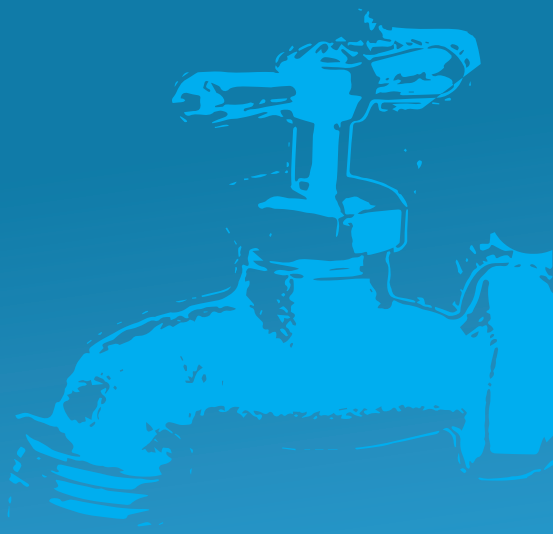
COMMUNITY BASELINE

April 2016



PROJECT
WALIB- Gedo
WASH and Livelihood Improvement
in Belet-Hawo, Gedo

A survey on WASH and Livelihood in 3 IDPs camps and host communities in Belet-Hawo, Gedo region.

Realized by

Centre for Research and Policy Analysis (CeRPA) in collaboration with arche noVa and ASEP staff

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Funded by

german humanitarian assistance
DEUTSCHE HUMANITÄRE HILFE

ASEP

arche noVa
Initiative for people in need

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List of Abbreviations

ASEP	ACTION FOR SOCIAL AND ECONOMIC PROGRESS
CAPI	COMPUTER ASSISTED PERSONAL INTERVIEWING
CERPA	CENTRE FOR RESEARCH AND POLICY ANALYSIS
CHW	COMMUNITY HEALTH WORKERS
DDG	DIGITAL DATA GATHERING
ERF	EMERGENCY RELIEF FUND
FGD	FOCUS GROUP DISCUSSION
HH	HOUSEHOLD
IDP	INTERNALLY DISPLACED PERSONS
KII	KEY INFORMANT INTERVIEW
LRRD	LINKING RELIEF, REHABILITATION AND DEVELOPMENT
LNGO	LOCAL NON-GOVERNMENTAL ORGANIZATION
MAPI	MOBILE ASSISTED PERSONAL INTERVIEWING
SPSS	STATISTICAL PACKAGE FOR SOCIAL SCIENCES
TOT	TRAINING OF TRAINERS
UNHCR	UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES
UWC	UMBRELLA WATER COMMITTEE
WALIB-GEDO	WALIB-GEDO: WASH AND LIVELIHOOD IMPROVEMENT IN BELET-XAAWA
WASH	WATER, SANITATION AND HYGIENE PROMOTION
WUG	WATER USER GROUPS

WALIB-GEDO OVERVIEW

The previous emergency project implemented in 2015 by ASEP in collaboration with arche noVa and funded by the German Humanitarian Assistance, has accomplished to improve the access to safe water for the Internal Displaced People (IDP) and vulnerable host community in Belet-Hawo town in Gedo Region (South Central Somalia). Prior to the intervention the 98% of the population in the camp of Belet-Amin relied on un-safe sources (river water and water sold by private commercial). Within 8 months the project has established a pipeline system that connects a borehole to the IDP camp and distribution of safe water through 6 communal water points. During the wave of displacement in July-August 2015 the camp population more than doubled. The Water Company, thanks to the advocacy of the project, agrees to provide free of charge water for the newly arriving IDPs as a first response. However, with the new influx of IDPs, the new water system is overstretched and there are a lot of issues which remain unattended.

In response to these challenges, WALIB-Gedo therefore aims at scaling up the previous intervention and to adequately respond to these new and combined emergency situations by providing WASH and livelihoods services which are essential to the survival of the IDPs as well as the most vulnerable segments of the host communities.

The project activities are realized in the IDP camp of Belet Amin in Belet-Hawo town and in 2 new IDP settlements of Bulo-ajuran and Bulo-jaron located 3 km far from Belet-Hawo. The host communities around the 3 IDPs settlements are also directly involved in the project.

IDPs in Belet-Hawo and the nearby host community continue to experience poor access to safe water, poor hygiene and sanitation services as well as little livelihood opportunities. While they share the same plight as other IDP settlements in Gedo Region such as Dolow and Luuq, they have been largely neglected by external assistance due to difficult access to the area and the fact that the IDPs in Belet-Hawo are not concentrated in one single camp environment. This project aims at closing this gap.

WALIB-Gedo **sets a special focus on women**, who are most affected by poor access to WASH services. The previous intervention has already strengthened the role of women by actively involving them into the management of the new water infrastructure as water committee members.

The new communal water points have minimized the distances to water points and thereby reduced time used in fetching water. This allowed women to be engaged in other household livelihood activities.

WALIB-Gedo aims to build on these first steps by ensuring a continuous capacity building and involving the women actively in the management of the new WASH services and inside the Water Company. Furthermore, the new project focuses on creating enhanced livelihood opportunities especially for women and thus strengthens their bargaining power within their household as well as within the community.
Shocks may happen at any time in Somalia so that the need of emergency intervention could quickly appear. An amount of 65,000 Euro (**ERF - Emergency Relief Fund**) will be used to respond to any shocks during the implementation of the project. A menu of actions will be identified according to specific events and contexts (flood, drought and conflict) in order to respond at best to the specific shock.

Following the **LRRD (Linking Relief, Rehabilitation and Development) approach**, WALIB-Gedo focuses on building local structures and capacities to ensure the sustainability, functionality and proper management of all water and sanitation facilities. Building long term community structures and self-help capacities ensure a transition from ad-hoc emergency relief measures to more durable solutions and enable the communities to re-built local structures which have been deteriorated due to the conflict. It also makes them more independent from the still weak central government and increases their bargaining power.

Project Design

Overall Project Goals:

- Vulnerable communities in Gedo Region are more resilient to conflict or climate-related shocks;
- Improved basic WASH services and livelihood opportunities for the new IDPs and the most vulnerable segments of the host communities and enhanced their integration;
- Scaling up the previous intervention to adequately respond to new and combined emergency situations in Gedo region.

Project Objective:

Increased equal and sustained access to safe and appropriate water, sanitation, hygiene (WASH) and livelihood services for the most vulnerable displaced people in the urban and peri urban areas of Belet Hawo town.

Output 1:

Target groups access to safe water and they are active in maintenance procedures on water facilities

- Construction of 1 communal water tank and extension of the pipe line system to provide water to 2 new IDPs settlements, Bulo-ajuran and Bulo-jaron;
- Construction of 5 communal water kiosks in the new IDPs camps;
- Trainings of Water User Groups (WUG);
- Establishing of 1 Umbrella Water Committee (UWC) for coordination and supervision;
- Trainings for the Water Company staff;
- Potable water testing.

Output 2:

Target groups have increased access to hygiene and sanitation

- Construction of 70 PIT latrines;
- Distribution of 570 Hygiene Kits in the new peri-urban IDP settlements of Bulo-ajuran and Bulo-jaron;
- Trainings (TOT) of volunteers hygiene promoter in Bulo-ajuran and Bulo-jaron and in Belet Admin on safe water practice and hygiene promotion.

Output 3:

Target groups have improved the solid waste management system

- Establishment of 6 Women Sanitation Groups;
- Trainings on Solid Waste Management;
- Provision of tools for the garbage recollection;
- Water voucher for the provision of free water as incentive for the recollection of the solid waste management.

Output 4:

Target group started up income generating activities and improve their productive livelihoods capacity

- One survey realized to establish a sustainable Solid Waste Management system to put in place in Belet-Hawo town;
- Entrepreneurship trainings on income generation on waste disposal;
- Start up small scale business in 27 kiosks in Belet-Xaawa town and surrounding;
- Business training in finance and management for 27 women.

Output 5:

Emergency Respond Fund (ERF) established to support the communities by reacting to emergency scenarios on the ground

The stakeholder's involvement in all the aspects of the implementation and the respect for community norms and culture is the base of WALIB-Gedo approach and will help to minimise the emergence of conflicts. Attention to gender and protection of vulnerable groups, environment, conflict sensitivity are trans-cutting issues that will be taken into account throughout the realization of the whole project.

Targets and geographical area of intervention:

Direct beneficiaries: the project will target 1.570 beneficiary households, or 10.990 individuals (assuming 7 people per household).

- 570 new IDP HH in Bulo-ajuran (HH 220) and Bulo-jaron (HH 350);
- 800 HH IDPs in Belet Amin and 200 HH in the host community;
- Water Company employees.

Indirect beneficiaries: 2,857 beneficiary household or 20,000 individuals in Belet Hawo town.

BASELINE SURVEY

Objectives

arche noVa and ASEP undertook the community baseline with 3 main goals in mind:

Establishment of a benchmark for project monitoring: to provide a background against which arche noVa and ASEP can assess changes generated by the implementation of the project and whether targets have been met. For this reason the baseline was undertaken before the start of planned activities.

Attribution: to better understand the specific contexts where the project will be implemented. By assessing a number of variables, the baseline provides up-to-date and relevant information on targeted communities and ultimately enhances stakeholders' knowledge of the situation the project aims to affect.

Establishment of a priority sectors/planning: the study shows which areas/sectors/sub groups with specific vulnerability should be given specific/particular focus or priority during the project implementation.

The report is divided in 3 parts

BACKGROUND & METHODOLOGY

Presents the context in which the community base line was designed and undertaken. This part clarify the back-ground, the profile of the target population, the aims of the base line and the approach & methodology adopted to collect relevant data.

FINDINGS & DISCUSSIONS

Focuses on the finding of the exercise, athered under 4 headings:
1) General household information;
2) Income, expenses and assets;
3) Water, sanitation and hygiene situation;
4) Relevant health indicators.

CONCLUSIONS & RECOMMENDATIONS

Discusses the main lessons, conclusion and recommenda-tion learned from the Baseline.

1 BACKGROUND & METHODOLOGY

The Somali people have long been facing a host of challenges which have heavily eroded the coping mechanism of households and communities: protracted conflict, insecurity, poverty, environmental degradation and natural hazards, poor or non-existing social services.

Like any other region in Somalia, Gedo has experienced complex emergency conditions and continued inter/intra factional and religious warfare since 1991. This armed conflict, which began with the war to topple the Siyad Barre regime, extended into political and religious violence, banditry and lawlessness. To date Gedo lacks a unanimously agreed authority.

The areas have a rainfall and temperature averaging at 250 mm p/y and 330 C respectively and they are prone to the effects of cyclical droughts, floods, epidemics and violent conflicts. Dawa and Juba River that passes through Dolow, Luuq, Burdhubo, and Bardhere provides permanent water either by flow or digging its bed. Apart from the flooding zone of the two rivers that hardly extends more than 200 m on each side of the river, where fresh water is obtained from infiltration wells, the drainage basin entirely consists of saline aquifers. The aquifers along the banks of the river are filled by the fresh river water through seepage and are available throughout the year.

In the northern parts of Gedo being an arid area. The movement of human and livestock populations in target villages is dictated by the availability of water and pasture. The southern side is relatively endowed with rich rangelands that seasonally generate huge pastures and forage suitable for browsing by a variety of livestock species.
If well managed this environment could provide sustainable livelihood system.

The riverine belt has rich alluvial soil suitable for production of food crops, vegetables and fodder as well as dairy & bee keeping. There are also pockets of areas with potential for dry land crop production through enhancing agricultural water resources management.

Due to its proximity within two countries of Kenya and Ethiopia, Belet-Hawo has huge opportunity for cross border trade and exchange of skills, knowledge and experiences.

The three border towns of Mandera (Kenya), Belet-Hawo (Somalia) and Suufka (Ethiopia) are a hub for cross-border trade exchange of goods and services (livestock as goats, cattle, camels, donkeys and chicken; livestock products such as milk, ghee, hides and skins; agricultural products as tomatoes, onions, watermelon, pawpaw, bananas, mangoes, lemon, and maize). The agricultural products are grown along the banks of Dawa and Juba rivers.

Main services and facilities are exchanged and/or shared particularly relate to education (schools, teachers); health (facilities, personnel) and veterinary services; as well as human resources for development work (personnel, consultants, trainers etc.) of which Kenya has better opportunities compared to the other two countries. The exchange and sharing is possible as local inhabitants are often able to freely move across the borders. Additionally, sharing of experiences between communities, joint trainings/learning could also be facilitated to enable experiential learning as well as foster stronger community ties for purposes of social integration, equitable resource sharing and peace building.

1.1 Profile of Target Population

The target populations of the project and the base line are mainly internally displaced persons (IDPs) vulnerable to and affected by a combination of natural and man-made disasters prevailing in the target area.

The relations between the clans and sub-clans tend in general to be cordial, although resources, particularly pasture, water and trade routes are often points of tension that occasionally leads to fully-fledged conflicts. Additionally, political affiliations, often along clan lines are also a major cause of tension. However, these conflicts do not persist and are usually managed using traditional conflict management/resolution mechanisms involving clan leadership, local authorities and traditional leaders. In general, relations are sustained through social ties such as those related to marriages, kinship, friendship/age sets and religion.

This baseline survey adopted a descriptive research design involving 273 households (17.3 % of the total number of households in the project target area) proportionately stratified according to the IDP camps and host community.

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1.2 Baseline research approach & methodology

Sampling Design

The population of the study (unit of analysis) has been chosen by the objectives of the baseline survey. In this regard, the study targeted different clusters among the residents of the 3 IDPs camps and villages (host communities) in Belet-Hawo. Different target respondents have been sought as were deemed most appropriate to handle various study questions. The selection of the study locations was directly linked to those areas where the project will be implemented.

The study employed random and non-random sampling techniques in selecting the study respondents. The survey team randomly selected the respondents to by interview in all the camps and villages.
The respondents for KIIs (Key Informant Interview) were however purposively selected based on their gender and age subject knowledge.

Data Collection

The data collection for the community base line took place from the 5th till 19th of April 2016. ASEP field staff carried out the data collection divided into 6 teams of 2 persons each. All data were collected using Digital Data Gathering (DDG) technology. This allowed the continuous monitoring of the data collection process (e.g. number of questionnaires completed by each enumerator at any given time; GPS coordinates of the location where each questionnaire was administrated; time needed for completing each questionnaire). The use of DDG technology helped ensure data quality, consistency and traceability.

A mixed method approach was adopted to collect both quantitative and qualitative data. The choice of data collection approaches for this baseline depended largely on accessibility and information obtained from the ground.
This study employed mainly primary sources of data. A one-day training session for 12 survey team members was conducted in Belet-Hawo. Survey personnel were acquainted with the project and objectives of the survey as well as the survey tools, instruments and methodology.

The base line data collectors were trained in DDG: the use of an ad hoc smart phone based application to collect data in the field and transmit them by internet to a shared remote facility.

Two data collection methods were used in the study:

Questionnaire administration.

A structured questionnaire was developed during the month of March 2016 by the consultant with the support of arche noVa and ASEP staff and used in data collection both in English and Somali languages. The questionnaire was coded and uploaded into a dedicated mobile platform Epicollect that allows data collection using smart phones. Use of mobile application allowed geo-referencing and image capture while creating a data collection database. The enumerators interviewed the sampled respondents (273 HH) and recorded the answers given in the questionnaires.

Key Informant Interviews.

The survey team selected key informant among the target population who had knowledge about the area or were experiencing the problem under investigation. 8 key informants were selected among the local water company staff, local health workers and local community leaders. 3 focus groups of discussion were realized.

Data Coding, Cleaning and Analysis

The descriptive statistics used in this report were generated through the use of SPSS (Statistical Package for Social Sciences) and MS Excel. The quantitative data collected through structured questionnaires and structured interviews were coded and entered into the SPSS data editor. Afterwards, frequencies have been run to find out if there were any mistakes made during the data entry process. In this process, all the mistakes, either of omission or commission have been corrected. Thereafter the researcher(s) ran crosstabs and frequencies where applicable with a view to generating various frequency tables, graphs and other relevant descriptive statistics as have been used in this report. To test the hypothesis nonparametric test (Cochran Q test and Friedman test) and parametric test (paired t-test) were used due to the fact that the study employed non random sampling methods.

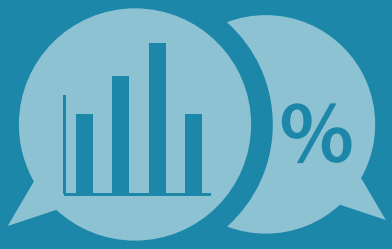
The data from KII were ordered in accordance to the data sources and data types. The researcher then went through the transcripts and classified them according to broad topics being mainly creating theme codes of social ventures and access to WASH facilities.

Efforts have been made to identify patterns, trends, associations and causal relationships in the themes. Thereafter comparisons have been made between the concerns and recommendations raised by various respondents.

Quality Assurance

To ensure the quality of the data, the researcher provided extensive monitoring of the field teams.The overall study coordinator, experienced supervisors members were used for this purpose. While supervising the fieldwork, the supervisory staff provided on-the-spot guidance to interviewers if any part of the questionnaire was not clear; this supervision helped to ensure completeness of each questionnaire.

2 FINDINGS & DISCUSSIONS



A comprehensive understanding of the socio-economic and environmental context of intervention is essential to the success of any project. Based on this premise, arche noVa and ASEP have taken a series of steps to strengthen their knowledge and understanding of key variables and dynamics in their area of intervention. The community baseline here presented is an integral part of this commitment to continue learning and improvement.

The following part presents the survey data and their analysis. The baseline sampling was composed by 273 households, the 17.4% of the total target households to be involved in WALIB-Gedo project (1570 HH).

90.9% of the respondents were **IDPs** and **9.1%** were from the **host communities**.

The following table shows the composition of sampling and where they come from:

Table 1: Composition of sampling

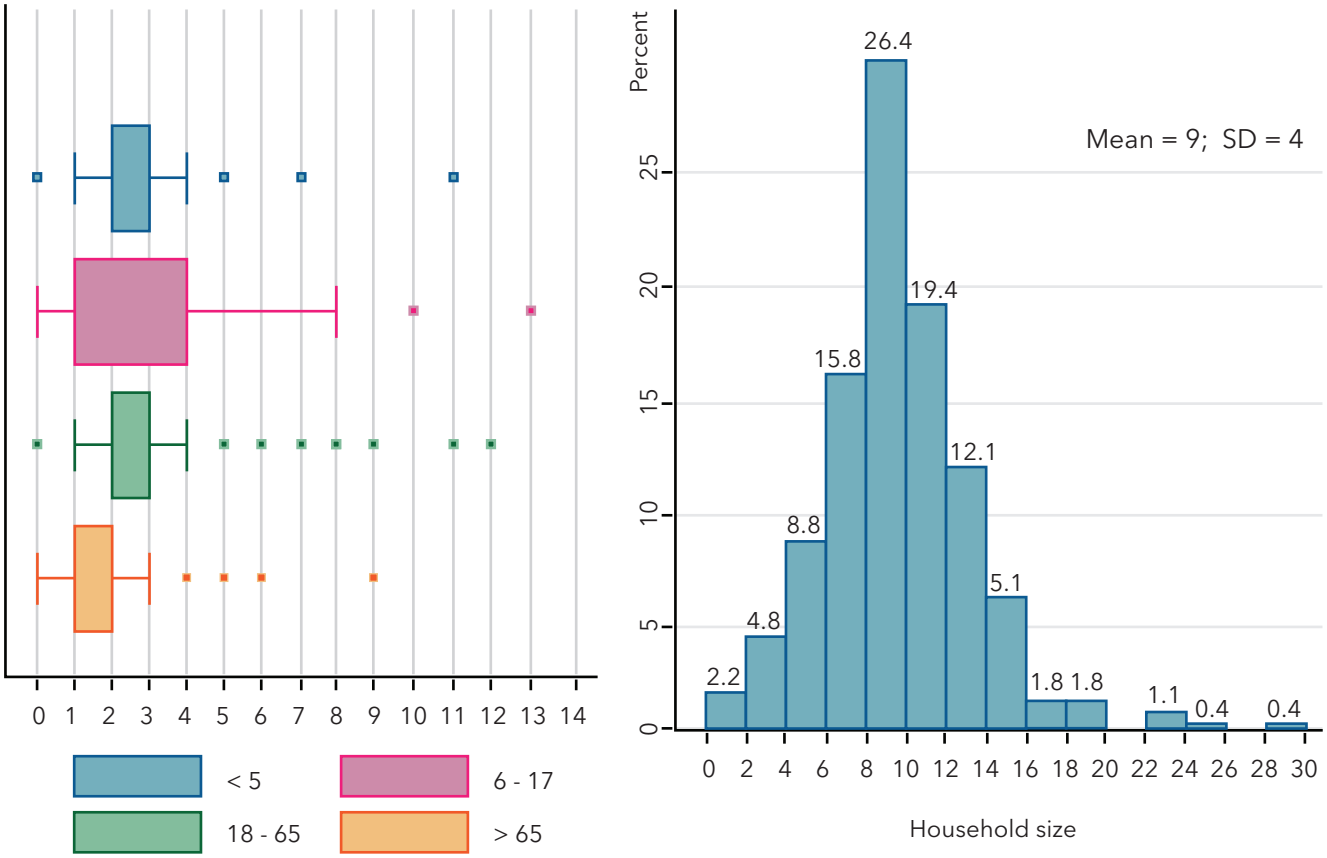
IDP camp/host community	Total HH	Baseline HH sample size	Percent
Belet Amin	800	152	19.0%
Bulo-jaron camp	350	62	17.7%
Bulo-ajuran camp	220	34	15.5%
Host communities	200	25	12.5%
TOTAL	1570	273	17.4%

2.1 Household general information

Most households have between 2 and 3 under-five children while in general households have an average of 9 family members. This represents a significant increase when compared to the standard of 7 members per household initially used in the calculation of the direct beneficiaries involved in the project. The real total number of direct beneficiaries of the project is 14,130. The breakdown of household composition by age groups confirms the preponderance of young people: on average half of the family members are between 6 and 17 years old.

48 (17.6%) of households are headed by women while the rest 225 (82.4 %) are headed by men.

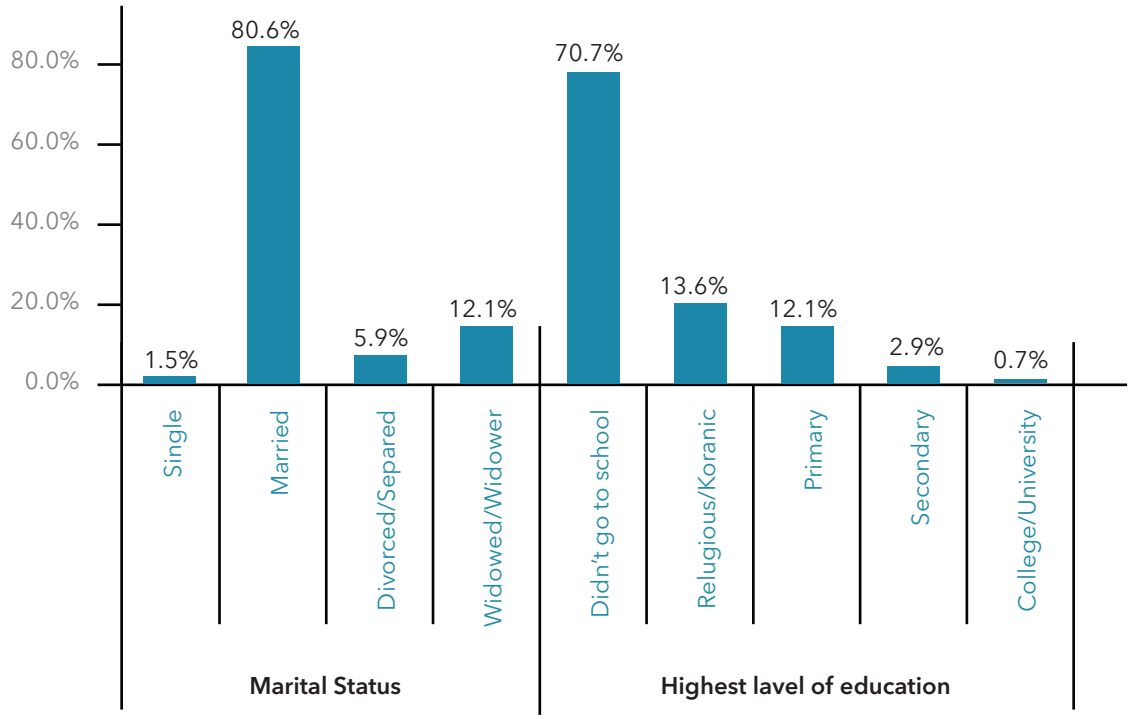
Figure 1: Household members by age



Majority of the household heads are married (80.6%) followed by widows/ers (12.1%) and divorced (5.9%) while only a small number are single (1.5%).

The analysis of literacy, educational level and school enrolment in the beneficiaries group provides a bleak outlook. **On average 70.7% of the heads of households had not attended any formal school**. These findings show a low literacy rate among households in the region given that only 15.7% had attended formal schooling. The project must consider the high level of illiteracy of the beneficiaries when the training activities (WASH, business management, solid waste management) will be organized.

Figure 2: Demographic characteristic of household head



The base line collected information on what respondents regard as their main household challenges. The shortage of food emerges as the single most important problem faced by local households (85%), followed by water shortage (65%), poor housing (55.3%), unemployment (42.9%) and poor sanitation facilities (42.1%). The lack of public services such as education and health care is not considerate the main challenges for the IDPs population and host community interview. This could be attributed to the emergency and temporary situation that the IDPs live in the camps especially in Belet-Hawo where they don't foresee to stay too long as in other camps of Somalia.

Table 2: Household challenges

Household challenges	Frequency	Percent
Shortage of food	232	85.0%
Shortage of water	178	65.2%
Poor housing	151	55.3%
Unemployment	117	42.9%
Poor sanitation facilities	115	42.1%
Lack of business opportunities	100	36.6%
Insecurity due to armed violence	89	32.6%
Access to education	62	22.7%
Access to healthcare	60	22.0%
Flooding	21	7.7%

It is important to highlight that all key challenges (food, water, housing, unemployment) have in common an economic dimension. They are all deeply rooted in the widespread insecurity and inadequacy of household livelihoods.

2.2 Income, Expenses and Assets

Majority of the respondents (62.6%) depended on **casual labour** as their main source of livelihood. The second most prominent source of income is **small trade** (19%), followed by the **sale of firewood or charcoal** (9.2 %).

However 8.4% of the respondents did not have a source of income.

Very few HH, only the 2.9%, rely on production and sale of agricultural products. Probably this data is influenced by the typology of the target population: IDPs living in temporary camps in an urban context.

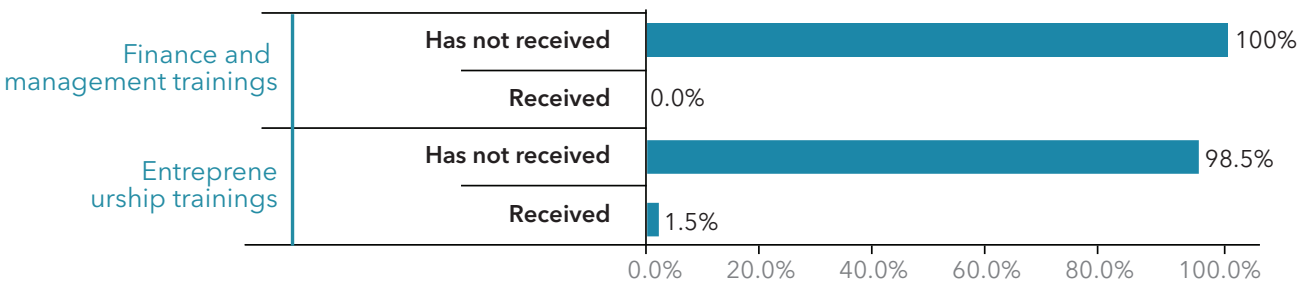
Table 3: Household challenges

Source of livelihood	Frequency	Percent
Casual daily labour	171	62.6%
Small trade/petty trade	52	19.0%
Sale of firewood/charcoal	25	9.2%
No income	23	8.4%
Transport	10	3.7%
Sale of livestock products	9	3.3%
Sale of agricultural products	8	2.9%
Money transfer from relatives	5	1.8%
Salary	2	0.7%
Monetary transfer from NGO	1	0.4%
Remittance from relatives abroad	1	0.4%
Community help (zakat, others)	1	0.4%

WALIB – Gedo will support women enterprises with the provision of key input for small business and the solid waste management in the 3 camps. A group of women will be trained on business skills. This component of the project would have an economical impact on the life of the most vulnerable population living in the camps and host communities.

According to the study findings, only 1.5% of the respondents had received entrepreneurship trainings. While on finance and management none had received trainings. This shows that capacity building among households is very minimal.

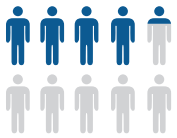
Figure 3: Training received



When looking in more detail at how household income is produced, the base line data reveal important information:

Figure 4: Contribution to household income

42% of male households are the sole contributors to the household income. The majority of households rely on only one member for the production of their income. The single breadwinner situation exacerbates household vulnerability in a so instable context. Most members contributing to household income are male.



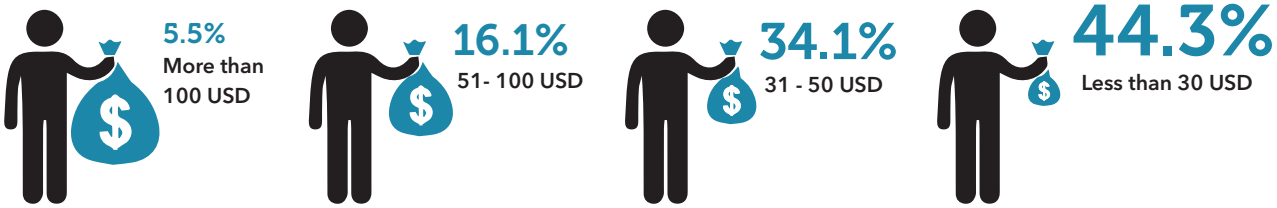
41% of the women households are the sole contributors to the household income. This high percentage of female households helps highlight the critical role that women play not only as caretakers but also as managers of household assets.

17% of households don't depend by only one breadwinner, but different components of the family, both men and women, jointly contributed to the household income.

Surveyed households were also asked the total value of their income in USD in the last 3 months. Results showed that 44.3% of the households earned less than 30 USD in the last three months. As shown in figure 5, the proportion of households decreased with increase in average monthly income levels. This shows that the majority of the households are in the lower income levels.

This analysis helps to highlight the widespread vulnerability of household income. This is caused by the uncertainty of income source and from the reliance to just one component in the family for the production of the entire income. In general food is the main expenditure. In this context relatively minor shock or economic change (increase the price of the food) may lead to the household's inability to access food in sufficient quantity and quality.
This is a clear indication that the households need general support to boost their livelihoods to fetch their basic needs.

Figure 5: Household monthly income levels



On average households living in the host communities are owners of 17 square metres land with 1 traditional house, 3 goats, 1 sheep, 1 chicken and 1 mobile phone. This shows there is a minimal ownership of assets in households thus could increase their vulnerability especially during shocks.

As a measure of building household resilience this shows that there is need to build up asset bases of households in the region.

Table 4: Household assets

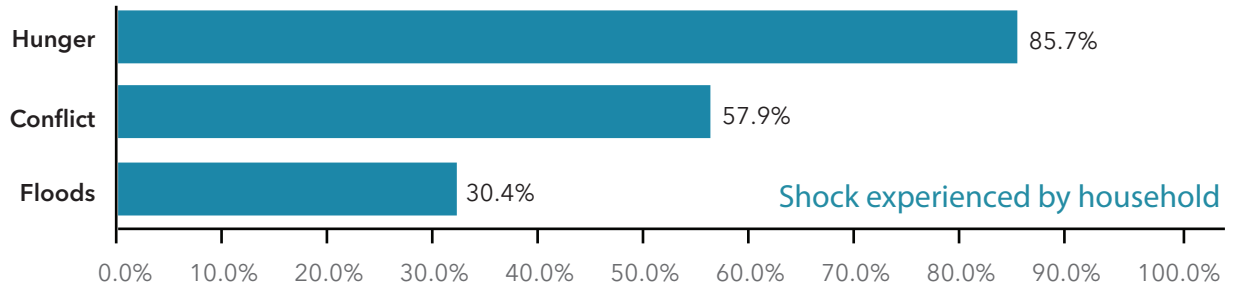
No.	Asset	Mean
1	Land (m2)	17
2	Goats	3
3	Traditional house	1
4	Mobile phone	1
5	Chicken	1
6	Sheep	1

The previous data and figure have already highlighted the centrality of food in the life of the target beneficiaries. Being the main household expenditure, food is also a major challenge. Majority of the surveyed households **(85.7 %) had experienced insufficient food for an average of 5 days in the last month** previous the interview.

The vast majority of households do not keep a food stock. This information may help arche noVa and ASEP to take in consideration, in case of shock during the project implementation, food distribution in the camps. The activities most likely to positively affect food security inside the camps are strengthening household income generation. In the host communities could be possible to promote also small scale food production.

On the other hand 57.9% of households were affected by conflicts in the last one year (averaging one conflict per year) or had experienced floods (30.4%). For these reasons they decided to abandon their properties and to move inside the camps. These data confirm something already noticed: the central role of the migration as households' copy strategies.

Figure 6: Household shocks



The following question helps to understand the strategies that households in economic stress adopt to obtain income. Surveyed households were asked about their main strategy to secure additional economic resources. Their answers reveal that migration is the leading solution.

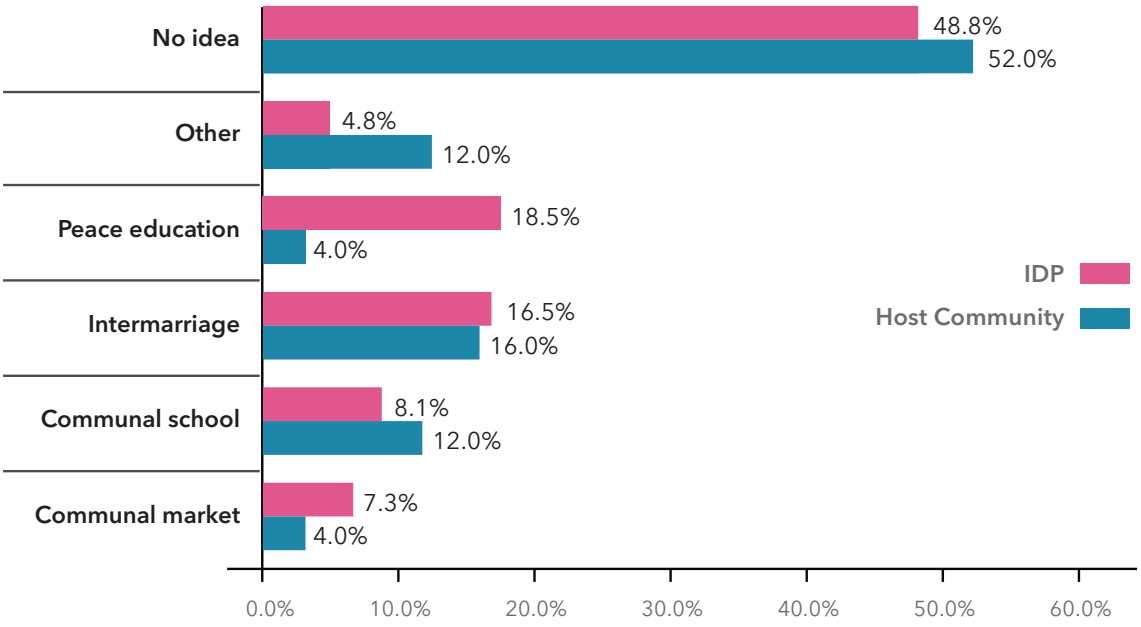
About a quarter (24.9%) of the respondents replied to migrate to agricultural areas to look for manual jobs when necessary, while 20.1% migrate to urban areas also to look for jobs. 22% of the respondent sent other household members to their relatives to seek for additional income to sustain the households, which underpins the close relationship among relatives as prominent Somali culture.

Table 5: Source of additional income when necessary

Source of additional income when necessary	Frequency	Percent
Migration of household members to agricultural areas for job	68	24.9%
Sending household members to relatives	60	22.0%
Migration of household members to urban areas for job	55	20.1%
Seeking assistance from relatives in Somalia	45	16.5%
Selling productive assets	26	9.5%
Taking care of animals for others	24	8.8%
Gathering wild fruit/vegetables	6	2.2%

According to the UNHCR IDP protection framework, integration of IDP and host community is key to IDPs protection without which the host community may feel that the IDPs are competitors to the existing resources. However according to the Somali traditional laws (*Xeer*) it is the prerogative of host communities are mandated to protect IDPs 2]. Although half of both, host community and IDPs respondents, did not have any idea how to integrate IDP and host community. Peace education was mostly favored (18.5%) by the IDPs while both IDPs and host community favored intermarriage. In addition establishment of common communal amenities (15.4%) also sufficed as an integration strategy that ought to be factored in. This shows that **establishment of communal WASH programs will enhance the integration of the IDPs and the host community**.

Figure 7: Methods of integrating IDPs and host community



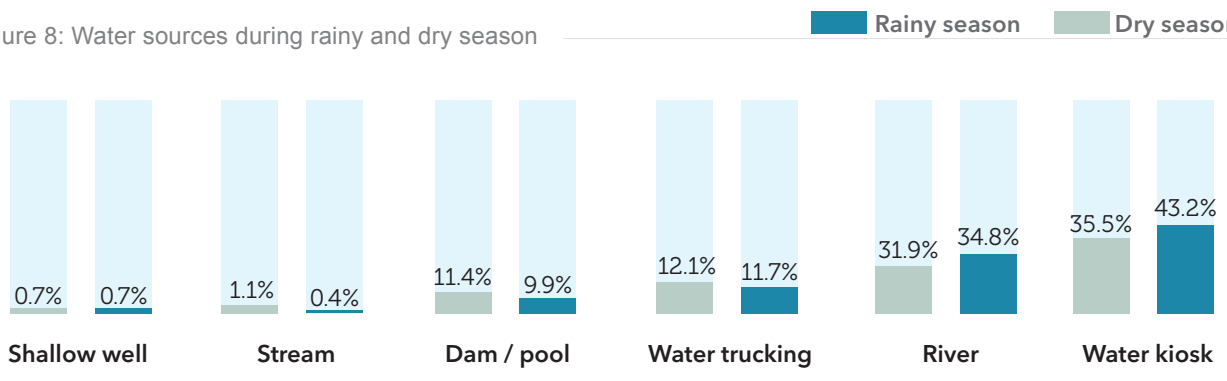
2.3 Water, Sanitation and Hygiene Situation

The vast majority of **households pay for their drinking water**. In spite of this throughout the year most households experience shortage of drinking and not drinking water. As shown in Figure 7 there is no significant difference in the household water sources during rainy and dry season (Cochran Q test p-value = 0.336).

Water kiosks remain the prevalent source, 35.5% during dry season, 43.2% during rainy season.

In addition a third of the respondents report to sourcing their water from the **river** during both dry (31.9%) and rainy season (34.8%). This means that a **third of households are susceptible to be contaminated by the river water**.

Figure 8: Water sources during rainy and dry season



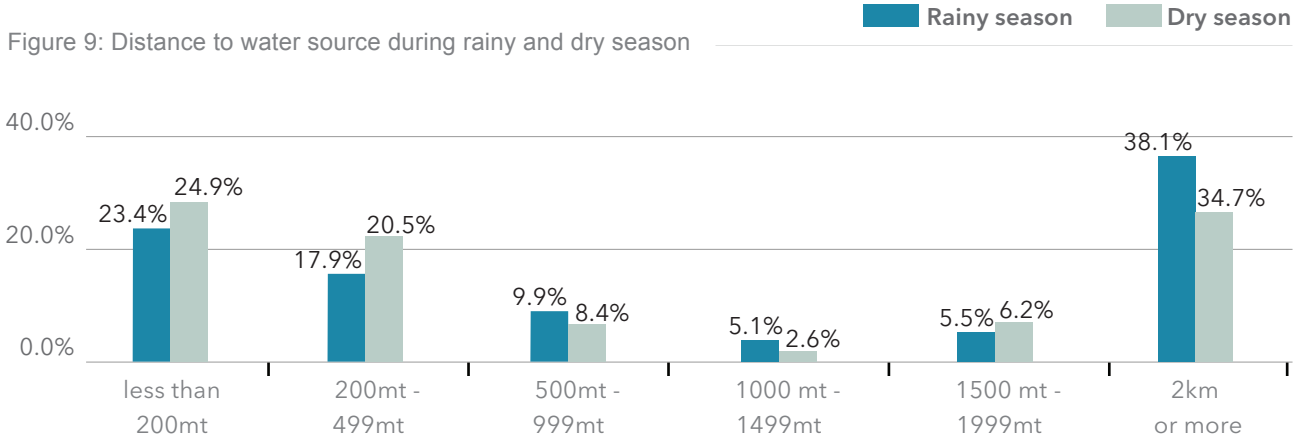
The general picture shows that households source water from relatively far distance. Over a third of the respondents source water from more than 2 km away during dry (37.4%) and rainy season (38.1%).

On the other hand only about a quarter of the respondents obtain water from less than 200 metres during both the dry (24.9%) and rainy season (23.4%).

As shown in the Figure 9 distance to the water sources is similar during both the rainy and the dry season (Friedman test p-value = 0.150).

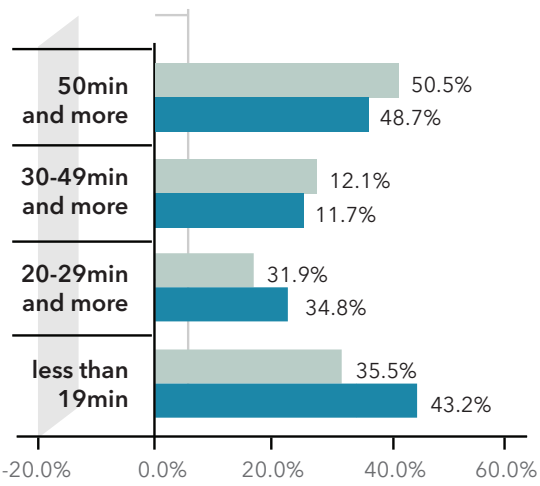
According to all the KIIs (Water Company staff, local leaders, health workers) there are always very long queues at the water kiosks and the water is transported by rolling jerricans on the ground, carrying it on the back and with donkey carts. The physical accessibility of the water is strained especially for women and children who are known to fetch water for the household.

Figure 9: Distance to water source during rainy and dry season



Half of the respondents report to be taking more than 50 minutes to travel to and from the water source both during the rainy (50.5%) and dry season (48.7%). However, only 16.1% and 16.8% of the respondents report to be taking less than 19 minutes. As shown in the Figure 10 time taken to travel to and from the water sources is similar during both the rainy and the dry season (Friedman test p-value = 0.516).

Figure 10:Time taken to and fro water source during rainy and dry season



Over a third (35.5%) of the respondents uses between 4 and 6 jerricans (one jerrican holds 20 litres) of water every day. **On average households use 6.4 jerricans every day, equal to 128 litres of water (14 litres per person)**[1]. This shows that water needed by households in the 3 IDPs camps and host communities is around 200,000 litres per day.

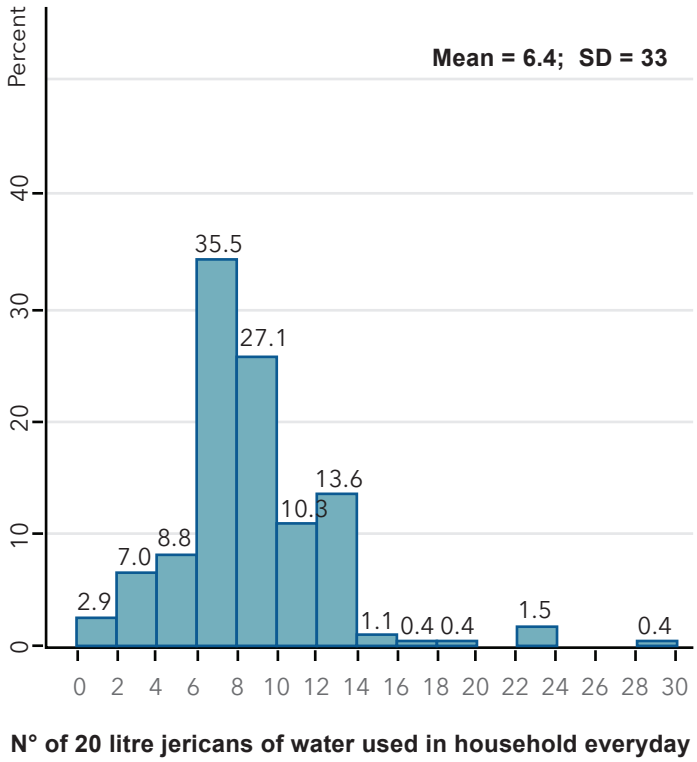
According to the Water Company Staff, at the moment they can pump 180,000 litres (180 m3) of water per day serving, through the communal water points, approximately 1,715 households (12,000 persons) at the rate of 15 lts per person per day. The deficit in the daily water requirement is balanced by other sources which include either direct extraction from the river or purchasing the water by the commercial water tankers and donkey cart water vendors. These sources have however failed to meet the water quality standard and are unsafe. Water is therefore rationed on a frequency of 4 days in a week to ensure a wider reach in water provision.

This shows that there is a serious short fall in water supplied as it is not meeting the demand for domestic purposes.

However, according to the KIIs, the place where water is sourced by the water vendors (river and private water wells) has enough for short-term and long term needs of the residents. This means that water is sufficiently available at the source but distance constraints the residents from fetching it and especially it is unsafe water.

Lack of safe drinking water access has contributed to staggering levels of diarrhoeal diseases. Poor sanitary and hygienic conditions in densely populated settlements and unsafe water sources are a major cause of malnutrition throughout the region.

Figure 11: Amount of water used in household everyday



[1] According to Shpere standards the average water use for drinking, cooking and personal hygiene is 15 litres per person per day (l/p/d).

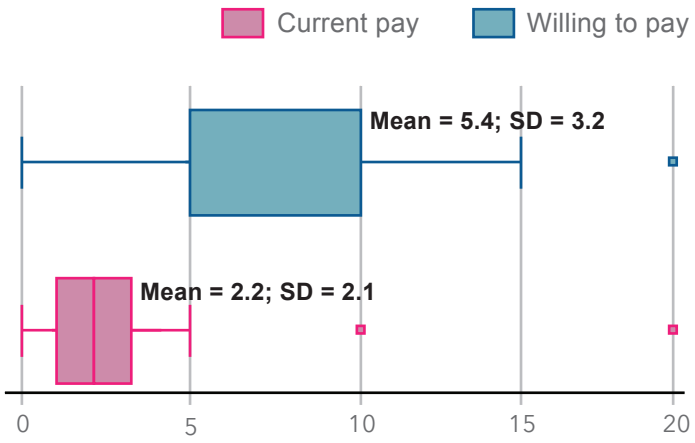
Most of the households are paying to the water vendors between Ksh 5 and Ksh 10 for 20-litre jerrican of water (on average households spent Ksh 5.4 to buy 20-litre jerrican of water). On the other hand most households would like to pay between Ksh 1 and Ksh 3 for a 20-litre jerrican of water.

On average households are willing and able to pay Ksh 2.2 for 20-litre jerrican of water.

As shown in Figure 12, the prices households are paying for water is significantly (paired t-test p-value < 0.01) higher than the prices they would pay.

This shows that there are significant constraints in water affordability for households.

Figure 12: Water prices



According to majority of the respondents their family members carry heavy water containers over long distances (81%) and spend a lot of time fetching water (79.1%).

Further majority (82.4%) of the respondents think that their families don't have enough water for laundry and other household uses throughout the year. Majority of the respondents (86.8%) doesn't think that their water sources are contaminated.

According to the KIIs, the water sourced from the river and bought by the water vendor is unsafe or at risk of contamination from microbiological like faeces and therefore disinfection is necessary.

During the previous project water tests were realized in Madera every month to verify the quality of the water provided by the Water Company. The water distributed through the communal water points is clean/-safe water.

Table 6: Attitude towards water source and water quality

Attitude towards water source and water quality	YES		NO	
	F	%	F	%
Our family carry heavy water containers over long distances	221	81.0%	52	19.0%
Our family spends a lot of time collecting water	216	79.1%	57	20.9%
Our family has safe drinking water available throughout all the year	75	27.5%	198	72.5%
Our family drinks and prepares food with safe water	115	42.1%	158	57.9%
Our family has available water for laundry and other household uses throughout all the year	48	17.6%	225	82.4%
Our water sources are contaminated with human faeces	36	13.2%	237	86.8%

Only 30.8% of households have sufficient water for cooking and 20.5% have sufficient water for hand washing. This shows there is a high shortage of water in households.

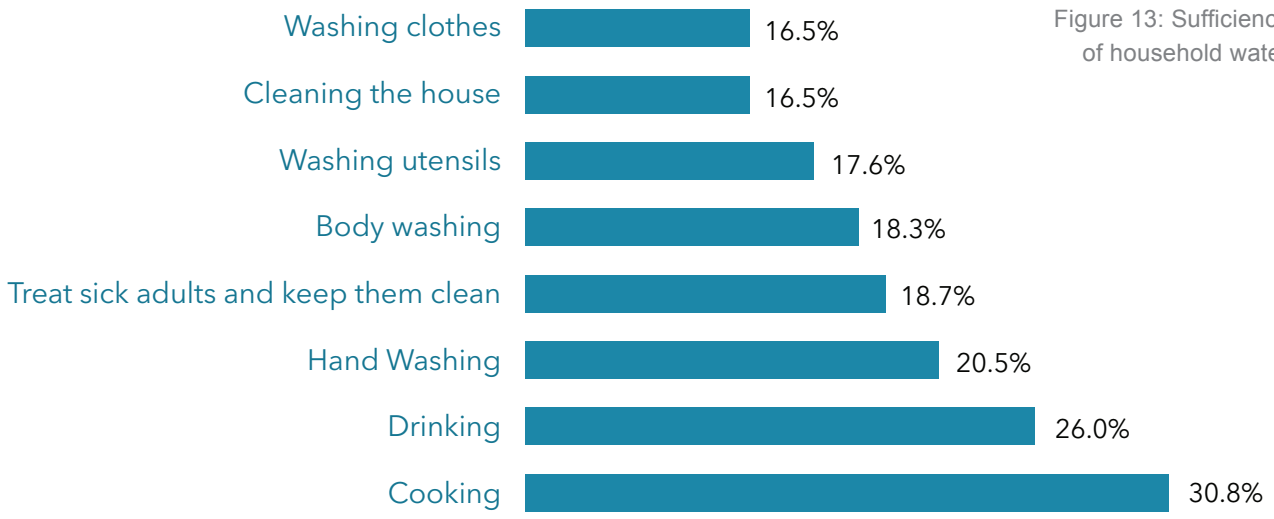


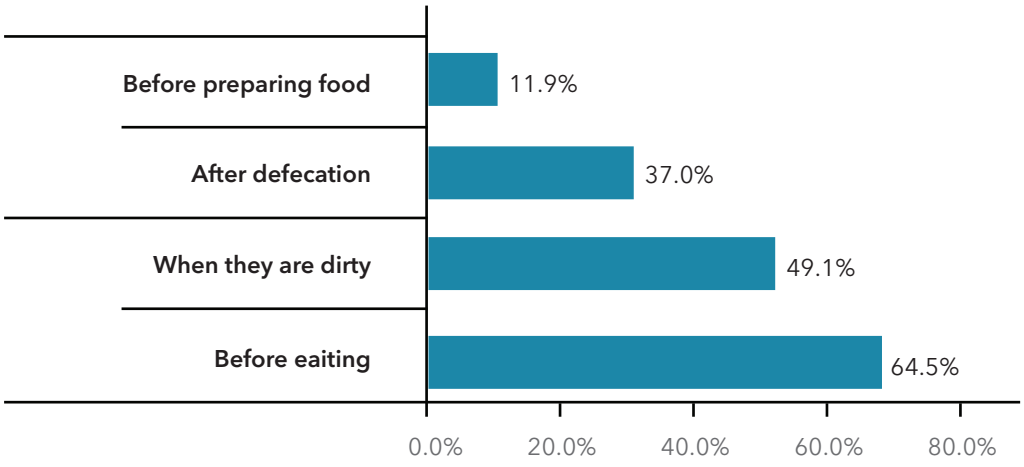
Figure 13: Sufficiency of household water

Majority (85%) of households don't have either taps or basins for hand washing while the remainder 13% have basin and 2% have tap for hand washing. This shows that washing facilities are extensively lacking among project households.

Figure 14: Hand washing facilities present

Majority (85%) of households don't have either taps or basins for hand washing while the remainder 13% have basin and 2% have tap for hand washing. This shows that washing facilities are extensively lacking among project households.

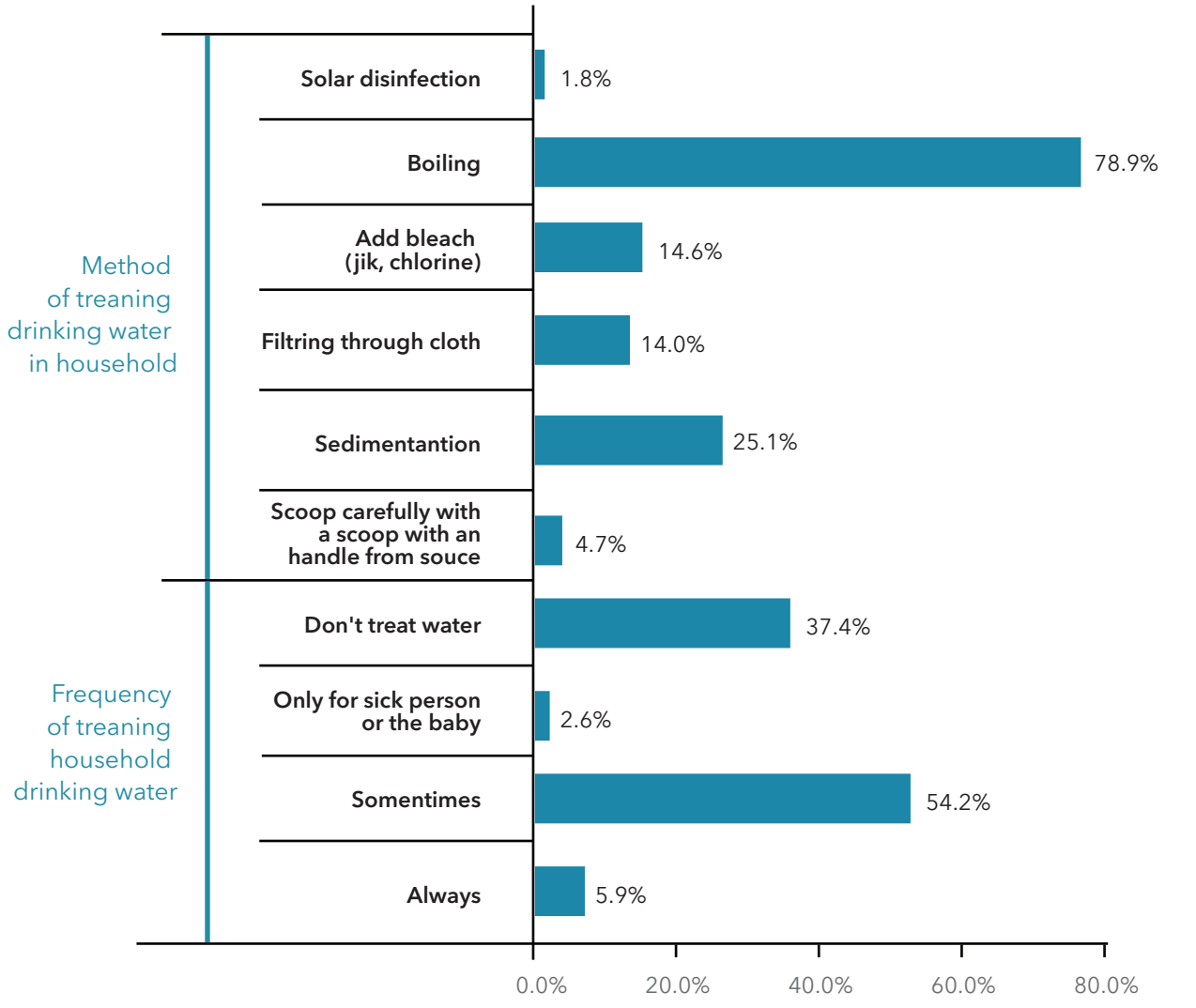
Figure 15: Hand washing with soap



According to the KIIs, even if water is not contaminated at the source there is possibility of contamination during storage and transport. This means water needs to be treated at home. Slightly over half (54.2%) of target population sometimes treats household drinking water, 5.9% treats water every day while 37.4% doesn't at all.

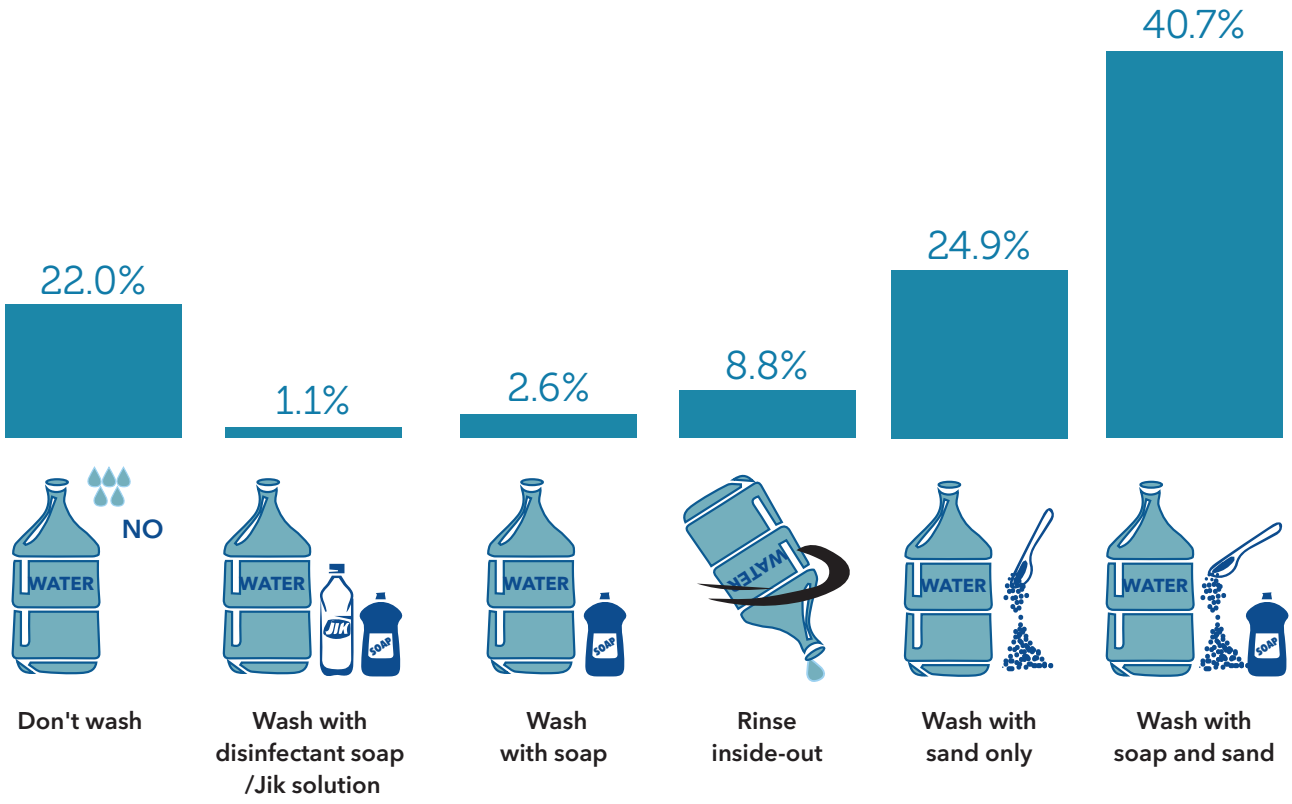
Among those who treat household drinking water 78.9% treat it through boiling. Only 5.9% reported to consistently treat drinking water and 37.4% never treated it. This shows there is a strong need to educate the host community and the IDPs on the importance of consistent drinking water treatment.

Figure 16: Water treatment



The results show that only 1.1% of the respondents adopt best practice cleaning water containers with disinfectant soap or Jik solution while 22% never clean water containers. This shows that residents have low knowledge and there is a strong need to educate residents on importance of adopting best practice in cleaning water containers.

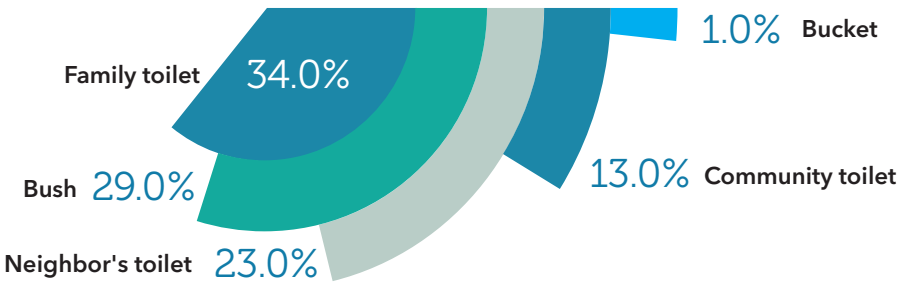
Figure 17: Methods used to clean water containers



Among all baseline participants slightly over a third of the households (34%) are using family toilet, 29% are defecating in the bush while 1% use buckets. This shows that 30% of households are practicing open defecation which poses a risk to the health of the residents of the IDP camps and the host community. According to the KIIs this happens although toilets are available in the area and the community is willing to use them. Vulnerable people like the elderly, the disabled and children don't have easy access as the available toilets do not have suitable infrastructures. In all cases women were responsible for cleaning and managing toilets. Therefore there is need for construction of more community toilets and educating residents on the dangers of open defecation. This education will serve to encourage residents to adopt improved good practice in defecation and drive them to construction of their own family toilets. According to all the KIIs the land slope and drainage patterns allow construction of Pit latrines in the area as the soil is permeable.

Additionally the KIIs observe that level of ground water allows safe construction of Pit latrines without contaminating ground water but only levers. Wheelbarrows and other construction/digging materials are available in the local market for toilet construction.

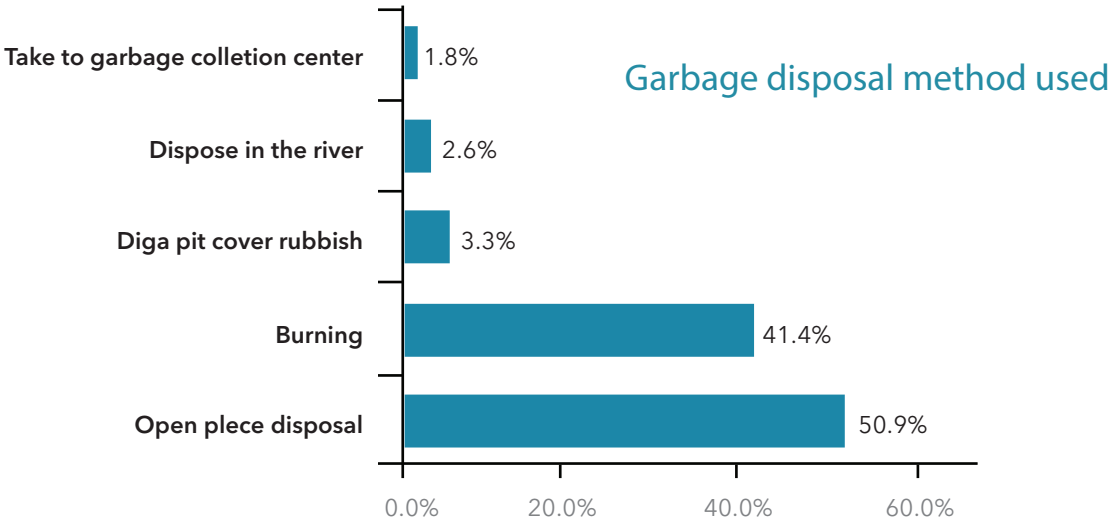
Figure 18: Type of toilet used in household



Concerning disposal of household waste, 50.9% of the respondents dispose their garbage in an open public place, 41.4% burnt it, 2.6% dispose garbage on the river, 3.3% dispose in a covered pit while 1.8% dispose at garbage collection centres. This showed that **only 3.3% of the households adopt good garbage disposal practices while the rest, 96.7%, dispose garbage in a manner that would compromise their health**.

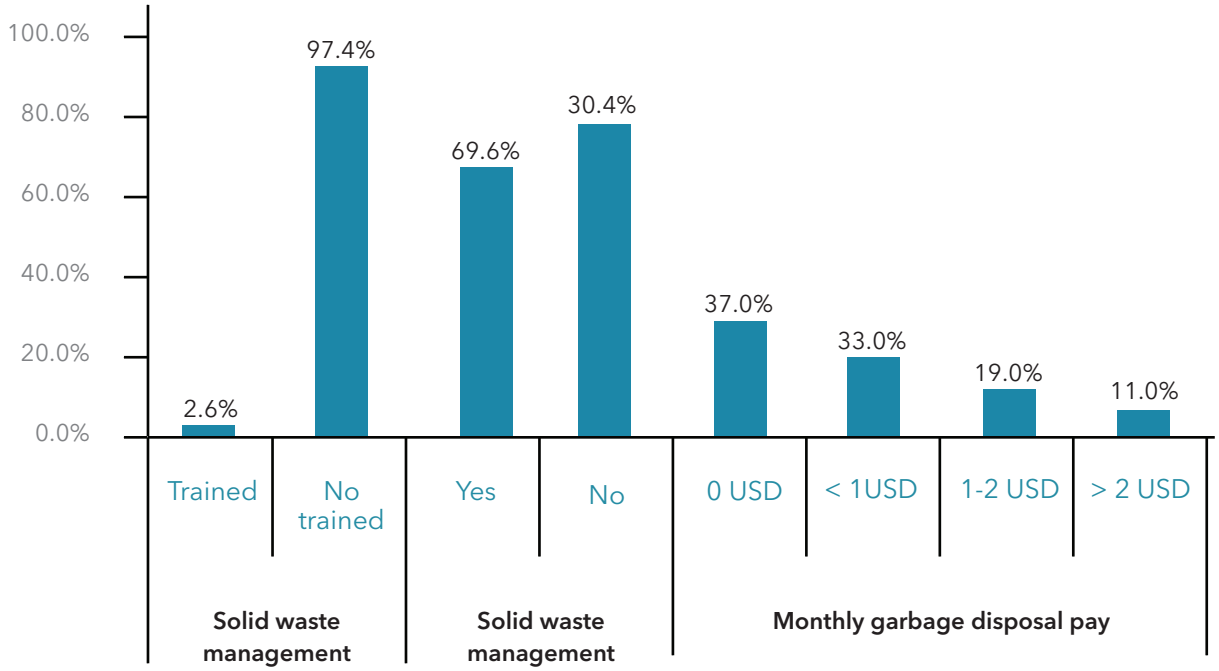
According to the KIIs there is significant amount of solid waste generated by households in the area therefore poses a health challenge, but households generally don't understand the connection between solid waste disposal and health related problems (69.6%).

Figure 19: Household garbage disposal



Only 2.6% of the respondents had been trained on solid waste management and the 37.3% are not willing to pay for garbage disposal services. This underscores the need for training of households on solid waste disposal with a view of enabling them embrace sustainable solid waste management. Half of the KIIs were thought that the community would pay for solid waste disposal services if introduced. In this case the waste disposal monthly charge should be minimal (not more than 1 USD).

Figure 20: Solid waste management concerns



Majority (98.5%) of the respondents acknowledge to have not received hygiene kits previously.

Majority of the respondents acknowledged to have never received information on safe water use and hygiene practices. However 17.2% received this information from Community Health Workers (CHW). Majority (53.2%) of CHW message was themed on common illness affecting the members of the households. This shows that although the information was supposed to be on safe water use and hygiene practices only 67.5% of the CHW message contained information on this course. 32.5% of the CHW message deviated to common illness and nutrition education. As a result therefore in the subsequent WASH education there is need for the CHW to mainly stick to WASH message.

Figure 21: Source of WASH practice information

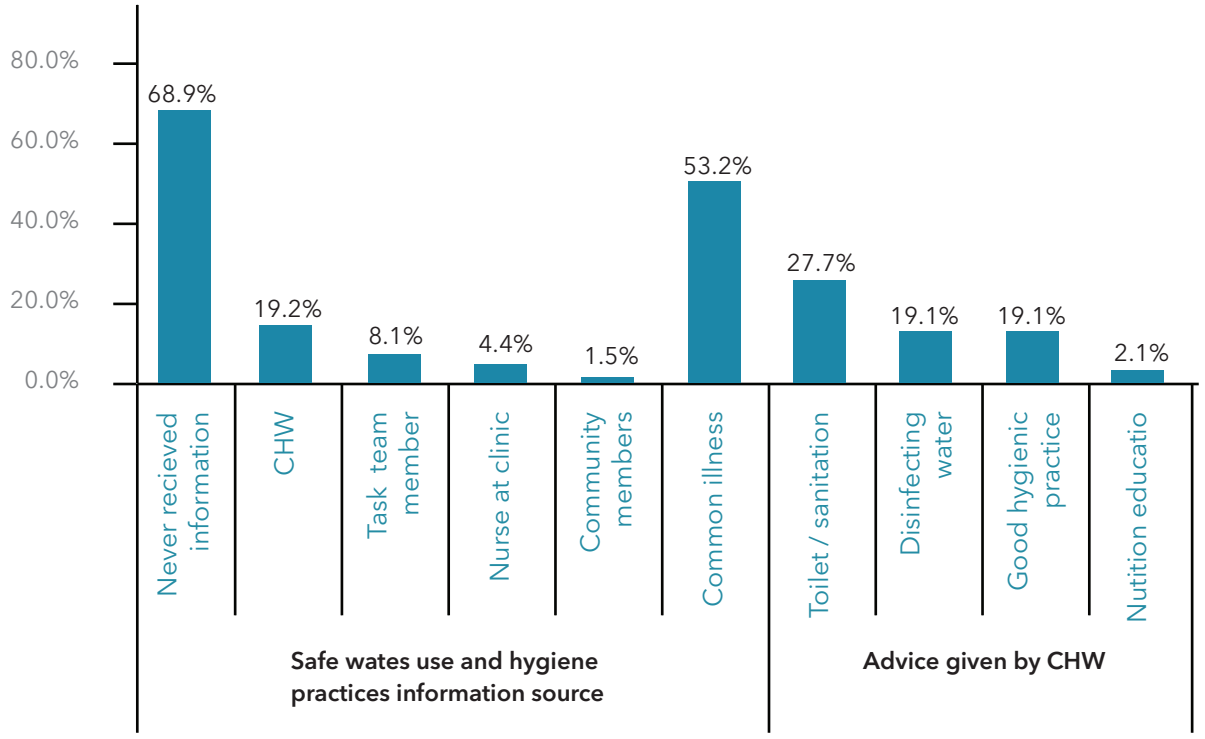
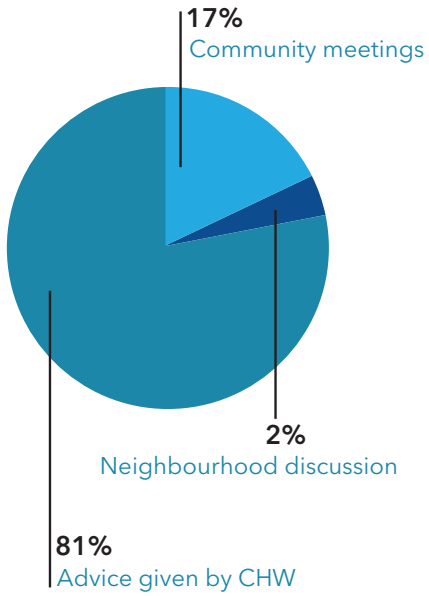


Figure 22: Participation in WASH promotion



Majority (81%) of the respondents had never participated in discussions on safe water practices and hygiene promotion, 17% had participated in WASH community meetings and 2% had participated in WASH promotion through their discussions with their neighbours.

KIIs noted that the users of water sources and latrines were not involved in their management as there were no existent arrangements for the same.

Additionally, according to KIIs there was no existing health promotion media available in the area.

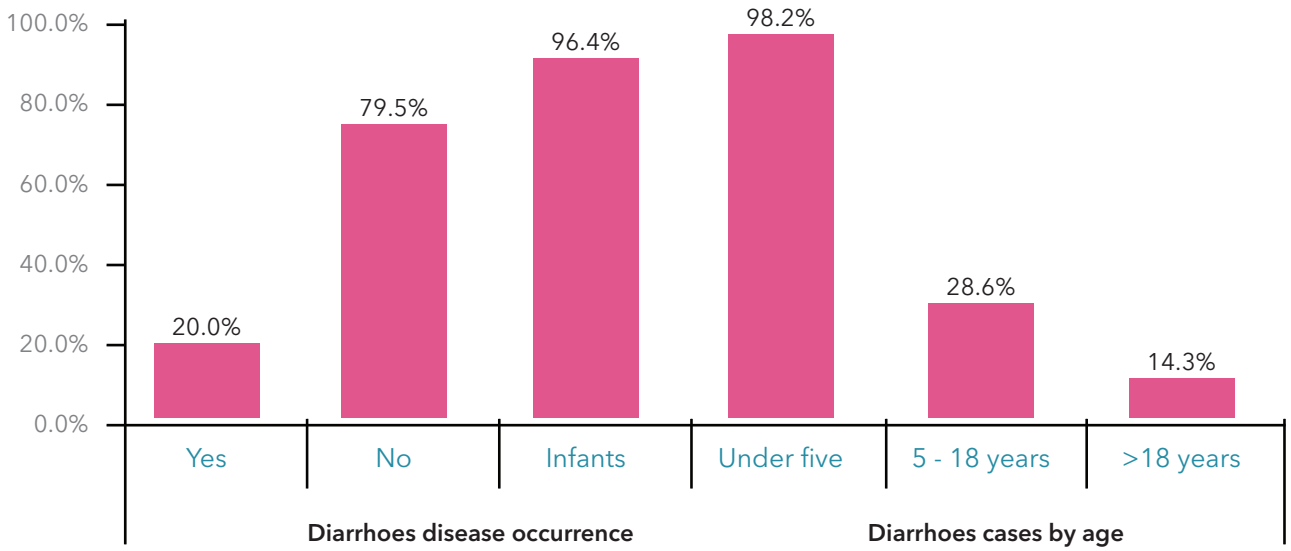
This shows that WASH promotion has not taken centre stage in the community discussions.

2.4 Relevant Health Indicators

According to the 20.5% of the respondents there were cases of diarrhoea in their households in the last two weeks preceding the study. 64.3% of these cases had very watery stool accompanied with discomfort, 32.1% had acute watery stools, 3.6% diarrhoea with blood. 96.4% were affecting infants and 98.2% affecting children under the age of five.

This shows that diarrhoea in the area affected mainly children below five years and infants with few very severe cases.

Figure 23: Diarrhoea cases



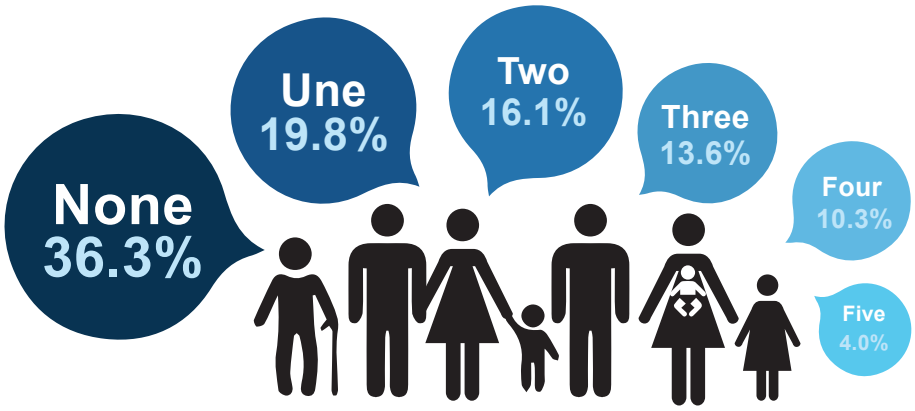
Nearly half (48.7%) of the respondents knew that washing hands before eating would prevent diarrhoea. Treating drinking water was cited by 38.8% of the respondents as a diarrheal prevention method. This showed that respondent had diverse views on the diarrhoea prevention method.

Figure 24: Diarrhoea prevention method known

Caregiver wash hands	16.8%
Have proper toilets	24.2%
People wash hands after toilet	28.6%
Treat drinking water	38.8%
People wash hands before eating	48.7%

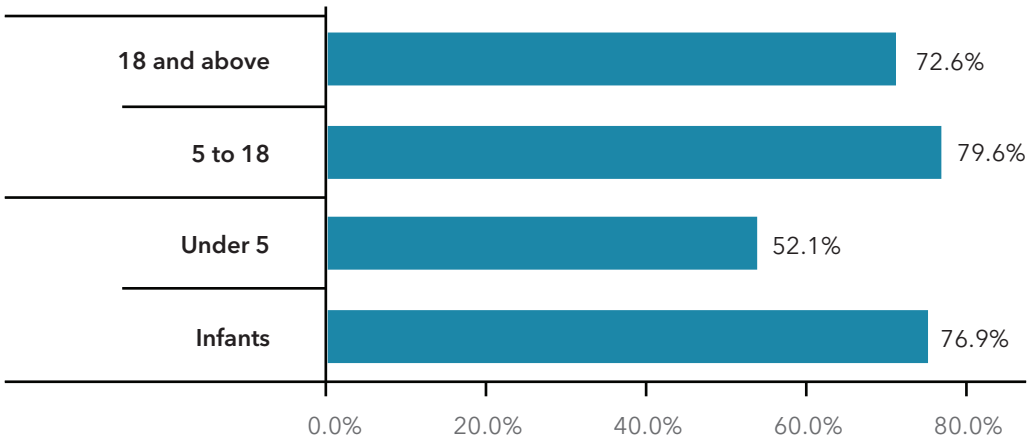
Further the study sought to measure the level of knowledge of respondents on diarrhoea prevention. Over a third (36.3%) of the respondents were not aware of any method of preventing diarrhoea while only 4% were aware of all the five diarrhoea prevention methods explored in this survey. In addition as shown in figure 25, except for those who knew four methods, the proportion of respondents decreased with higher levels of knowledge. This indicates that most of the residents had lower levels of knowledge on diarrhoea prevention.

Figure 25: Number of diarrhoea prevention methods known



According to the study in the last two weeks preceding the survey, malaria was mostly prevalent among adults (79.5%) followed by infants (76.9%). In this case malaria had nearly similar prevalence across all age groups. This shows that malaria affected in a similar manner all members of the community.

Figure 26: Prevalence of Malaria



3 CONCLUSIONS & RECOMMENDATIONS

3.1 Lessons Learnt

The analysis of the data from the community baseline shows that beneficiaries target is facing a large number of key challenges.

In particular:

1. Average household size is significantly higher than initially thought, 9 members for family instead of 7. The real total number of direct beneficiaries of the project in April 2016 is 14,130.
2. 42% of male households are the sole contributors to the household income. 17.6% percentage of female-headed households.
3. Widespread illiteracy. 70.7% of the heads of households had not attended any formal school.
4. Income insecurity is a very widespread concern. 59,6 % households rely on just one member for the production of household income. Household income is mostly used to purchase food.
5. 85.7 % households have experienced food shortage in the month previous the inter view.
6. 44.3% of the target households are in the lower income levels and highly susceptible to emer gency shocks (less than 1 USD per day).
7. A significant proportion of women does not have an income generating activity and therefore could not contribute to the household income.
8. About 30% of households obtain their drinking water from unprotected and contamiated water sources.
9. Throughout the year most households experience shortage of drinking and not drinking water (only 30.8% have sufficient water for cooking and 20.5% for hand washing).

10. 30% of household members defecate in open public space.

11. Lack of safe drinking water access has contributed to staggering levels of diarrhoeal diseases. Poor sanitary and hygienic conditions in densely populated settlements and unsafe water sour ces are a major cause of malnutrition throughout the area.

12. Household waste is usually left in open space (50.9%) or burnt (41.4%). 69.6% of the households don't understand the connection between solid waste disposal and health related problems.

13. Majority of the respondents (68.9%) acknowledged to have never received information on safe water use and hygiene practices.

14. Majority of the target households don't know the relationship between water/sanitation and disease. Over a third (36.3%) of the respondents is not aware of any method of preventing diarrhoea.

15. Malaria however is highly prevalent among all age-groups in the community.

3.2 Conclusions and recommendations

Based on the baseline findings, the survey concludes as follows:

1. Poor sanitation is a significant concern for target households. Therefore there is huge need for assistance in accessing safe water, sanitation services and hygiene promotion.

2. At the same time it is important to increase the number of households (especially women) producing income to reduce the food shortage and to increase their capacity to buy safe water. For this reason WALIB-Gedo should improve the access to key productive assets as well as provide trainings in business skills and support to new business.

3. In case of an emergency/shock situation during the project, WALIB-Gedo could use the ERF (Emergency Relief Fund) to organize food and/or hygiene kit distributions.

4. Water selling services is quite prominent among the households as indicated by the proportion of respondents who source water from water kiosks (safe water) and water trucks (unsafe water) equal to 43.2% and 12.1%. Often water is contaminated during transportation and storage. An urgent need is to educate the host communities and the IDPs on the importance of consistent drinking water treatment.

5. On average households use 128 litres of water every day (14 litres per person), but the water supplied by the existing water kiosks is not sufficient. As a result households had to queue for long time to fetch safe water and they use unsafe water fetched to the river or bought to the water sellers.

6. The Water Company can pump 180,000 litres (180 m3) of water per day serving approximately 1,715 households (12,000 persons). Water is rationed on a frequency of 4 days in a week. This shows that there is a serious short fall in water supplied as it is not meeting the demand for domestic purposes. However, according to the KIIs, the place where water is sourced has enough for short-term and long term needs of the residents. This means that water is sufficiently available at the source, but distance constraints the residents from fetching it and however this water is unsafe and must be treated.

7. For this reason it is necessary to enlarge the water service supply. WALIB-Gedo will focus on it in collaboration with the Water Company and other International NGOs. It is also necessary to increase the number of water communal points in the camps and host communities to improve the distribution of safe water.

8. WALIB-Gedo will build the facilities (water kiosk and latrines) accessible to special groups. ASEP and arche noVa will work in collaboration with German Toilet Organization, partners in the German WASH network.

9. The current price (3 Kes and 5 Kes) for safe water supplied by the water kiosks is considered too much high for the target beneficiaries. They are willing to pay 2.2 Kes. During the project we must establish and reach the point of balance between the capacity of the beneficiaries to pay the service and the amount sufficient to provide an efficient service by the Water Company.

10. The monthly charges for solid waste disposal services should not be more than 1 USD per month.

11. It is furthermore important to reinforce the Water Company capacity on financial management, revenue collections, book keeping, conflict resolution mechanisms, general aspects on technical operation and maintenance of water system, water quality testing. Unsafe water sources are a major cause of malnutrition throughout the area.

12. Could be extremely useful to provide Potable Water Testing Kit to the Water Company to easily check the quality of the water.

13. Good hand washing with soap and consistent water treatment is minimally practiced among households. It is strongly suggested to organize and train volunteers hygiene promoter in each camp and host communities to promote hygiene practise. Take into consideration the high illiteracy rate and to organize the trainings and didactical materials according with the households' knowledge and capacities.

14. Households have constrained access to proper human waste disposal as well as solid waste disposal. However solid waste management is not considerate as a major health concern to most households. WALIB-Gedo should improve the waste disposals particularly in the IDPs camps.

15. CHWs are efficient in delivery of WASH information. However, although the information was supposed to be essential about safe water use and hygiene practices, a significant portion CHW message deviate to common illness and nutrition. This could be attributed to the fact that WASH promotion has not taken centre stage in the community discussions till now. Take in consideration to organize the trainings in collaboration with CHW and share with them the didactical and promotional materials. WALIB-Gedo should fully embrace community mobilization as it has been shown that the community is highly receptive of WASH initiatives and reduce program resistance that might occur.

16. There is need for extensive community education on aspects of consistent water treat ment, hand washing, dangers of open defecation and methods of preventing and controlling diarrhea as the community has been shown to depict poor practices towards these health elements. The message also should contain elements of malarial control, which has been shown to be rampant in the area.

17. The WASH initiatives should fully incorporate both the IDPs and the host community as they have been shown to be equally vulnerable. In addition, this incorporation will enhance integration of the IDPs and the host community thus reducing conflict and build better relationship.

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List of Tables

List of Figures

ASEP Action for Social and Economic Progress
www.asepsomalia.org

Is a local non-governmental organization (LNGO) whose mission is to facilitate livelihood improvement amongst pastoral communities, farmers and urban poor in the south western regions of Somalia. ASEP was established in 1995 to partially fill the vacuum in service delivery that resulted from the collapse of the Somali state. Since that time, ASEP has continuously been responding to the emergency, rehabilitation, recovery and development needs of diverse communities. ASEP currently operates in the districts of Belet-hawo, Dolow, Luuq and Garboharey of Gedo region. It also has operational reach to other parts as well as Bay, Bakool and Jubba regions of Somalia.

arche noVa
www.arche-nova.org

Founded in Dresden, Germany, in 1992, is an independent organization working in 14 countries world wild. arche noVa expertise is focused especially in the WASH sector (Water, Sanitation and Hygiene promotion) with a wide range of activities to support local communities and civil society organizations.
The assistance can be divided into 3 categories:
Immediate help to ensure survival and to overcome emergencies especially regarding WASH; **Rehabilitation and reconstruction** of water and hygiene system destroyed by war or natural calamities; **Development projects on WASH**, Climate Change, Food security and Disaster Risk Reduction; **Educational programs** to develop global solidarity awareness, to increase the pool of donors and volunteers and to influence private companies and public institution. Intensive regional workshops regarding WASH in emergency are realized by arche noVa every year in Bangkok (Thailand), Kampala (Uganda) and Berlin (Germany). Since 2015 arche noVa is active to promote the **integration of the refugees and asylum seekers** in Saxony, Germany.