RHINO CAMP WASH KAP ENDLINE SURVEY 2020

A 2020 Study on current community access to and practices on Water, Sanitation and Hygiene in Rhino Camp Refugee Settlement in Arua District

December 2020

watermission UGANDA

UNHCR The UN Refugee Agency

Contents

I. Acknowledgements

UNHCR wishes to thank all partners (IPs and Ops) for this opportunity to contribute to the creation of new knowledge in the WASH sector in Rhino Camp Refuge 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. We believe that findings of this study contribute to other studies to provide the basis for measuring and comparing progress in the WASH sector. UNHCR in Rhino Camp operation sees this as a great landmark to celebrate. UNHCR thanks all those whose efforts contributed to the production of this survey.

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

We thank OPM, Arua District through its various units who contributed to the survey notably the DWO, DHO who provided the support we wanted to carry this out.

We 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. UNHCR would like to single out Acidri Daniel WMU M&E Team Lead, Apire Samuel-WMU Senior WASH Officer and all WMU field staff and all the Humanitarian Support Personnel on Public Health Promotion for taking up this challenge, for preparing the whole survey and for leading in the data collection, analysis, report writing and editing.

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

UNHCR

31st December 2020

II. Abbreviations and Acronyms

KAP	Knowledge and Practices
DWO	District Water Officer
DHO	District Health Officer
WASH	Water and Sanitation Hygiene
WTWG	Wash Technical Working Group
UNHCR	United Nations High Commissioner for Refugees
MHM	Menstrual Hygiene Management
HH	Household
OPM	Office of the Prime Minister
POCs	Persons of Concern
RWCs	Refugee Welfare Councils.

III. Executive summary

Introduction

Uganda is hosting over 1 million refugees (Uganda Refugee Response, UNCHR, and September 2020) with about 190,742 (UNHCR 30th September 2020) 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 destruction of systems, hence creating for interventions to reconstruct them. In order to efficiently and effectively improve WASH service delivery in the settlement, there is need for accurate and reliable information on which to base programmatic decisions. Rhino Camp settlement has had a number of interventions by different partners, and in as much as there were access indicators obtained regularly by the partners that provide extremely useful average figures at settlement level, there has been a gap in the in-depth understanding of the situation at household level and to account for disparities within the settlement so as to measure the impact of the interventions.

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

Methodology

The survey mainly utilized 2 methods: Household questionnaire survey and documentary review. The survey covered all the 7 zones of Rhino Camp settlement, with samples drawn from all the zones. Sample size for each zone was calculated using the UNHCR sample size determination tool. A sample of 2,364 (only refugees) was interviewed using the household questionnaire survey. Reviewed documents included: partners periodic updates, 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.

Key findings

UNHCR WASH standard Indicators

These programme indicators are common to UNHCR WASH projects. The data is specific only to the programme areas and does not necessarily represent any national figures or trends.

Parameter	Indicator	Ocea	Siripi	Eden	Tika	Odobu	Ofua	Omugo	Over all base line	Overall endline
Water Quantity	Average litres of potable water/per person/per day collected at HH level	24.1	24.9	19.9	26.2	24.1	19.9	24.8	22.0	23.5
	% HHs with at least 10 L/p protected water storage capacity	50%	53%	44%	44%	45%	39%	52%	22%	47%
Water Access	Maximum distance [m] from household to potable water collection point	296	424	369	321	337	296	329	381	337
Water Quality	% HHs collecting drinking water from protected/treated sources	100%	100%	100%	100%	100%	100%	100%	99.8 %	100%
Sanitation	% HHs with family latrine/toilet	92%	94%	93%	58%	95%	99%	99%	79%	90%
	% HHs reporting defecating in a toilet/latrine	99%	98%	99%	78%	98%	99%	99%	91%	96%
	% HHs practicing open defecation. **Includes defecating in the bush at night.	5%	6%	1%	28%	9%	4%	3%	15%	8%
	% HHs having access to a bathing facility	78%	75%	85%	65%	72%	93%	90%	75%	80%

Hygiene	% HHs with access to soap	87%	87%	72%	77%	67%	78%	95%	48%	81%
	% HHs with access to a specific hand-washing device	36%	57%	74%	36%	45%	53%	61%	14%	52%
	% respondents knowing at least 3 critical moments when to wash hands	99.4%	100%	99.0%	99.4%	100%	98.4%	100%	83.9 %	99.5%
Solid Waste	% HHs with access to solid waste disposal facility	82.4%	83.7%	88.9%	51.9%	82.3%	66.9%	70.8%	74.2 %	74.8%

Other WASH related indicators

Parameter	Indicator
Water Supply	A majority of the households have access to improved water facilities. Most of the of the households (94%) reported public tap/standpipe as their principal source of drinking water for members in the household compared to (4%) who reported hand pump/borehole and 2% had piped water connection to their households. Adult females (81%), adult males (5%) and children (11-18 years) (14%) are responsible to fetch water for domestic use. Majority of the households (95%) reported that water sources are within 500-meter radius a 6-minute walk distance. At least 95% of the population use jerry cans for water collection and storage. Average litres of potable water/per person/per day collected at household level is above post emergency standard at 24 L/p/d. At zone level, Ocea stands at 24.1, Siripi at 24.9, Eden at 19.9, Tika at 26.2, Odobu at 24.1, Ofua at 19.9 and Omugo at 24.8. Generally, the water per capita is above the post emergency standard of 20 L/p/d. About (47%) of the households had at least 10 L/p protected water storage capacity while the rest (53%) had less than 10 L/p storage capacity. Most of the water points are at acceptable distances from households, average distance to the nearest water point was 337 metres. The minimum distance to the nearest water point was 80 metres while the maximum at 2400 metres. Over half of the households (55%) clean their containers once a week while less than half of the households (39%) clean their containers every time they use them. The rest 6% clean their containers once in a month.
Water treatment	Most households (85%) 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 sensitisation is required for the (15%) regarding safe water chain.
Sanitation	About (21%) reported that children under-5 living in the households usually defecate in the open. Meanwhile, (42%) reported that children under 5 years are always introduced to the household latrine (this applied to only children who can walk and squat), 8% use plastic pot, and 4% use communal latrine for their children. For children under-5 who do not use a latrine, all the households collect and dispose of their faeces in the latrine.

	A very few number of adult household members (8%) defecate in the open especially at night. They gave a reason of no latrine in the household (51%), latrine too far (17%), and it is too dark at night (27%). The majority of the households (90%) use a single household facility, 6% have shared facility used by a number of households. Majority of the households (80%) have a designated shower/bathing facility with exception of only (20%) of the households.
Waste management	Majority of households (75%) have access to solid waste disposal facility. Most households (73%) dispose of domestic waste in the household pit. With (12%) in designated open area, (9%) at the undesignated open area, (1%) bury it, (2%) dispose in communal and (3%) burn it. It was observed that (75%) of the households had clean courtyards with exception of only (25%) of the households.
Hygiene	The key times when people practice hand washing with soap include before eating (97%), after defecation (92%) and before cooking/meal preparation (83%). Other important key times on hand washing with soap registered very low such as before breast-feeding (35%), after handling baby faeces or diapers (23%) and before feeding children (27%). Hand washing with soap and water is widely practiced as claimed by 52% of the respondents, though hand washing with water only is practiced by 81%, and in the absence of soap 42% of the respondents use ash for proper handwashing. The main reasons why people do not wash hands with soap is the Inability to afford soap (11%), Soap already used up (79%), and other reasons (10%). The observation from the survey also revealed that, 36% of households who had hand-washing facility did not have soap place next to it while 64% had soap at the hand washing station. Furthermore, (19%) of households did not have water in the hand-washing device.
Health and hygiene messages	More than half (90%) of the surveyed communities has access to health and hygiene messages. Messages vary and the most common ones include hand washing with soap, use of mosquito nets, latrine use, cleaning and covering water containers, covering food and cleanliness around water points. The most preferred channels for receiving hygiene messages are home visits (78%), community meetings (15%), radio (4%), FGD and printed flyers each at (2%).
Diarrhoea prevalence, knowledge and health seeking behaviour	Diarrheal cases were reported by (23%) of the surveyed households especially among children less than 5 years while for 5 years and above it was reported at (12%)

	Respondents believe that the most common causes of diarrhoea include; transmission by drinking dirty water (93%), eating dirty or undercooked food (91%), and through flies (76%). They believe that diarrhoea can be prevented through, washing hand with soap and water (81%), cooking food well (79%), boiling or treating water/ drinking clean water (81%), cleaning eating utensils (44%), covering food properly (36%), washing fruits and vegetables before eating (44%) and using toilet/latrine facility to defecate (38%) among other measures.

IV. Background and context

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 2020, Uganda hosted an estimated 1,381,122 refugees spread over 30 refugee settlements across 12 districts. The main causes 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 190,742 refugees settled in 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.

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

One of the critical needs in post-emergency is accurate and reliable information on which to base programmatic decisions. However, to be able to know what the situation is at household level and to account for disparities within Rhino Camp Refugees Settlement, WMU as the Implementing WASH partner commissioned an endline KAP survey in December 2020 whose results are highlighted in this report through household survey with a sound sample size representing accurately the rest of the settlement.

V. Survey objectives

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

Specific objectives are to;

- Establish the Knowledge, Attitudes and Practices (KAP) of refugees in relation to 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 in relation to 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 household level were extracted from the OPM statistics of registered refugees in Rhino Camp Refugee Settlement. This formed a sample frame from which sample size was drawn. As seen from the table below;

Rhino Camp settlement sample size			
Zone	**Population**	**Household size**	**Sample household**
Zone I	13,688	2,631	336
Zone II	12,603	3,031	342
Zone III	4,740	1,078	284
Zone IV	9,035	2,545	335
Zone V	12,500	2,227	329
Zone VI	26,952	6,787	365
Zone VII	36,504	11,513	373
Total	**116,022**	**29,812**	**2,364**

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 were 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 number of data collectors

Zone	Households	Selected sample size	Number of enumerators
Zone 1: Ocea	2,631	336	12
Zone 2: Siripi	3,031	342	12
Zone 3: Eden	1,078	284	12
Zone 4: Tika	2,545	335	12
Zone 5: Odobu	2,227	329	12
Zone 6: Ofua	6,787	365	12
Zone 7: Omugo	11,513	373	12
Total	**29,812**	**2,364**	84

Indicators and questionnaire elaboration

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

The questionnaire was reviewed in WASH Working Group meeting to remove some optional questions. The tool was then transformed into an electronic questionnaire to be administered with tablets and mobile phones using the 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 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. Issues on data gathering faced by the pre-testing team 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	Section in the questionnaire
Water Supply	Average litres of potable water/per person/per day collected at HH level	Section B
	% HHs with at least 10 L/p protected water storage capacity	
	Maximum distance [m] from household to potable water collection point	
Water treatment	% HHs collecting drinking water from protected/treated sources	Section C
Hygiene	% HHs with access to soap	Section D
	% HHs with access to a specific hand-washing device	
	% respondents knowing at least 3 critical moments when to wash hands	
Sanitation	% HHs with family latrine/toilet	Section E
	% HHs reporting defecating in a toilet/latrine	
	% HHs practicing open defecation. **Includes defecating in the bush at night.	
	% HHs having access to a bathing facility	
Solid Waste	% HHs with access to solid waste disposal facility	Section E

Ethics and consent

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

The research teams then gained verbal consent from all household members for quantitative data collection process emphasising the issue of confidentiality and the security of the information they are providing. For successful management of expectations from household members, the enumerators clearly explained that participating in the survey would not lead to any direct benefits, nor could the enumerators provide diagnostic or individual case management support to each household visited. The research objectives and implementation plan was discussed and shared with key WASH partners in the settlement including UNHCR, OPM and the district and this took place through WASH sector meetings and individual meetings with OPM and district officials. Stakeholder consultations were also conducted so as to improve the questionnaire.

Recruitment and training

A total of 84 enumerators 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 actual data collection exercise. 7 supervisors selected from WMU staff helped to monitor and support the enumerators during data collection.

Enumerators picking GPS coordinate during training

Enumerators attending end line survey training

Data collection and quality control measures

Enumerator conducting household interviews

Enumerator conducting household interviews

The enumerators received 3 days of training and administered the questionnaire on tablets and mobile phones. In principle, the team composed of at least a male and a female enumerator, in order to ensure quality, gender sensitive interviews. Interpreters were not used during interview sessions because the enumerators were comfortable and well-versed with the language spoken in the areas where they worked. For children in the households aged 0-17 years old, interviews were conducted chiefly with the mothers or primary caregivers. In these cases, interviews addressed household level questions, as well as individual questions concerning both the mothers or primary caregivers themselves and their children, carefully respecting ethical considerations and advice provided by UNHCR. For the individuals of 18 years or above, enumerators directly asked all the questions from all the sections of the questionnaire. Collected data was stored on a secure UNHCR Kobo server and checked daily by WMU M&E Officer for inconsistencies. Each household survey took approximately 60 minutes to administer. Exact times varied depending on the responses from the household heads and whether or not there were identified person to respond to survey questions.

Data analysis plan

All quantitative data collected was fully reviewed and consolidated into a single dataset for all the 7 zones. In accordance with the analysis plan, thematic analysis was conducted based on the different sectors that appear as sections of this report, and using different types of disaggregation in order to elicit further meaning (e.g. location, age, gender). Statistical tests were then run for selected variables in order to establish correlation factors. Specifically, descriptive analyses using multivariate analysis statistical hypothesis tests (chi^2 for variance, independence, regression analyses, etc.) were used in order to describe and compare the various groups considered by the study and validate the statistical relevance of findings. All the major statistical results in this report

was analysed using the standardized UNHCR WASH KAP analysis tool, advanced excel analysis and SPSS data analysis software.

Limitations, challenges and lessons learnt

Challenges

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

- Some community members were reluctant to participate in the survey. They informed the field teams that there have been many surveys conducted in the past and no interventions (project) have resulted from these surveys.
- Other community members even exaggerated their condition/situation in order to elicit sympathy. To triangulate what they were told, field teams had to verify some concerns like verifying the storage containers of water.
- Mobile data collecting gadgets (Phones &tablets) were not enough and some had weak batteries, some data collectors had to use their personal 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 by male data collectors.

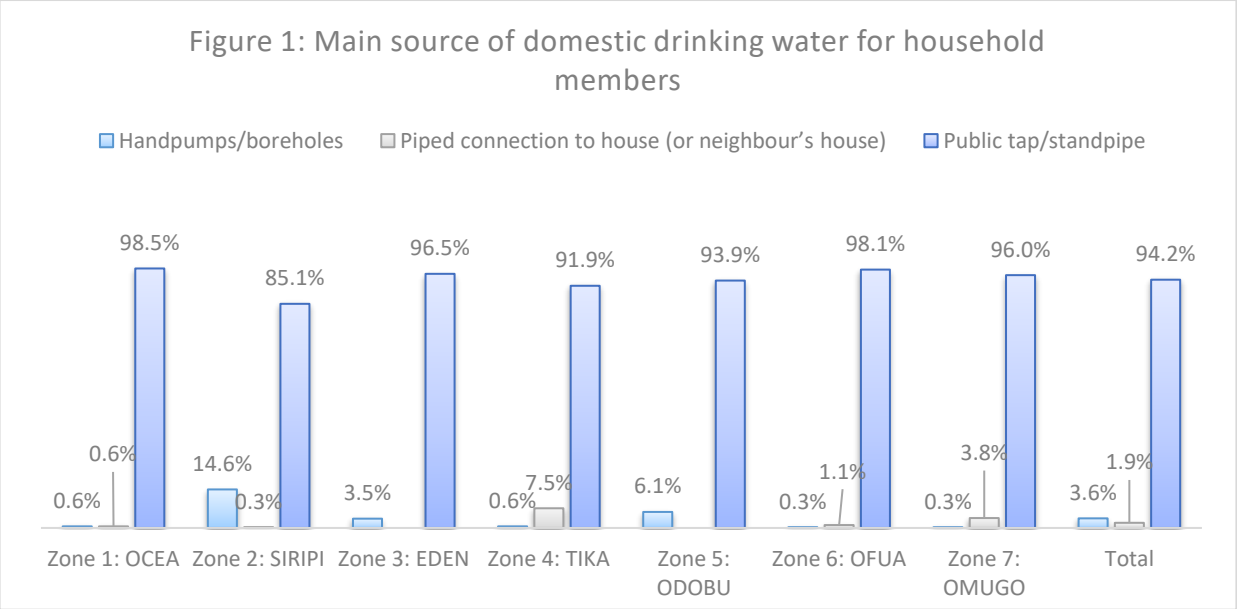
Lessons learnt

- The hiring of local and community based data collectors who understand the local context not only facilitated the work but also helped in creating community acceptance.
- 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 on hygiene but this does not translate into practice.

VII. Key results and finding

Water Supply

Main source of drinking water

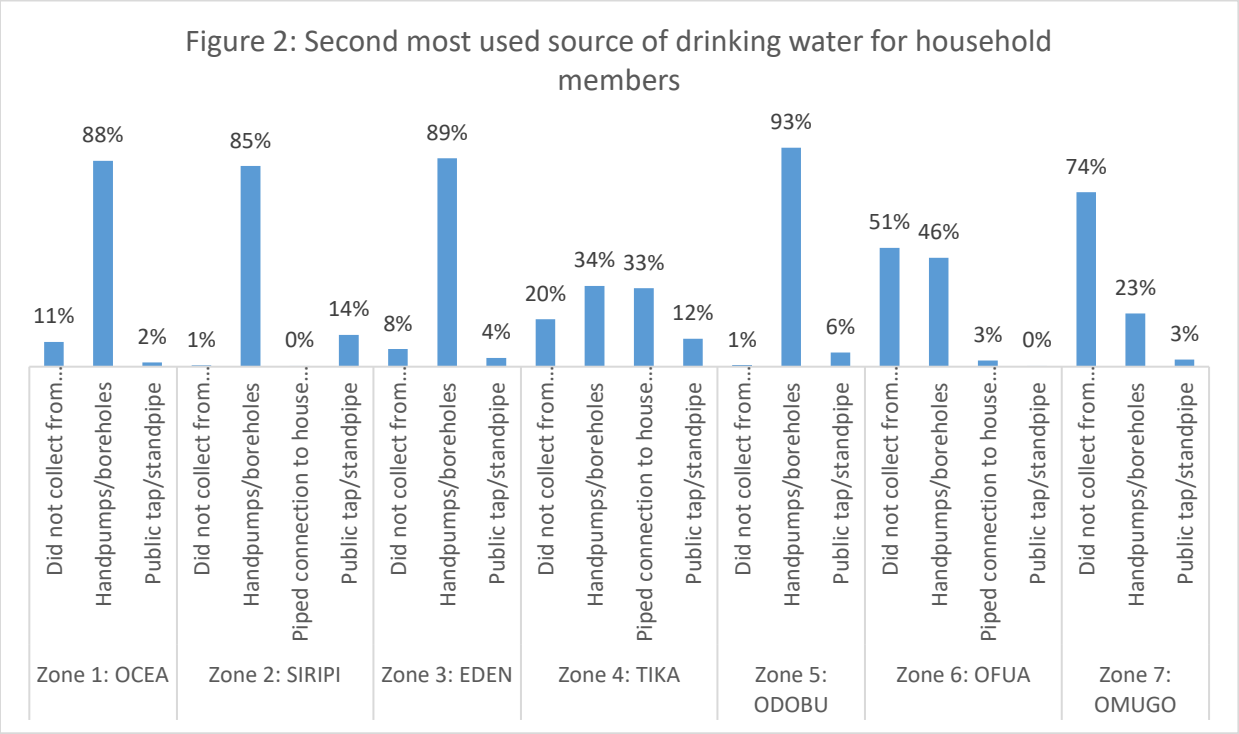


According to the survey findings as presented in figure 1 above, majority of the households (94%) across all the reported public tap/standpipe as their main source of drinking water for members in the household as compared to only (3.6%) who reported handpumps/boreholes and only 1.9% who reported piped 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 (99%), closely followed by Ofua (98%), Ede (97%) and Omugo (96%) respectively. Odobu zone had 94%, Tika at 92% and Siripi at 85% of the households. There were household water extensions reported at Tika, Omugo and some parts of Ofua zone. The survey revealed an improvement in public tap/standpipe water supply by 9% from baseline. This is as result of continuous operation and maintenance activities and new extensions in the zones.

Public tap/stand pipe providing clean drinking water for households

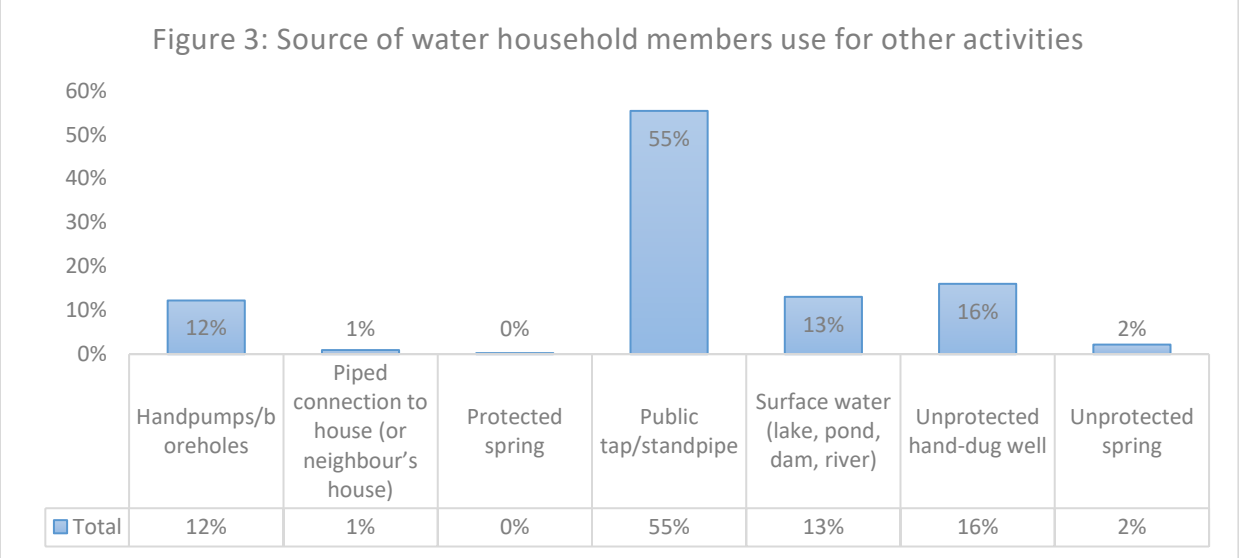
Piped water connection at a household in Tika zone

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 above revealed that, over half of the households across all zones use handpump/borehole as their main alternative water source at (64%) while about 34% of the households did not collect water from any other source apart from their main source of water which is public tap/stand pipe. Piped connection to the household was reported at Tika (33%) and Ofua zone (3%).

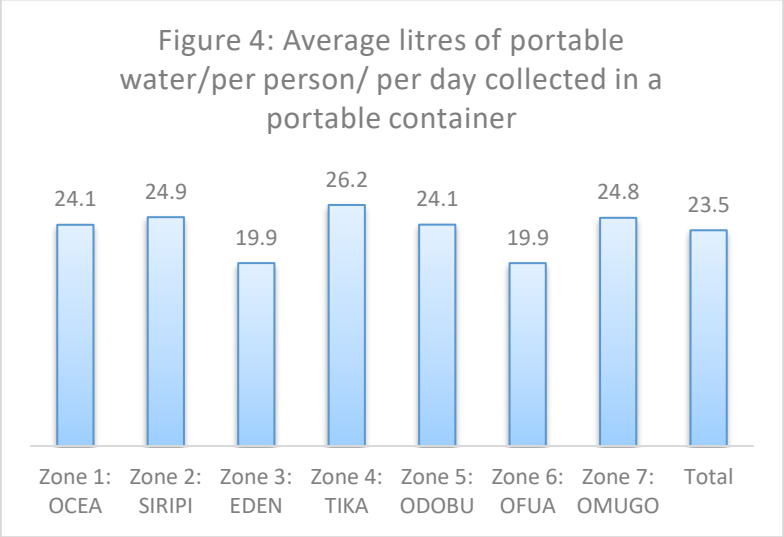
Sources of water for other activities



The survey sort to find out about the sources of water the households use for other activities like gardening, brick laying, animal consumption and others as in figure 3 above. The results revealed that, over half of households (55%) use public tap/standpipe for other activities in the household and this is followed by about (16%) of the households who use unprotected hand-dug well for other domestic activities while others use Surface water (lake, pond, dam, river) (13%), handpump/borehole (12%), unprotected spring (2%) while piped connection to household was reported at 1%.

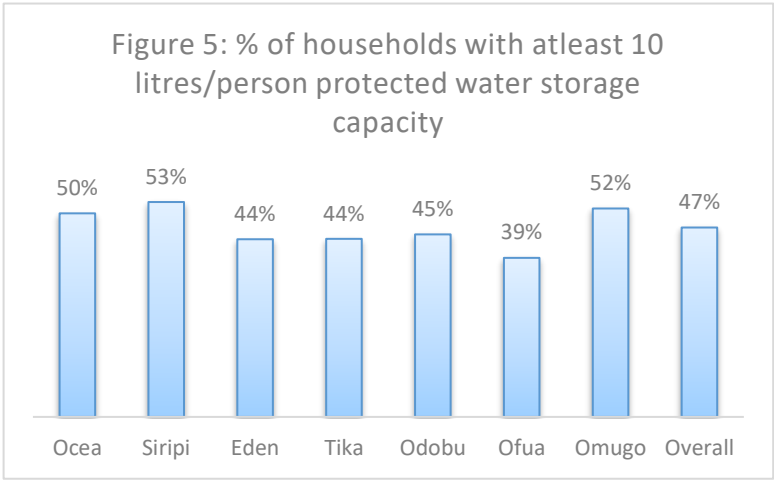
Water per capita per zone

According to the findings from the survey, the average liters of portable water/per person/ per day collected at household level across all the zones stand at 24 compared to 22 at baseline. The findings from the survey revealed at zone level that, Tika had a better percapita at 26.2 l/p/d closely Ocea and Odobu both reported 24 l/p/d each while Eden and Ofua both reported 20 l/p/d. The percapita across all the zones conforms to the emergency standard of 20 l/p/d, this could be as a result of routine system repairs and maintenance and fixing broken tap stands and extensions to new areas in the zones



Protected water storage container

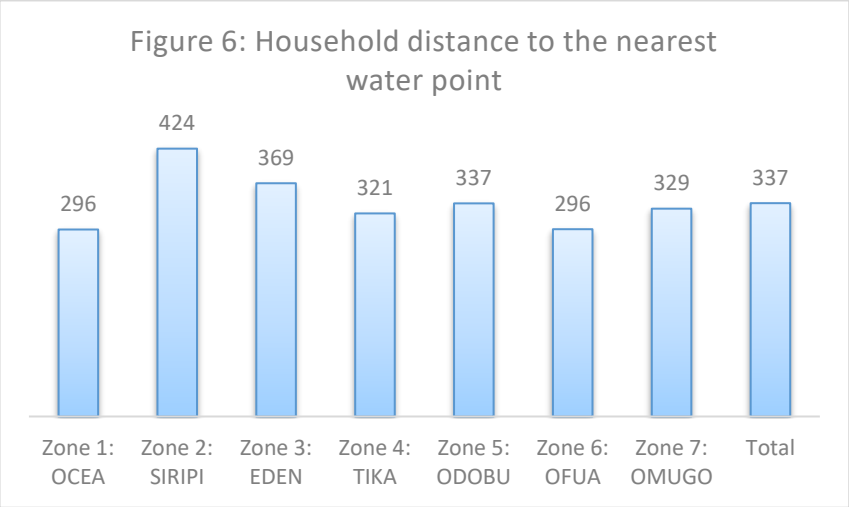
According to findings as in figure 5, the percentage of households with at least 10 liters/per person of protected water storage capacity across all the zones stand at 47% compared to the baseline figure of 22%. The survey also revealed that Siripi, Omugo and Ocea had a higher figure at 53%, 52% and 50% respectively. This was followed by Odobu at 45%, Eden and Tika each at 44%, while Ofua had 39%. This was very low as compared to the post emergency standard of over 80% of the households though an improvement by 25% from the baseline. Since the storage capacity is very low, this can also affect the daily water



consumption capacity and or increase on the frequency of water collection per day from the water source.

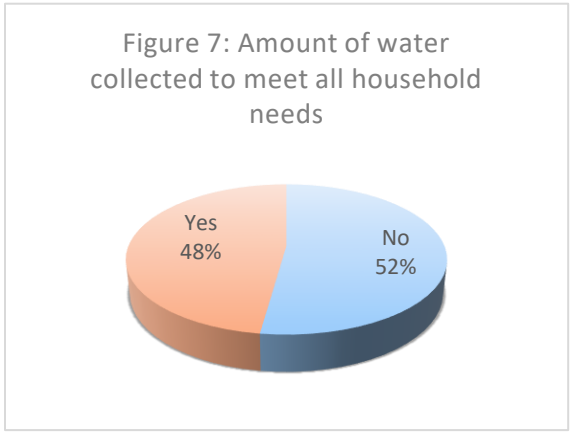
Distance to the nearest water point

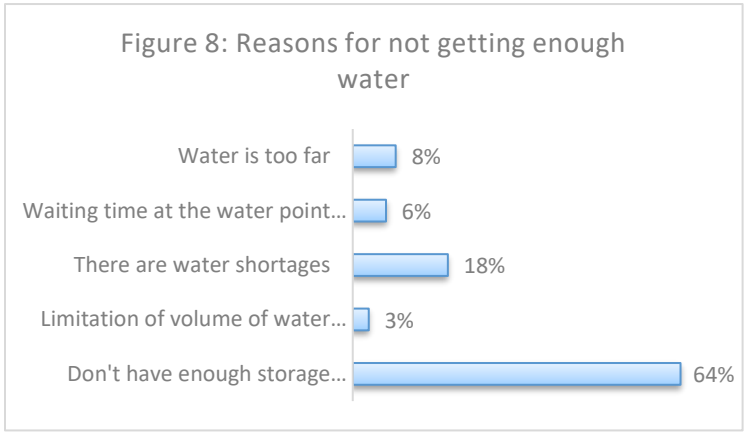
From the survey findings, the overall average walking distance by household members to the nearest water point was 337 meters compared to the baseline figure of 381 meters. Further findings from the survey revealed that, in the settlement, most households walk a maximum distance of about 2400 meters from their households to portable water collection point especially when the nearest source is broken down with the minimum distance as short as 80 metres. The survey revealed that, at Tika and Eden, most households walk as far as over 424 metres to get water with households from Eden walking 369 meters.



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

The survey looks at whether households collect enough water to meet their needs. The response indicated that close to half of the households (48%) reported that they collect enough water for their household needs compared to (29%) at baseline with the exception of (52%) 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 figure 8 above, most households reported that they do not have enough storage containers for collecting water (64%); this was followed by households who reported water shortages (18%). The rest of the households gave other reasons such as, waiting time at water point being too long

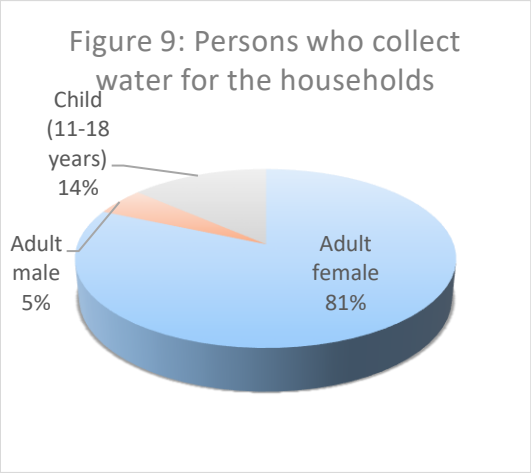




(6%), water being too far (8%), and limitation of volume of water that can be collected at water point at 3%.

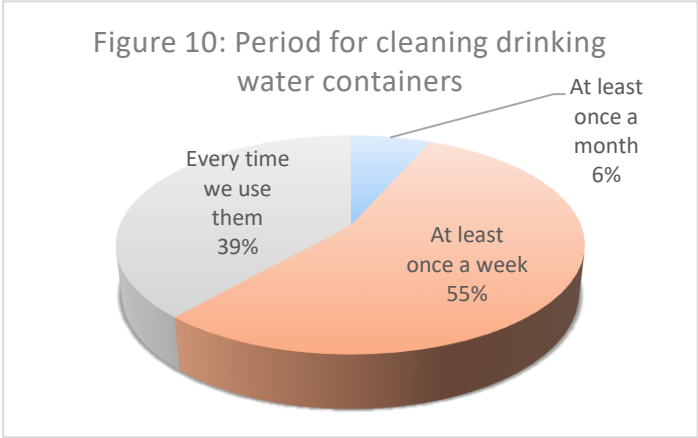
Persons who collect water for the household

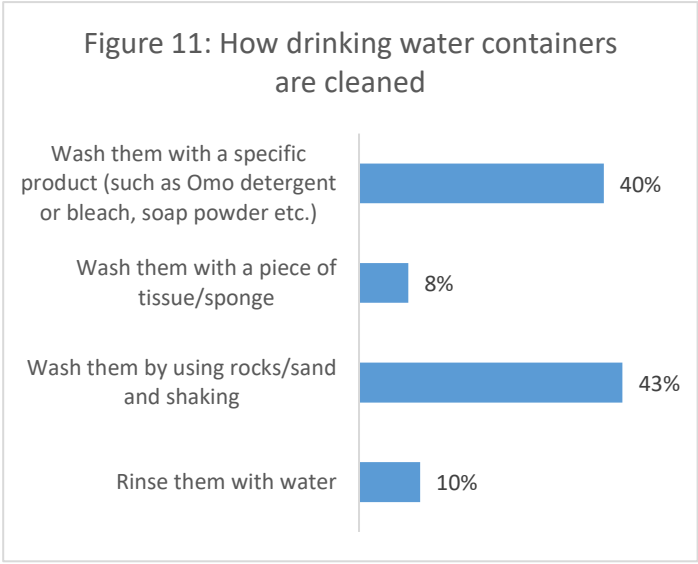
On who usually collect water for the households, the majority of the households (81%) reported that it is adult females who usually collect water for the household, followed by children aged 11-18 years at 14% and adult male at 5%.



Cleaning drinking water containers

The households were asked how frequent they clean their drinking water containers, the response indicated that, over half of the households (55%) clean their containers at least once a week, followed by (39%) of the households who clean their containers every time they use them. The other 6% clean their containers once in a month. On how households clean their drinking water containers, close to half of the households (43%) reported that, they wash their containers using rocks/sand while shaking, less than half of the households (40%) wash their containers with a specific product like omo detergent, soap powder, etc. while about 10% and 8% either wash their containers with a piece of tissue/sponge or they just rinse them with water. The respondents were also tested on safe water chain at household level, the result revealed that, the majority 85% of the households were seen to observe safe water chain at their households while the rest 15% did not observe safe water chain.





Hygiene

Presence of soap

The survey revealed the percentage of households with access to soap at 81% compared to the baseline figure of only 48%. Most households (79%) reported that by the time of the survey they had ran out of soap while (11%) of households could not afford soap and 10% gave other reasons for not having soap.

Further analysis revealed that, majority of the households (85%) got soap through a distribution by NGOs while 10% purchase soap and rest 5% were gifted soap. Furthermore, over half of the households (56%) revealed that they would use Ash in absence of soap. 35% would use water only, 8% use sand and the rest 1% do not use anything when there is no soap at the household.

Figure 12: Presence of soap for the households

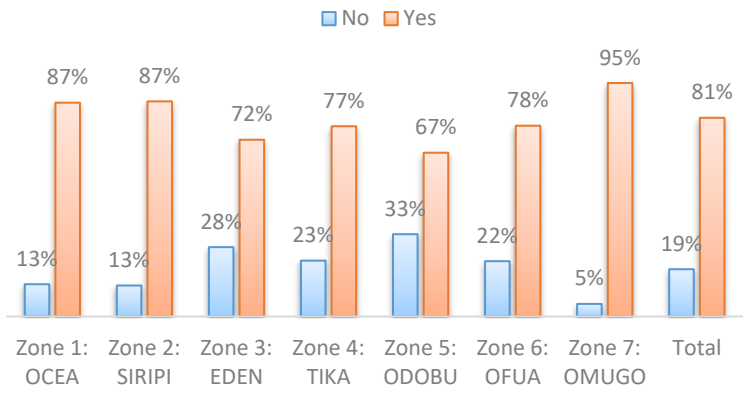
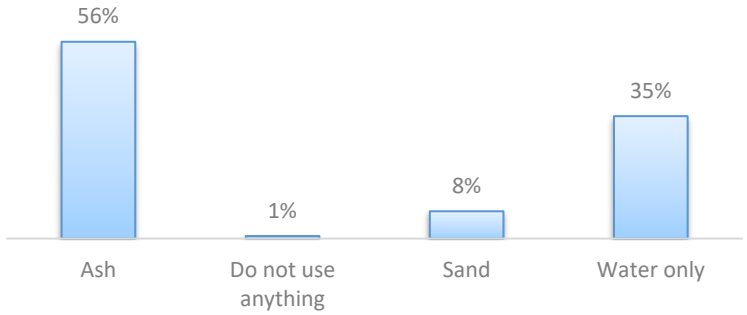
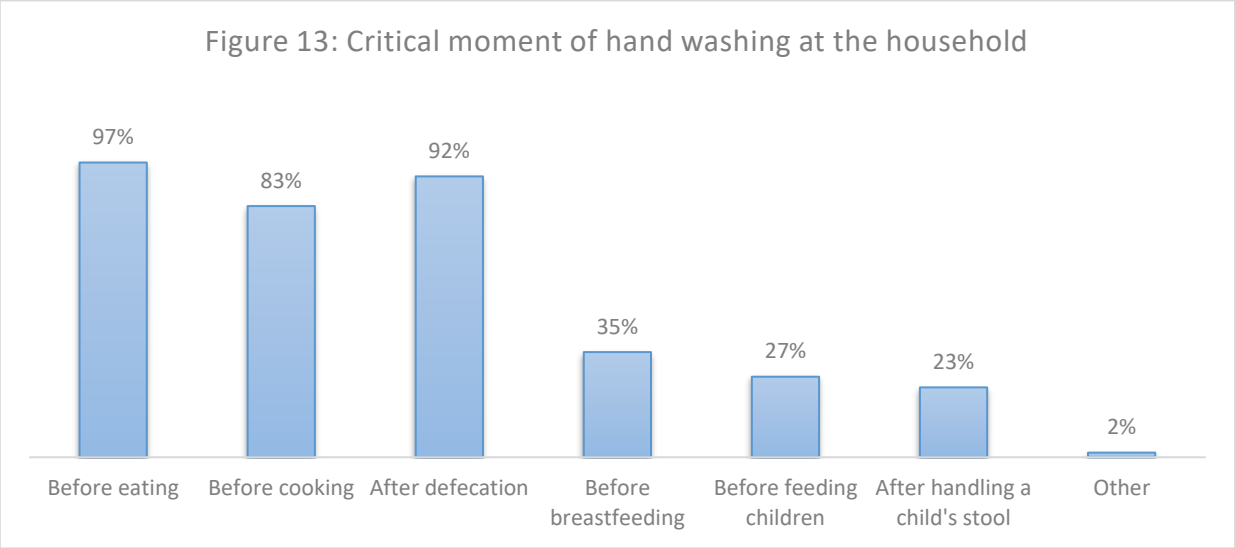


Figure 13: What households use in absence of soap

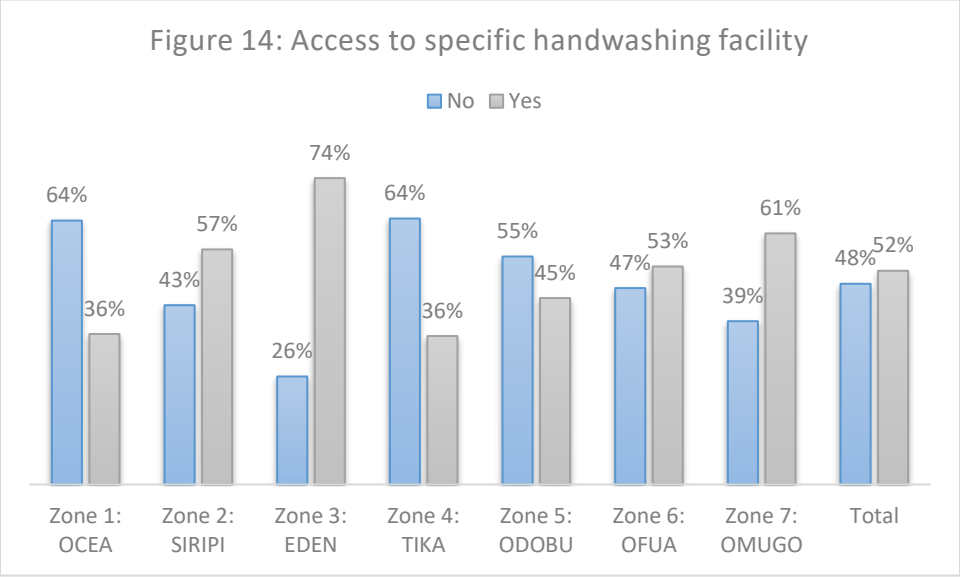


Critical hand washing moments



The households were asked to name at least 3 of the most important times when someone should wash hand. The survey revealed as in figure 13 above that most household members stated the 3 moments as before eating (97%), after defecation (92%) and before cooking/meal preparation (83%). The rest of the households also identified another set of 3 critical moment of hand washing as; After handling a child's stool (23%), before breastfeeding (27%), and before feeding children (35%).

Specific hand washing device/station at household

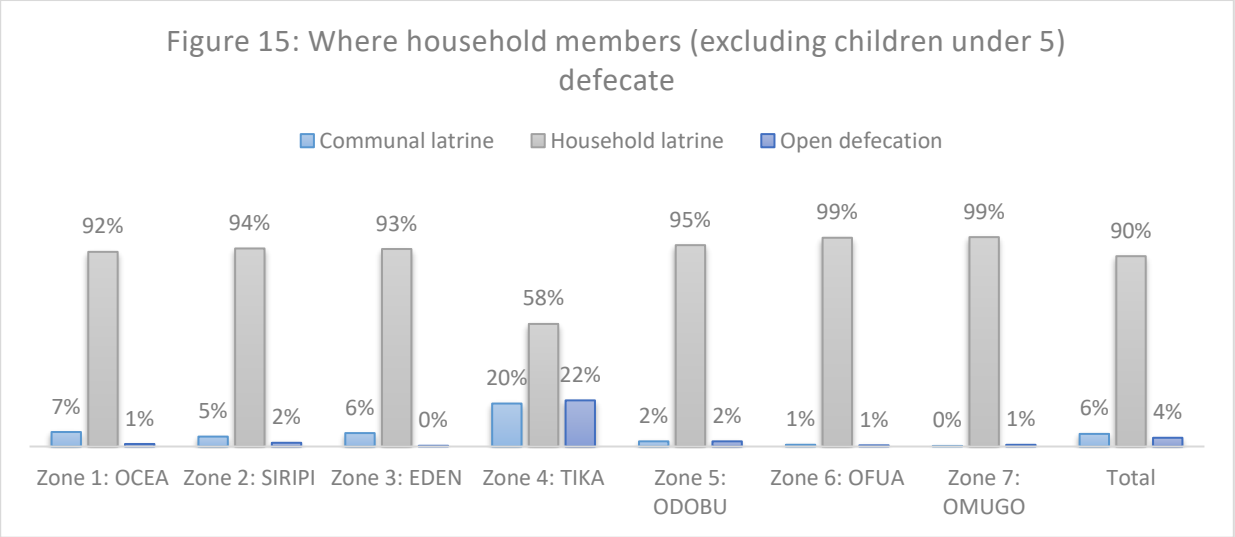


The survey also assessed the presence of hand washing facility in the household. The result revealed as in figure 14 above that, over half of the household had hand washing device/station in their households compared to only 14% of the households reporting presence of hand washing facility at baseline while the rest (48%) did not have hand washing facility in their household. From the observations carried out, 81% of households with hand washing device had water in it and the rest 19% did not have water meaning either the water got finished or the device is not being used. The observation from the survey also

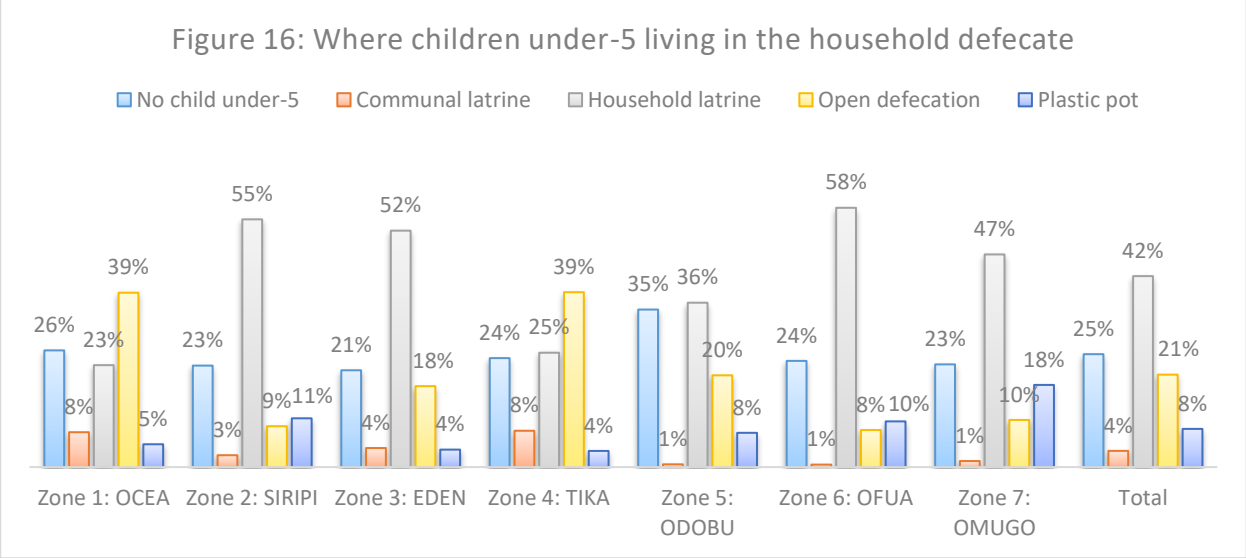
revealed that, 64% of households who had hand-washing facility had soap placed next to it while 46% had no soap at the hand washing station.

Sanitation

Where household members excluding children under 5 defecate



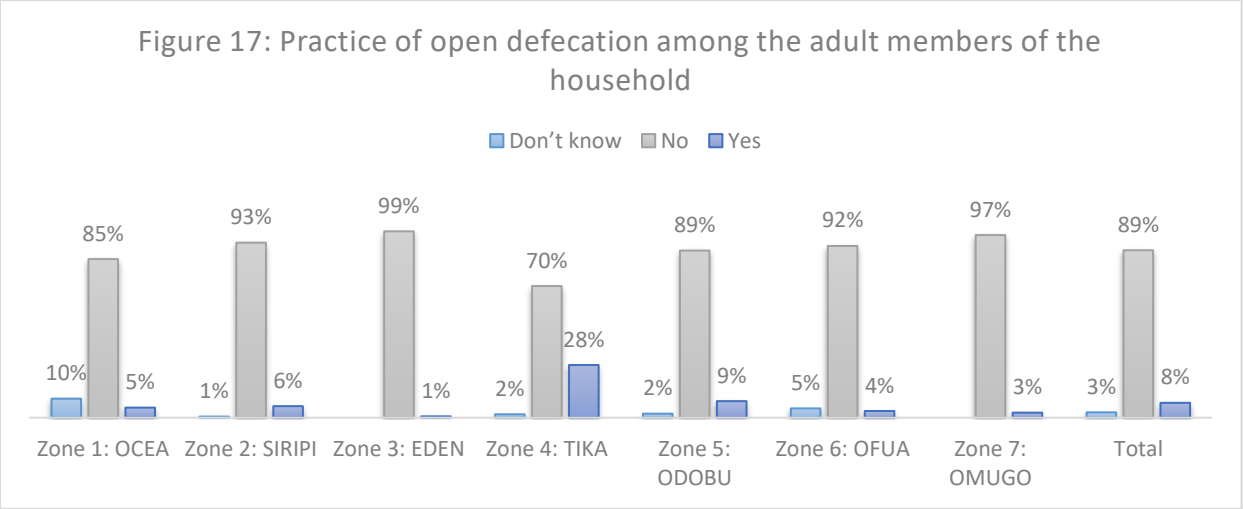
According to the survey findings as in figure 15, the majority of household members (90%) defecate in the household latrine (this excludes children under 5years of age) compared to 79% of the households at baseline. With only a few (6%) who use communal latrine (new arrivals were considered to use communal latrine) while about (4%) practice open defecation in places where they stay. The survey also revealed that, the percentage of households with access to latrine/toilet stands at 95%.



From the findings as in figure 16, close to half of the households 42% reported that, the children under 5 years who have started walking always defecate in the household latrine while about 21% of the households reported that children under 5 years practice open defecation and about 8% of the households use plastic pots for the children under 5 years to defecate, while the rest 4% take

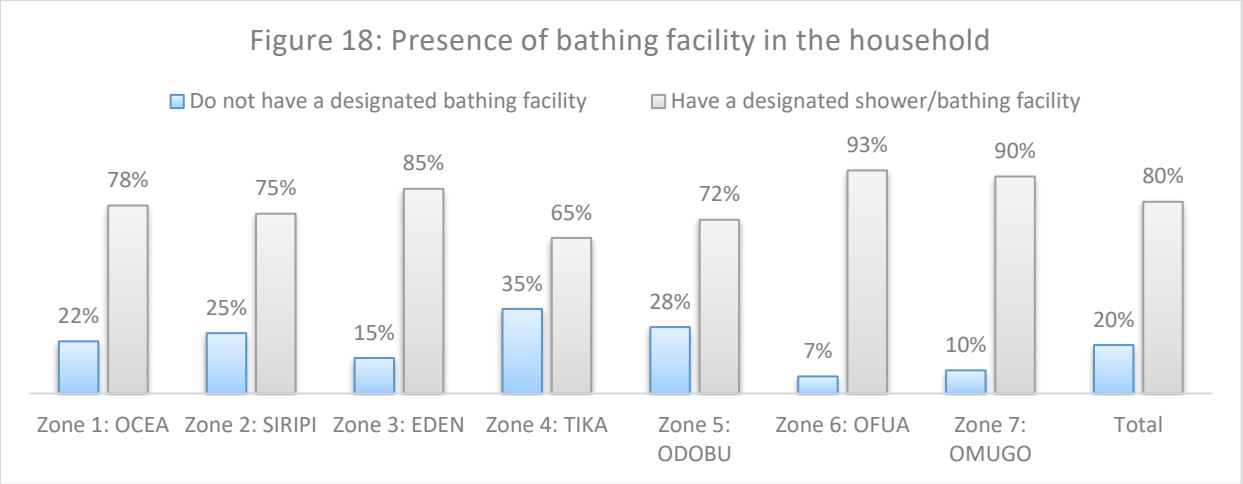
their children to the nearby communal latrine to defecate. For children under-5 who do not use a latrine, finding revealed that, all the households collect and dispose of their faeces in the latrine.

Practice of open defecation among adult members of the household



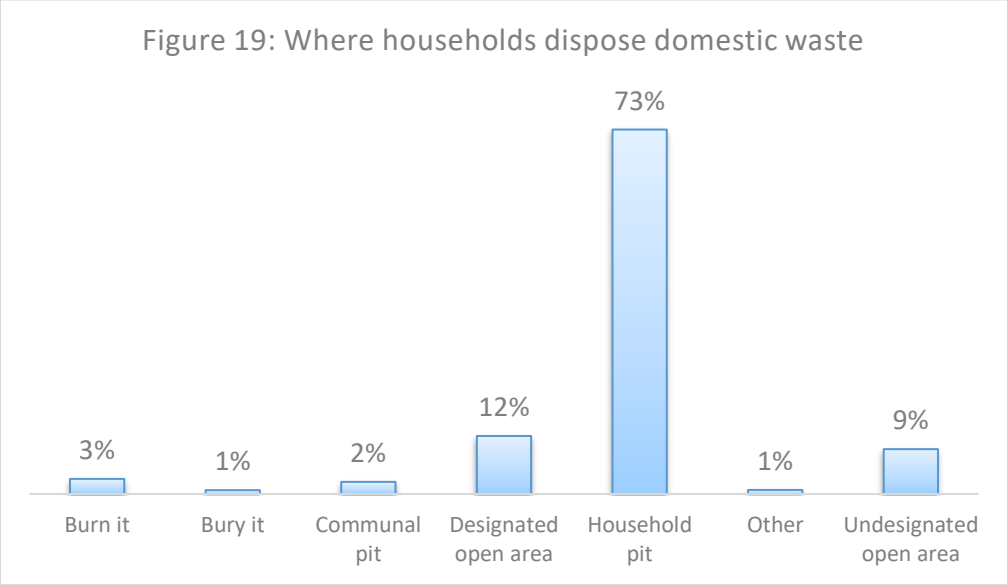
The survey also revealed as in figure 17 below that, about 8% of adult members in the household defecate in the open especially at night compared to 16% at baseline and they gave a reason of no latrine in the household (51%), latrine is too far (17%) and too dark at night (27%).

Presence of bathing facility for the households



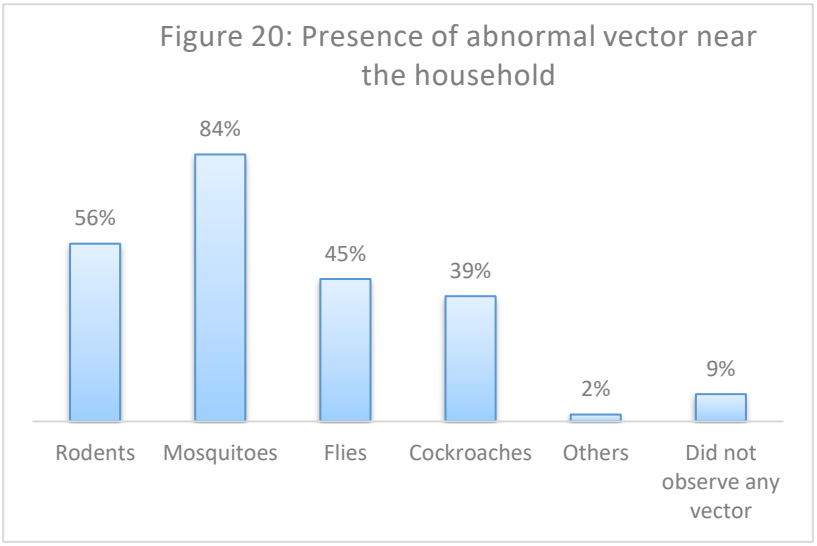
The survey revealed as in figure 18 above that, the majority of the households (80%) have a designated shower/bathing facility compared to 75% at baseline with exception of 20% of the households with no bathing facility as it was observed in the households during the survey. It was also observed that, 95% of households cover their food when it is kept for another person.

Waste management



According to the survey, the percentage of households with access to solid waste disposal facility stands at 75%. Much as there is solid waste disposal facility in most of the households, the practice of dumping waste in the facility remains poor with wastes visible near the households and on the compound as observed by enumerators during the data collection process. The figure 19 revealed more than half of the households 73% dispose of domestic waste in the household pit, with 12% in designated and 9% in undesignated open area, 3% burn domestic waste, 2% dispose in communal pit and another 1% bury it. It was observed that, 81% of the households had clean courtyard with exception of only 19% where rubbish was seen littered on the compound.

Presence of abnormal vector near the household



The most common abnormal vector reported by households were mosquitoes at 84% followed by rodents at 56%, flies were reported by 45% of the households while cockroaches reported by 39% of the households. About 9% of the households did not observe any abnormal presence of vectors at their homes.

Messaging

Respondents were asked to indicate the available common means to receive health and hygiene messages. The result revealed home visits from CHWs (74%) as the best common means followed by community meetings at 16%, radio at 5%, printed flyers at 1% and Focussed Group Discussions at 2% and others at 1%. Furthermore, the figure 22 revealed that 78% of the households prefer receiving hygiene and health messages through home visits by hygiene promoters, 15% from community meetings, only 4% would prefer radio while 2% 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 58% had received visits while only 35% reported attending community meetings on health and hygiene messages.

Figure 21: Best common means available to receive hygiene and health messages

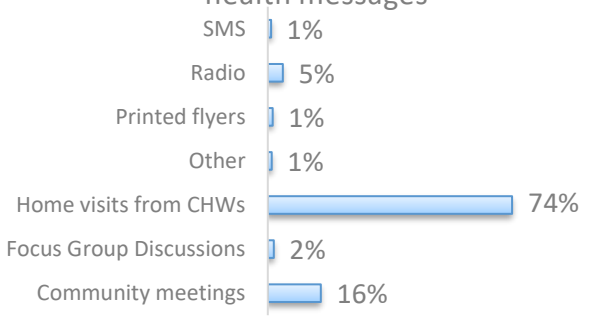
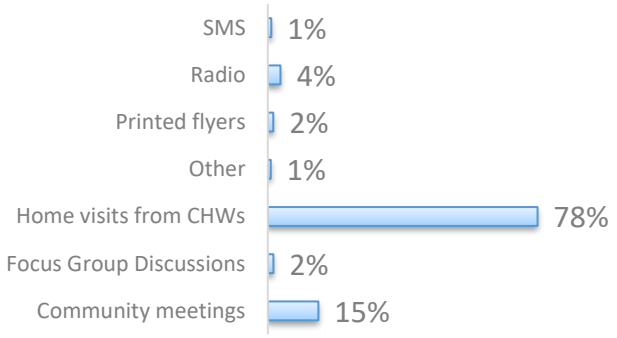


Figure 22: The beast alternative to receive hygiene and health messages



Diarrhoea prevalence, knowledge and health seeking Behaviour

From the survey, the diarrhoea prevalence among children under 5 years was at 23% while among 5 years and above was at 12%. The household members mentioned the most common possible causes of diarrhoea as: through drinking contaminated water (93%), through eating contaminated or undercooked food (91%), from flies at 76%, from unpleasant odor at 28% and from contact with someone sick with diarrhoea (13%). 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. This result means that most household members have good knowledge and understanding on health related issues because of several health education sessions conducted by hygiene promoters/community health workers.

Figure 23: Ways that people can get diarrhea

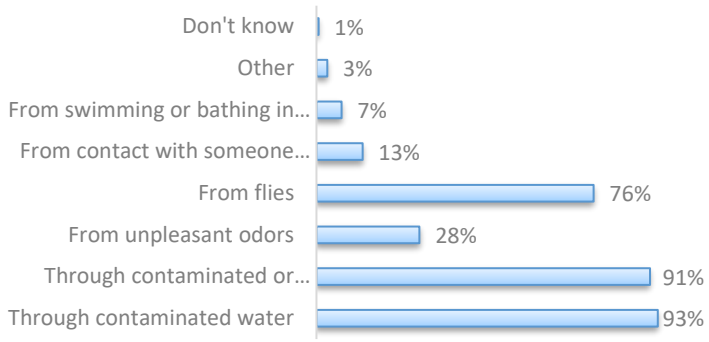
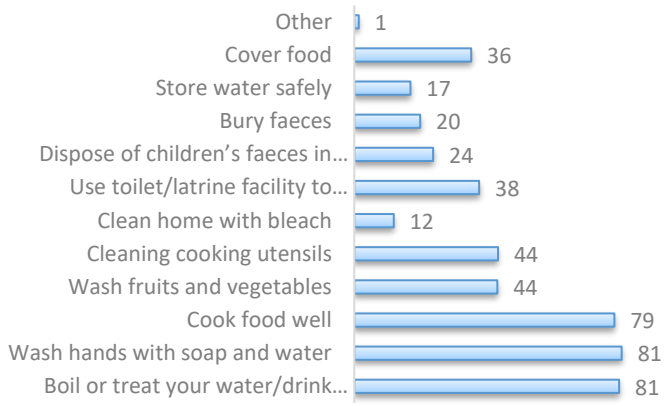


Figure 24: Ways that people can prevent diarrhea



Respondents were also asked ways in which diarrhoea can be prevented as in figure 24 above. They mentioned the most common ways as: washing hand with soap and water (81%), boiling or treating water or drinking clean water (81%), cooking food well (79%), cleaning cooking utensils (44%), washing fruits and vegetables at 444%, covering food (36%), and using latrine/toilet facility to defecate (38%). Other preventive measures include disposing of children's faeces in latrine (24%), and storing water safely for drinking (17%).

Conclusion

In view of the above indicator findings, this KAP survey acknowledges that partners have done a tremendous job in improving the living conditions of the refugees in relation to Water, hygiene and Sanitation compared to the 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 has improve with average litres per capita at 24 l/p/d compared to 22 l/p/d as at baseline survey. A 10 litre per person protected water storage capacity is still low at 47% compared to baseline figure of 22%. Though the survey found out that the major source of water across the settlement was public tap/standpipe (94%), the proportion of households collecting water from protected source 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 the open defection at still at 8% which is supposed to be zero and so more needs to be done by distributing latrine digging kits and encouraging households to dig latrines. In reference to 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 need for continuous maintenance and rehabilitation 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 water supply system should ensure that the systems remain functional to guarantee the water per capita does not drop below the current and that household continue to get water from protected/treated source. Sustainable operation and maintenance mechanisms should be put in place by setting up community management structures and livelihood options.
- Massive rehabilitation of boreholes and 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 post emergency phase, partners need to encourage households to venture into sanitation marketing with a main focus on cash based interventions like livelihood projects to boost community members' demand for sanitation products including latrine construction materials.
- In as much as most households have and use latrines, it is still imperative for partners to consider the fact that latrines would fill up, hence creating a need for support to construct others. Since the settlement has moved from an emergency to a post emergency phase, partners need to continue to encourage households to construct toilets/latrine so that cases of open defecation can either disappear or reduce. More so, WMU needs to continue distributing latrine digging kits across all the zones and also encourage household members to dig latrine holes.
- Sanitation activities should target elimination of open defecation by adults and safe disposal of children faeces since the cases continue to be high in the settlement most especially in Tika zone and households should be encouraged to construct bathing facilities since the access to these facilities.

Hygiene

- There is need for partners to encourage household heads to provide more Non-Food Items such as soap, jerricans and hand-washing facilities such as tippy taps to households. This is likely to increase the per capita consumption of water since most respondents had water storage containers less than 10L.
- Women in reproductive ages should be trained on how to manufacture reusable pads as well as their proper disposal. This is because the findings found out that most women used disposable pads and disposed sanitary pads in latrines this leads to faster filling up of the latrines.
- There is need for intensive hygiene promotion activities across all the zones with particular focus on 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 52% in Rhino Camp refugee settlement.
- There is need for refresher training to equip hygiene promoters, Refugee welfare committees and Water User Committees on WASH promotion approaches as well as on monitoring of community health improvement strategies. The findings showed that, the most preferred way of receiving messages was through home visits by the community health workers (Hygiene Promoters).

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	26-27 October 2020	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	27-28 October 2020	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	28-30 October 2020	Database in Kobo collect tool 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	3 days	16-18 November 2020	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		Flexible	TORs for Survey Supervisors, Data Collectors
3	Signing of Contracts & Briefing			Flexible	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	2 Days	19-20 November 2020	Field staff trained (The supervisors will mentor and guide the data collectors at the field level)

5	Pre-testing of the instruments and review/adopt tools for the survey	Identification of pilot areas and conducting pre-test	1 day	21 November 2020	Revised Instruments and techniques
Stage 3: Fieldwork					
1	Data collection	Implementation of data collection exercise in agreed sampling areas	5 days/ zone	23-27 November 2020	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	28 November 2020	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 device into the Kobo collect database	2 Days	30 November-1 December 2020	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.	3 days	2-4 December 2020	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	5 days	7-11 December 2020	Analysis of baseline indicators
Stage 5: Report Making & Dissemination					
1	Develop draft of Final Report for comment	Develop and submit Final Report for review by UNHCR and WTWG	5 days	11-16 December 2020	Draft report

2	Review of draft KAP Survey report	Review of draft KAP survey report by UNHCR and WTWG	3 days	14-16 December 2020	Feedback on draft report
3	Integration of comments	While doing the modification of the report, send invitation to the Consortium and relevant government agencies	2 days	15-16 December 2020	Comments integrated
4	Presentation of the Findings	Follow up the invitees	1 day	16 December 2020	Feedback on the findings
5	Develop Final Baseline Report	Develop and submit Final Report and dissemination materials; Power Point presentation and 2 page summary of findings	5 days	15-16 December 2020	Final Report submitted

Annex 3: Communities covered in the KAP survey

Rhino Camp settlement sample size			
Zone	**Population**	**Household size**	**Sample household**
Zone I	13,688	2,631	336
Zone II	12,603	3,031	342
Zone III	4,740	1,078	284
Zone IV	9,035	2,545	335
Zone V	12,500	2,227	329
Zone VI	26,952	6,787	365
Zone VII	36,504	11,513	373
Total	**116,022**	**29,812**	**2,364**

Annex 4: Community contact persons

S/N	NAMES	Designation	Zone	TELEPHONE
1	AYUME ISAAC	RWC 1	Ofua	0773361385
2	BALA SIMON	RWC 1	Ocea	0750427792
3	JACOB MANYON MANYOK	RWC 1	Siripi	0780990737
4	JAMAICA NELSON	RWC 1	Eden	0771249055
5	MOHAMMED JACKSON	RWC 1	Tika	0753493002
6	SARAH	RWC 1	Odobu	0702476566

Annex 5: KAP survey team

List of enumerators

Omugo		
S/N	**ENUMERATOR NAME**	**MOBILE NUMBER**
1	Angundu Collins	256787181011
2	Mungujakisa Edwin	256776877905
3	Joja Tom	256783668672
4	Munduga Tonny	256779545543
5	Ariku Simon	256785676562
6	Angunjia Peter	256775212729
7	Badi Michael	256789385951
8	Sida Harriet	256786684814
9	Sitima Agnes	256777262003
10	Aleti Jesca	256775032154
11	Ajiga Nobert	256772815488
12	Afulu Joseph Junior	256771819332

Siripi		
S/N	**ENUMERATOR NAME**	**MOBILE NUMBER**
1	Wadok Stephen Longa	256771288318
2	Aluma Joseph	256783171791
3	Nyakuru Bibiana	256758195118
4	Monday David	256779693699
5	Oliver Lugala Jackson	256786183666
6	Okuonjiga Robert	256701880652
7	Taban Emmanuel	256789710667
8	Rufas Bita Elias	256787179088
9	Inziku Felex	256707313389
10	Cyrus Emmanuel	256773380795
11	Kenyi Emmanuel	256779601403
12	Keji Beida	256783262015

Ocea		
S/N	**ENUMERATOR NAME**	**MOBILE NUMBER**
1	Juma Francis	256788222220
2	Ayikoru Milka	256784080182

3	Timothy Johnson Jalan	256789120892
4	Vicky Night Sitima	256775987091
5	Sunday Joyce	256779010718
6	Lemi Emmanuel	256786877697
7	Julias Nyerere Christopher Wani	256775061669
8	Peter Gatchuk Machar	256789698968
9	Letiru Joan	256772409463
10	Onen Joseph Willy	256759059167
11	Madepi Salume	256758489657
12	Gatluak Jok Kuol	256751906023

Odobu		
S/N	**ENUMERATOR NAME**	**MOBILE NUMBER**
1	Kofi Anan	256771066536
2	Abujabar Samson	256780454028
3	Pech Lim Gatluak	256780400659
4	Sanya Stephen	256779714500
5	Oryem Quincy Willy	256782334070
6	Majuk Dan	256786105580
7	Met Lim Gatluak	256780542338
8	Charles Woja Surur	256789692982
9	Immaculate Kojoki	256705468528
10	Asiku Leonard	256781483144
11	Amule Abubakar	256778590313
12	Night Aida	256700206456

Tika		
S/N	**ENUMERATOR NAME**	**MOBILE NUMBER**
1	Vulima Pasikole	256787426263
2	Toko Santus	256785304970
3	Awininiki Susan	256782344415

4	Faida Jane	256773738469
5	Guma Emmanuel	256774628258
6	Ayikoru Harriet	256775029929
7	Oroma Samuel	256783799149
8	Arindu Alfred	256786505529
9	Trimaru Monica	256778720715
10	Dama Emmanuel	256789146683
11	Toma Vivian Hildah	256776579804
12	Gati Geofrey	256774840128

Ofua		
S/N	**ENUMERATOR NAME**	**MOBILE NUMBER**
1	Towongo Francis	256753336415
2	Moga Justine	256754428874
3	Asibaziyo Godliver	256776829599
4	Musoke Mark	256700263706
5	Yakani Lenard	256773992142
6	Adomati Lawrence	256785519657
7	Amandi Wilfred	256707313384
8	Adriko Constantine	256759649253
9	Goya Moses	256772421936
10	Ayozu Joy	256774865333
11	Buzu Bridget Bako	256779696105
12	Oliver Dada Vitale	256781469500

Eden		
S/N	**ENUMERATOR NAME**	**MOBILE NUMBER**
1	Taban Phillip	256785115860
2	Emmanuel Juka Sapana	256781464145
3	Nelson Mandela	256784300066
4	Data Charles	256778766185

5	Joice Monday	256770516991
6	Inna Janet Taban	256772404210
7	Khemis Ezibon Morris	256775736667
8	Amanda Hope	256784988517
9	Wamoya Balam	256756512468
10	Drijaru Clara	256777815045
11	Atibuni Festus	256777515704
12	Yire Econi	256703538168

Annex 6: Activity Photos

Enumerators picking GPS coordinate during training

Enumerators attending end line survey training

Enumerator conducting household interviews

Enumerator conducting household interviews

Public tap/stand pipe providing clean drinking water for households

Piped water connection at a household in Tika zone

Enumerator conducting household interviews

WMU M&E Officer training enumerators on data collection