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ABBREVIATION

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AWD</td>
<td>Acute Watery Diarrhea</td>
</tr>
<tr>
<td>EFSNA</td>
<td>Emergency Food Security and Nutrition Assessment</td>
</tr>
<tr>
<td>FCS</td>
<td>Food Consumption Score</td>
</tr>
<tr>
<td>FRC</td>
<td>Free Residual Chlorine</td>
</tr>
<tr>
<td>HDDS</td>
<td>Household Dietary Diversity Score</td>
</tr>
<tr>
<td>HC</td>
<td>Host Communities</td>
</tr>
<tr>
<td>HH</td>
<td>Household</td>
</tr>
<tr>
<td>HNO</td>
<td>Humanitarian Needs Overview</td>
</tr>
<tr>
<td>IDP</td>
<td>Internally Displaced People</td>
</tr>
<tr>
<td>IPC</td>
<td>Integrated Pest Management</td>
</tr>
<tr>
<td>IPM</td>
<td>Integrated Pest Management</td>
</tr>
<tr>
<td>MAHFP</td>
<td>Monthly Average Household Food Provisioning</td>
</tr>
<tr>
<td>OFDA</td>
<td>Office for Foreign Disaster Assistance</td>
</tr>
<tr>
<td>ORS</td>
<td>Oral Rehydration Salt</td>
</tr>
<tr>
<td>TFPM</td>
<td>Task Force for Population Movement</td>
</tr>
<tr>
<td>WASH</td>
<td>Water, Sanitation, and Hygiene</td>
</tr>
<tr>
<td>UNOCHA</td>
<td>United Nations Office for the Coordination of Humanitarian Affairs</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

CARE Yemen has been implementing an OFDA-supported “Emergency assistance for conflict-affected and vulnerable communities” project in four districts (As Sudah, As Sawd, Jabal Yazid, and Maswar) of Arman Governorate and two districts (Mabyan and Ash Shagadirah) of Hajjah Governorate, Yemen. The goal of the project is to improve the basic living conditions, and facilitate early recovery and resilience of internally displaced persons and host communities affected by conflict in Yemen. This project seeks to meet the critical WASH and basic living needs of the most vulnerable households living in the targeted districts so that lives are saved, suffering is alleviated, and human dignity is maintained. The specific objectives of the project are: reduce morbidity from WASH-related diseases of vulnerable IDPs and host communities; enable the most vulnerable IDPs and host communities to meet their basic and immediate needs, and increase their asset base; and improve the food security and nutritional status of the most vulnerable host communities.

In order to measure the changes in key outcomes of the project through comparing with the benchmark values, an end-line survey was conducted with 729 beneficiary households living in the six project operational districts of the Amran and Hajjah Governorates in January 2019. The survey mainly used quantitative methodology (i.e. household survey) to collect pertinent data. Here are the key survey outcomes:

- **Access to safe water**: 74.9% of respondents in Amran and 83.3% in Hajjah Governorates mentioned to have access to safe water from protected water sources such as piped water system and protected wells.

- **Availability of water from the primary water source**: 63.1% of interviewees from Amran and 93% from Hajjah Governorate replied that water is available from the main water sources (whether protected or unprotected) throughout the year.

- **Amount of water collected/person/day**: 5.4% of survey participants in Amran and 21% in Hajjah Governorate collect less than 10 liters of water/person/day. 23.3% of survey participants in Amran and 42.2% in Hajjah Governorate collect 10-15 liters of water/person/day. 71.3% of interviewees in Amran and 36.6% in Hajjah Governorate collect more than 15 liters of water/person/day.

- **Time to collect water**: Only 25.3% interviewees from Amran and 3.2% of respondents from Hajjah respectively replied that it takes more than 60 minutes to collect water from the primary source.

- **Practice of water treatment**: 76% of households in Amran and 96% in Hajjah treat water before drinking.

- **Availability of household latrines**: 86.8% of interviewees in Amran and 93.7% in Hajjah mentioned to have household latrines.

- **Practice of handwashing**: 43.4% of respondents in Amran and 66.9% in Hajjah mentioned to practice hand washing during three or more critical moments of hand washing.

- **Household Dietary Diversity Score**: The average HDDS for the targeted household in Amran and Hajjah is 7.1 and 6.5 respectively. This denotes a moderate quality of diet whereby households consume an average of around 6 food groups out of the recommended twelve food groups.
• Food Consumption Score: The average FCS for the targeted household in Amran and Hajjah is 53.4 and 53.2 respectively. In addition, 82.2% of surveyed households in Amran and 65.5% in Hajjah are in acceptable food consumption.

• Monthly Average Household Food Provisioning: The survey result indicated an MAHFP value of 11.5 and 5.9 for Amran and Hajjah respectively. This implies households have adequate food in 11.5 months in Amran and 5.9 months in Hajjah.

• Vegetable production: 22.3% of respondents in Amran and 27.5% in Hajjah grow dark leafy green vegetables such as okra, lettuce, radish, and parsley.

• Crop protection: 22% of respondents in Amran and 37.7% in Hajjah practice crop protection measures such as deep ploughing, crop rotation, insecticides, and mulching.
1 INTRODUCTION

Yemeni people continue to bear the brunt of ongoing hostilities and severe economic decline since the escalation of conflict in March 2015. According to the Yemen 2019 Humanitarian Needs Overview (HNO), 24.1 million people are now in need of humanitarian assistance. This figure includes 14.3 million people in acute need of immediate assistance to save or sustain life. Furthermore, 20.1 million Yemenis are food-insecure, including 9.9 million who are severely food-insecure; 17.8 million people lack access to safe drinking water or sanitation; and 19.7 million lack adequate healthcare.

The result of the Integrated Food Security Phase Classification of December 2018 revealed that 37.4% and 21% of Amran’s population are respectively classified into Crisis Phase and Emergency Phase whereas 0.9% of population are categorized into Catastrophic Phase. This signifies the situation is extremely dynamic and fragile, requires close monitoring on key food security and nutrition indicators, and requires the continuation of humanitarian assistance. In addition, according to the 17th report of the Taskforce of Population Movements (TFPM) of the protection cluster, a total of 157,812 individuals (26,302 HHs) have been displaced to Amran governorate. The TFPM report further indicated that 2519 HHs (15,114 individuals) have returned back to Amran. Furthermore, according to the 2018 HNO, a total of 1,010,000 individuals (83.5% of Amran’s total population) requires humanitarian assistance.

Similarly, according to the December 2019 IPC, 66% of Hajjah’s population is categorized under Phase II (Crisis phase) and above, signifying the need for emergency humanitarian assistance. In addition, according to the 2019 HNO, 2,010,000 people (80.1% of Hajjah’s 2,510,000 population) are in need of humanitarian assistance. Furthermore, 17th report of the Task Force for Population Movement (TFPM) of the protection cluster indicated that a total of 377,562 individuals (62,927 HHs) have been displaced to Hajjah Governorate. The high number of IDPs has stretched local communities and host families’ safety nets.

The Emergency Assistance for Conflict-affected and Vulnerable Communities project provides immediate water, sanitation and hygiene (WASH) assistance through rehabilitation of water schemes, support for household latrines, and hygiene promotion activities. In areas affected by the cholera outbreak, the project focuses on WASH activities in line with the Yemen Health and WASH Clusters’ Integrated Cholera Response Plan. The project provides conditional cash assistance through temporary employment opportunities to the most vulnerable households to mitigate the impact of job loss and resource depletion. This intervention will help them to meet their most immediate needs and rebuild vital community assets. The project also supports households with provision of agricultural inputs such as seeds and farm tools so as to improve the food diversity and nutritional status of households.

I. OBJECTIVES OF THE SURVEY

The main objective of this survey is to measure the changes in key outcomes of the project through comparing with the benchmark values. These outcome indicators are

- Projected increase in number of months of food self-sufficiency due to distributed seed systems/agricultural input for beneficiary households
- Percentage of the target population achieves Acceptable Food Consumption Score (FCS)
- Average Household Dietary Diversity Score (HDDS)
- Percentage of post-harvest produce protected against diseases and pests
- Percentage of hectares protected against diseases and pests
• percentage of people trained by USAID/OFDA partners practicing appropriate crop protection procedures, by sex
• Average liters/person/day collected from all sources for drinking, cooking and hygiene
• Percentage of households who know at least three critical moments of hand washing

III. METHODOLOGIES AND SURVEY SITES

A. Study Methodology

The baseline survey was conducted in four districts (As Sudah, As Sawd, Jabal Yazid, and Maswar) of Amran Governorate and two districts (Mabyan and Ash Shagadirah) of Hajjah Governorate in January 2019. The survey team mainly used quantitative methodology (i.e. household survey) to collect pertinent data/information.

B. Sampling methodology

A household survey covered 729 households from the targeted villages across the six districts in Amran and Hajjah Governorates, which were selected on randomly basis. This sample was calculated based on a margin of error of ±5%, and 95% confidence level. The survey employed a Probability Proportion to Size sampling approach in each Governorate. Data were collected from 387 households in Amran Governorate (i.e. 14 HHs in As-Sudah, 127 HHs in As-Sawd, 139 HHs in Jabal Yazid, and 107 HHs in Maswar district) and 342 households in Hajjah Governorate (i.e. 212 HHs in Mabyan 130 HHs and in Ash Shagadarah), reaching a total of 727 HHs in both Governorates. The survey team contacted an adult person in the HH and requested their consent/permission to conduct an interview with a member of that household. When permission was granted, the respondent was interviewed face to face in the privacy of their own home.

C. Data Collection and entry

The household survey was conducted in January 2019 in the six districts of Amran and Hajjah Governorates. Data was checked, entered, encoded, and analyzed using Kobo toolbox.

Table 1: Number of survey participants

<table>
<thead>
<tr>
<th>District</th>
<th>Total number of interviewees</th>
<th>Percentage</th>
<th>District</th>
<th>Total number of interviewees</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Amran Governorate</td>
<td></td>
<td></td>
<td>B. Hajjah Governorate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>As Sudah</td>
<td>14</td>
<td>3.7</td>
<td>Ash Shagadirah</td>
<td>130</td>
<td>38</td>
</tr>
<tr>
<td>As Sawd</td>
<td>127</td>
<td>32.8</td>
<td>Mabyan</td>
<td>212</td>
<td>62</td>
</tr>
<tr>
<td>Jabal Yazid</td>
<td>139</td>
<td>35.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maswar</td>
<td>107</td>
<td>27.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>387</td>
<td>100</td>
<td></td>
<td>342</td>
<td>100</td>
</tr>
</tbody>
</table>

Total number of interviewees = 729

IV. RESULTS OF THE SURVEY

1. DEMOGRAPHIC CHARACTERISTICS

   Amran Governorate

   1.1. Sex of respondents: 67% of respondents are male and female constitute 33% of the respondents.
1.2. Household status: All respondents are from the host communities.
1.3. Marital status: 95.3% of interviewees are married; 0.3% are single; 4.1% are widowed; and 0.3% are divorced.
1.4. Age of respondent: The average of respondents is 37.5 years.

_Hajjah Governorate_
1.1 Sex of respondents: 60.2% of respondents are male and female constitute 39.8% of the respondents.
1.2 Household status: Host communities constitute 95.6% of the respondents, and 4.4% are Internally Displace people (IDPs).
1.3 Marital status: 94.7% of interviewees are married; 0.3% are single; and 5% are widowed.
1.4 The average age of respondents is 42.1 years.

2. WATER, SANITATION, AND HYGIENE

2.1 Source of water

_Amran Governorate_
As per indicated in Table 2, participants of the survey mentioned different sources of water that included piped systems at home; piped systems at public places, open well/spring; protected well, water truck, and other sources such as unprotected water reservoirs and dams. The majority of respondents (50.1%) mentioned that their main sources of water are protected wells/springs and 7.5% and 16.8% of survey participants respectively indicated that ‘unprotected wells’ and ‘unprotected reservoirs/dams’ are their primary sources of water. 10.1% mentioned piped water in the house; 8.3% stated piped water at public places; and 6.4% indicated water truck; as their primary source of water. This implies 74.9% of interviewees have now access to safe water; and this is a big improvement comparing to the baseline survey value where only 13.6% had access to safe water prior to the intervention.

Table 2: Source of water

<table>
<thead>
<tr>
<th>Main source of water</th>
<th>Amran</th>
<th></th>
<th>Hajjah</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>End-line</td>
<td>Baseline</td>
<td>End-line</td>
</tr>
<tr>
<td>Piped water, in house</td>
<td>2.4%</td>
<td>10.1%</td>
<td>0.3%</td>
<td></td>
</tr>
<tr>
<td>Water truck / water vendor</td>
<td>5%</td>
<td>6.4%</td>
<td>11.1%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Piped water, public</td>
<td>1.3%</td>
<td>8.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>River/stream/lake</td>
<td>0.5%</td>
<td>0.8%</td>
<td>6.7%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Protected wells/spring</td>
<td>4.9%</td>
<td>50.1%</td>
<td>3.5%</td>
<td>83%</td>
</tr>
<tr>
<td>Unprotected wells/springs</td>
<td>53.3%</td>
<td>7.5%</td>
<td>56.6%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Other (unprotected reservoirs/dams/valleys)</td>
<td>32.6%</td>
<td>16.8%</td>
<td>21.8%</td>
<td>1.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

_Hajjah Governorate_
The main sources of water for the majority of surveyed households (83%) are protected wells whereas 12.6% and 1.7% of respondents respectively mentioned that their primary water sources are ‘rivers/streams/lakes’ and ‘unprotected wells’. Comparing to the baseline value where only 14.9% of interviewees had access to safe water, there is a big change where 83.3% of survey participants indicated that they have access to protected water sources.
2.2 Adequacy and quantity of water and time to fetch water

2.2.1 Adequacy of water from the main source

Amran Governorate

63.1% of respondents replied that water is available at their main water source throughout the year whereas 36.9% responded that they do not get water from the primary source throughout the year. There is a noticeable increment where only 44.6% of interviewees, during the baseline survey, reported of having water from the main source throughout the year.

Hajjah Governorate

The bulk majority of interviewed participants (93%) responded that water is available at their main water source throughout the year. Only 7% indicated that they do not get water from the primary source throughout the year. Comparing to the baseline value where 86.2% replied that they get water from the source throughout the year, there is a slight improvement in accessing water throughout water.

2.2.2 Daily quantity of water collected

Amran Governorate

Survey participants were asked about the quantity of water the household collects from the main water source per person per day for the entire household for drinking, cooking, and hygiene. Accordingly, 69.3% of interviewees replied that they collect more than 15 liters of water per person per day while 23.3% of them indicated that they collect 10-15 liters of water per person per day. (22.8% and 35% at baseline Vs 5.43% and 23.26% at end line) of respondents respectively mentioned that they collected ‘less than 10 liters of water per person per day’ and ‘10 – 15 liters of water per person per day’. (36.5% at baseline Vs 69.25% at end line) of interviewees reiterated that collected ‘more than 15 liters of water per person per day’ and the remaining (5.7% at baseline Vs 2.07% at end line) of survey participants could not able to mention the amount of water they collected.

Hajjah Governorate

42.3% and 36.6% of respondents respectively mentioned that they collected ‘10-15 liters of water per person per day’ and ‘more than 15 liters of water per person per day’; 20.5% of interviewees reiterated that collected ‘less than 10 liters of water per person per day’; and the remaining 0.6% of survey participants could not able to mention the amount of water they collected.

Table 3: Quantity of water that households collect from the main source

<table>
<thead>
<tr>
<th>Quantity of water collected per person per day</th>
<th>Amran Baseline</th>
<th>Amran End line</th>
<th>Hajjah Baseline</th>
<th>Hajjah End line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10 liters of water per person per day</td>
<td>22.8%</td>
<td>5.3%</td>
<td>20.5%</td>
<td>28.8%</td>
</tr>
<tr>
<td>10 – 15 liters of water per person per day</td>
<td>35%</td>
<td>23.3%</td>
<td>42.3%</td>
<td>38.7%</td>
</tr>
<tr>
<td>More than 15 liters of water per person per day</td>
<td>36.5%</td>
<td>69.3%</td>
<td>36.6%</td>
<td>31.2%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>5.7%</td>
<td>2.1%</td>
<td>0.6%</td>
<td>1.3%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
2.2.3 Distance of water source and time to collect water

**Amran Governorate**

With regard to the distance of the primary water source from their homestead, 49.4% respondents replied that the distance of the water source from the house is more than 500 meters and 47% mentioned that the distance is less than 500 meters. The remaining 3.6% could not mention the distance. Regarding the time to collect water from the primary source, 46.5% and 24.8% of respondents respectively replied that it takes ‘less than 30 minutes’ and ‘30-60 minutes’ to collect water from the primary water source. 25.3% of interviewees responded that it takes ‘more than 60 minutes’ to collect water from the primary source. The remaining 3.4% of survey participants could not tell the time that it takes to collect water from the source.

**Hajjah Governorate**

68.7% interviewees replied that the distance of the water source from the house is more than 500 meters and 28.1% mentioned that the distance is less than 500 meters. The remaining 3.2% of respondents could not mention the distance. Regarding the time to collect water from the primary water source, 66.4% and 30.4% of respondents respectively replied that it takes ‘less than 30 minutes’ and ‘30-60 minutes’ to collect water from the primary water source. 28% of interviewees responded that it takes ‘more than 60 minutes’ to collect water from the primary source. The remaining 3.2% of respondents could not mention the time they spend to collect water from the primary source.

Table 3: Distance to the water source and time taken to collect water from the main source

<table>
<thead>
<tr>
<th>Distance and time</th>
<th>Amran</th>
<th></th>
<th>Hajjah</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>End line</td>
<td>Baseline</td>
<td>End line</td>
</tr>
<tr>
<td><strong>Distance of the primary water source from the homestead</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Less than 500 meters</td>
<td>42.2%</td>
<td>47%</td>
<td>61.3%</td>
<td>68.7%</td>
</tr>
<tr>
<td>• More than 500 meters</td>
<td>55.7%</td>
<td>49.4%</td>
<td>34.3%</td>
<td>28.1%</td>
</tr>
<tr>
<td>• Do not know</td>
<td>2.1%</td>
<td>3.6%</td>
<td>4.4%</td>
<td>3.2%</td>
</tr>
<tr>
<td><strong>Time taken to collect water from the primary water source</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Less than 30 minutes</td>
<td>39.9%</td>
<td>46.5%</td>
<td>31.6%</td>
<td>66.4%</td>
</tr>
<tr>
<td>• 30-60 minutes</td>
<td>24.4%</td>
<td>24.8%</td>
<td>37.5%</td>
<td>30.4%</td>
</tr>
<tr>
<td>• More than 60 minutes</td>
<td>35.7%</td>
<td>25.3%</td>
<td>28%</td>
<td>28%</td>
</tr>
<tr>
<td>• Do not know</td>
<td>3.4%</td>
<td>2.9%</td>
<td>3.2%</td>
<td></td>
</tr>
</tbody>
</table>

2.2.4 Existence and functionality of water management committees

**Amran Governorate**

The survey questionnaire incorporated issues related to the existence and functionality of water management committees. Accordingly, 77.5% replied that the water sources have functional water management committees and the remaining 22.5% affirms the non-existence of the water management committees.

**Hajjah Governorate**

The bulk majority of respondents (86.8%) replied that the water sources have functional water management committees and 12.6% of them indicated there are no water management committees. The remaining 0.6% of respondents do not know whether water management committees exist or not.
Table 5: Existence of functional water management committees

<table>
<thead>
<tr>
<th>Are there functional Water Management Committees?</th>
<th>Amran Baseline</th>
<th>Amran End line</th>
<th>Hajjah Baseline</th>
<th>Hajjah End line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>91.5%</td>
<td>77.5%</td>
<td>0.9%</td>
<td>86.8%</td>
</tr>
<tr>
<td>No</td>
<td>8.5%</td>
<td>22.5%</td>
<td>83.9%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Don’t know</td>
<td></td>
<td></td>
<td>15.2%</td>
<td>0.6%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

2.2.5 Practice of water treatment

Amran Governorate

Interviewees were also asked about the practice of water treatment. 76% of interviewees treat water before drinking whereas 24% of respondents do not treat water before drinking. Among those households that responded to practice water treatment, 82.7% use Aquatabs to treat water, 1% use filter, 1.5% practice boiling, 1.8% use solar disinfection, 10.7% of respondents use chlorine (HTH), and the remaining 3.3% of respondents use different methods to treat water.

Hajjah Governorate

96.2% of interviewees treat water before drinking whereas 3.8% of respondents do not treat water before drinking. Among those households that responded to practice water treatment, 72% use Aquatabs to treat water, 25.3% practice chlorination, 0.9% practice boiling, 0.6% use filter, and 1.2% use different methods to treat water.

Table 6: Practice of water treatment

<table>
<thead>
<tr>
<th>Do you treat water before drinking?</th>
<th>Amran Baseline</th>
<th>Amran End line</th>
<th>Hajjah Baseline</th>
<th>Hajjah End line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>28%</td>
<td>76%</td>
<td>6.8%</td>
<td>86.8%</td>
</tr>
<tr>
<td>No</td>
<td>72%</td>
<td>24%</td>
<td>93.2%</td>
<td>12.6%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

2.3 Hygiene and sanitation

2.3.1 Sanitary infrastructure:

Amran Governorate

The majority of respondents (85.8%) of respondents mentioned to have household latrine and the remaining 14.2% do not have household latrine. Among those households who responded to have latrine, 85.9% have pit latrine, 12% have a pour flush latrine, and the remaining 2.1% have flush latrine. In line with this, 50.9% of survey participants replied that the latrines have hand washing provision. Meanwhile, 94.9% of respondents mentioned that women and girls use latrine in household whereas 5.1% of interviewees responded negatively. Out of those interviewees who responded that women and girls are not using latrine in household, 17.7% of replied that they go to the bush, 58.8% use neighbors’ toilet, and 23.5% of respondents go to different places for excretion such as abandoned houses.

Hajjah Governorate

93.9% of interviewees mentioned to have household latrine while 6.1% of them do not have household latrine. Among those households who responded to have latrine, 20.6% have pit latrine and 79.4% have a pour flush latrine. With regard to the number of latrines that a household currently has, 97.7% of respondents have ‘1 stance/cubicle’ and 2.3% of interviewees have ‘2 stances/cubicle’. In line with this, 54.4% of survey participants replied that the latrines have hand washing provision whereas the remaining 45.6% replied that the latrines do not have hand
washing provisions. Meanwhile, 92% of respondents mentioned that women and girls use latrine in household whereas 8% of interviewees responded negatively. Those interviewees who responded that women and girls are not using latrine in household mentioned that women/girls go to bushes and abandoned places for defecation.

Table 7: Sanitary infrastructure and practice

<table>
<thead>
<tr>
<th>Sanitary practice</th>
<th>Amran</th>
<th>Hajjah</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>End line</td>
</tr>
<tr>
<td>Households that have household latrines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Yes</td>
<td>75%</td>
<td>85.8%</td>
</tr>
<tr>
<td>• No</td>
<td>25%</td>
<td>14.2%</td>
</tr>
<tr>
<td>Do household latrines have hand washing facilities?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Yes</td>
<td>10%</td>
<td>50.9%</td>
</tr>
<tr>
<td>• No</td>
<td>90%</td>
<td>49.1%</td>
</tr>
<tr>
<td>Do women/girls use household latrines?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Yes</td>
<td>76%</td>
<td>94.9%</td>
</tr>
<tr>
<td>• No</td>
<td>24%</td>
<td>5.1%</td>
</tr>
</tbody>
</table>

2.3.2 Hygiene promotion

Amran Governorate
With regard to the practice of bathing, 95.9% of respondents mentioned to have soap for bathing. There is an improvement in availability of bathing at household level comparing to the baseline value of 74%. Among the 4.1% of respondents who replied not to have soap for bathing, 31.2% use washing powder for bathing and 68.8% use only water.

Hajjah Governorate
98.3% of respondents mentioned to have soap for bathing. There is an improvement in availability of bathing at household level comparing to the baseline value of 48.1%. All respondents who replied not to have soap for bathing indicated that they only use water.

3. KNOWLEDGE, ATTITUDE, AND PRACTICE (KAP)

3.1 Awareness on cholera

Amran Governorate
The survey includes questions about beneficiaries’ knowledge, attitude, and practice of cholera prevention and control. 98.7% of interviewees replied that they heard about cholera and the remaining 1.3% have not heard about it. Among the interviewees who mentioned to heard about cholera, 34.5% of respondents heard about cholera through community based hygiene promoters, 40.5% heard through radio, 21.2% heard through TV, 1.8% heard through social media, and 2% heard throughout both radio and TV.

Hajjah Governorate
99.7% of interviewees replied that they heard about cholera and the remaining 0.3% have not heard about it. Among the interviewees who mentioned to heard about cholera, 87.8% of respondents heard about cholera through community based hygiene promoters, 4.4% heard...
through radio, 1.9% heard through TV, and 5.9% of interviewees heard about cholera throughout through the combination of the different channels mentioned above.

### 3.2 Knowledge on causes of cholera

**Amran Governorate**

With regard to the causes of cholera, interviewees mentioned different causes of Cholera. 49.2% of respondents mentioned that the main cause of cholera is drinking unsafe or contaminated water, 15.1% mentioned that eating bad or contaminated food cause cholera, 17.6% reiterated that poor personal hygiene (not washing hand) cause cholera, 17.9% replied that combination of all above causes cholera. The remaining 0.3% of respondents mentioned that they don’t have any idea about causes of cholera. Regarding the symptoms of cholera, 38.6% of respondents mentioned that fever, vomiting, and watery diarrhea are the symptoms of cholera; 51.7% cited watery diarrhea as a symptom of cholera; 26.4% of replied that fever and vomiting are the symptoms of Cholera, 8.4% mentioned stomach and abdominal pain as a symptom of Cholera, 3.5% cited bloody diarrhea, and 8.5% responded that fever, vomiting, watery diarrhea, stomach and abdominal pain, bloody diarrhea, and dehydration are symptoms of cholera.

**Hajjah Governorate**

94.2% and 75.4% of respondents respectively mentioned that the main cause of cholera is ‘drinking unsafe or contaminated water’ and ‘eating bad or contaminated food’. 52.6% of interviewees reiterated that poor personal hygiene (not washing hand) cause cholera, 34.2% of them indicated flies/insects cause cholera, and 0.6% replied that they do not have any knowledge regarding the causes of cholera. Regarding the symptoms of cholera, 81.3% of respondents mentioned that fever, voting, and watery diarrhea are the symptoms of cholera; 90.6% cited watery diarrhea as a symptom of cholera; 29.5% of replied that fever, vomiting, watery diarrhea, and abdominal pain are the symptoms of Cholera, and 10.8% mentioned bloody diarrhea as a symptom of Cholera. The remaining 0.3% interviewees reiterated that they do not have knowledge on the symptoms of cholera.

### 3.3 Knowledge on dealing with suspected cholera cases and cholera prevention

**Amran Governorate**

The survey incorporated issues related with dealing of suspected cholera cases in the household. Accordingly, 89.4% and 9.8% of respondents respectively mentioned of ‘going to the nearby health facility’ and ‘start to drink Oral Rehydration Salt (ORS)’. The remaining 0.8% of interviewees replied that they will take either one or a combination of actions such as going to pharmacy, drink honey, and eating garlic. Survey participants also mentioned different action to prevent Cholera. Hence, 42.3% and 27.5% of interviewees respectively mentioned ‘wash hands with soap’ and ‘drink safe water’; 6.6% of respondents mentioned store food safely and eating hot meal as a means of preventing cholera; and 14.6% of them cited using and keeping the latrine clean as a means of preventing cholera. The remaining 0.2% of survey participants responded that they do not know what to do to prevent cholera and Acute Watery Diarrhea (AWD).

**Hajjah Governorate**

97.6% and 1.8% of respondents respectively mentioned of ‘going to the nearby health facility’ and ‘start to drink Oral Rehydration Salt (ORS)’. The remaining 0.6% of interviewees replied that they do not know how to deal with suspects of cholera. Survey participants also mentioned different action to prevent Cholera. Hence, 92.7% and 72.2% of interviewees respectively mentioned ‘wash hands with soap’ and ‘drink safe water’; 57.9% of replied that they should use and keep the latrine clean; 46.8% of respondents mentioned store food safely and eating hot meal; 23.4% of them
mentioned of managing solid waste very well; and 13.7% mentioned breastfeeding of children to prevent cholera and Acute Watery Diarrhea (AWD).

### 3.4 Use of chlorinated water

**Amran Governorate**

With regard to use of chlorinated water, 90.7% of respondents like/prefer to use chlorinated water and 8.3% do not prefer to use chlorinated water. Those respondents who prefer to use chlorinated water mentioned various reasons for their preference. Accordingly, 88% and 8% of interviewees respectively mentioned that they prefer chlorinated water ‘to prevent cholera’ and ‘to avoid getting sick’ and 4% replied that they prefer chlorinated water because it is already treated.

**Hajjah Governorate**

98.5% of respondents like/prefer to use chlorinated water and 1.5% do not prefer to use chlorinated water. Those respondents who prefer to use chlorinated water mentioned various reasons for their preference. Accordingly, 55% and 41.8% of interviewees respectively mentioned that they prefer chlorinated water ‘to prevent cholera’ and ‘to avoid getting sick’ and 3.2% replied that they prefer chlorinated water because it is already treated.

### 3.5 Materials to collect and store water

**Amran Governorate**

Survey households use various materials to transport water from the source. 2.9% and 5.2% of respondents respectively mentioned using ‘open bucket/container with 10-liters capacity’ and ‘open bucket/container with 20-liters capacity’. 10.5% of interviewees jerry cans with 10-liters capacity and 81.4% of them use jerry cans with 20-liters capacity. With regard to materials for storing water in the household, the majority of respondents (93%) use jerry can with lid 20-liters capacity; 4.1% at end line use open bucket with 20-liters capacity; 2.3% use jerry cans with 10-liters capacity; and 0.6% use open bucket with 10-liters capacity to store water.

**Hajjah Governorate**

84.5% and 10.2% of respondents respectively mentioned using ‘covered bucket/container with 20-liters capacity’ and ‘open bucket/container with 20-liters capacity’. 4% of interviewees indicated of using ‘covered bucket with 10-liters capacity’ and the remaining 1.3% use ‘open bucket with 10-liters capacity’ to collect water from the source. With regard to materials for storing water in the household, the majority of respondents (87.4%) use covered jerry cans and buckets with 20-liters capacity; 8.2% use open bucket with 20-liters capacity; 3.2% use covered jerry cans with 10-liters capacity, and 1.2% use open bucket with 10-liters capacity.

### 3.6 Practice of handwashing

**Amran Governorate**

With regard to practice of hand washing, 68.2% of respondents wash their hand regularly and 31.8% wash occasionally. The survey also incorporated hand wash practice of beneficiary households during the five critical moments, which are after using latrine, before eating, before cooking, before feeding the baby, and after cleaning baby diapers. Accordingly, 11.1% and 43.4% of interviewees practice hand washing during ‘one’ and ‘two’ critical moments. 43.4% of respondents mentioned to practice hand washing during three or more critical moments of hand washing. The remaining 2.1% do not practice hand washing in any of the above-mentioned critical moments.
Hajjah Governorate
92.1% of respondents wash their hand regularly and 7.9% wash occasionally. The survey also incorporated hand wash practice of beneficiary households during the five critical moments, which are after using latrine, before eating, before cooking, before feeding the baby, and after cleaning baby diapers. Accordingly, 9.6% and 23.1% of interviewees practice hand washing during ‘one’ and ‘two’ critical moments. 66.9% of respondents mentioned to practice hand washing during three or more critical moments of hand washing. The remaining 0.4% do not practice hand washing in any of the above-mentioned critical moments.

<table>
<thead>
<tr>
<th>Sanitary practice</th>
<th>Amran</th>
<th>Hajjah</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Do you wash your hands regularly?</strong></td>
<td>Baseline</td>
<td>End line</td>
</tr>
<tr>
<td>Yes</td>
<td>59%</td>
<td>68.2%</td>
</tr>
<tr>
<td>No</td>
<td>41%</td>
<td>31.8%</td>
</tr>
<tr>
<td><strong>Practice of handwashing during 5 critical moments</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One critical moment</td>
<td>56.2%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Two critical moments</td>
<td>12.5%</td>
<td>43.4%</td>
</tr>
<tr>
<td>Three or more critical moments</td>
<td>22.8%</td>
<td>43.4%</td>
</tr>
<tr>
<td>Do not practice handwashing during critical moments</td>
<td>8.5%</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

4. FOOD SECURITY

4.1 Household Dietary Diversity Score (HDDS)
The Household Dietary Diversity Score (HDDS) tool measures the number of food groups a household consumes over the past month period. It serves as a proxy indicator of household food access. In order to better reflect a quality diet for the household, the number of different food groups consumed was calculated, rather than the number of different foods consumed.

Amran Governorate
The mean HDDS of targeted areas is 7.1 denoting a moderate quality of diet whereby households consume an average of around 7 food groups out of the recommended twelve food groups. This is a significant improvement comparing to the baseline value of 4.8.

Hajjah Governorate
The mean HDDS of targeted areas is 6.5 denoting a moderate quality of diet whereby households consume an average of around 6-7 food groups out of the recommended twelve food groups. This indicator shows an improvement comparing to the baseline value of 5.22.

4.2 FOOD CONSUMPTION SCORE (FCS)
The FCS is considered as a proxy indicator of current food security. FCS is a composite score based on dietary frequency, food frequency and relative nutrition importance of different food groups. The FCS of a household is calculated by multiplying the frequency of foods consumed in the last seven days with the weighting of each food group. The weighting of food groups has been
determined by WFP according to the nutrition density\(^1\) of the food group. The sum of the scores is then used to determine the FCS. The maximum FCS has a value of 112 which would be achieved if a household ate each food group every day during the last 7 days. The total scores are then compared to pre-established Yemeni thresholds: Poor food consumption: 0 to 28; borderline food consumption: 28.5 to 42; and acceptable food consumption: > 42.

\textit{Amran Governorate}

According to the results from the survey, HHs consumed rice/cereals for an average of 7 days/week; beans/peas/nuts for an average of 2.63 days/week; vegetables/leaves for an average of 2.47 days/week; fruits for an average of 0.98 days/week; meat/fish for an average of 0.92 days/week; milk for an average of 4.62 days/week; sugar/honey for an average of 6.53 days/week; oil/butter for an average of 5.19 days/week; and tea/coffee for an average of 6.88 days/week. The average FCS for the surveyed HHs is 53.4, which shows substantial improvement comparing to the baseline value of 38.6. In line with this, households are categorized according to the pre-established thresholds:

- 5.94% of HHs are in poor food consumption (baseline value was 22.5%)
- 11.89% of HHs are in borderline food consumption (baseline value was 34.5%)
- 82.17% of HHs are in acceptable food consumption (baseline value was 43%)

\textit{Hajjah Governorate}

Surveyed HHs consumed rice/cereals for an average of 6.3 days/week; beans/peas/nuts for an average of 4.32 days/week; vegetables/leaves for an average of 3.11 days/week; fruits for an average of 1.06 days/week; meat/fish for an average of 1 day/week; milk for an average of 3.65 days/week; sugar/honey for an average of 4.1 days/week; oil/butter for an average of 5.83 days/week; and tea/coffee for an average of 6.32 days/week. The average FCS for the surveyed HHs is 53.2, which shows substantial improvement comparing to the baseline value of 37.65. In line with this, households are categorized according to the pre-established thresholds:

- 14.6% of HHs are in poor food consumption (baseline value was 29.2%)
- 19.9% of HHs are in borderline food consumption (baseline value was 30.1%)
- 40.7% of HHs are in acceptable food consumption (baseline value was 40.7%)

5. AGRICULTURE

5.1 Months of Adequate Household Food Provisioning (MAHFP)

MAHFP is one of the tools that measures household’s food access during different months of the year. Over time, the MAHFP indicator can capture changes in the household’s ability to address vulnerability in such a way as to ensure that food is available above a minimum level the year round. Measuring the MAHFP has the advantage of capturing the combined effects of a range of interventions and strategies, such as improved agricultural production, storage and interventions that increase the household’s purchasing power. Accordingly, survey participants responded to the questions whether there were months (in the past 12 months) in which the household did not have enough food to meet their family needs.

\(^1\) Nutrition density is defined as the ratio of nutrient content (in grams) to the total energy content (in kilocalories)
**Amran Governorate**
The survey result depicted a MAHFP of 11.5, which implies households have adequate food in 11.5 months and respondents did not have adequate food at an average of 0.5 months/year. The baseline value was 10.3.

**Hajjah Governorate**
The MAHFP result for surveyed households in Hajjah Governorate was 5.9, which implies households have adequate food in 5.9 months and respondents did not have adequate food at an average of 6.1 months/year. The baseline value was 4.5.

### 5.2 Vegetable Production

**Amran Governorate**
Survey participants were asked whether they grow dark leafy green vegetables. Accordingly, 22.3% of respondents mentioned that they grow any dark leafy green vegetables such as watercress, leeks, carrots, and radish in an average area of 1900 sqm/HH. The average quantity of seeds that have been planted was 7.03 Kgs/HHs and the average harvest was 7433.12 Kgs/HH. During the baseline survey none of the interviewees mentioned to grow dark leafy green vegetables.

**Hajjah Governorate**
27.5% of surveyed households mentioned that they grow dark leafy green vegetables such as Okra, Radish, Molokhia, and lettuce. Only 2.3% of interviewees during the baseline survey indicated to grow dark leafy green vegetables.

### 5.3 Crop Protection

The survey questionnaire included the crop protection measures – such as deep ploughing, selection of pest resistant crop plant varieties, irrigation management, crop rotation, insecticides, and mulching - that households currently use.

**Amran Governorate**
100% of beneficiaries who received training on crop protection responded that they practiced one or more of the above-mentioned crop protection (pest control) measures. The total protected agriculture area that use the above-method is 1906 square meters. During the baseline survey, none of the interviewees indicated of applying any crop protection (pest control) measures.

**Hajjah Governorate**
89.2% of beneficiaries who received training on crop protection replied that they applied one or more crop protection (pest control) measures, including deep ploughing, fences, irrigation management, and removing weeds. The total protected agriculture area that use the above-method is 2684 square meters.

### V. CONCLUSIONS

The result of the end-line survey revealed that the project has a profound impact on the lives/livelihoods of targeted beneficiaries through enhancing access to safe water; improving knowledge/practice on key hygiene and sanitation issues; increasing access to cash to meet basic and immediate needs; and improving agronomical practices. There has been a significant improvement in access and availability of safe water at household level, which – along with increase knowledge in hygiene - mainly contribute to the reduction of water borne diseases such as diarrhea and AWD. Furthermore, the construction/rehabilitation of water schemes has reduced
the burden on women through reducing the time to fetch water from far distances so that they can spend more time now on other household chores. Along with the water schemes, the construction of family latrines reduced the safety and protection threats experienced by women and girls while travelling to fetch water and also practicing defecation in the bushes.

The cash transfer intervention helped the community members to improve their food security and nutrition status of targeted households, which is corroborated by the improvement of the key food security indicators, including Food Consumption Score and Household Dietary Diversity Score. The rehabilitation of community assets (mainly the rehab of rural roads) has also helped community members to have a relatively access to basic services such as markets and health facilities.

The distribution of seeds and farm tools along with the training on agronomic practices helped community members to grow vegetables and can use the harvest for household consumption and market. This helped them to enhance food availability at household level, diversification of diet, and enhance household income.
## ANNEX 1: BASELINE AND END-LINE VALUE OF KEY OUTCOME INDICATORS

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Unit</th>
<th>Amran Governorate</th>
<th>Hajjah Governorate</th>
<th>Weighted Average</th>
<th>Amran Governorate</th>
<th>Hajjah Governorate</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of HHs that have access to safe/protected water sources</td>
<td>Percent</td>
<td>13.6</td>
<td>14.9</td>
<td><strong>14.2</strong></td>
<td>74.9</td>
<td>83.3</td>
<td><strong>78.8</strong></td>
</tr>
<tr>
<td>Percentage of HHs that collect more than 15 liters/person/day collected from all sources for drinking, cooking and hygiene</td>
<td>Percent</td>
<td>36.5</td>
<td>31.2</td>
<td><strong>34.0</strong></td>
<td>71.3</td>
<td>36.6</td>
<td><strong>55</strong></td>
</tr>
<tr>
<td>Percentage of HHs that travel more than one hour to collect water</td>
<td>Percent</td>
<td>35.7</td>
<td>28</td>
<td><strong>32.1</strong></td>
<td>25.3</td>
<td>3.2</td>
<td><strong>14.9</strong></td>
</tr>
<tr>
<td>Percentage of HHs that treat water before drinking</td>
<td>Percent</td>
<td>28</td>
<td>6.8</td>
<td><strong>18.1</strong></td>
<td>76</td>
<td>96</td>
<td>85.4</td>
</tr>
<tr>
<td>Percentage of households who store their drinking water safely in clean containers</td>
<td>Percent</td>
<td>68</td>
<td>75</td>
<td><strong>71.3</strong></td>
<td>95.3</td>
<td>90.7</td>
<td>93.1</td>
</tr>
<tr>
<td>Percentage of HHs with household latrine</td>
<td>Percent</td>
<td>75</td>
<td>39.4</td>
<td><strong>58.3</strong></td>
<td>86.8</td>
<td>93.7</td>
<td>90</td>
</tr>
<tr>
<td>Percentage of HHs that know at least three critical moments of hand washing</td>
<td>Percent</td>
<td>22.8</td>
<td>2.1</td>
<td><strong>13.1</strong></td>
<td>43.4</td>
<td>66.9</td>
<td>54.4</td>
</tr>
<tr>
<td>Average Household Dietary Diversity Score (HDDS)</td>
<td>Number</td>
<td>4.8</td>
<td>5.22</td>
<td><strong>5.0</strong></td>
<td>7.1</td>
<td>6.5</td>
<td>6.8</td>
</tr>
<tr>
<td>Average Food Consumption Score</td>
<td>Number</td>
<td>38.6</td>
<td>37.65</td>
<td><strong>38.2</strong></td>
<td>53.4</td>
<td>53.2</td>
<td>53.3</td>
</tr>
<tr>
<td>Percentage of households achieve Acceptable Food Consumption</td>
<td>Percent</td>
<td>43</td>
<td>40.7</td>
<td><strong>41.9</strong></td>
<td>82.2</td>
<td>65.5</td>
<td>74.4</td>
</tr>
<tr>
<td>Projected increase in number of months of food self-sufficiency due to distributed seed systems/agricultural input for beneficiary households</td>
<td>Month</td>
<td>10.3</td>
<td>4.5</td>
<td><strong>7.6</strong></td>
<td>11.5</td>
<td>5.9</td>
<td>8.8</td>
</tr>
<tr>
<td>Percentage of post-harvest produce protected against diseases and pests</td>
<td>Percent</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>26%</td>
<td>23%</td>
<td>24.6</td>
</tr>
<tr>
<td>Hectares protected against diseases and pests</td>
<td>Percent</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1.91</td>
<td>2.68</td>
<td>4.59</td>
</tr>
<tr>
<td>Percentage of people trained by USAID/OFDA partners practicing appropriate crop protection procedures, by sex</td>
<td>Percent</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100</td>
<td>89.2</td>
<td>94.9</td>
</tr>
</tbody>
</table>
ANNEX 2: SURVEY QUESTIONNAIRE
EMERGENCY ASSISTANCE FOR CONFLICT-AFFECTED AND VULNERABLE COMMUNITIES PROJECT

BASELINE SURVEY QUESTIONNAIRE

Interview Date: ___ / ___/ ___ (DD/MM/YYYY)
Interviewer Name: ____________________________

Governorate__________________________

District____________________________

Village_________________________

Household Status: ☐ Female Head of HH   ☐ Male head HH   ☐ Other adult

A. DEMOGRAPHIC INFORMATION

1. Sex of respondent:

2. Age of respondent:

3. How many adults (>18 years) live in your household including yourself?   M ............ F ............

4. How many children 5 to 18 years of age live in your household?   M ............ F ............

5. How many children <5 years of age live in your household?   M ............ F ............

B. WASH

B - 1 Water Supply infrastructure:

1- What is your main source of water for drinking, cooking and hygiene (bathing and washing)?

- Piped water, in house
- Water truck / water vendor
- Piped water, public
- River/stream/lake
- Well, protected
- Spring water
- Well, unprotected
- Other: Specify ____________________________

2- Is water available at your main water source throughout the Year (12 months)?

- YES
- NO
- I do not Know
3- If NO, for how long is the water available at the water source above:
   • Over 9 months
   • 6 – 9 months
   • 3 – 6 months
   • Less than 3 months.
   • I do not know

4- How much water do you collect from the above water sources per person per day for entire household (drinking, cooking and hygiene) per day?
   • Less than 10L per person per day
   • 10L to 15L per person per day
   • More than 15L per person per day.
   • I do not know

5- How far is your main water source from your house?
   • Less than 500m
   • More than 500m
   • I do not know.

6- On average how long does it take you to walk to your main water source?
   • Less than 30 minutes.
   • Between 30 – 60 minutes.
   • More than 60 hour.
   • I do not know

7- Does your water source have a water management committee?
   • YES
   • NO
   • I do not Know

8- If YES, is the water source committee active/functional currently?
   • YES
   • NO
   • I do not Know

9- Is the water at your household treated?
   • YES
   • NO
   • I do not know

10- If YES, how is your water treated?
    • Boiling
    • Using Filters
    • Aquatabs.
    • PUR sachets.
• Solar disinfection.
• Treated from pipeline (use of HTH).
• Other: (specify).
• I do not know

11- If treatment is by chlorination what is the FRC (Measure using pool tester)
• 0 mg/L
• Less than 0.2 mg/L
• More than 0.2 mg/L

B-2 Sanitation infrastructure:

12- Does your household have a latrine/Toilet?
• YES
• NO
• I do not know

13- If YES which type of toilet is it?
• Pit latrine
• Pour flush toilet.
• Flush toilet.
• Other (Specify):

14- How many latrines/toilets does your household have?
• 01 stance/cubicle
• 02 stances/cubicles
• More than 2 stances/cubicles

15- Do women and girls in your household use toilets?
• YES
• NO

16- If NO, what do they use?
• Go to the bush
• Go to the neighbors
• Go the near hospital/school etc.
• Others (specify).
• I do not know

17- Does your have a toilet?
• YES
• NO

18- If NO where do you go for excreta disposal?
• At the neighbor.
• In the bush.
• In the nearby school or hospital.
• Others (specify):
B-3 Hygiene Promotion:

19- Does your household have soap for bathing?
   • YES
   • NO
   • I do not know
20- If NO, what do you use for bathing?
   • Shower Gel
   • Ash.
   • Washing powder
   • Water Only
   • Others (specify)
21- Does your household have washing soap?
   • YES
   • NO
   • I do not know

C KAP BASELINE questions:

1- Have you ever heard about cholera?
   • Yes
   • No
   • I Don’t know
2- If YES, from where did you hear about cholera?
   • On radio
   • On TV
   • Through Social media.
   • Through community based hygiene promoters
   • Others (specify)

3- What causes cholera?
   • Drinking unsafe/contaminated water.
   • Eating bad/contaminated food
   • Poor personal hygiene (not washing hands etc).
   • Flies and Insects.
   • Others (specify).
   • I do not know

4- What symptoms are associated with cholera?
   • Fever and vomiting.
   • Watery diarrhea
• Stomach and abdominal pain.
• Bloody diarrhea.
• Dehydration.
• Others: (specify)
• I do not know

5- What should you do when there is a suspected cholera case within your household?
• Go to the nearby health facility.
• Start drinking ORS
• Others (specify).
• I do not know

6- What do you do at your household to prevent cholera and AWD?
• Wash hands with soap.
• Drink safe water.
• Using and keeping latrines clean.
• Store food safe and eating hot meals.
• Managing solid waste well.
• Breast feeding babies regularly.
• I do not know.

7- Do you like using chlorinated water?
• YES
• NO

8- If yes why do you like using chlorinated water?
• To avoid getting cholera.
• To avoid getting sick
• Because it is already treated.
• Other (specify)
• I do not know

9- If NO why don't like using chlorinated water?
• Not accepted culturally.
• No accepted religiously
• Bad taste.
• Bad smell
• Others (specify)

10- What do you use for fetching your water for your household?
• 10L open bucket/container.
• 20L open bucket/container.
• 10L Jerry can with lid.
• 20L Jerry can with lid.
11- What do you use for storing your drinking water at household?
- 10L open bucket/container.
- 20L open bucket/container.
- 10L Jerry can with Lid.
- 20L Jerry can with Lid.

12- Do you regularly wash your hands?
- Yes
- Occasionally
- No

13- When do you usually wash your hands with soap?
- After using the latrines
- Before eating.
- Before cooking
- Before feeding the baby
- After cleaning baby diapers
- Others (specify)

D. FOOD SECURITY

SECTION 1. HDDS (HOUSEHOLD DIETARY DIVERSITY SCORE)

The Household Dietary Diversity Score (HDDS) is often used as a proxy measure of household’s access to food. **NOW, I WOULD LIKE TO ASK YOU ABOUT THE TYPES OF FOODS THAT YOUR HOUSEHOLD ATE DURING THE LAST 24 HOURS? (Write 1 if the HH ate the type of foods during the past 24 hours; or write 0 if the HH did not eat the type of foods for during the past 24 hours).**

<table>
<thead>
<tr>
<th>#</th>
<th>Food group</th>
<th>Response Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rice, bread, rice noodles, biscuits, cookies, or any other foods made from millet, sorghum, maize, and wheat</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Pumpkin, carrot, white potatoes, white yams, manioc, cassava or any other foods made from roots or tubers?</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Beans, Peas, groundnuts and cashew nuts</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Vegetables, leaves</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Fruits</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Beef, goat, poultry, pork,</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Egg</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Fish</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Milk yogurt and other dairy</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Sugar and sugar products, honey</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Oils, fats and butter</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Spices, tea, coffee, salt, fish power, small amounts of milk for tea.</td>
<td></td>
</tr>
</tbody>
</table>
SECTION 2. FCS (FOOD CONSUMPTION SCORE)

The Food Consumption Score (FCS) is a composite score based on dietary diversity, food frequency, and the relative nutritional importance of different food groups. NOW, I WOULD LIKE TO ASK YOU ABOUT THE TYPES OF FOODS THAT YOUR HOUSEHOLD ATE DURING THE LAST SEVEN DAYS? (Write 7 if the HH ate the types of foods for 7 days of the week; Write 6 if the HH ate the types of foods for 6 days of the week; Write 5 if the HH ate the types of foods for 5 days of the week etc; write 0 if the HH did not ate the types of foods throughout the week).

<table>
<thead>
<tr>
<th>#</th>
<th>Food group</th>
<th>Response Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rice, maize, maize porridge, sorghum, millet pasta, bread and other cereals</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Beans, Peas, groundnuts and cashew nuts</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Vegetables, leaves</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Fruits</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Beef, goat, poultry, pork, eggs and fish</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Milk yogurt and other diary</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Sugar and sugar products, honey</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Oils, fats and butter</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Spices, tea, coffee, salt, fish power, small amounts of milk for tea.</td>
<td></td>
</tr>
</tbody>
</table>

E. AGRICULTURE

SECTION 3. MONTHS OF ADEQUATE HOUSEHOLD FOOD PROVISIONING (MAHFP)

This is one of the tools that measures household’s food access. NOW I WOULD LIKE TO ASK YOU ABOUT YOUR HOUSEHOLD’S FOOD SUPPLY DURING DIFFERENT MONTHS OF THE YEAR. When responding to these questions, please think back over the last 12 months.

In the past 12 months, were there months in which you did not have enough food to meet your family’s needs in (January)?

Yes
No

PUT 1 IN THE BOX IF THE RESPONDENT ANSWERS YES TO THE FOLLOWING QUESTION. PUT 0 IN THE BOX IF THE RESPONSE IS NO.

<table>
<thead>
<tr>
<th>#</th>
<th>MONTHS</th>
<th>Response Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>January</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>February</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>March</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>April</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>May</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>June</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>July</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>August</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>September</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>October</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>November</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>December</td>
<td></td>
</tr>
</tbody>
</table>
3-1 Do you grow dark leafy green vegetables?
   1. Yes
   2. No (Skip to end of survey)

SECTION 4 : Types of Vegetables Grown

Dark Leafy Green Vegetables. NOW, I WOULD LIKE TO ASK YOU ABOUT THE TYPE OF VEGETABLES YOU PLANT? (Write 1 if the HH plants the type of vegetable; or write 0 if the HH does not use plant that type of vegetable).

<table>
<thead>
<tr>
<th>#</th>
<th>Vegetable</th>
<th>Response Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Okra</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Parsley</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Coriander</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Radish</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Molokhia</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Lettuce</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Leeks</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

4-1 How many square meters do you plant? ______________________

4-2 How many Kgs of seeds do you plant? ______________________

4-3 How much Kgs did you harvest? ______________________

4-4 How many months did your harvest last? ______________________

SECTION 5 : Crop Protection / Pest Control Measures

Crop Protection / Pest Control Measures. NOW, I WOULD LIKE TO ASK YOU ABOUT THE CROP PROTECTION MEASURES YOU USE? (Write 1 if the HH uses the type of crop protection/pest control; or write 0 if the HH does not use the type of crop protection).

<table>
<thead>
<tr>
<th>#</th>
<th>Crop Protection / Pest Control Measures</th>
<th>Response Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Deep Ploughing</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Fences or netting</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Selection of pest resistant crop plant varieties,</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>timing of planting and harvesting,</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>irrigation management</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>crop rotation</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Mulching</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>removing weeds</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>destroying/burning crop residues</td>
<td></td>
</tr>
<tr>
<td></td>
<td>keeping garden/orchards border areas free of pests and pest breeding sites</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Insecticides</td>
<td></td>
</tr>
</tbody>
</table>

5-1 How many square meters do you protect using the methods above? ______________________
SECTION 6 : Harvest Protection Measures

Harvest Protection Measures. NOW, I WOULD LIKE TO ASK YOU ABOUT THE HARVEST MEASURES YOU USE? (Write 1 if the HH uses the type of harvest protection or write 0 if the HH does not use the type of harvest protection).

<table>
<thead>
<tr>
<th>#</th>
<th>Food group</th>
<th>Response Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Locally made storage structures such as sheet metal silos</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Sealed/airtight bags (low oxygen subterranean, plastic bags, etc)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Community storage facilities</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Solar driers or fuel powered driers</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Seed or grain treatment techniques including the use of botanical pest control agents, such as black pepper and coconut oil</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Grain treatment with agro chemicals</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Sun driers</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>removing weeds</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>destroying/burning crop residues</td>
<td></td>
</tr>
</tbody>
</table>

6-1 How much of your harvest do you protect using the measures above?