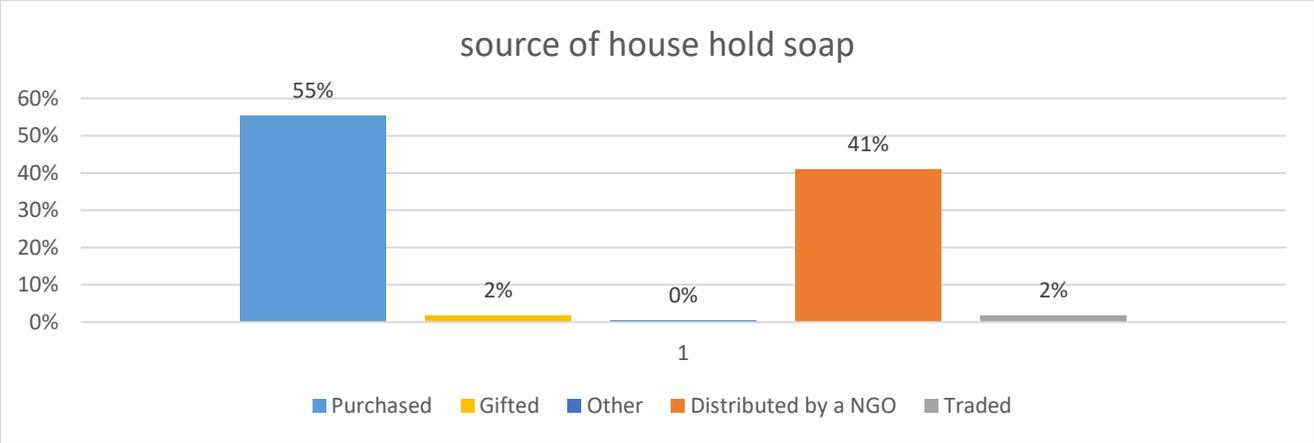


Figure 14

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 15 above that most household members stated the 3 moments as before eating (95%), after defecation (92%), and before cooking/meal preparation (75%). The rest of the households also identified another set of 3 critical moments of handwashing as; After handling a child’s stool (21%), before breastfeeding (38%), before feeding children (29%), (2%) others and (1%) Don’t know /no response.

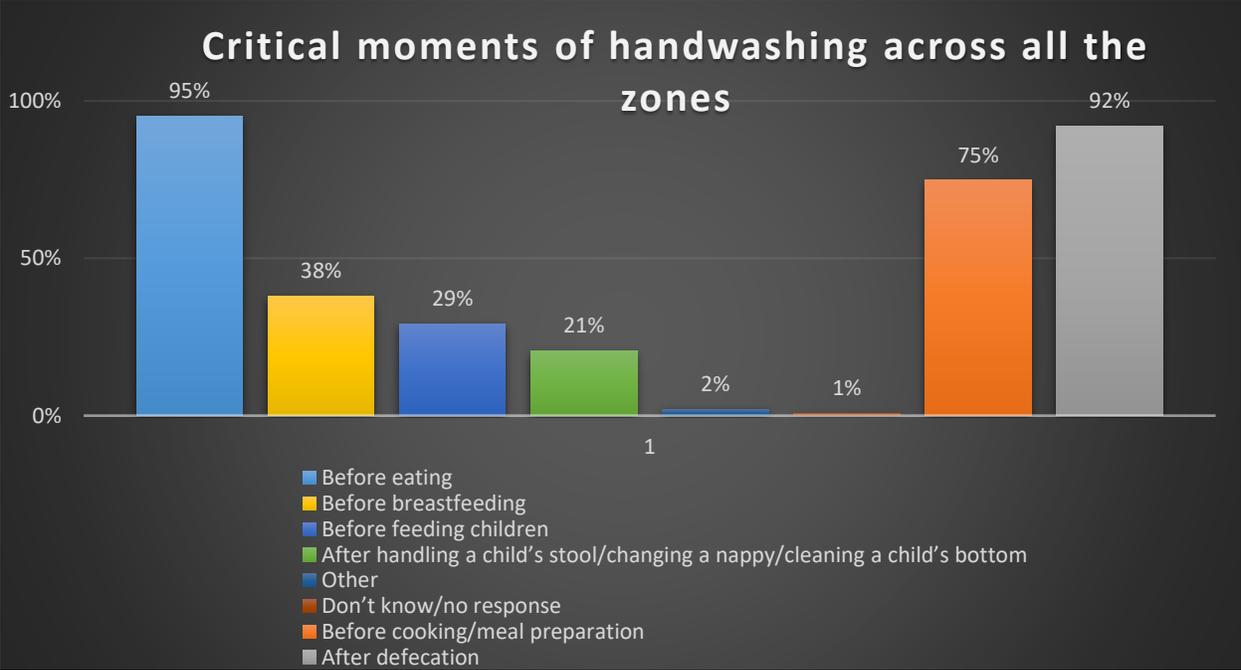


Figure15

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, 41% of the household had handwashing device/station in their households compared to (36) of the household's reporting presence of handwashing facility at baseline while the rest (59%) did not have handwashing facility in their household. From the observations carried out, 77% of households with handwashing devices had water in them and the rest 23% 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 77 of households who had handwashing facilities had soap placed next to it while 41% had no soap at the handwashing station.

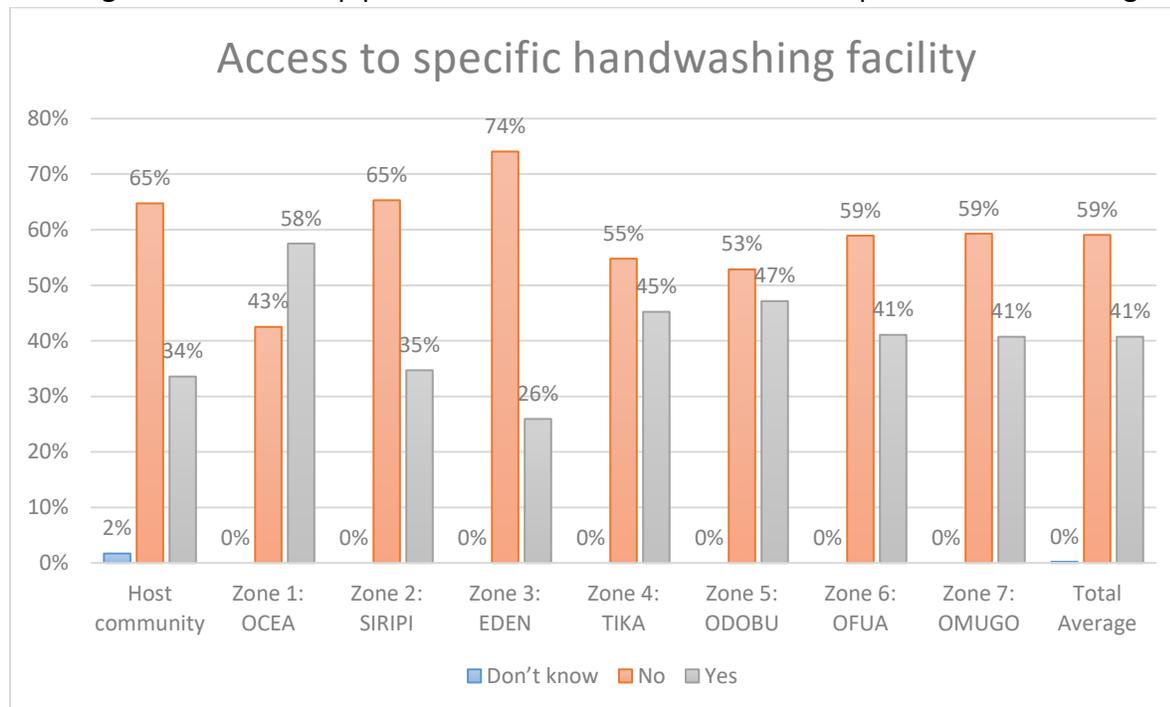


Figure 16

Sanitation

Where household members excluding children under 5 defecate

According to the survey findings as in figure 17, most household members (82%) defecate in the household latrine (this excludes children under 5 years of age) compared to 96% of the households at baseline. Only a few (1%) use communal latrine (new arrivals were considered to use communal latrine) while about (7%) practice open defecation in places where they stay. The survey also revealed that the percentage of households with access to latrine/toilet stands at 82%.

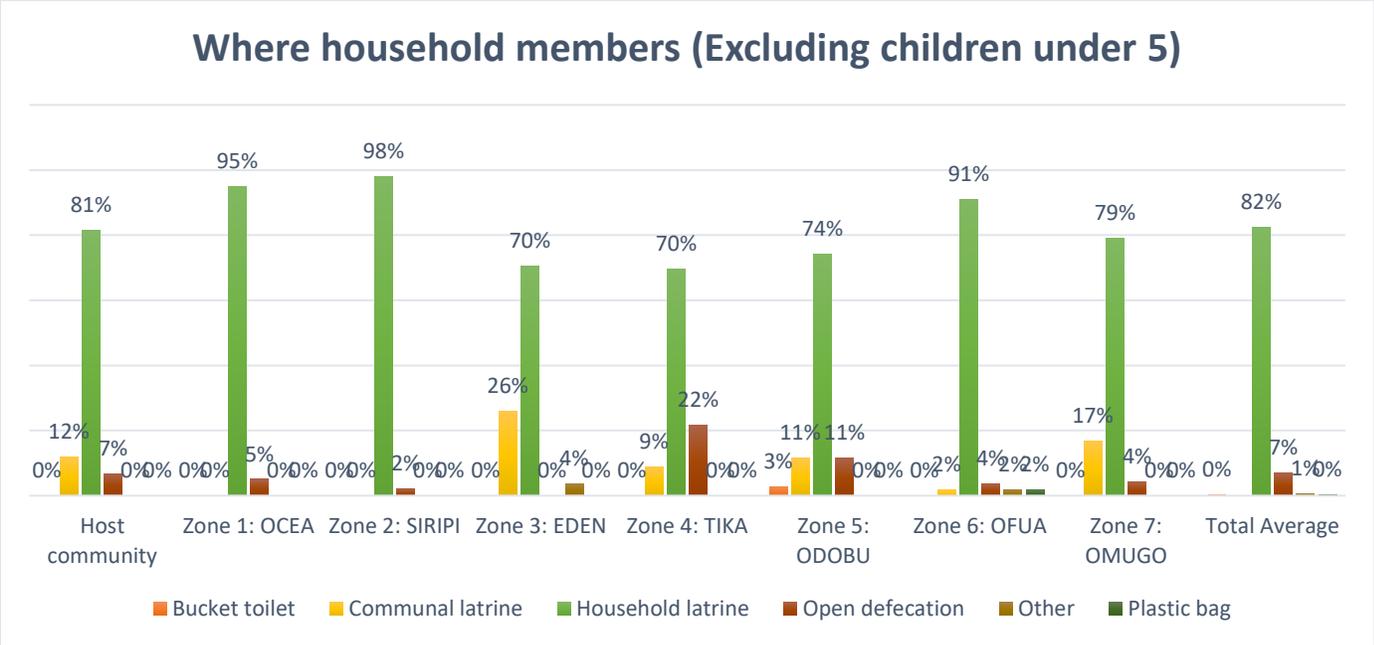


Figure 18

Where children under 5 living in the household defecate

From the findings as in figure 18 below, close to half of the households 56% reported that, the children under 5 years who have started walking always defecate in the household latrine while about 23% of the households reported that children under 5 years practice open defecation and about 14% of the households use plastic pots for the children under 5 years to defecate, while the rest 3% take their children to the nearby communal latrine to defecate and 1% use plastic bags. 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.

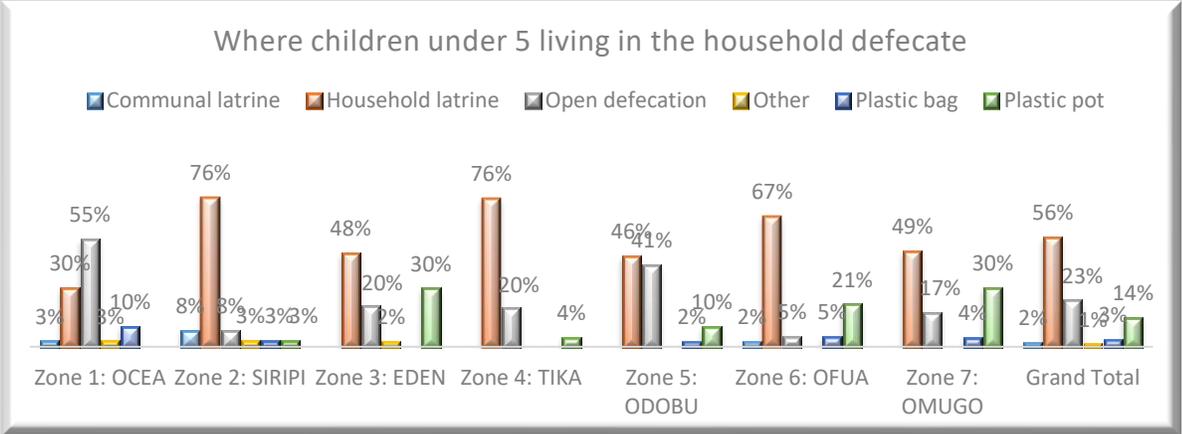


Figure 19

The practice and reasons for open defecation among adult members of the household

The survey also revealed as, in figure 19 and 20 below that, about 10% of adult members in the household defecate in the open especially at night compared to 4% at baseline with the highest being Eden which is a receiving sight for the new arrivals and they gave a reason for no latrine in the household (55%) compare to baseline (40%), the reason for open defecation latrine is too far (14%) and too dark at night (20%), 8% others , (2%) Too tired and (2%) Don't know /Not sure.

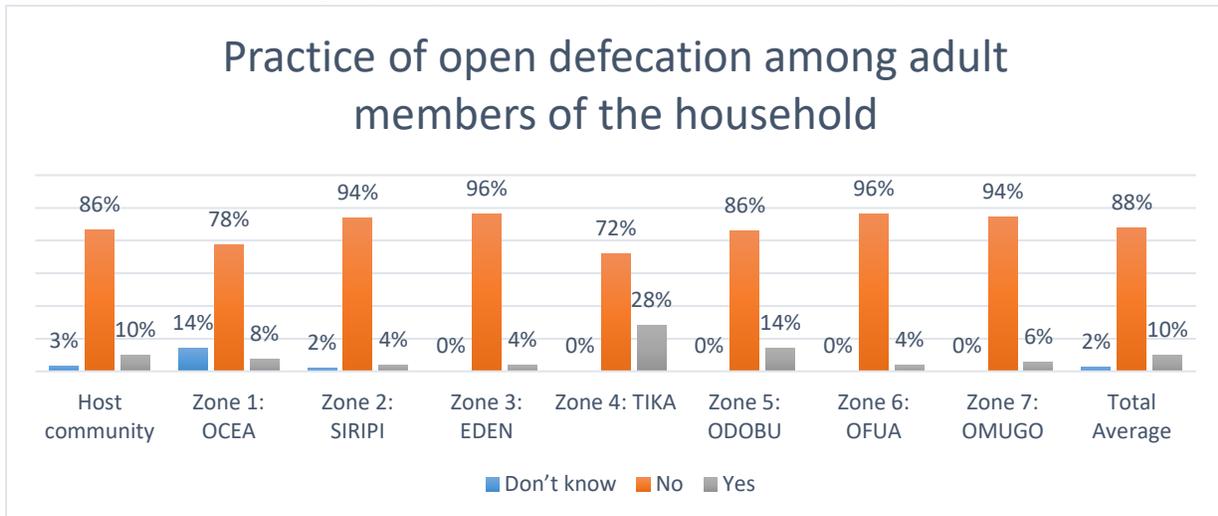


Figure19

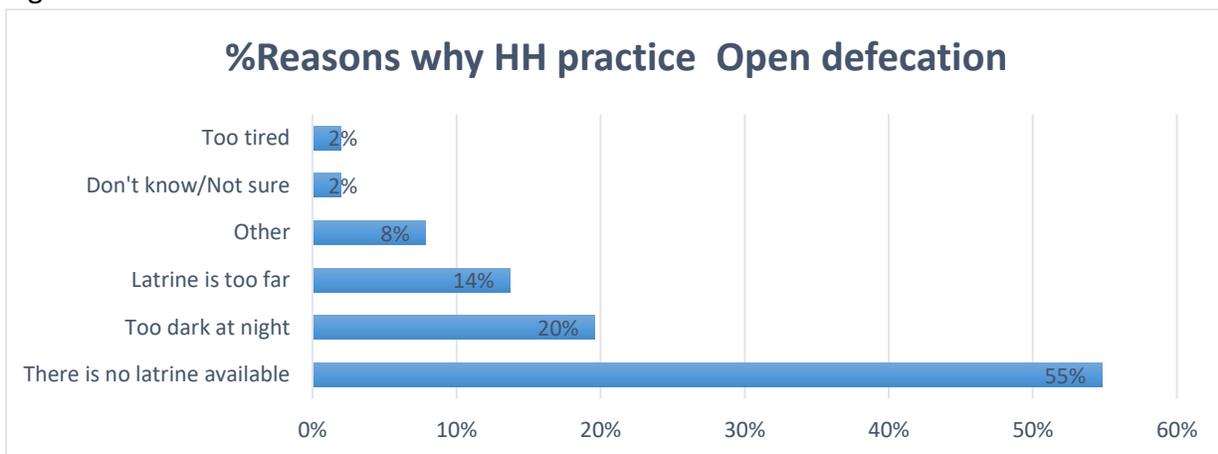


Figure20

Presence of bathing facility for the households

The survey revealed as, in figure 21 below that, most of the households (72%) have a designated shower/bathing facility compared to 77% at baseline with exception of 24% of the households with no bathing facility as it was observed in the households during the survey and don't or couldn't observe the (2%). It was also observed that 75% of households cover their food when it is kept for another person while 22% didn't cover their food, 3% Didn't Know because the it was not observed.

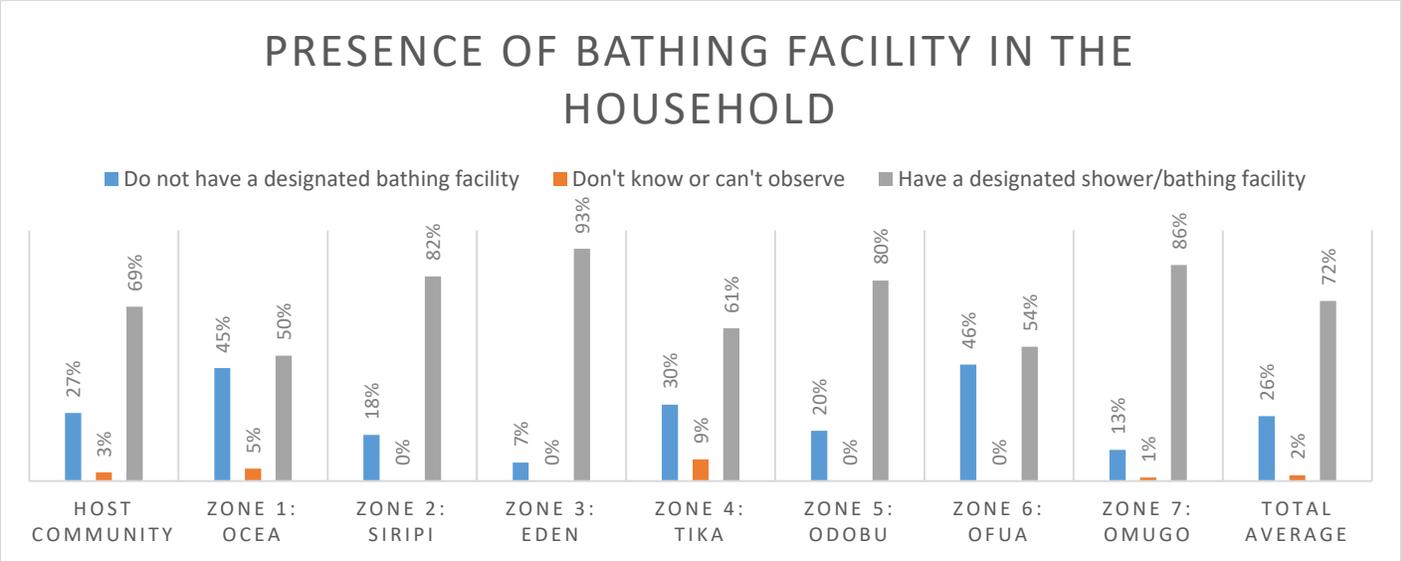


Figure 21

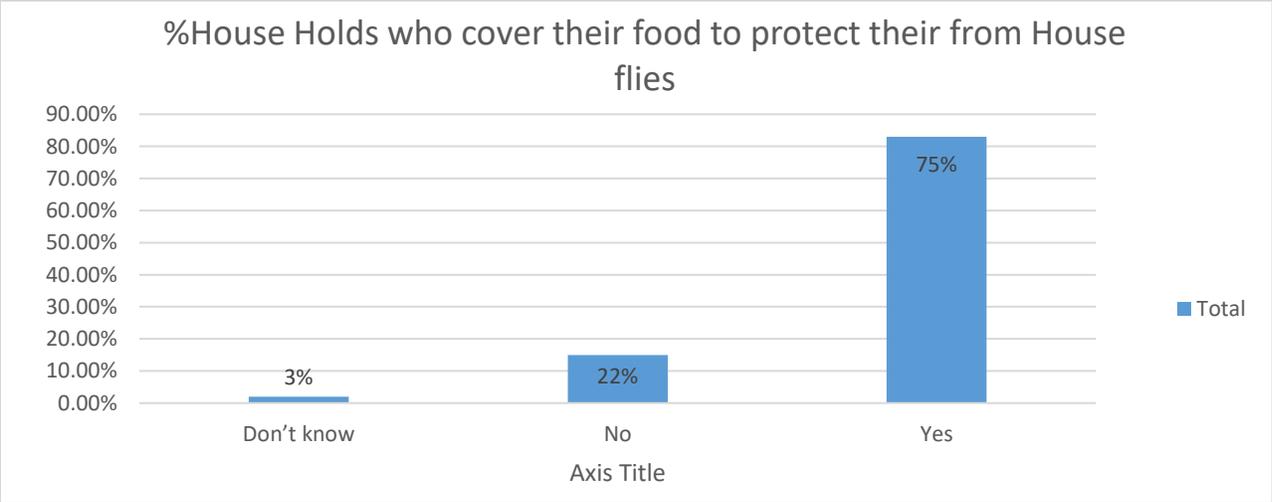


Figure 22

Waste management

According to the survey, the percentage of households with access to solid waste disposal facilities stands at 58% as compared to the baseline survey of 84%. Much as there is a 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. Figure 23 revealed more than half of the households 58% dispose of domestic waste in the household pit, with 20% in designated and 14% in undesignated open areas, 5% burn domestic waste, 1% dispose of in the communal pit, and a 1% others. It was observed that (74%) of the households had a clean courtyard with exception of only (26%) where rubbish was seen littered on the compound as shown in figure 24 below.

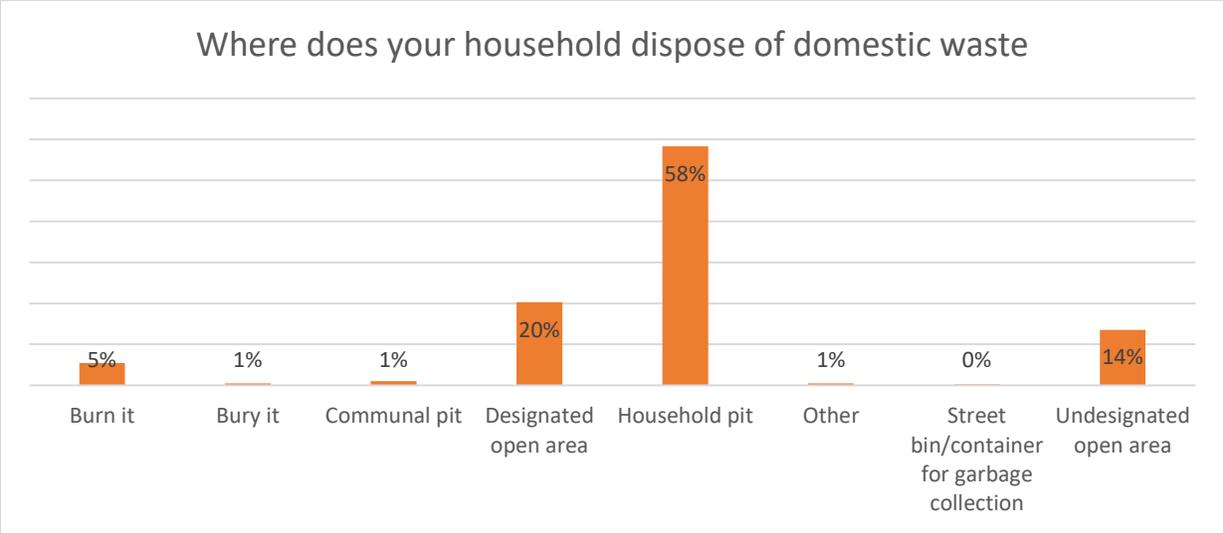


figure 23

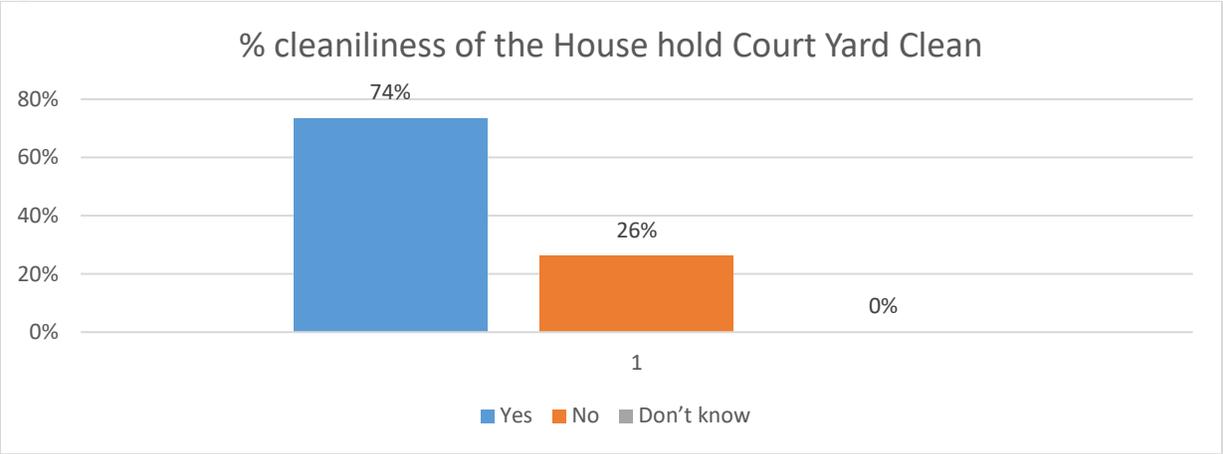


Figure 24

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 35% followed by rodents at 21%, flies were reported by 18% of the households while cockroaches were reported by 21% of the households. About 5% of the households did not observe any abnormal presence of vectors at their homes and 1% were others which was a negligible percentage.

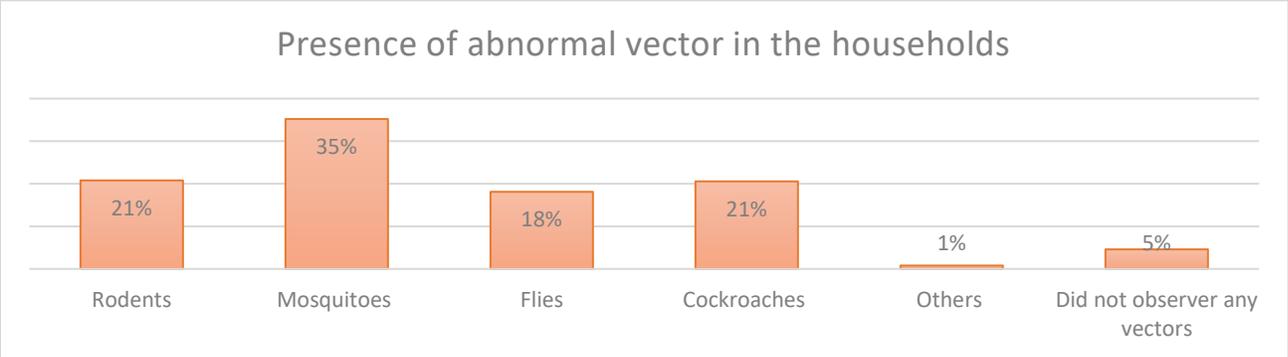


Figure 25

MESSAGING

Respondents in figure 26 were asked to indicate the available common means to receive health and hygiene messages. The result revealed home visits from CHWs (53%) as the best common means followed by radio at 15%, community meetings at (26%), Focused Group Discussions at (3%), SMS (1%) and others at (2%). Furthermore, figure 26 revealed that 59% of the households prefer receiving hygiene and health messages through home visits by hygiene promoters, 23% from community meetings, only 14% would prefer radio while 3% prefer 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 54% had received visits while 46% reported that the community health workers visited them with the health and hygiene messages as shown in the findings in figure 26,27 and 28 below.

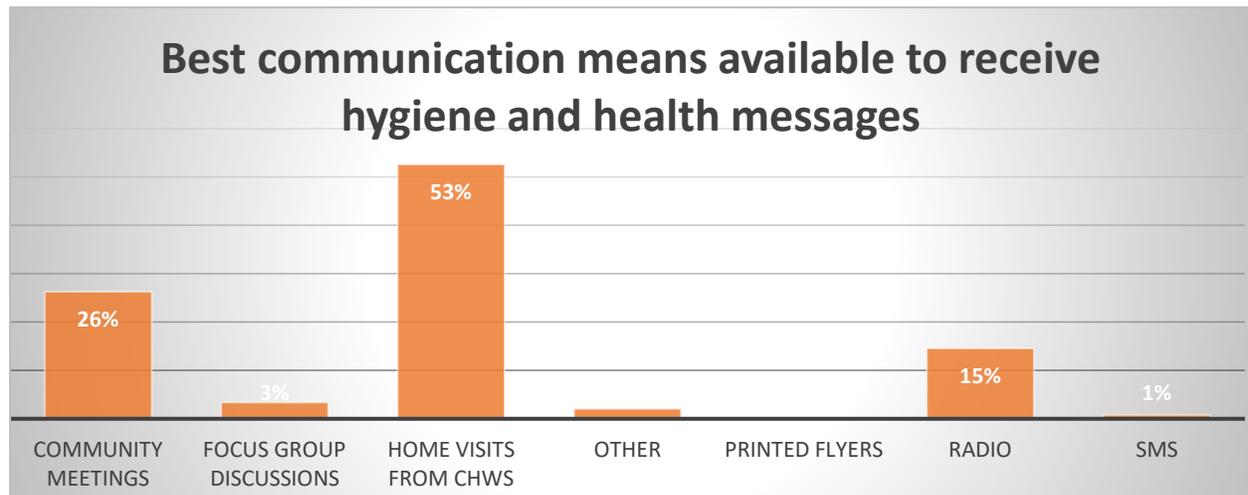


Figure 26

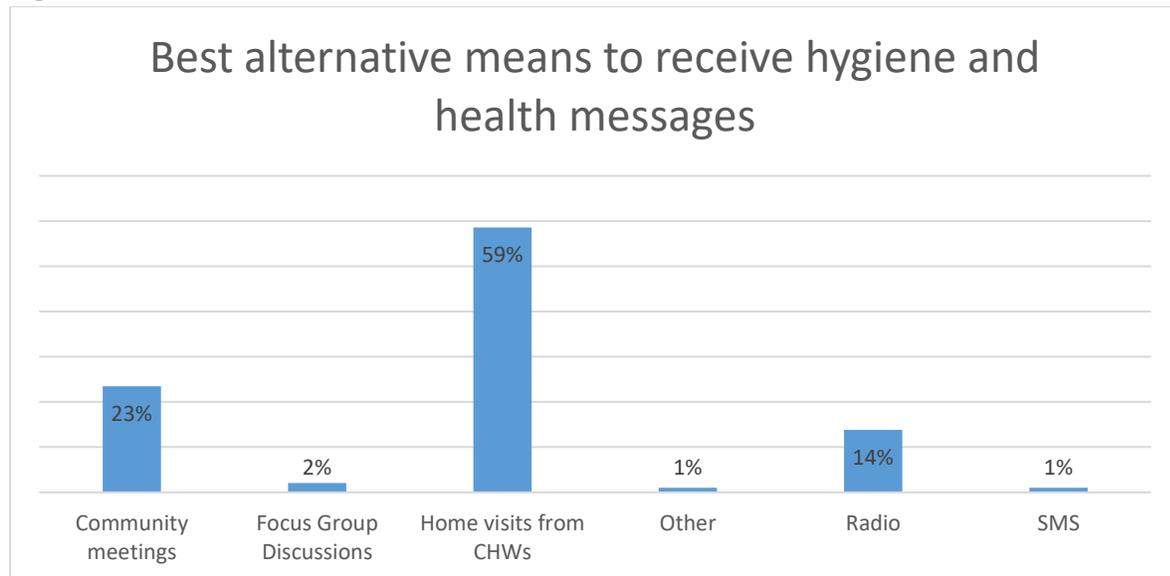


Figure 27

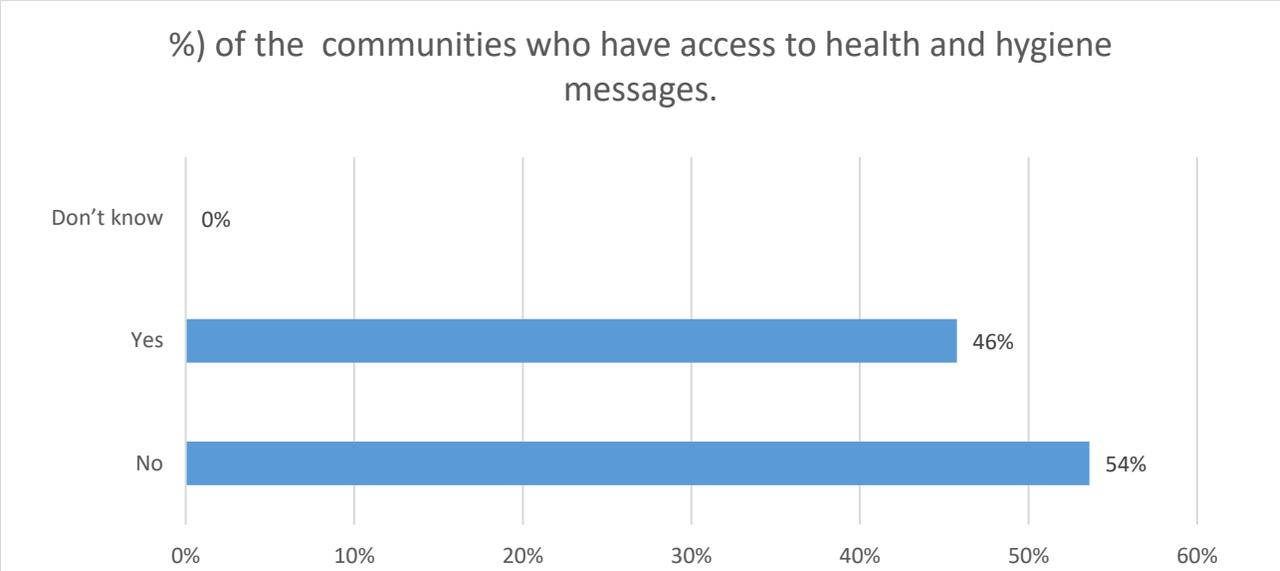


Figure28

Knowledge on Diarrhoea prevention, and health-seeking Behaviour

From the survey, the knowledge on ways diarrhoea prevalence and health-seeking knowledge among children under 5 years was at 21% while among 5 years and above was at 10%. The household members mentioned the most common possible causes of diarrhoea as drinking contaminated water (93%), eating contaminated or undercooked food (90%), flies at 77%, from unpleasant odor at 25%, and contact with someone sick with diarrhoea (12%). The respondents also mentioned some uncommon ways such as through swimming/bathing in surface water (7%) while about (1%) of the households don't know the ways that people can get diarrhoea (1%) 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.

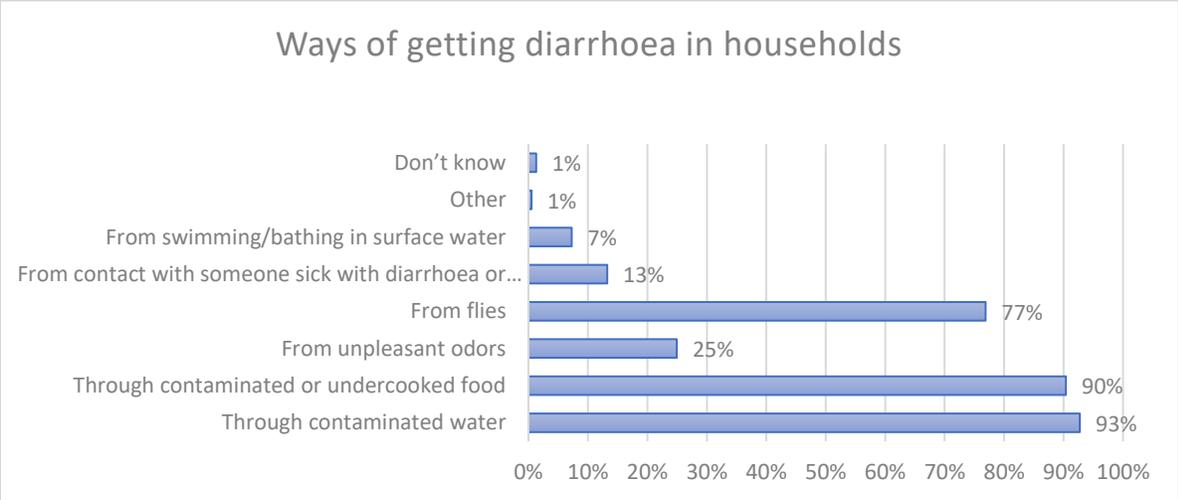


figure 29

Respondents were also asked ways in which diarrhoea can be prevented as in figure 29 below. They mentioned the most common ways as washing hands with soap and water (78%), boiling, or treating water or drinking clean water (73%), cooking food well (82%), cleaning cooking utensils (50%), washing fruits and vegetables at 45%, covering food (17%), and using latrine/toilet facility to defecate (41%). Other preventive measures include disposing of children’s faeces in the latrine (26%), storing water safely for drinking (13%), bury faeces (16%), Receive vaccine (6%), Breast feeding babies(4%) and others (1%).

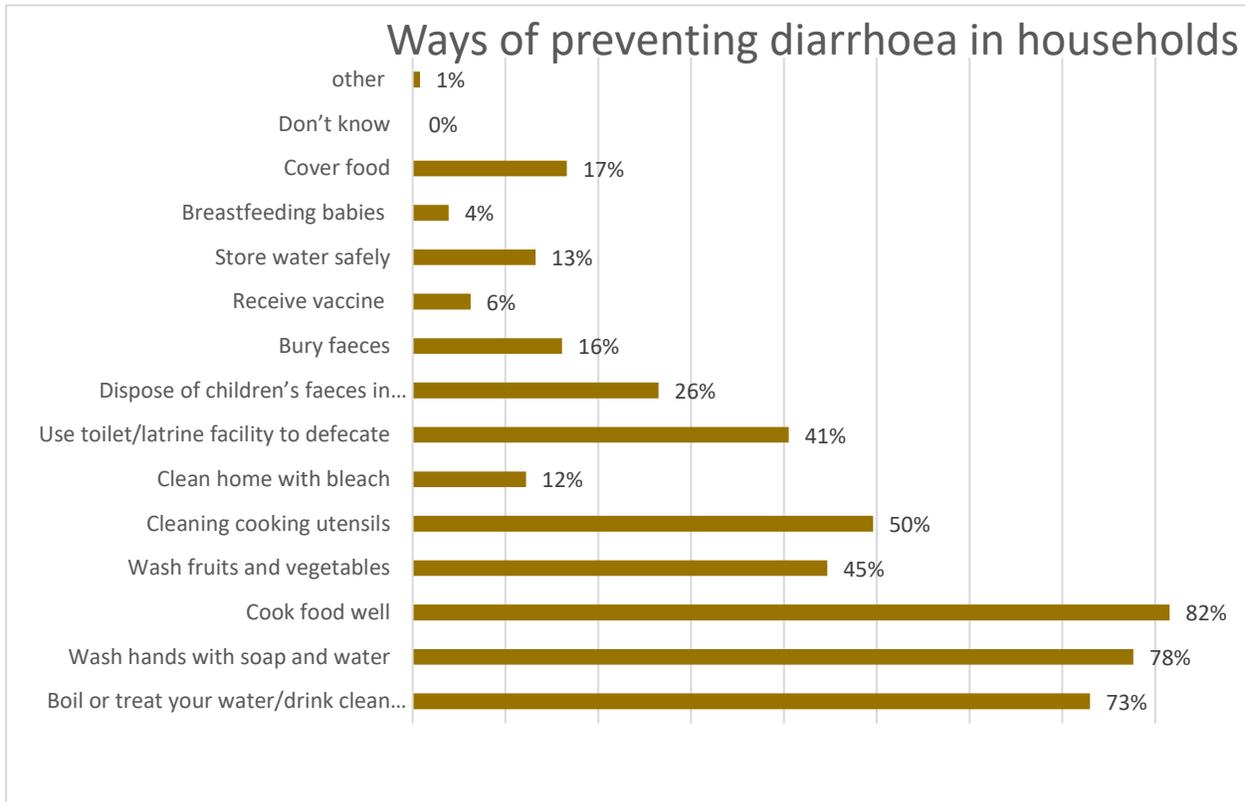


Figure30

Menstrual hygiene management

Materials used in the last menstrual period

From the survey findings in figure 30, while reproductive-age girls and women between the age of 12-48 were being interviewed on the preferred material used during the menstruation period, Most women and girls of reproductive age (60%) said they use disposable pads, followed by (28%) said the use Re-usable pads, while (7%) said they use Re-useable Cloth(8%), (3%) said they use Cotton and (1%) layers of underwear and (1%) nothing /bleed into clothes.70% 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

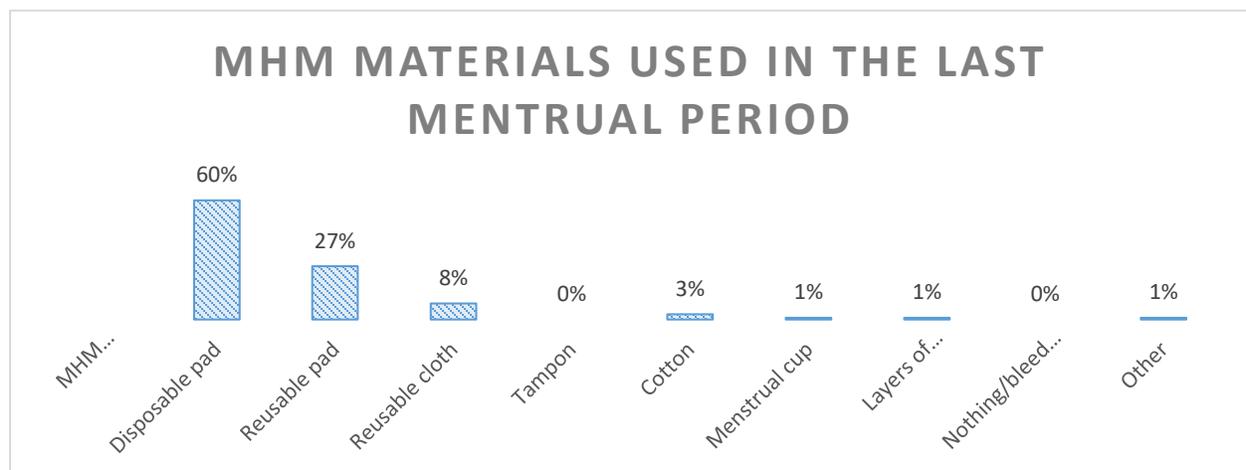


Figure 31

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 from a latrine 86% followed by 13% who said they change theirs from home and 1% 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 , while in figure 32 the women and girls of reproductive age were asked where they dispose of their used menstrual Products, the highest respondent said (90%) they dispose of their used-up products in the latrine, this is followed by (2%) burning they've used up products and (5%) wash and reused them and (1%) trash them, (2%) leave them in an open place.

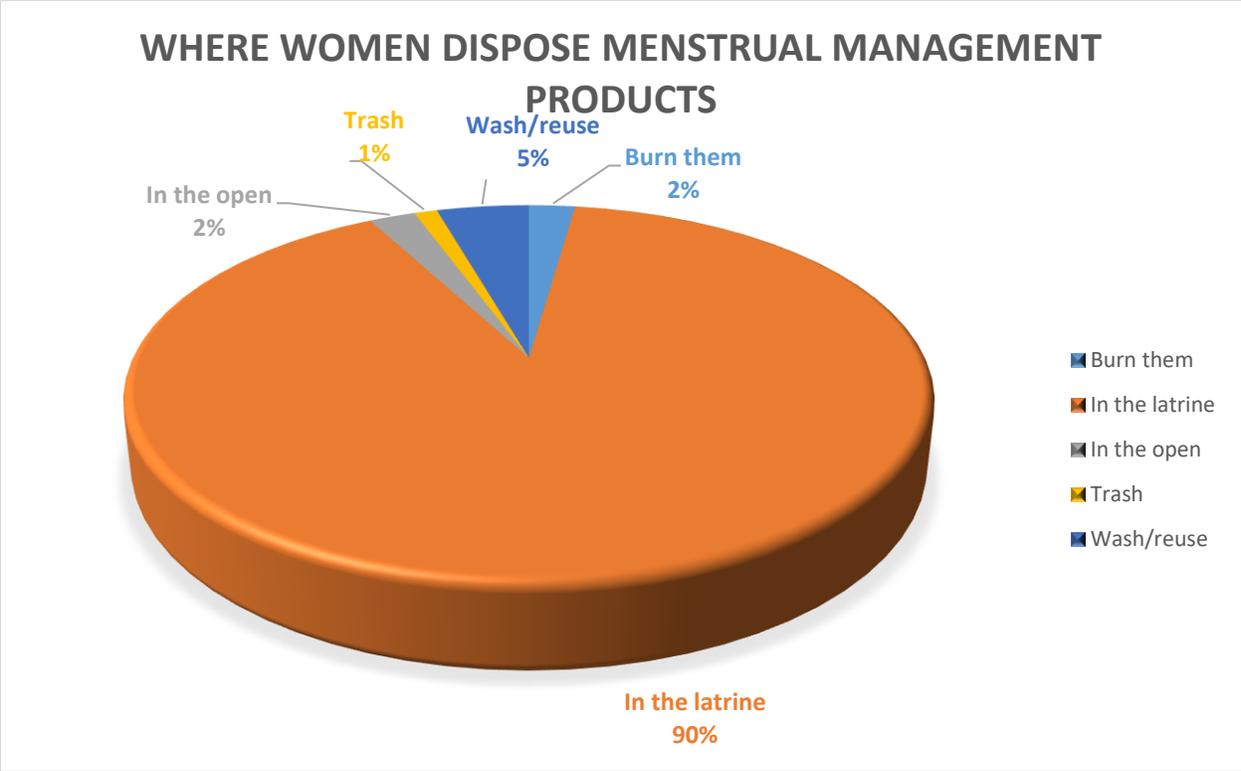


Figure 32

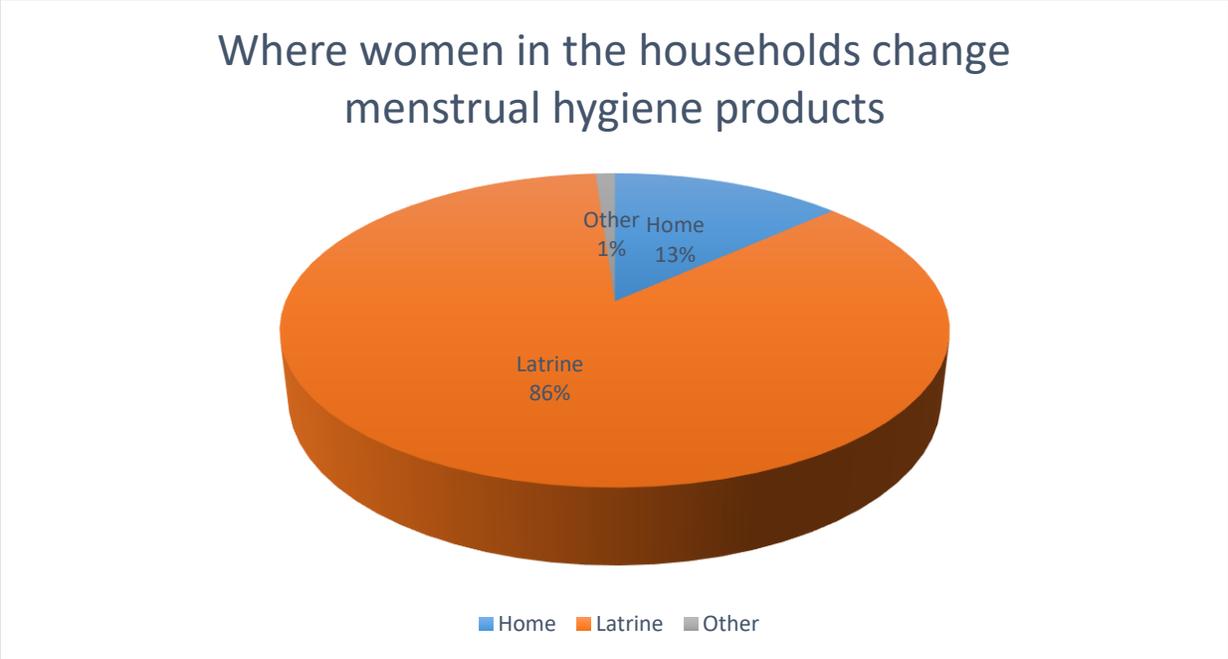


Figure 33

Menstrual hygiene management products women used before coming to the refugee settlement and whether they are satisfied with the materials used when they came to the settlement.

According to the 2022 end-line survey, (47%) of women of production age were satisfied with the material and (53%) were not Satisfied while they were asked about the most common Menstrual

Hygiene management materials used before they came to the settlement, the woman and girls of reproductive age reported that(55%) were using disposable pads, (8%) reported that they were using cotton while, (15%) reported that they were using re-usable clothe , (1%) were using nothing and bleed in clothes, while the issue of women of reproductive unsafe menstrual management 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 as shown in figure 35 and 36 below.

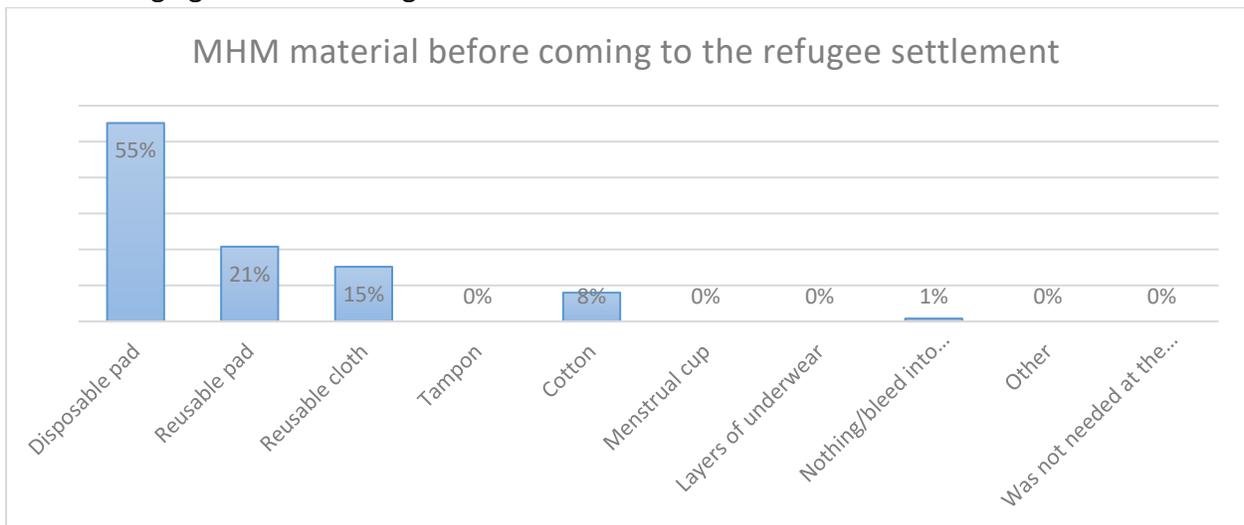


Figure 34

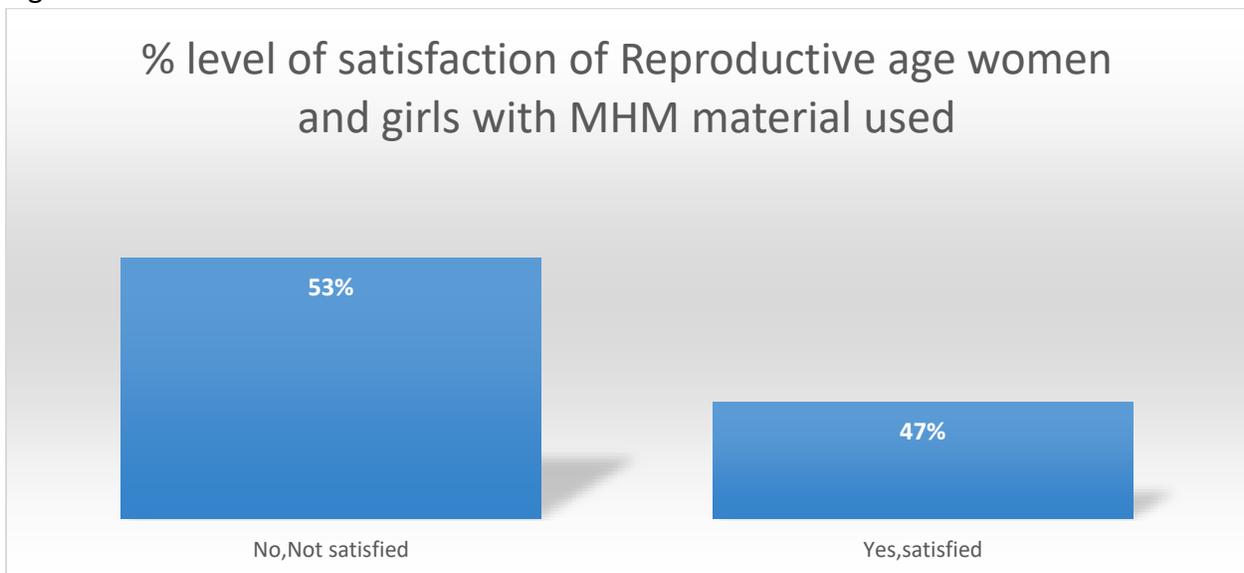


Figure 36

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 many surveys have been 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.
- 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.

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 23 l/p/d compared to 24 l/p/d as at the baseline survey. A 10 liter per person protected water storage capacity is still low at 14.6% compared to the baseline figure of 34%. Though the survey found out that the major source of water across the settlement was public tap/standpipe (98%), the proportion of households collecting water from protected sources has greatly improved which is at 100% 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 open defecation has dropped to 4% as opposed to 8% as of baseline and much work still need to be done to nail the final nail on to 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. About 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 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.

VIII. 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 the 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 water supply situation especially in Eden and Ofua zone 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 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 (86%) had 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 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 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 Rhino Camp 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 2022 end-line survey in figure 33 below, the most common Menstrual Hygiene management materials use before while interviewing the woman and girls of reproductive age they reported that (75%) were using disposable pads, (22%) reported that they were using cotton while (19%) reported that they were using re-usable clothe and (6%) were using a layer of underwear and (3%) reported they were using Nothing / Bleed into clothes, 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.

IX. Annexes

[Annex 1: Questionnaire](#)



2a - Standard WASH
KAP Questionnaire.do

[Annex 2: KAP Survey work plan](#)

Field Activity plan to conduct KAP survey in Rhino Camp settlement

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	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 December 2022	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 collect 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, questionnaire, 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	12 December 2022	Revised Instruments and techniques
Stage 3: Fieldwork					
1	Data collection	Implementation of data collection exercise in agreed sampling areas	4 days/ zone	12-15 December 2022	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.
2	Submission of output and review 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 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 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	16th -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