European Union
Civil Protection and
Humanitarian Aid

Survey Report

Knowledge Attitude & Practice (KAP) Survey of WASH Services Project in Dadaab Refugee Camps

Donor: European Commission Directorate General Humanitarian Aid & Civil Protection (ECHO)

Consultant: DONIC Research & Consulting

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List of Acronyms and Abbreviations

CHP	Community Hygiene Promoters
CIK	CARE International in Kenya
COVID-19	Coronavirus Disease 2019
ECHO	European Commission Directorate General Humanitarian Aid & Civil Protection
FGD	Focus Group Discussion
HH	Household
GoK	Government of Kenya
IRC	International Rescue Committee
KAP	Knowledge Attitude and Practice
KES	Kenya Shillings
KII	Key informant Interview
KRCS	Kenya Red Cross Society
O&M	Operations and Maintenance
PoC	Persons of Concern
Ppl	People
RAP	Refugee Assistance Program
RAS	Refugee Affairs Secretariat
SBCC	Social Behavioural Change Communication
UNHCR	United Nations High Commission for Refugees
WASH	Water Sanitation and Hygiene
WUA	Water Users Association

Executive Summary

Introduction

The European Commission Directorate General Humanitarian Aid & Civil Protection (ECHO) funded CARE to implement Water, Sanitation and Hygiene (WASH) project in Ifo, Dagahaley and Hagadera refugee camps in Dadaab. The overall objective of the project was self-reliance in the provision of essential WASH services for persons of concern in Dadaab refugee camps.

Specifically, the project focused on provision of potable water, managing solid waste disposal and delivering a comprehensive environmental sanitation program that incorporated vector control and health/hygiene promotion for refugees and COVID-19 response.

End Line WASH KAP Survey

The overall objective of this survey was to examine knowledge, attitudes and practices of the beneficiaries, gaps in the WASH activities in Dagahaley, Ifo and Hagadera camps and to provide information that would improve future programming.

The survey adopted a cross-sectional descriptive research design, and employed quantitative and qualitative methods of data collection which included: Literature Review, 392 Household Surveys, four Key Informant Interviews (KIIs), three Focus Group Discussions (FGDs) and direct observations.

Findings and Discussions

Household demographics

- Majority of the respondents (61.0%) were female.
- All respondents were from two countries of origin: Somalia (98.2%) and Ethiopia (1.8%).
- Average age of the respondents was 40.8 years.
- Relatively large households with an average of seven (7) people living in each household. Two (2) of these are children under five years; one (1) is disabled and one (1) elderly.

Access to and consumption of water

Main source of water (100.0%) for households use in the three camps is tap stands constructed by CARE. Women (including girls) predominantly collect water for everyday use in the household, followed by young men, boys and adult men.

Average time taken to go one way to the water points is 12.1 minutes. Observations revealed that each block has at least 2 tap stands. It takes an average of 17 minutes to queue for water with PoCs in Hagadera spending the longest time (23.7 minutes).

Discussions with key informants and in the focus groups cited increased water supply particularly during the COVID-19 pandemic which resulted from increased availability of pumping fuel and thus more pumping time for the water.

The average water use for drinking, cooking and personal hygiene in a household is 15.4 litres per person per day, which is equivalent to the SPHERE standard (15 litres per person per day). The survey therefore concluded that the PoCs have sufficient water for domestic use. The consultant further appreciates CARE's internal monitoring mechanisms and database that provides higher average water use values across the three camps (above 30 litres per person per day). This is attributed to increased hours of water pumping and availability of water during COVID-19 pandemic.

Water quality

Water at the camps is treated at source and therefore all households access portable water. 98% of the respondents clean their water vessels before fetching water.

The survey observed that 37% of the visited households did not cover their water storage containers, which is a poor practice, and dipping method of fetching water from the storage container is a practice among only 31% of the population.

The population further complained of over chlorination of water which they attribute to the cause of ulcers, stomach upsets and other diseases especially to elders, expecting mothers and children. On average, 64% of the PoCs are using quality water for HH use.

Access and use of latrines

96.8% of the respondents have access to HH latrines (communal and household), 0.5% use buckets and 2.7% defecate openly. The SPHERE standard of over 60% using and accessing latrines has been achieved across all the three camps.

Reasons for open defecation include: difficulty accessing shared latrines especially at night, cultural barriers, elderly and children not able to access latrines.
Most respondents (95.5%) dispose children feaces in latrines.

The survey concluded that there is need for additional awareness and sensitisation sessions on use of and cleanliness of latrines.

Knowledge and attitudes on sanitation

Majority of respondents (72.2%) relate drinking of contaminated water with diarrhoea. No significant cases of diarrhoea in the three camps in the past one month, with FGDs indicating that increased cases of diarrhoea are usually high during rainy or very dry seasons, predominantly on children under 5 years.
The survey concluded that prevalence of diarrhoea in the camps is caused by lack of adequate knowledge and predominant poor hygiene and sanitation practices.

Household solid waste management

56.8% of respondents take their waste to communal pits/designated open areas, 32.6% at household pits, 3% burn and 7.6% to undesignated open areas.

FGDs revealed critical gaps including poor disposal of market and slaughter house wastes, careless disposal of wastes by some community members and improper dumping at dump pits.

Lack of cooperation from some community members during clean up campaigns; lack of protective gear for demonstrations and equipment to dispose carcasses from the blocks which CARE used to provide as opposed to the current situation where carcass disposal is solely the community's responsibility.

An average of 92.4% have access to and are practicing safe solid waste management.

Knowledge on hygiene and access to information

76% of the beneficiaries confirmed having heard hygiene messages over the past three months. Out of those who received the hygiene messages, handwashing at critical times ranked the highest at 61.3%, while 0.3% don't recall any message.

The survey further concluded that the hygiene promotion messages and activities address key behaviours and misconceptions and are targeted for all user groups. 71.6% of respondents received messages from hygiene promoters, which confirms their effectiveness.

Other potential partners for consideration are the school hygiene clubs, community leaders, health centres and radio stations.

Hygiene practices

95% of respondents know at least 3 of 5 critical hand-washing times. This is over the 60% SPHERE standard.

98% of the respondents use soap to wash hands at critical times, with the remaining not using soap because it's expensive to buy soap, some think water alone is sufficient for cleaning, others think its takes a lot of time to use soap while other is due to negligence and laziness.

Survey noted a general perception within the community that their well-being is entirely the role of the agencies, and this causes them to exercise some unsafe hygiene practices.

Operation and maintenance of WASH facilities

85% of the observed water sources were clean with no stagnant water around. 81% of respondents are aware of someone responsible for management of water points. This was also confirmed by

FGDs and KIIs. This is a good indication that the community is willing to be an active player in ensuring sustainable access to quality water.

Community participation

Water users' association are responsible for management of water points. CARE staff support the committees by providing O&M to the water points. 74.7% of the respondents reported to have been involved in hygiene promotion campaigns, trainings and meetings.

CARE enjoys an overall good reputation within the community with 81.6% noting that CARE implements its projects in a safe, transparent and participatory manner.

Additionally, an average of 68.9% of the respondents reported that their basic WASH needs have been met generally.

COVID-19 awareness and practices

Key findings on COVID-19 awareness and practices include:

- Majority of respondents (95.4%) have heard about COVID-19 and have received information about its symptoms, how it is transmitted, how to prevent the disease, and how to wear masks or wash hands.
- Only 22.1% reported to have gone for testing.
- 31% are aware of someone who has either been diagnosed with or hospitalized as a result of having COVID-19.
- Majority of respondents (84.0%) view COVID-19 as not dangerous at all, 12.9% view the virus as somehow dangerous with only 1.7% considering the virus to be dangerous.
- 94.3% of the respondents are not taking any measure in their daily life to prevent the risk of COVID-19 infection.
- There are various rumours spreading within their communities about COVID-19. These rumours have either created social tension or led to harmful behaviours, which should be responded to swiftly by providing communities with the right information.
- Poor economic conditions often do not allow PoCs to buy hygiene products such as masks and disinfectants, increasing their risks of infection.
- There is lack of adequate information among the PoCs with regards to COVID-19. Information gaps that exist are on: symptoms of COVID-19 infection, how to maintain personal hygiene, how and when to use masks, what should be done after a person has recovered from the disease, etc.
- Given the evolving nature of the situation, communities may also be interested in information on the number of COVID-19 cases, recoveries and vaccinations in each of the camps.

Conclusions

Water supply and quality: The project has enabled PoCs to access sufficient water per person per day, following the SPHERE standards. The quality of water in the camps is also up to the standards, with possible contaminations from the water points to household use

Sanitation: The SPHERE standards on latrine access has been achieved, with pockets of open defecation reported in all the three camps. Cleanliness of latrines is generally acceptable; there is high awareness of the importance of latrine use, causes and prevention of diarrheal diseases. Solid waste management poses a challenge across the three camps with critical gaps still in existence.

Hygiene: Hygiene promoters have effectively delivered key hygiene messages in all the three camps. SPHERE standard on knowledge of at least three of five critical handwashing times has been achieved. Other barriers on hygiene practices such as cultural beliefs and ignorance still evident within the population.

Operation and maintenance of WASH facilities: Water points within the camps are generally well maintained under the management of tap stand monitors, with each household paying a monthly fee for the service. This is a good indication that the community is willing to be an active player in ensuring sustainable access to quality water.

1.0 Introduction

This report presents findings of the Knowledge, Attitude and Practice (KAP) survey carried out in Dagahaley, Ifo and Hagadera refugee camps, in March 2021.

This section of the report presents the background information of Dadaab refugee camps, nature of programs implemented by CARE International in Dadaab and the Water, Sanitation and Hygiene (WASH) project.

1.1 CARE International in Dadaab

CARE International has been working in Kenya since 1968, and currently implements major programs in 20 out of 47 counties reaching approximately 2 million people per year. The programs align with national and county level priorities focusing on refugee assistance, health, water and sanitation, financial inclusion, adaptation to climate change, disaster risk reduction, agricultural value chains and humanitarian and emergency response.

CARE International in Kenya (CIK) is implementing projects in Dadaab refugee complex under the Refugee Assistance Program (RAP). CIK is also the lead partner of United Nations High Commission for Refugees (UNHCR) for Water, Sanitation and Hygiene in the three camps within Dadaab: Dagahaley, Ifo and Hagadera.

Dadaab refugee camp complex is situated in Garissa County, near the border with Somalia, and was established in 1991 following the beginning of civil war in Somalia. Today, the camp complex is home to refugees from many countries in eastern and central Africa, including South Sudan, Burundi, Congo, Ethiopia, Eritrea and Somalia.

Dadaab camp complex now hosts about 223,876 individuals (222,244 refugees and 1,632 asylum seekers) of which 51% are female and 49% are male, across the existing three camps of Hagadera, Dagahaley and Ifo. 55% of the population are children (below 18 years), 79% are women and children[1].

1.2 WASH Services Project in Dadaab

With funding from DG European Civil Protection and Humanitarian Aid Operations (ECHO), CIK has been implementing Water, Sanitation and Hygiene (WASH) project in Dagahaley, Ifo and Hagadera refugee camps.

The overall objective of the project is self-reliance in the provision of essential WASH services for persons of concern in Dadaab refugee camps. Specifically, the project focuses on provision of potable water, managing solid waste disposal and delivering a comprehensive environmental sanitation program that incorporated vector control and health/hygiene promotion for refugees.

The three intended results/outcomes from the project include:

1) Minimum acceptable standards for water supply and quality are maintained in Dadaab refugee camps.
2) Maintenance and improvement of sanitation standards, improvement of hygiene practices across the camps and enhanced preparedness and response to WASH related emergencies.
3) Target group has capacity to apply knowledge and skills learned to improve management and delivery of WASH services.

1.3 About the Consultants

DONIC Research & Consulting is a development consulting company providing professional research-based consulting services to help client organizations explore and choose the best strategic options and opportunities in their programs and operations.

The company is headquartered in Nairobi, Kenya and operates internationally across the African continent in Kenya, Uganda, Tanzania, Somalia, Ethiopia, South Sudan, Eritrea, Djibouti, etc.

More information about the company can be accessed through info@donicconsulting.org.

[1] UNHCR, February 2021

2.0 End Line WASH KAP Survey

This section of the report describes the objectives, scope of work, survey methodologies used in sampling and data collection, data analysis and interpretation techniques and quality assurance mechanisms employed.

2.1 Objectives of the Survey

The overall objective of this survey was to examine knowledge, attitudes and practices of the beneficiaries, gaps in the WASH activities in Dagahaley, Ifo and Hagadera camps and to provide information that would improve future programming.

2.2 Scope of Work

The survey was done in Dagahaley, Ifo and Hagadera camps where the project was implemented, and specifically covered the following aspects:

1) Evaluation of water, sanitation and hygiene situations in Dagahaley, Ifo and Hagadera camps.
2) Determine existing knowledge on WASH topical issues such as: access to water, sanitation, hand washing, latrine hygiene and use, water borne and hygiene related diseases, gender roles in WASH, community participation in WASH management, social inclusion and issues of disability/vulnerability.
3) Determine the impact and identify the gaps in; water supply/quality, solid waste management, sanitation facilities, vector control and hygiene promotion communication and mobilization strategies implemented by CARE.
4) Determine the efficiency and effectiveness of cash transfer intervention in providing WASH services.
5) Determine if humanitarian assistance by CARE is delivered in a safe, accessible, accountable and participatory manner.
6) Determine the health risks, knowledge, attitudes, and behaviours towards COVID-19.

2.3 Survey Methodology

This survey employed cross sectional, scientific and statistical approaches to examine knowledge, attitudes and practices of the beneficiaries, gaps in the WASH activities in the three camps and provide information that would improve future programming.

2.3.1 Data Sources and Sampling Techniques

A mixture of both qualitative and quantitative methods were used to capture, analyse and present relevant information.

Data collection methods used included:

Literature review

- The consultants reviewed the following key project design and implementation documents: Project proposal; Project interim report; Dadaab KAP survey reports (2015, 2016, 2017, 2018 and 2019); Project work plan; and UNHCR Dadaab statistical package (February 2021).

Household survey

- The survey team conducted household surveys on 392 households in all the three camps. This represented a 102.1% achievement of the target sample size (384).
- The tool comprised mainly of closed-ended questions and a limited number of open-ended questions.
- In order to ensure representation, the survey team applied **simple random sampling** of the overall population.
- To determine scientifically accepted sample size, sample size was computed by the theory of Krejcie and Morgan[2] (1970) Sample Size Estimation table and formula:

$$N = \frac{Z^2 PQ}{d^2}$$

[2] Krejcie, R.V., & Morgan, D.W., (1970). Determining Sample Size for Research Activities. Educational and Psychological Measurement.

- Where:
  N: sample size.
  Z: statistical constant representing a 95% confidence interval = 1.96
  P: 0.5 (i.e. 50%).
  Q: equivalent to 1 – p
  d: sampling error (i.e. 5% or 0.05)

- Therefore:

$$N = \frac{(1.96)^2(0.5)(0.5)}{(0.05)^2} = 384$$

- The following matrix summarises the achieved sample breakdown:

Table 1: Summary of achieved sample sizes for HH survey

Camp	Total sample reached	Breakdown by gender	
		Male	Female
Dagahaley	**122**	57	65
Ifo	**145**	54	91
Hagadera	**125**	42	83
Totals	**392**	**153 (39.0%)**	**239 (61.0%)**

Focus group discussions

- Three FGDs (1 per camp) were undertaken during the survey.
- They included group discussions with community representatives (men, women, youth and people living with disabilities). Each FGD consisted a group discussion of 6-12 persons guided by a facilitator, who introduced topics for discussion and helped the group participate in a lively and natural discussion amongst themselves.
- Strength of the FGDs relied on allowing the participants to agree or disagree with each other so that it provided insights into how a group thinks about an issue, about the range of opinion and ideas, and the inconsistencies and variation that exists within these groups in terms of beliefs and their experiences and WASH practices.
- The discussions further supplemented the quantitative data from household survey and were principally focused on determining changes (outcomes/results) and observations by community members after project implementation.

Key informant interviews

- Four (4) KIIs were conducted with staff from IRC, KRCS, CARE and RAS.
- These constituted formal consultations with agency staff to better contextualize the findings and provide much of the background information presented in this report as to the day-to-day operations of WASH activities in the camps.

Direct observations

- Those who study human behaviour indicate that there is often a gap between what people say they do and what they actually do. Therefore, observed behaviour is often a more dependable indicator than what is self-reported.
- All the three camps were visited and observations in and around the households, latrines, water points and boreholes were undertaken.
- Exploratory observations were undertaken where the consultant went to the locations, got acquainted with the environment and people, made observations, asked questions, listened and took notes.
- The observations gave insights into efficacy and practicality of WASH practices within households.

2.3.2 Training of the Enumerators

Prior to field data collection, all field enumerators and supervisors received a one-day training. The training focused on the WASH project background, sampling procedures, interviewing techniques, how to use KOBO (an Android-based mobile application) and familiarization with the data collection questionnaire.

Additionally, a pilot of the tool was conducted in order to pre-test the form in the field prior to use and to ensure that data collectors were fully familiar with it. Data collected during the course of the survey were stored directly on CARE's internal server.

Table 2: Field enumerators training schedule per camp

Camp/training centre	Date of training	Time of training	Number trained
Dagahaley	15/03/2021	8:30 am to 11:30 am	11
Ifo	15/03/2021	2:00 pm to 5.00 pm	11
Hagadera	18/03/2021	8:30 am to 11:30 am	11

The consultants constantly supervised the enumerators in the field to maintain quality of data collection. Checking the quality of responses were done at the end of each day and in this process, feedback was given to enumerators for any observed errors.

2.3.3 Data Analysis, Interpretation and Reporting

Quantitative data analysis

- Quantitative data analysis was helpful in providing quantitative values for all the indicators of interest.
- In analysing the quantitative data, three levels of measurements were used, namely: nominal data (for example male or female), ordinal data (for example strong or weak capacities), and interval data (for example Likert scale – ranking satisfaction on scale of 1-5).
- Data was analysed using Excel 2016 through tabulations (for frequency and percent distributions), running descriptive as needed by the variables of interest and disaggregating the data across different variables and subcategories of variables using crosstabs.

Qualitative data analysis

- Qualitative analysis and interpretation were constructed through content analysis to interpret meaning from the text data and arrive at naturalistic paradigm that is emanating from the findings.
- Key steps followed in analysing the qualitative data include:
    a) Process and record data immediately. As soon as data was collected, the information was processed and recorded immediately while the interaction was still fresh in the facilitators' minds.
    b) Data analysis began as soon as collecting the first piece of information began. This included reviewing the data and mentally processing it for themes or patterns that were exhibited.
    c) Data reduction process of reducing and transforming raw data in order to identify and focus in on what is meaningful.
    d) Undertake content and thematic analysis to identify meaningful patterns and themes. Content analysis were carried out by coding the data for certain words or content, identifying their patterns and interpreting their meanings. Thematic analysis involved grouping data into themes that helped answer the survey questions.
    e) Conclusion drawing and verifications.

Reporting

- This assignment runs between 11th March, 2021 to 26th March, 2021.
- The draft KAP survey report has been submitted on 24th March, 2021.
- The final KAP survey report will be submitted on 26th March, 2021.

2.4 Survey Constraints

Although considerable care was taken in designing the KAP questionnaire to avoid ambiguity, quality of responses to a number of questions was highly dependent on skills of the enumerators. Clear instructions were given during training and in the survey form when to prompt and when to probe for answers; nevertheless, it is expected that some mistakes might have happened in the field.

Findings in this report are only representative at camp level, and therefore findings related to subsets within the overall sample have a lower confidence level and wider margin of error, and as such should be treated as indicative.

In addition, where questions were directly comparable, comparisons have been made with the 2016, 2017, 2018 and 2019 WASH KAP Survey reports, though it should be noted that as the raw data was not available, tests for statistical significant could not be conducted, so all differences noted in the report are indicative only.

There were no significant issues regarding data collection for this assessment, although it was noted that timing could be a problem if not communicated to the respondents beforehand.

3.0 Findings and Discussions

This section of the report presents the findings from the survey. The section is sub-divided into seven (7) subsections including: household demographics; water supply and quality; sanitation; hygiene; operations, maintenance and community participation; and COVID-19 awareness.

3.1 Household Demographics

Table 3 below summarises the demographic characteristics of the respondents and households from which they come from. Key findings include:

- Majority of the respondents (61.0%) were female.
- All respondents were from two countries of origin: Somalia (98.2%) and Ethiopia (1.8%).
- The average age of the respondents was 40.8 years old (Dagahaley – 42 years; Hagadera – 41.5 years; and Ifo – 39.0 years).
- Relatively large household sizes with an average of seven (7) people living in each household. Two (2) of these are children under five years; one (1) is disabled and one (1) elderly.

Table 3: Socio-demographic information of the respondents

Background information		Camps			Total average
		Dagahaley	Hagadera	Ifo	
Countries of origin	Somalia	99.2%	97.6%	97.9%	**98.2%**
	Ethiopia	0.8%	2.4%	2.1%	**1.8%**
Gender of respondents	Male	46.7%	33.6%	37.2%	**39.0%**
	Female	53.3%	66.4%	62.8%	**61.0%**
Average age of respondents		42.0 years	41.5 years	39.0 years	**40.8 years**
Average household size		8 ppl	6 ppl	7 ppl	**7 ppl**
Average number of children (<5 years) within a household		2	2	1	**2**
Average number of people with disability within a household		0	0	1	**1**
Average number of the elderly within a household		1	1	2	**1**

3.2 Water Supply and Quality

Water supply and quality has been analysed from the aspects of access to water, its quality and consumption within the households.

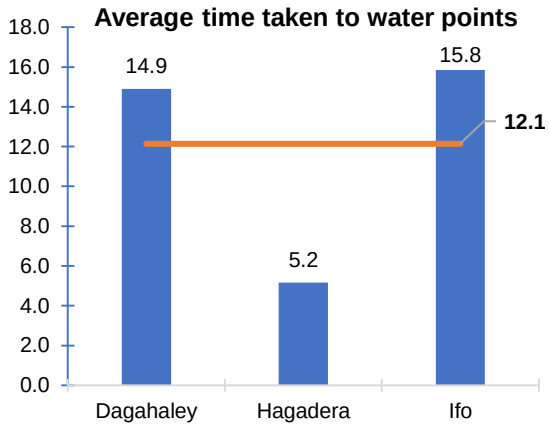
3.2.1 Access to and consumption of water

Survey results indicated that the main source of water for households use in the three camps is tap stands constructed by CARE as indicated by all respondents (100.0%).

This therefore means that all target households (100.0%) collect their drinking water from protected water sources only.

The survey further noted that water collection is a major task for any household irrespective of the distance covered to the water points. Focus group discussions revealed that women (including girls) predominantly collect water for everyday use in the household, followed by young men, boys and adult men.

The average time taken to go one way to the water points varied across the camps, with an overall average of 12.1 minutes. Observation of the water points revealed that each block has at least 2 tap stands and the distance varies from house to house.



Whereas the distance to water point seems not to be an issue, FGDs revealed that the delays are mainly attributed to long queues which are mainly caused by short pumping hours, low water pressure at some of the points and limited water storage capacity at household level.

On average, it takes 17 minutes to queue for water with PoCs in Hagadera spending the longest time (23.7 minutes). It is worth noting that there is remarkable improvement on the queuing time from an

average of 70 minutes during the 2019 survey. This was owed to the fact that every section/block has a tap stand.

Table 4: Indicator values for water access and consumption across the three camps

Indicator	Camps			Average for all camps
	Dagahaley	Ifo	Hagadera	
Time taken per trip to take water from the source (minutes)	14.9	15.8	5.2	**12.1**
Average queuing time at water source (minutes)	19.0	7.5	23.7	**17.1**
Average water use per person per day (litres)	16.5	14.3	15.5	**15.4**

In terms of water consumption, findings show that there is a significant relationship between amount of water collected and used per day and the size of household. The larger the household, the more water is needed.

The average water use for drinking, cooking and personal hygiene in a household is 15.4 litres per person per day, which is equivalent to the SPHERE standard (15 litres per person per day). The project has therefore enabled PoCs to access sufficient water for HH use. The consultant further appreciates CARE's internal monitoring mechanisms and database that provides higher average water use values across the three camps (above 30 litres per person per day). This is attributed to increased hours of water pumping and availability of water during COVID-19 pandemic.

Discussions with key informants and in the focus groups cited increased water supply particularly during the COVID-19 pandemic which resulted from increased availability of pumping fuel and thus more pumping time for the water.

The survey further noted that use of water varies with seasonality. During dry seasons, demand for camp water from host communities and animals goes up, while amount of water being pumped remains the same. The camp household water availability and use surveys should be utilized to understand impacts of seasonal variations on water usages, both at the camps and host communities. These findings should then inform amount of water to be pumped and hours needed for sufficient access to water.
The survey therefore concluded that the persons of concern have sufficient water for domestic use.

3.2.2 Water quality

Water may become unsafe at any point between collections and use. Even clean water collected from a source can be contaminated prior to use at critical points due to unsafe hygiene practices[3].

Jerry cans are the widely used containers for fetching water at water points. 98% of the respondents noted that they clean their water vessels before fetching water. This was confirmed by totality of focus group discussions and observations that noted generally acceptable cleanliness of the water fetching jerry cans. However, the general practice observed is to wash the water containers by using water only, with only 50% of the observed PoCs using detergents.

Containers used for water storage include jerry cans (mainly for storing drinking water), plastic buckets and drums/barrel. 67% of the respondents indicated that they didn't store water thus collected daily which was also confirmed by the FGDs.

Table 5: Average number of water containers owned by households

Camp	Average # of water containers owned per HH		
	5 Liters	10 Liters	20 Liters
Dagahaley	2	3	18
Hagadera	2	2	16
Ifo	3	4	9
Average for all camps	**2**	**3**	**14**

[3] Sphere project handbook, IFRC 2011

It was observed during the survey that 37.0% of the visited households did not cover their water storage containers, which is a poor practice simply because water can easily get contaminated. Additionally, dipping method of fetching water from the storage container is a practice among only 31.0% of the population, which can also lead to contamination.

On water treatment, all households do not treat the water. Discussions in the focus groups and with key informants noted that water is treated at the source by CARE staff, thus its portable. Focus groups in Hagadera and Ifo complained of over chlorination of water in some occasions, which they attribute to the cause of ulcers, stomach upsets, diabetes, high blood pressure and other diseases especially to elders, expecting mothers and children.

3.3 Knowledge, Attitudes and Practices on Sanitation

This subsection is divided into access and use of latrines, knowledge and attitudes on sanitation and solid waste management.

3.3.1 Access and use of latrines

The survey established that 96.8% of the respondents have access to latrines (communal and household), 0.5% use buckets and 2.7% defecate openly. The SPHERE standard of over 60% using and accessing latrines has been achieved across all the three camps.

Table 6: Defecation practices across the three camps

Camp	Defecation practices			
	Communal latrine	**Household latrine**	**Bucket**	**Open Defecation**
Dagahaley	9.2%	89.4%	1.4%	0.0%
Hagadera	3.4%	94.9%	0.0%	1.7%
Ifo	6.2%	87.7%	0.0%	6.2%
Average for all camps	**6.4%**	**90.4%**	**0.5%**	**2.7%**

Reasons for open defecation were reported to be difficulty in accessing the shared latrines especially at night, cultural barriers of sharing latrines with some close relatives, difficulties by the elderly people to access the latrines and fear to enter the latrines for the children.

FGDs and key informants reported that the practice of open defecation contributes to high occurrence of diarrheal and other water-borne diseases. When asked main reasons for not constructing latrines, they retorted that its expensive and some do not have any space for construction as the land does not belong to them.

Latrine observation was done to check the cleanliness of the latrine: 69% of the latrines were found to be clean. However, the survey team concluded that there is need for additional awareness and sensitisation sessions on this topic.

The preferred method of disposing children's feaces by most (95.5%) respondents is throwing into the latrine. Others burry the feaces (0.5%), dispose across the fence (3.4%) and leave it where it is (0.5%).

3.3.2 Knowledge and attitudes on sanitation

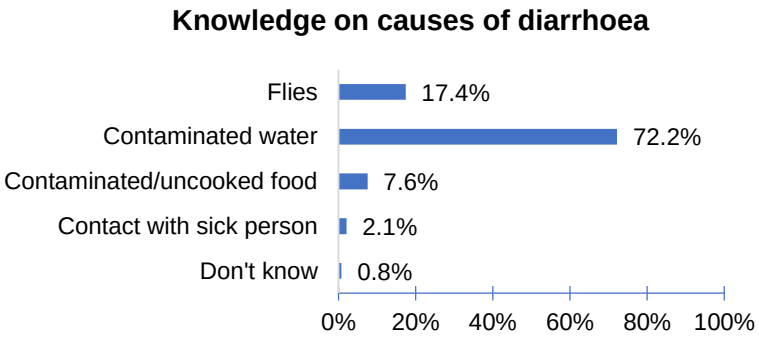
Findings from the survey show that the PoCs in all the three camps are largely aware of causes of diarrheal diseases and how they should be prevented.

According to the respondents, the main causes of diarrhoea are: drinking contaminated (72.2%), flies (17.4%), eating contaminated or uncooked food (7.6%) and having contacts with a sick person (2.1%). FGDs further revealed that prevalence of diarrheal diseases often spikes during rainy seasons.

On the management of diarrhoea, majority of the PoCs understand the importance of medical intervention and the standard primary measures. KIIs indicated other practices like use of rice water and cow milk (*gorgor*) as a common practice in diarrhoea management.

All the three camps did not experience significant cases of diarrhoea in the last one month before the KAP survey.

86.5% of the respondents said that none of their household members suffered from diarrhoea. It's however important to note that FGDs indicated that increased cases of diarrhoea are usually high during rainy or very dry seasons, predominantly on children under 5 years.



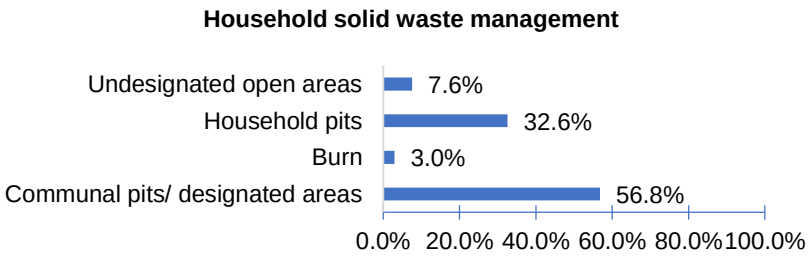
The survey concluded that prevalence of diarrhoea in the camps is caused by lack of adequate knowledge and predominant poor hygiene and sanitation practices.

3.3.3 Household solid waste management

The survey established that households used different approaches to dispose waste. 56.8% take their waste to communal pits/designated open areas, 32.6% at household pits, 3% burn and 7.6% to undesignated open areas.

This was corroborated by community FGD that revealed that CARE provided wheel barrows to collect and dump the waste at the rubbish pits outside each block. The rubbish is then burned by sanitation cleaners employed by CARE.

Field observation also confirmed that rubbish is collected and burned but there was still a lot of scattered waste in various places.



FGDs in Ifo and Dagahaley camps further identified critical gaps that should be addressed including: poor disposal of market waste and waste from slaughter house, careless disposal of wastes by some community members and improper dumping at the dump pits. They also reported lack of cooperation from some community members during clean up campaigns; lack of protective gear for demonstrations and equipment to dispose carcasses from the blocks which CARE used to provide as opposed to the current situation where carcass disposal is solely the community's responsibility.

3.4 Knowledge, Attitude and Practices on Hygiene

This subsection presents findings on knowledge on hygiene, access to information and hygiene practices across the three camps.

3.4.1 Knowledge on hygiene and access to information

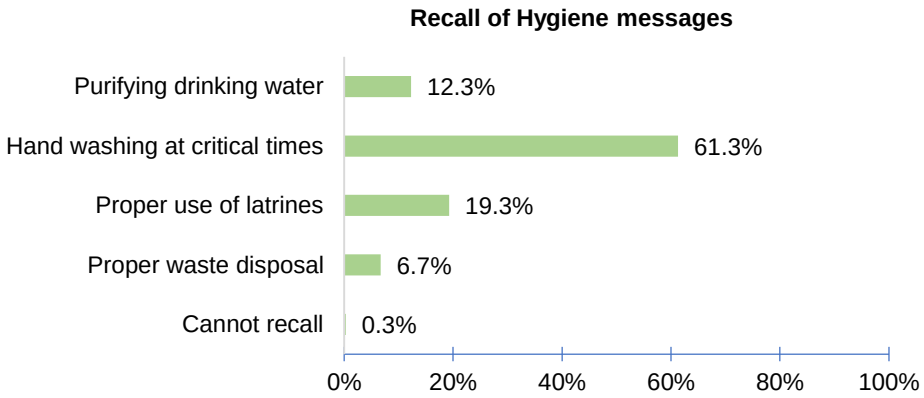
The ECHO WASH project used hygiene promoters employed by CARE to sensitize the community through hygiene messages, and therefore the survey sought to establish the key messages that the beneficiaries received, recalled and the sources of information.

76% of the beneficiaries confirmed having heard hygiene messages over the past three months. Out of those who received the hygiene messages, handwashing at critical times ranked the highest at 61.3%, while 0.3% don't recall any message.

Observations by the survey team and discussions with key informants and focus groups confirmed that the hygiene promotion messages and activities address key behaviours and misconceptions and are targeted for all user groups.

For higher coverage, there is need to enhance hygiene promotion activities in the intervention area.

When asked about the sources of hygiene messages, 71.6% of respondents indicated to have received these messages from the hygiene promoters, which confirms effectiveness of hygiene promoters. Further considerations should be paid to school hygiene clubs given that some respondents get these messages from schools.



The community leaders, health centres and radio stations are key partners that should be considered for further engagements.

Table 7: Sources of hygiene messages within the camps

Camp	Sources of hygiene messages				
	Hygiene promoters	**Community leaders**	**Health centre**	**Radio**	**Schools**
Dagahaley	77.0%	1.8%	8.0%	12.4%	0.9%
Hagadera	84.7%	0.0%	4.2%	9.7%	1.4%
Ifo	58.7%	0.8%	5.8%	32.2%	1.7%
Average for all camps	**71.6%**	**1.0%**	**6.2%**	**19.6%**	**1.3%**

3.4.2 Hygiene practices

In order to establish their hygiene practices, the respondents were asked whether they washed their hands or not. 95% of respondents know at least 3 of 5 critical hand-washing times. The SPHERE standard of at least 60% has therefore been achieved.

Additionally, 98.0% of the respondents use soap to wash hands at the critical times. Community FGD also revealed that they wash hands to cleanse and kill germs that may cause diseases. These findings further validate the above finding that the hygiene promotion messages and activities address key behaviours and misconceptions and are targeted for all user groups.

Discussions from the focus groups revealed that some members do not wash hands with soap because it's expensive to buy soap, some think water alone is sufficient for cleaning, others think its takes a lot of time to use soap while other is due to negligence and laziness. Household surveys revealed that 83.5% of the households have (any type of) soap present in the house in a month.

Other findings on hygiene practices to be noted include:

- Some beneficiaries believe that washing of hands for religious purposes (before prayers) is sufficient.
- Beneficiaries think that their well-being is entirely the role of the agencies such that they may not use soap for hand washing because it has not been provided, roll water on the ground for lack of wheelbarrows to be provided by CARE, leave children feaces within the compound because faecal scoops and potties have not been provided, fail to dispose dead animal carcass because it's role of the agencies to do carcass disposal.
- The sharing of one /common hand washing container bowl in which everyone dips his/her hand during mealtime is a common practice.

3.5 Operation & Maintenance and Community Participation

This sub-section presents findings on operation and maintenance (O&M) of WASH facilities and community participation.

3.5.1 Operations and maintenance of WASH facilities

On the maintenance of tap stands, 81% of the respondents across the three camps said there is someone responsible for the management of water points. This was also confirmed by focus group discussions and interviews with the key informants who noted that there is tap stand monitors who take care and manage the water points, with each household paying between KES 20 and KES 100 per month.

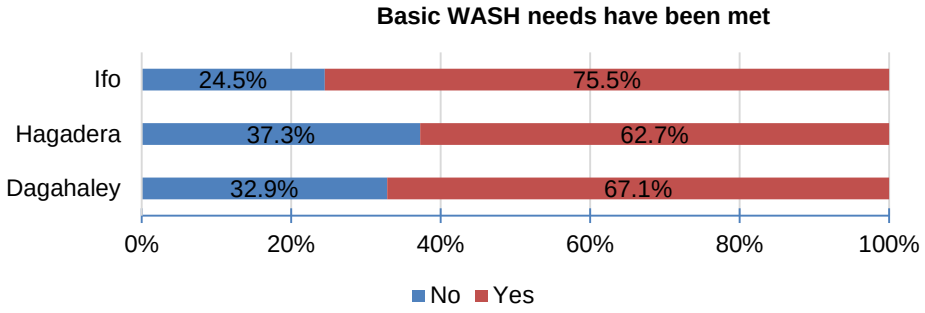
This is a good indication that the community is willing to be an active player in ensuring sustainable access to quality water. On average, 85% of the observed water sources were clean with no stagnant water around.

3.5.2 Community participation

Water users' association are responsible for the management of water points in terms of provision of security, solving community conflicts and maintaining cleanliness. The committees reported not have been trained on maintenance since the O&M of the water point is offered by CARE staff.

74.7% of the respondents reported to have been involved in hygiene promotion campaigns, trainings and meetings. CARE also enjoys an overall good reputation within the community with 81.6% noting that CARE implements its projects in a safe, transparent and participatory manner.

Additionally, an average of 68.9% of the respondents reported that their basic WASH needs have been met generally.



3.6 COVID-19 Awareness and Practices

This sub-section presents a health risks analysis, knowledge, attitudes and behaviours that the PoCs hold towards COVID-19.

3.6.1 Health risks and knowledge on COVID-19

Majority of the respondents (95.4%) have heard about COVID-19 and have received information about its symptoms, how it is transmitted, how to prevent the disease, and how to wear masks or wash hands. However, only 22.1% reported to have gone for testing. 31% further reported to be aware of someone who has either been diagnosed with or hospitalized as a result of having COVID-19.

When asked during the FGDs on how COVID-19 spreads, the respondents mentioned correctly that it can spread through droplets from infected persons when coughing and sneezing, or direct contact with infected people, touching contaminated objects or surfaces, or touching nose, eyes and mouth with dirty hands.

Regarding the measures to prevent COVID-19 infection, respondents in the FGDs correctly identified washing hands with soap, wearing masks when going out, maintaining physical distance, using hand sanitizer and maintaining good coughing etiquette.

3.6.2 Attitudes and behaviour towards COVID-19

Attitudes refer to PoCs' feelings towards COVID-19, as well as their perceptions, beliefs, or any preconceived ideas that they may have towards the disease. Majority of survey respondents (84.0%) view COVID-19 as not dangerous at all, 12.9% view the virus as somehow dangerous with only 1.7% considering the virus to be dangerous.

When asked on measures that they take in their daily life to prevent the risk of COVID-19 infection, 94.3% of the respondents reported that they are not doing anything about it, 4.0% reported to be taking some measures while 1.7% reported that they only sometimes take measures. These findings were complemented by field observations which noted that no safety measures were being observed in public spaces.

Participants in the FGDs further stressed that there are various rumours spreading within their communities about COVID-19. These rumours have either created social tension or led to harmful behaviours, which should be responded to swiftly by providing communities with the right information. Example of false information being passed around through word of mouth include: there is no coronavirus, mask does not protect individuals, the virus only affects older people, the virus does not infect young people, etc.

Participants in the FGDs further reiterated that they avoid going to hospital unless they have a major illness, and that economic conditions often do not allow them to buy hygiene products such as masks and disinfectants increasing their risks of infection.

These findings therefore point at lack of adequate information among the PoCs with regards to COVID-19. Information gaps that exist are on: symptoms of COVID-19 infection, how to maintain personal hygiene, how and when to use masks, what should be done after a person has recovered from the disease, etc.

Key informants stressed that while the PoCs may have information about preventive measures, awareness needs to be raised about protective behaviours that people should adopt, and that people needed further encouragement to adopt safe and healthy practices.

Given the evolving nature of the situation, communities may also be interested in information on the number of COVID-19 cases, recoveries and vaccinations in each of the camps.

3.7 Six Years Trend Analysis (2015 to 2021) of WASH Standard Indicators

This matrix gives a six years' comparative analysis of the standard WASH indicators against the Sphere and/or UNHCR standards:

#	WASH Indicators	Sphere/UNHCR Standards	Indicator Values					
			2015	2016	2017	2018	2019	2021
Water Supply and Quality								
1	Average water use for drinking, cooking and personal hygiene in a household	At least 15 litres per person per day	13.6 l ppd	18.57 l ppd	22.58 l ppd	18.0 l ppd	15.1 l ppd	15.4 l ppd
2	Households collecting ≥15 litres per person per day for domestic use	≥80%	95%	100%	Not measured	Not measured	100%	100%
3	Households collecting drinking water from protected water sources only	≥70%	99.5%	91.1%	99%	100%	100%	100%
4	Distance from household to nearest water point	≤500 meters	70 M	200 M	500 M	1 KM	200 M	115 M
5	Queuing time at water point	≤15 minutes	1.9%	15-30 mins	≥30 mins	Not Measured	68 mins	17 mins
6	Time taken to fill a 20-litre container	≤3 minutes	Not measured	Not measured	Not measured	Not measured	7.45 mins	3.52 mins
7	Estimate number of people per water point	≤250 people	Not measured	Not measured	Not measured	Not measured	67 households	50 households
8	Households with sufficient daily water storage capacity (50 litres for 5 family members average)	≥80%	Not measured	96%	Not Measured	91.7%	56.8%	67.9%
9	Availability of water at water points throughout the year	Yes. Water sources and systems are maintained such that appropriate quantities of water are available consistently or on a regular basis	Not Measured	Not measured	No, severe shortages to no water at all. Faulty and missing nozzles, short supply time	Not measured	Yes (71.53%)	Yes (93.0%)
Sanitation								
10	Persons per communal or shared latrine	≤50 persons	Not measured	7%	21%	1.7%	6.46%	1.5%

#	WASH Indicators	Sphere/UNHCR Standards	Indicator Values					
			2015	2016	2017	2018	2019	2021
11	Households reporting defecating in a latrine	≥60%	Not measured	96%	67%	96.4%	96.8%	96.8%
12	Households with access to latrines	≥60%	86.7%	87%	94%	95.2%	96.8%	96.8%
13	Distance from household to nearest latrine	≤50 meters	Not measured	50 M	Not measured	Not measured	50 M	50 M
14	Separate toilets for women and men available in public places (markets, schools, health centres, etc.)	Yes	Not measured	Not Measured	Not measured	Not measured	No (82.2%)	No (67.4%)
15	All groups within the population have equitable access to facilities	Yes	Not measured	Not measured	No, children below 5yrs (66%), Physically challenged (13%) and the elderly 7% are reported not being able to use latrines.	Not measured	Not Measured	Yes, for children, power flash toilets being used. No, latrine facilities not friendly to the physically challenged and elderly.
16	Communal latrines compliant with UNHCR standards (cleanable slabs, privacy & structural safety)	≥60%	Not measured	97%	Not measured	84.3%	Not Measured	Not Measured
17	Handling of children feaces within households	Children's faeces are disposed-off immediately and hygienically	93% reported throwing into latrines	65% reported throwing the faeces into the latrines.	96% disposed baby faeces responsibly	15% disposed faeces responsibly	83.3% disposed responsibly	86.7% disposed responsibly
Hygiene Promotion and Practices								
18	Households with (any type of) soap present in the house	≥90%	Not measured	1%	87%	81%	83.5%	83.5%
19	Soap available per person per month	≥450 grams per person per month	Not measured	Not measured	Not measured	Not Measured	Not Measured	Not Measured
20	Households with knowledge of at least 3 of 5 critical hand-washing times	≥60%	66.8%	Measured but not clear	60%	81.6%	95%	95.3%

#	WASH Indicators	Sphere/UNHCR Standards	Indicator Values					
			2015	2016	2017	2018	2019	2021
	Households that use soap at critical times		Not measured	13%	82%	Not measured	98%	98.0%
21	Number of refugees per hygiene promoter	≤500 people	Not measured		1,175	Not Measured	Not Measured	Not Measured
22	Hygiene promotion messages and activities address key behaviours and misconceptions and are targeted for all user groups	Yes	Yes (51.8%)	Yes (92%)	Yes(88%)	Not Measured	Yes (76.3%)	Yes (86.7%)
23	Users take responsibility for management and maintenance of facilities as appropriate, and different groups contribute equitably	Yes	Yes	Not measured	Yes	Not measured	Yes	Yes
24	Projects include effective mechanisms for representative and participatory input from all users, including in the initial design	Yes	Not Measured	Not measured	Yes	Not measured	Yes (46.4%)	Yes (74.7%)
Solid Waste Management								
25	Storage and disposal of waste in the households	Household waste is put in containers daily for regular collection, burnt or buried in a specified refuse pit (≤15 meters from household)	56% communal dump pit	33% throw in garbage pits and 66% burn along the roads	69% burnt the waste, 20% throw in garbage pits,	76% use garbage pits and 13% burn	80% garbage pits and 13% burn	92.6% garbage pits and 6.1% burn
26	Collection and transport of garbage	At least twice a week	Yes	Yes	Yes	Not measured	Not measured	Not measured

4.0 Conclusions and Recommendations

This section of the report presents the conclusions and recommendations that have been made out of the analyses of findings.

4.1 Conclusions

Water supply and quality: The project has enabled PoCs to access sufficient water per person per day, following the SPHERE standards. The quality of water in the camps is also up to the standards, with possible contaminations from the water points to household use.

Sanitation: The SPHERE standards on latrine access has been achieved, with pockets of open defecation reported in all the three camps. Cleanliness of latrines is generally acceptable, there is high awareness of the importance of latrine use, causes and prevention of diarrheal diseases. Solid waste management poses a challenge across the three camps with critical gaps still in existence.

Hygiene: Hygiene promoters have effectively delivered key hygiene messages in all the three camps. SPHERE standard on knowledge of at least three of five critical handwashing times has been achieved. Other barriers on hygiene practices such as cultural beliefs and ignorance still evident within the population.

Operation and maintenance of WASH facilities: Water points within the camps are generally well maintained under the management of tap stand monitors, with each household paying a monthly fee for the service. This is a good indication that the community is willing to be an active player in ensuring sustainable access to quality water.

COVID-19 awareness and practices: There is lack of adequate information among the PoCs with regards to COVID-19. Information gaps that exist are on: symptoms of COVID-19 infection, how to maintain personal hygiene, how and when to use masks, what should be done after a person has recovered from the disease, etc.

4.2 Recommendations

1) WASH committee members should be involved in monitoring WASH activities within the camps. This should be coupled by further trainings of community volunteers at block level on WASH, community sensitization and leadership.
2) There is need to increase construction of disability friendly latrines.
3) The camp household water availability and use surveys should be utilized to understand the impacts of seasonal variations on water usages, both at the camps and host communities. These findings should then inform amount of water to be pumped and hours needed for sufficient access to water.
4) The WASH technical team and committees should be sensitized on the key hygiene risks of public health importance, pools of stagnant water next to tap stands, and poor disposal of household waste should be avoided.
5) There is need for swift response to provide communities with the right information on COVID-19 and address information gaps particularly on: symptoms of COVID-19 infection, how to maintain personal hygiene, how and when to use masks, what should be done after a person has recovered from the disease, etc. Given the evolving nature of the situation, communities may also be interested in information on the number of COVID-19 cases, recoveries and vaccinations in each of the camps.

5.0 Annexes: KAP Survey Data Collection Tools

HH Survey_WASH KAP Survey_Dadaab_(

FGD Guide_WASH KAP Survey_Dadaab_(

KII Guide_WASH KAP Survey_Dadaab_CIK_M

Observation Checklist_WASH KAP