

KIRYANDONGO WASH KAP ENDLINE SURVEY



A 2020 end line study on current community access to and practices on
Water, Sanitation and Hygiene in Kiryandongo Refugee Settlement in
Kiryandongo District

December 2020

Contents

I.	Acknowledgements.....	2
II.	Abbreviations and Acronyms	3
III.	Executive summary	4
IV.	Background and context	10
V.	Survey objectives	Error! Bookmark not defined.
VI.	Methodology.....	11
	Survey area and sample frame	11
	Sampling size and methodology	11
	Indicators and questionnaire elaboration	12
	Ethics and consent	13
	Recruitment and training.....	13
	Data collection and quality control measures	14
	Data analysis plan	14
	Limitations, challenges and lessons learnt	14
	Challenges	15
VII.	Key results and finding.....	16
	Water Supply.....	16
	Hygiene	21
	Sanitation	23
	Waste management.....	24
	Messaging	25
VIII.	Conclusion.....	27
IX.	Recommendations	28
X.	Annexes.....	30
	Annex 1: Questionnaire	30
	Annex 2: KAP Survey work plan	30
	Annex 3: Communities covered in the KAP survey.....	30
	Annex 4: Community contact persons.....	32
	Annex 5: KAP survey team	33
	Annex 6: Activity Photos	34

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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 Kiryandongo Refuge settlement. This study comes at a crucial time in Kiryandongo. A time when UNHCR has declared her strategic intention to embark on long-term development activities within the settlement. 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 Kiryandongo 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, Kiryandongo District through its various units who contributed to the survey notably the DWO, DHO who provided the support we wanted to carry this out.

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Finally, we thank the baseline survey team for their commitment and dedication in getting this done. UNHCR would like to single out Acidri Daniel WMU M&E Team Lead, Apire Samuel-WMU Senior WASH Officer/Team leader-Arua, Enock Kiraire-Project Manager 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.

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

UNHCR

31th 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 1.3 million refugees (Uganda Refugee Response, UNCHR, and OPM September 2020) with about 67,743 (OPM September 2020) of them settled in Kiryandongo refugee settlement. This rapid influx of refugees has put pressure on key facilities and services including shelter and WASH infrastructure.

In addition, the influx also led to 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. Kiryandongo settlement has had a number of interventions by different partners, and in as much as there were access indicators obtained regularly by the partners that provide extremely useful average figures at settlement level, there has been a gap in the in-depth understanding of the situation at household level and to account for disparities within the settlement so as to measure the impact of the interventions.

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

Methodology

The survey mainly utilized 2 methods: Household questionnaire survey and documentary review. The survey covered all the 2 Ranches of Kiryandongo 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 373 (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	Post Emergency standard	Endline Ranch 1	Endline Ranch 37	Overall Baseline survey	Overall Endline survey
Water Quantity	Average litres of potable water/per person/per day collected at HH level	≥20	26.7	20.3	22.8	23.3
	% HHs with at least 10 L/p protected water storage capacity	≥80%	64.9%	68.8%	37.7%	67%
Water Access	Maximum distance [m] from household to potable water collection point	≤500m	297	314	397	306
Water Quality	% HHs collecting drinking water from protected/treated sources	≥95%	98.2%	97.5%	98%	99%
Sanitation	% HHs with family latrine/toilet	≥85%	87.7%	83.2%	83%	85.3%
	% HHs reporting defecating in a toilet/latrine	≥85%	98.2%	97.5%	96%	98%
	% HHs practicing open defecation. **Includes defecating in the bush at night.	0	1%	1%	5%	1%
	% HHs having access to a bathing facility	≥90%	70.2%	68.3%	67%	69.2%
Hygiene	% HHs with access to soap	≥90%	78.4%	75.2%	76%	77%
	% HHs with access to a specific hand-washing device	≥90%	56.7%	61.9%	34%	60%

	% respondents knowing at least 3 critical moments when to wash hands	≥80%	99.4%	98.5%	82%	99%
Solid Waste	% HHs with access to solid waste disposal facility	≥90%	77.2%	65.3%	64%	71%

Other WASH related indicators

Parameter	Indicator
Water Supply	<p>A majority of the households have access to improved water facilities. Close to half of the of the households (48%) reported Public tap/standpipe as their principal source of drinking water for members in the household compared to (43%) who reported handpump/borehole.</p> <p>Adult females (78%), adult males (4%) and children (11-18 years) (18%) are responsible to fetch water for domestic use. Majority of the households (98%) reported that water sources are within 500-meter radius a 6-minute walk distance. At least 98% of the population use jerry cans for water collection and storage.</p> <p>Average litres of potable water/per person/per day collected at household level is above post emergency standard at 26.6 L/p/d. At zone level, Ranch 1 stands at 29.4 and Ranch 37 at 24.2 l/p/d. Generally, the water per capita is above the post emergency standard of 20 L/p/d.</p> <p>About (66.9%) of the households had at least 10 L/p protected water storage capacity while the rest (33.1%) had less than 10 L/p storage capacity.</p> <p>Most of the water points are at acceptable distances from households, average distance to the nearest water point was 306 metres. The minimum distance to the nearest water point was 80 metres while the maximum at 800 metres. Over half of the households (63%) clean their containers every time they use them while less than half of the households (36%) clean their containers at least once a week. About 1% of households clean their containers once in a month.</p>
Water treatment	<p>Most households (88%) were observed when pouring and dipping cups to scoop water from their drinking water containers, the result showed that there was no contact between the hands and water in the container hence no contamination. More sensitisation is required for the (12%) regarding safe water chain.</p>
Sanitation	<p>Close to half of the households (42%) reported that children under-5 living in the households usually defecate in the open. Meanwhile, (36%) reported that children under 5 years are always introduced to the household latrine (this applied to only children who can walk and squat), 15% use plastic pot, another 7% use plastic bag and 3% use communal latrine for their children. For children under-5 who do not use a latrine, majority (50%) of the households collect and dispose of their faeces in the latrine while the rest 50% either burry it or collect and dispose elsewhere.</p>

	<p>A very few number of adult household members (1%) defecate in the open especially at night. They gave a reason of no latrine in the household (25%), it is too dark at night (25%) and latrine too far (50%). The majority of the households (87%) use a single household facility, 12% have shared facility used by a number of households. Most of the latrines from (98%) of the households are in use. Majority of the households (69%) have a designated shower/bathing facility with exception of only (31%) of the households.</p>
Waste management	<p>Majority of households (71%) have access to solid waste disposal facility. Most households (67%) dispose of domestic waste in the household pit. With (14%) in designated open area, (5%) at the undesignated open area, (4%) bury it, (3%) dispose in communal and (5%) burn it. It was observed that (82%) of the households had clean courtyards with exception of only (18%) of the households.</p>
Hygiene	<p>The key times when people practice hand washing with soap include after defecation (92%), before eating (97%) and before cooking/meal preparation (67%). Other important key times on hand washing with soap registered very low such as before breast-feeding (12%), after handling baby faeces or diapers (22%) and before feeding children (19%).</p> <p>Hand washing with soap and water is widely practiced as claimed by 60% of the respondents, though hand washing with water only is practiced by 75%, and in the absence of soap 20% of the respondents use ash for proper handwashing. The main reasons why people do not wash hands with soap is that the Soap was already used up (93%), and the rest of the household cannot find soap (7%).</p> <p>The observation from the survey also revealed that, 54% of households who had hand-washing facility did not have soap place next to it while 46% had soap at the hand washing station. Furthermore, (37%) of households did not have water in the hand-washing device.</p>
Health and hygiene messages	<p>The majority of the surveyed communities (98%) had 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.</p> <p>The most preferred channels for receiving hygiene messages are home visits (75%), community meetings (16%), radio (8%), Focussed Group Discussion at (1%) and SMS at 1%.</p>
Diarrhoea prevalence, knowledge and health seeking behaviour	<p>Diarrhoea cases were reported by (35%) of the surveyed households especially among children less than 5 years while for 5 years and above it was reported at (17%)</p>

	<p>Respondents believe that the most common causes of diarrhoea include; transmission by drinking dirty water (88%), and through flies (70%), eating dirty or undercooked food (76%).</p> <p>They believe that diarrhoea can be prevented through, washing hand with soap and water (65%), cooking food well (55%), boiling or treating water/ drinking clean water (52%), cleaning eating utensils (45%), covering food properly (43%), and using toilet/latrine facility to defecate (37%) among other measures.</p>
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IV. Background and context

Uganda is hosting over 1 million refugees (Uganda Refugee Response, UNCHR, and September 2020) with about 67,743 (UNHCR 30th September 2020) of them settled in Kiryandongo refugee settlement. This rapid influx of refugees has put pressure on key facilities and services including shelter and WASH infrastructure.

In addition, the influx also led to destruction of systems, hence creating for interventions to reconstruct them. In order to efficiently do this, there is need for accurate and reliable information on which to base programmatic decisions. There have been quite 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 camp level, there was still need have an in-depth understanding of the situation at household level and to account for disparities within a camp so as to measure the impact of the interventions and establish what still needed to be done so as to achieve the required Standards.

It is therefore against the above background that the WASH cluster seek to conduct a Knowledge, Attitude and Practices (KAP) end line survey to assess the impact of WASH intervention for the last 1 year.

According to a baseline KAP survey conducted by WMU/UNHCR in January 2020, 5% of the surveyed households reported practicing open defecation. This can be attributed due to lack of enough materials for Households latrine construction. Only 34% of the surveyed households had hand-washing facilities. 64% practice proper disposal of solid waste. 83% of the households had access to family latrine, and the water per capita for the settlement was at 22.8 l/p/d which is above the UNHCR minimum standards of 20l/p/d.

WMU currently is implementing WASH activities with funding from UNHCR in Kiryandongo. These activities include water supply and sanitation and hygiene promotion. It is against this background, WMU conducted an end line survey that will measure the achievements through KAP (knowledge, Attitudes and Practices) of the communities in Kiryandongo settlement where Water, Sanitation and Hygiene activities are being implemented.

1. Overall 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 Kiryandongo refugee settlement

2. Specific Objectives

- Establish the current Knowledge, Attitudes and Practices (KAP) of refugees in relation to WASH in Kiryandongo refugee settlement as at endline.
- Generate information regarding quality, access to and effectiveness of WASH interventions in Kiryandongo refugee settlement.

V. Methodology

Survey area and sample frame

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

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

Zone	Population size	Households	selected sample size
Ranch 1	35,060	5,479	171
Ranch 37	30,904	4,779	202
Total	65,964	10,258	373

Sampling size and methodology

Simple Random sampling was adopted to reflect and compare the experiences across the 2 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
Ranch 1	5,479	171	7
Ranch 37	4,779	202	8
Total	10,258	373	15

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 ranch 37. 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 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 quantitative data collection process emphasising the issue of confidentiality and the security of the information they are providing. For successful management of expectations from household members, the enumerators clearly explained that participating in the survey would not lead to any direct benefits, nor could the enumerators provide diagnostic or individual case management support to each household visited. The research objectives and implementation plan was discussed and shared with key WASH partners in the settlement including UNHCR, OPM and the district and this took place through WASH sector meetings and individual meetings with OPM and district officials. Stakeholder consultations were also conducted so as to improve the questionnaire.

Recruitment and training

A total of 15 enumerators were recruited from the 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. 2 supervisors selected from WMU staff helped to monitor and support the enumerators during data collection.



Figure 1 Enumerator training on data collection and research protocol

Data collection and quality control measures

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



Figure 2 Enumerator conducting household data collection



Figure 3 Enumerator conducting household data collection

Data analysis plan

All quantitative data collected was fully reviewed and consolidated into a single dataset for all the 2 Ranches. 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 (χ^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.
- The team faced challenges of bad roads and poor terrain and there was heavy rainfall in some days which affected data collection process.
- Some respondents especially women were shy responding to menstrual hygiene questions administered by male data collectors.

Lessons learnt

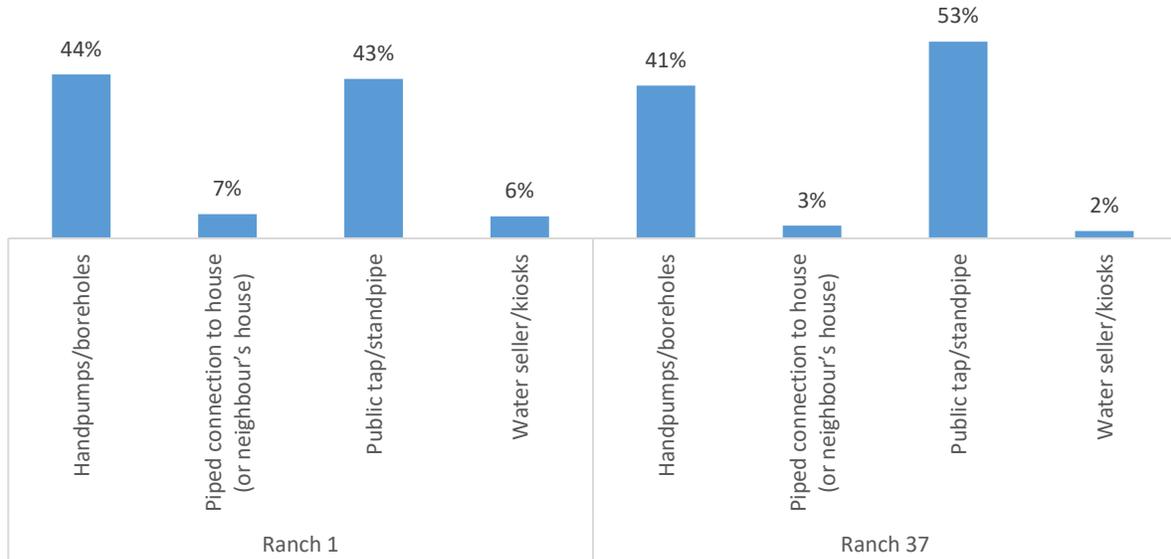
- The hiring of local data collectors who understand the local context not only facilitated the work but also helped in creating community acceptance.
- Future funding for Surveys, partner organizations should invest in mobile data collection gadgets (cell Phones& tablets) to ease data collection.
-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

VI. [Key results and finding](#)

Water Supply

Main source of drinking water

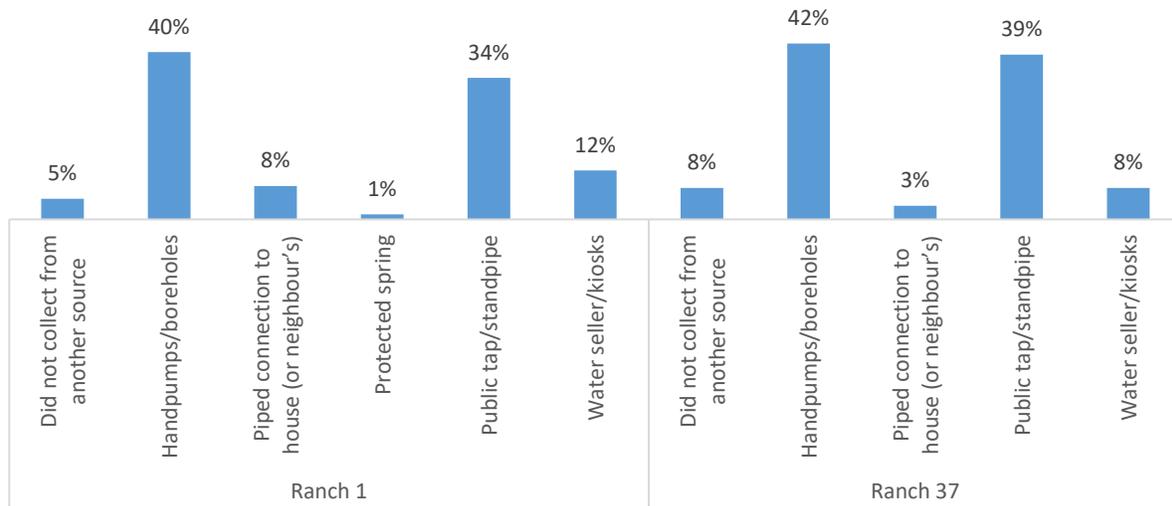
Figure 1: Main source of water for household members



From the survey findings as presented in figure 1 above, close to half of the households (48%) across all the ranches reported hand public tap/standpipe as their main source of drinking water for members in the household as compared to (43%) who reported handpump/borehole. About 5% had piped water connection to their households and only 4% got water from water sellers/water kiosks. At the zonal level, Ranch 1 reported the majority of households who get their main drinking water from hand pumps/boreholes (44%) while Ranch 37 reported public tap at 53%. About 43% of households from Ranch 1 reported public tap/stand pipe as their main source of water followed by 41% of households from Ranch 1 who reported handpump/borehole. Very few household members from both ranches had piped connection to their households with ranch 1 at 7% while ranch 37 at 3%.

Second most used source of domestic drinking water

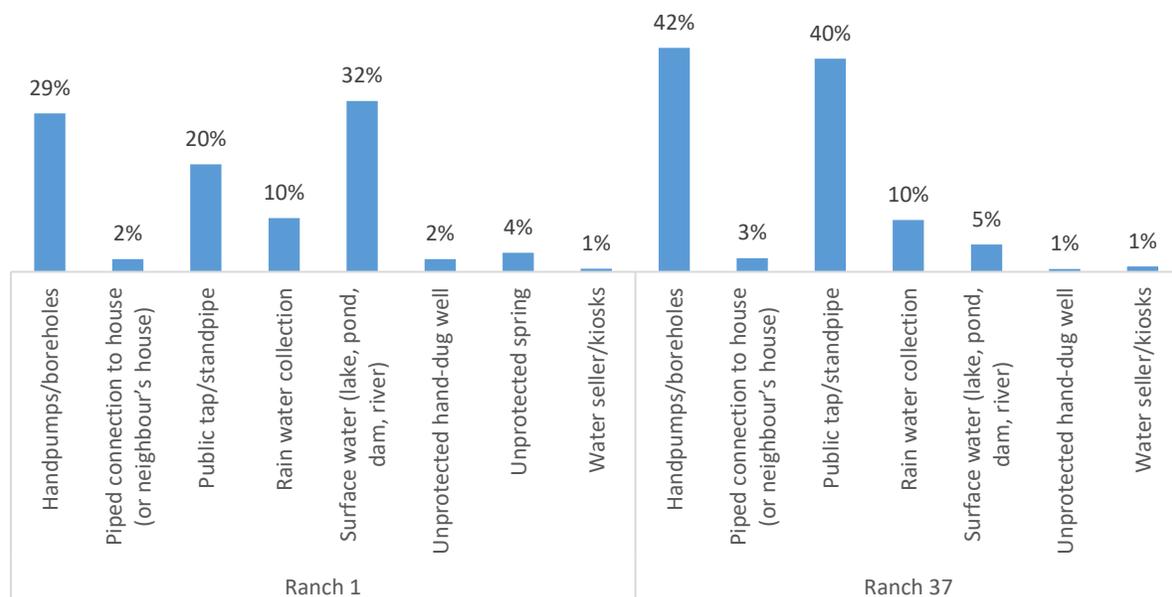
Figure 2: Second most used source of domestic drinking water for household members



The survey also looked to find out the alternative source of domestic drinking water for the households. The result as in figure 2 above revealed that, a good number of households across both Ranches have handpump/borehole as their main alternative water source at (41%) while about (37%) of the households still collected water from public tap/standpipe. About 6% of households especially from both Ranches had piped water connection to their house and they used it as their alternative water source while 7% of the households did not collect water from another source apart from their main source.

Sources of water for other activities

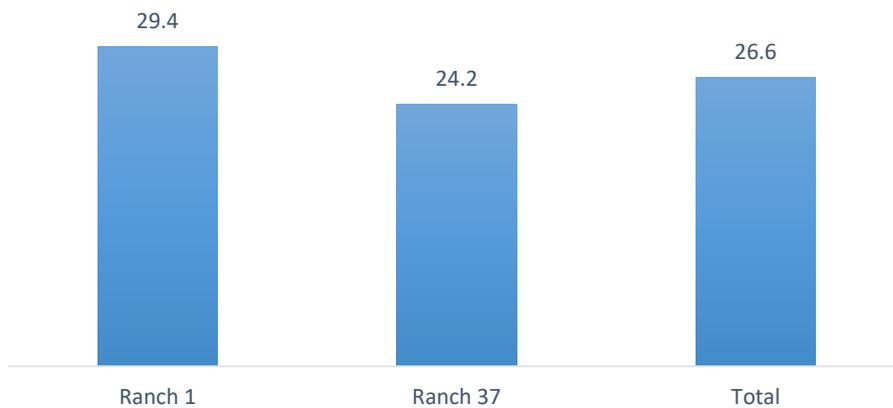
Figure 3: Source of water for other activities



The survey asked about the sources of water the households use for other activities like gardening, brick laying, animal consumption and others as in figure 3 above. The results revealed that, about (36%) of the households across all the ranches use hand pumps/boreholes for other activities in the household and this is followed by about (30%) of the households who use public tap/stand pipe water for other domestic activities while others use rain water (10%), surface water (19%) and other water sources for carrying out non domestic activities.

Water per capita per zone

Figure 4: Average litres of portable water/per person/per day collected in a portable container



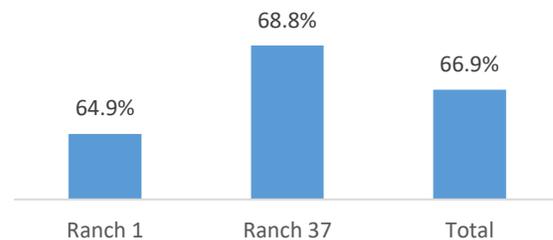
According to the findings from the survey, the average liters of portable water/per person/per day collected at household level from the two ranches as at endline survey stand at 27 compared to the one at baseline which was at 2

3. The findings from the survey revealed at zone level that, Ranch 1 had a better percapita at 29 l/p/d while Ranch 37 had 24 l/p/d. The percapita across all the zones conforms to the post emergency standard of 20 l/p/d, this is attributed to routine system repairs and maintenance and fixing broken tap stands, continuous operation and maintenance activities, increased protected water storage capacity, water system upgrades and extensions where more public tap stands were constructed and several other water options and sources in the settlement.

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 from the two Ranches greatly improved at endline at 66.9% compared to the baseline figure of 37.7%. The survey also revealed that Ranch 37 had a higher figure at 68.8% from 30.3% while Ranch 1 had 64.9% from 44.6% as at baseline. This was a great improvement as compared to the post emergency standard of

Figure 5: % of households with atleast 10 litres/person protected water storage capacity

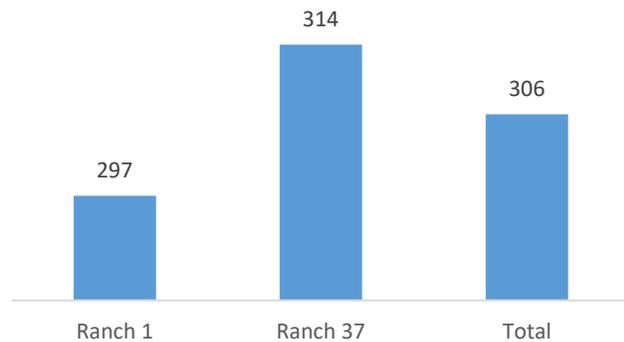


over 80% of the households. Since the storage capacity improved, the daily water consumption capacity and or increase on the frequency of water collection per day from the water source has also improved as a result of the high water percapita. The improved protected water storage capacity is mainly because most households (over 70%) have enough protected water storage containers.

Distance to the nearest water point

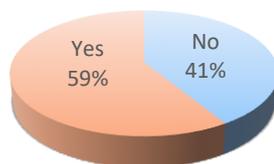
From the survey findings, the overall average walking distance by household members to the nearest water point was 306 meters compared to 397 meters at baseline. Further findings from the survey revealed that, in the settlement, most households walk a maximum distance of about 800 meters from 1440 meters as at baseline survey from their households to portable water collection point with the minimum distance as short as 80 metres. The survey revealed that, at Ranch 1, most households walk an average distance of 297 meters compared to a distance of 405 metres as at baseline while Ranch 37 at 314 meters from 388 meters at baseline.

Figure 6: Household distance to the nearest water point



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

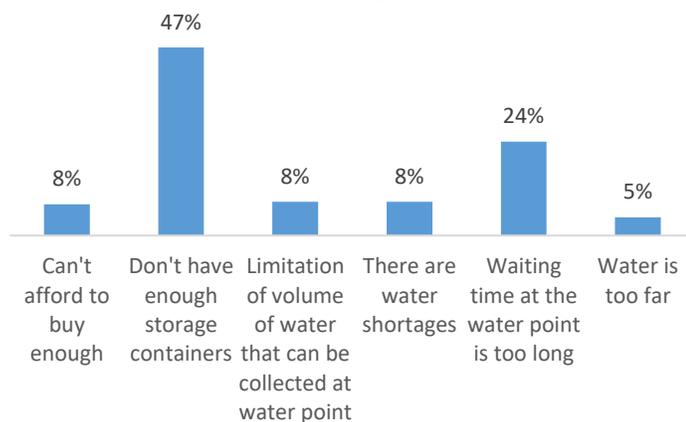
Figure 7: Amount of water collected to meet all household needs



collect enough water for their household needs with the exception of (41%) of the households who do not collect enough water for their households, this was an improvement by 12% from the baseline. Among the reasons as to

The survey looks at whether households collect enough water to meet their needs. The respondents indicated that over half of the households (59%) reported they do

Figure 8: Reasons why households don't collect enough water

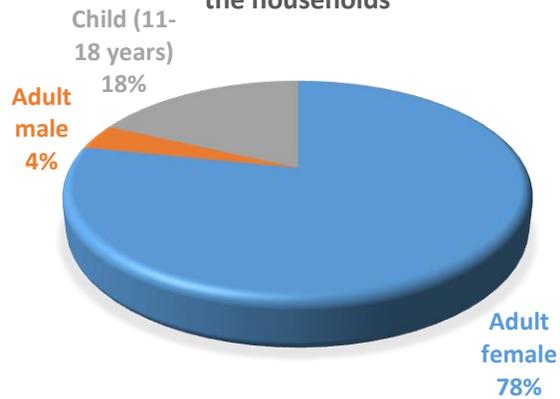


why households do not collect enough water to meet their needs as presented in figure 8 above, many households reported that they do not have enough storage containers for collecting water (47%); this was followed by households who reported long waiting time at water point at (24%). The rest of the households gave other reasons such as, water shortages (8%), inability to buy enough water (8%) limitation of volume of water that can be collected at water point at 8%, and water being too far (5%).

Persons who collect water for the household

There was much deviation from baseline survey on who usually collect water for the households, the majority of the households (78%) reported that it is adult females who usually collect water for the household, followed by children aged 11-18 years at 18% and adult male at 4%.

Figure 9: Persons who collect water for the households



Cleaning drinking water containers

The households were also asked at endline survey how frequent they clean their drinking water containers, the response indicated that, majority of the households (63%) clean their containers every time they use them compared to 55% at baseline survey, followed by (36%) of the households who clean their containers at least once a week while 1% clean their containers once a month at endline compared to 18% that reported the same at baseline survey. On how households clean their drinking water containers, over half of the households (54%) reported that, they wash their containers using specific products such as omo detergents or soap powder compared to 48% at baseline while 30% of the households wash their containers using rocks/sand and shake at the same time. About 16% wash them with a piece of tissue/sponge. 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.

Figure 10: Period for cleaning drinking water containers

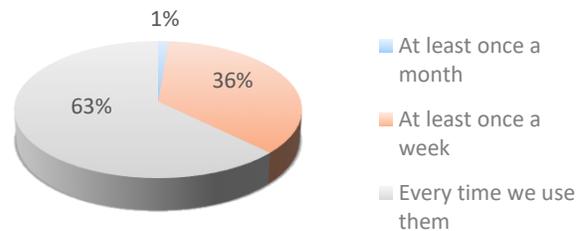
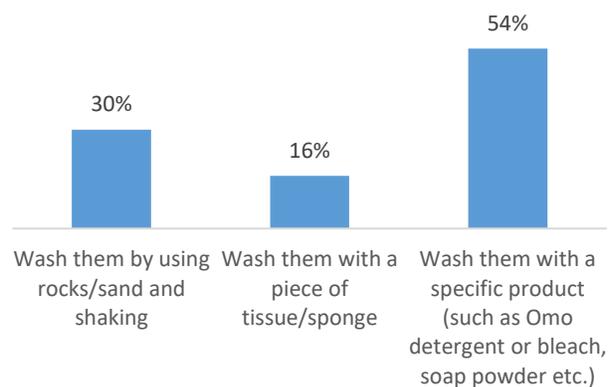


Figure 11: How drinking water containers are cleaned



Hygiene

Presence of soap

The survey revealed the percentage of households with access to soap at 77% which was more less the same as at baseline with 76%. Majority of the households (93%) reported that by the time of the survey they had ran out of soap while (7%) of households could not afford soap.

Further analysis revealed that, at endline survey, majority of the households (77%) get their soap through NGO distribution compared to over half of households at baseline (55%) who purchased their soap while about 22% of the households purchased their soap with only 1% who were gifted soap. Furthermore, majority of the households (75%) revealed that they would use water only in absence of soap while 20% would use ash, 1% use sand and the next 3% used other things when there is no soap at the household.

Figure 12: Presence of soap for the households

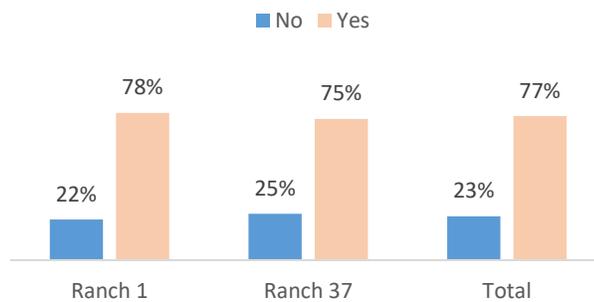
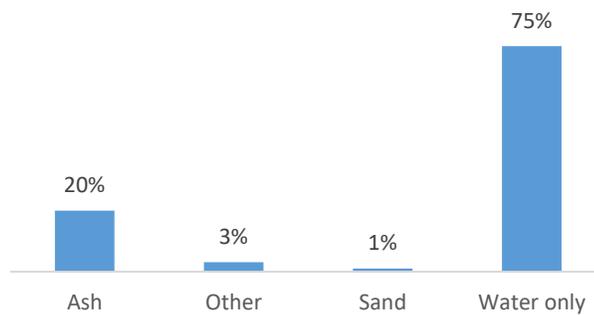


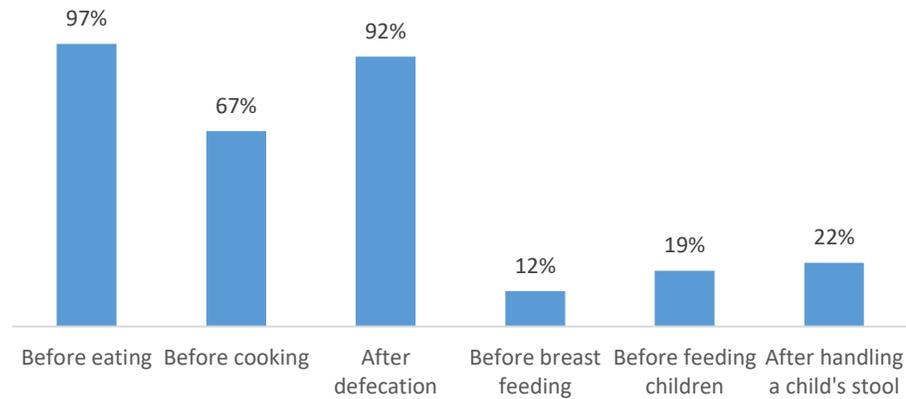
Figure 13: What households use in absence of soap



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 14 above that most household members stated the 3 moments as before eating (97%), after defecation (92%) and before cooking/meal preparation (567%).

Figure 14: Critical moment of hand washing at the households

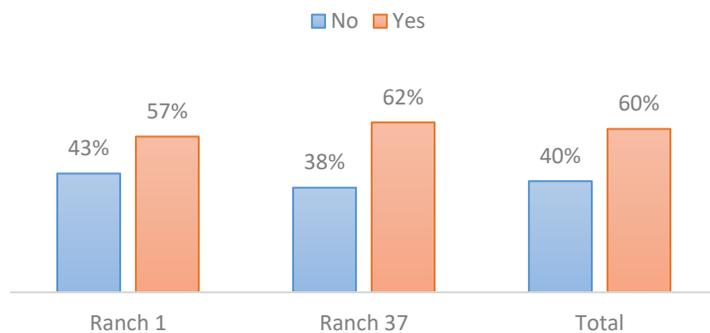


The rest of the households also identified another set of 3 critical moment of hand washing as; After handling a child’s stool (22%), before feeding children (19%), and before breastfeeding (12%).

Specific hand washing device/station at household

The survey also assessed the presence of hand washing facility in the household. The result as at endline survey revealed as in figure 15 that, 60% of the households had hand washing device/station in their households compared to 34% that reported at baseline while the rest (40%) did not have hand washing facility in their household at endline survey. From the observations carried out, there was

Figure 15: Access to specific hand washing facility



water in 73% hand washing device and the rest 27% did not have water meaning either the water got finished or the device was not being used. The observation from the survey also revealed that, 54% of households who had hand-washing facility did not have soap placed next to it while 46% had soap at the hand washing station.

Sanitation

Where household members excluding children under 5 defecate

According to the survey findings as in figure 16, the majority of household members (87%) defecate in the household latrine (this excludes children under 5 years of age) compared to 83% at baseline survey. With only a few (13%) who use communal latrine while only (1%) practice open defecation in places where they stay compared to 4% at baseline survey. The survey also revealed that, the percentage of households with access to latrine/toilet stands at 99% compared to 96% at baseline.

From the findings as in figure 17, about 42% reported that, the children under 5 years who have started walking always defecate in the open while about 36% of the households reported that children under 5 years are supported to defecate in household latrine and about 15% of the households use plastic pots for the children under 5 years to defecate, and about 7% use plastic bags while the rest 3% take their children to the nearby communal latrine to defecate. For children under-5 who do not use a latrine, finding revealed that, about 50% collect and dispose of their faeces in the latrine while the rest 50% either bury it or collect and dispose elsewhere.

Figure 16: Where household members (excluding children under 5) defecate

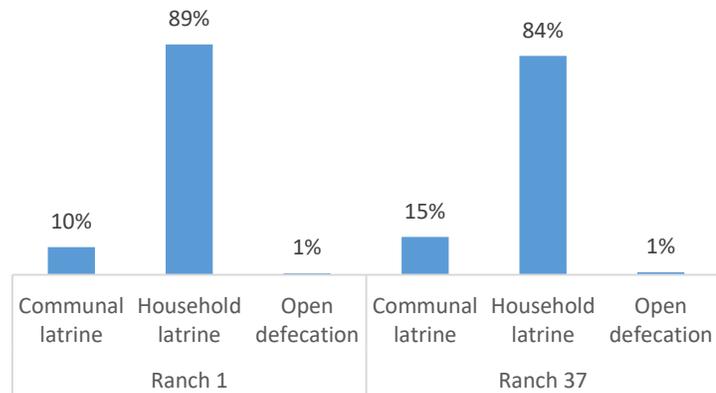
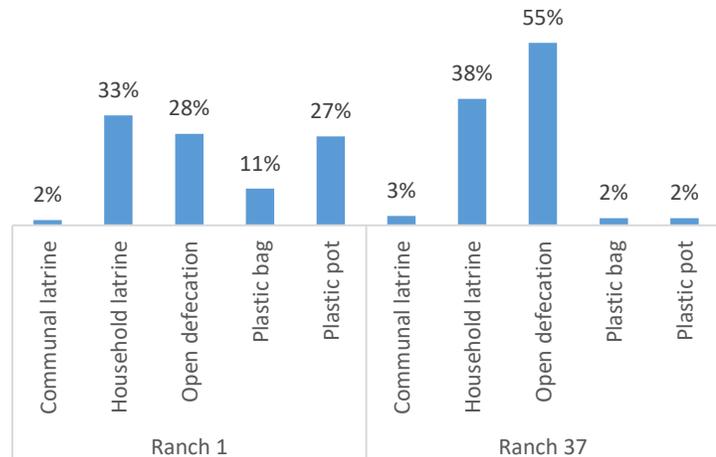


Figure 17: Where children under 5 living in the households defecate



Practice of open defecation among adult members of the household

The survey revealed at endline survey as in figure 18 below that, only 1% 5% of adult members in the household defecate in the open especially at night compared to about 5% at baseline survey. The households gave a reason of latrine being too far (50%), too dark at night 25%, and another 25% said there was no latrine at the household.

Presence of bathing facility for the households

The survey revealed as in figure 19 above that, the majority of the households (73%) have a designated shower/bathing facility compared to 67% at baseline survey while about 27% of the households as at endline survey had no bathing facility as it was observed in the households during the survey. It was also observed that, 83% 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 84% compared to 63% at baseline survey. Much as there is solid waste disposal facility in most of the households, the practice of dumping waste in the facility still remains poor with wastes visible near the households and on the compound as observed by enumerators

Figure 18: Practice of open defecation among adult members of the household

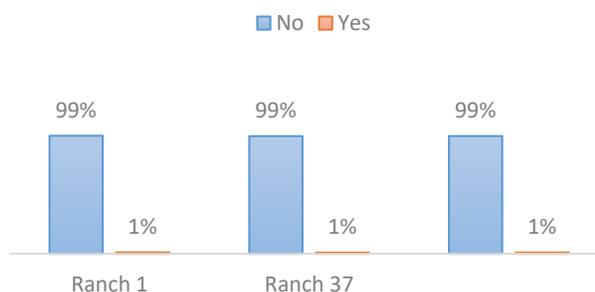


Figure 19: Presence of bathing facility in the household

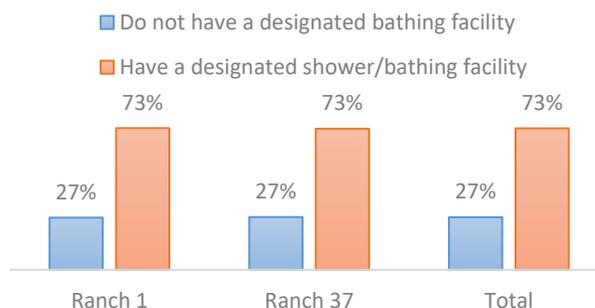
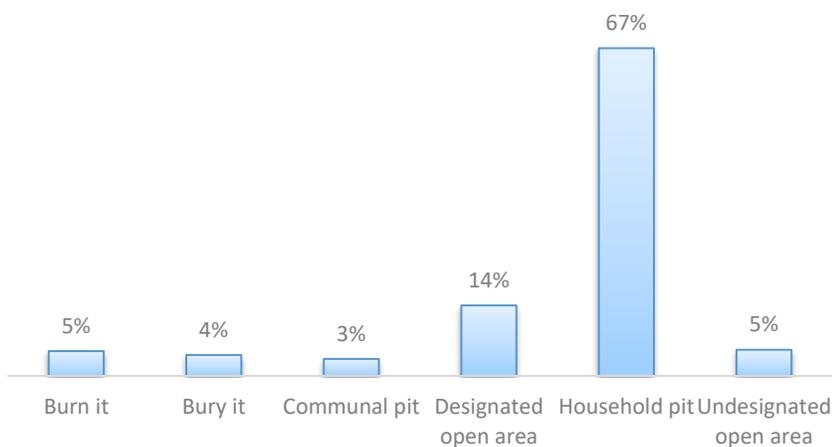


Figure 20: Where households dispose domestic waste



during the data collection process. The figure 20 revealed that over half of the households 67% dispose of domestic waste in the household pit, with 14% in a designated open area, while 5% burn it, 6% bury it and 3% dispose in communal pit. About 5% of the households use undesignated open areas to disposed their domestic waste. It was observed that, 82% of the households had clean courtyard compared to 66% as at baseline survey while about 18% did not have clean courtyard.

Presence of abnormal vector near the household

The most common abnormal vector reported by households were mosquitoes at 90% compared to the baseline figure of 78% followed by Rodents at 46%, Cockroaches were reported by 41% of the households while flies were reported by 27% of the households. About 5% 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 (76%) as the best common means followed by community meetings at 10%, radio at 10%, Focussed Group Discussions and Short messages at 1% and 3% respectively. Furthermore, the figure 23 revealed that 75% of the households prefer receiving hygiene and health messages through home visits by hygiene promoters compared to the baseline survey response of 61%. About 16% prefer to receive from community meetings, only 8% would prefer radio while only 1% preferred Short messages and focussed group discussions. The survey further asked the respondents if they had received a community health worker in their community in the last month, about 69% had received visits compared to only 44% at baseline survey while only 31% reported attending community meetings on health and hygiene messages.

Figure 21: Presence of abnormal vector near the household

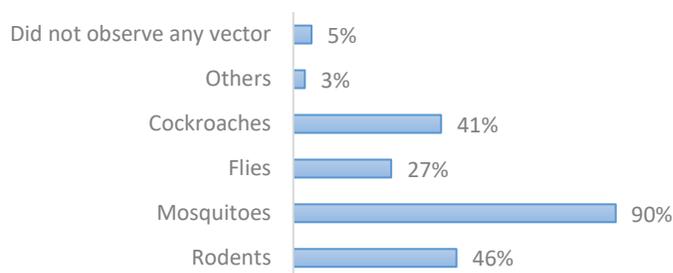


Figure 22: Best common means available to receive hygiene and health messages

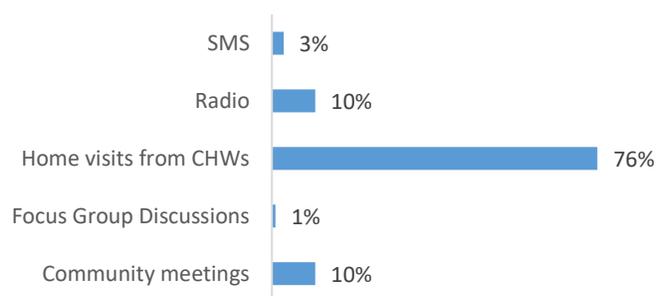
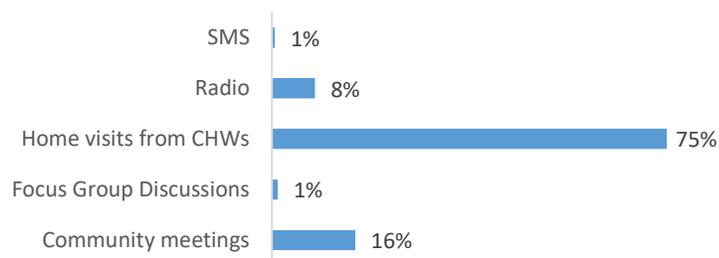


Figure 23: The best alternative communication means to receive hygiene and health messages



Diarrhoea prevalence, knowledge and health seeking Behaviour

From the survey, the diarrhoea prevalence among children under 5 years was at 35% which is a slight increment of 5% since the baseline survey figure was at 30% while among 5 years and above was at 17%. The household members mentioned the most common possible causes of diarrhoea as: through drinking contaminated water (88%), from flies at 70%, and through eating contaminated or undercooked food (76%). The respondents also mentioned some uncommon ways such as from contact with someone sick with diarrhoea at 8%, unpleasant odor at 5%, through swimming/bathing in surface water (4%) while about 1% of the households mentioned other ways that people can get diarrhoea. This result means that most household members have good knowledge on health related issues because of several health education sessions conducted by hygiene promoters/community health workers.

Respondents were also asked ways in which diarrhoea can be prevented as in figure 25 above. They mentioned the most common ways as: washing hand with soap and water (65%), cooking food well (55%), boiling or treating water or drinking clean water (52%), cleaning cooking utensils (45%), covering food (43%), and using latrine/toilet facility to defecate at (37%). Other preventive measures include restoring water safely for drinking (13%) and washing fruits and vegetables at (14%).

Figure 24: Ways that people can get diarrhea

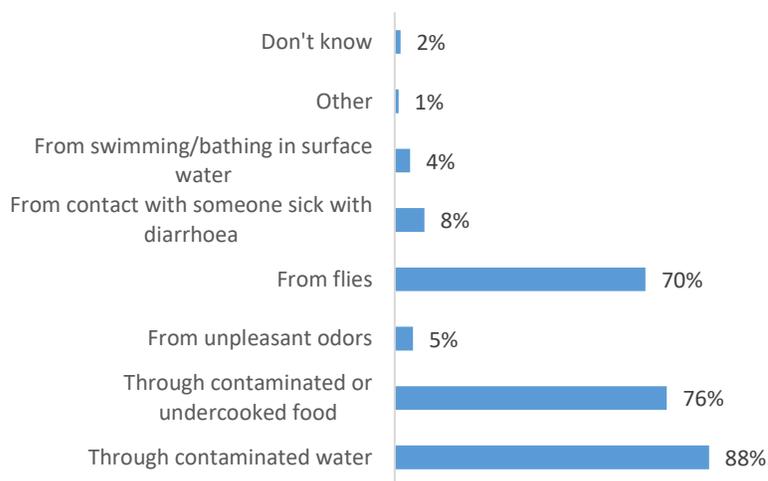
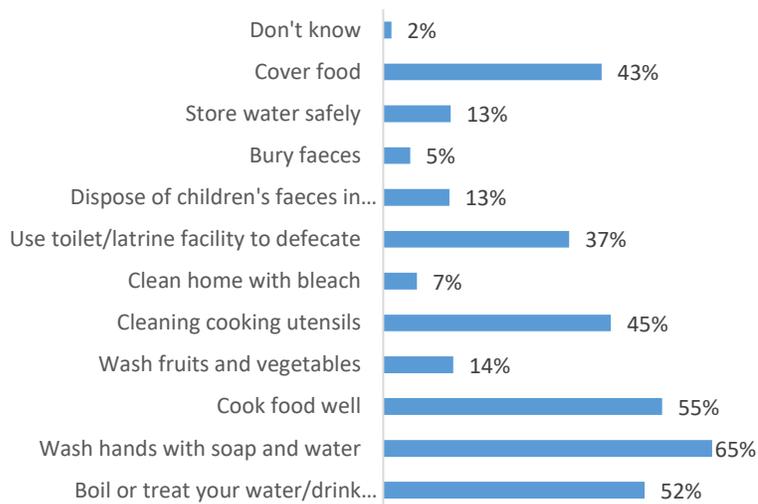


Figure 25: Ways household members can prevent diarrhoea



VII. Conclusion

In view of the above indicator findings, this KAP survey acknowledges that partners have done a tremendous work in improving the living conditions of the refugees in relation to Water, hygiene and Sanitation in the settlement. However, there are still some few challenges under the different thematic areas to ensure that the post emergency standards are attained. Access and use of safe water has greatly improved with average litres per capita at 23.3 l/p/d compared to 20 l/p/d as a standard. A 10 litre per person protected water storage capacity has also improved as at 67% from 37.7% at baseline survey and this is still below the post emergency standard of over 80%. Though the survey found out that the major source of water across the settlement was public tap/standpipe (48%), other sources like handpumps/borehole (43%), piped connection to house (5%) and water seller/kiosks (3%) were also reported. The proportion of households collecting water from protected source has also improved at (99%) which is above the post emergency standard of (95%). This therefore implies that the current water supply systems have greatly improved in the settlement. The sanitation situation in terms of open defecation has also dropped as reported at only 1%. The access to family latrine has been reported at 85% while the proportion of households defecating in latrine is at 99% meaning the general sanitation situation has greatly improved as at endline survey. The access to bathing facility is at 69% compared to 67% at baseline while access to specific handwashing facility is also below the post emergency standard at 60% though this is an improvement from the baseline figure of 34%. 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, pipe cuts from some communities, and broken taps ; 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 in the settlement.

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 disappear from the settlement. More so, WMU needs to continue distributing latrine digging kits across all the ranches 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 and households should be encouraged to construct bathing facilities since the access to these facilities are still below the post emergency standard.

Hygiene

- There is need for partners to encourage household heads to provide more Non-Food Items such as soap, jerricans and hand-washing facilities such as tippy taps to HH. This is likely to increase the per capita consumption of water since most respondents had water storage containers less than 10L.
- Women in reproductive ages should be trained on how to make 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 ranches since the situation is no 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 at 60% in Kiryandongo 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).
- Radio media should be explored as means of transmitting messages on WASH in the settlement though it has been reported as the least media for receiving health and hygiene information. Radio programmes and spot messages should be put in peak times especially in the morning hours between 5 and 10am.

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 Kiryandongo 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	2-4 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	5-6 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	7 November 2020	Revised Instruments and techniques
Stage 3: Fieldwork					
1	Data collection	Implementation of data collection exercise in agreed sampling areas	5 days/ zone	9-13 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	14 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	16-17 November 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	16-18 November 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	19-24 November 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	25-30 November 2020	Draft report
2	Review of draft KAP Survey report	Review of draft KAP survey report by UNHCR and WTWG	3 days	1-3 December 2020	Feedback on draft report
	Integration of comments	While doing the modification of the report, send invitation to the Consortium and relevant government agencies	2 days	2-3 December 2020	Comments integrated
3	Presentation of the Findings	Follow up the invitees	1 day	4 December 2020	Feedback on the findings
4	Develop Final Baseline Report	Develop and submit Final Report and dissemination materials; Power Point presentation and 2 page summary of findings	5 days	7-11 December 2020	Final Report submitted

Annex 3: Communities covered in the KAP survey

Zone	Population size	Households	selected sample size
Ranch 1	35,060	5,479	171
Ranch 37	30,904	4,779	202
Total	65,964	10,258	373

Annex 4: Community contact persons

S/N	Name	Designation	Contact
1	Deng Mabek Deng	Community leader	256788360856
2	Thon Tut Thon	Community leader	256788360856
3	Malang Arok Atem	Community leader	256788360856
4	Achut Samuel Mabior	Community leader	256788360856
5	Apwoya Lakwach Charles	Community leader	256788360856
6	Majak Ngong	Community leader	256788360856
7	Opoka Francis Ochan	Community leader	256788360856
8	Awar Majok John	Community leader	256788360856
9	Otto George	Community leader	256788360856
10	Chuong Batuk	Community leader	256788360856
11	William Markson	Community leader	256788360856
12	Madit Matuek	Community leader	256788360856
13	Olaa William	Community leader	256788360856
14	Marol Panchol Ngor	Community leader	256788360856
15	Odoch Franco Nyeko	Community leader	256788360856

Annex 5: KAP survey team

S/N	Name	Designation	Contact
1	Acidri Daniel	M&E Officer	256779022467
2	Orik Pauline	WASH Officer	256775115877
3	Simon Tumusiime	Assistant WASH Officer	256782830481
4	Gueh Marko	Enumerator	256780776563
5	Obonyo Martha	Enumerator	256706792801
6	Nanteza Agnes	Enumerator	256787166117
7	Ojok Jimmy	Enumerator	256773401098
8	Riak David Keech Deng	Enumerator	256781999008
9	Anena Diana	Enumerator	256780222953
10	Ndungu Mwihakia Julia	Enumerator	256788540787
11	Obalim Reagan	Enumerator	256777208885
12	Odera John	Enumerator	256774678225
13	Hillary Goodluck	Enumerator	256779424312
14	Ochan Martin Modi	Enumerator	256773143406
15	Ampire Praise	Enumerator	256772243133
16	Orach Alex	Enumerator	256785701529
17	Oyella Fiona	Enumerator	256777867576
18	Ociti Walter	Enumerator	256776166434

Annex 6: Activity Photos



Figure 1 Enumerator training on data collection and research protocol



Figure 2 Enumerator conducting household data collection



Figure 3 Enumerator conducting household data collection



Figure 4 Enumerators inspecting water source during endline survey



Figure 5 Enumerator conducting data collection during endline survey in kiryandongo settlement



Figure 6 Kiryandongo settlement KAP endline survey