WASH Needs Assessment in Far Al Udayn District, Ibb Governorate

Conducted by:
Relief and Development Peer Foundation (RDP)

Presented to:
Yemen WASH Cluster
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List of Acronyms

**WASH**: Water, Sanitation, and Hygiene.

**HHs**: Households.

**FGDs**: Focus Group Discussions.

**RDP**: Relief and Development Peer Foundation.

**HC**: Health Center.

**AWD**: Acute Watery Diarrhea.

**ARI**: Acute Respiratory Infection.

**CLTS**: Community Led Total Sanitation.

**IDPs**: Internally Displaced Persons.

**PLW**: Pregnant/lactating woman.
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Acknowledgement

We would like to send a heartfelt "thank you" to Marije Broekhuijsen, Mohammed Farhan from WASH Cluster and Abdulkawi Moharram from iMMAP, for the continued support, encouragement, and advice they have provided throughout the time of conducting this WASH needs assessment.

Honestly, we have been extremely lucky to have Marije Broekhuijsen, Mohammed Farhan and Abdulkawi Moharram from iMMAP who devoted their efforts helping us coordinating with other partner organizations and gave us their considerations so strongly to provide us with the required WASH tools during the period of the assessment.

Completing this work would have been all the most difficult if it were not for the supportive assistance we continue to receive from the Health Office in Far Al Udayn district and the Executive Unit.

We are and forever will be grateful for everything they have done for us, and words are no place to be found to express how much we profoundly appreciate their treasured assistance. They have surely gained our sincere love, appreciation, and gratitude.


**Executive Summary**

RDP conducted a water, sanitation, and hygiene (WASH) needs assessment in three areas (Bani Ahmed, Al-Aqiba, Al-Ahmol) located in Far Al Udayn district, Ibb Governorate (December 23th, 2017 to January 7th, 2018). The assessment aimed to:

- Determine the current situation of WASH sector in Far Al Udayn district.
- Finding out the causes behind a great level of negative health impacts.

Recent conflict escalation in Hayas and Jabal Ras districts of Al Hudaydah governorate has forced many families to abandon their homes. Far Al Udayn district has become the host place for IDPs as it is a neighboring area. These IDPs have increased the burden and doubled the suffering of the original inhabitants of Far Al Udayn. As reported in late Dec. 2017, IDPs moving from Al Hudaydah to Far Al Udayn, have been reached to 120 families, 91 of whom have been staying in Al Ahmol sub-district. So as a result of the huge number of IDPs and their dire need for water, hygiene and sanitation.

Clearly, the assessment data has been collected from household questionnaires, key informants, and focus group discussions. In 19 locations, household surveys covered 100 HHs (924 individuals – including 199 under5 years old children), 10% of whom were new IDPs. This needs assessment includes the methodology of assessment, key findings and recommendations.

The assessment showed that the conditions in Far Al Udayn does not meet multiple Sphere minimum standards and indicators as shown below:

- Water Quantity: 51% of household surveyed in the three areas use less than 15 liters/person/day while 47% use 15-35 liters/person/day;
- Up to 42% of HHs spend more than 30 minutes up to 1 hour to go to the main water point, fetch water, and return while 15% spend (1 – 2hours);
- 50% of HHs indicated that distance considered as a problem;
- 23% of households surveyed in the three areas use unprotected wells;
• 21% of HHs surveyed do not have latrines while 23% of HHs do not have a sufficient number of latrines to meet the ratio of 1 latrine per 20 people according to Sphere standards.
• 41% of HHs do not have enough quantity of water in the last 30 days. Besides, 72% of them reduce water for hygiene practices, 40% go to fetch water from a further water point, and 23% get water on credit/borrow water.
• 33% of HHs use flush latrine - open (unimproved) while 20% use Pit latrine-open/without slab (unimproved).
• 35% of HHs have issues related to the taste, look, and smell of the main water source for the last 30 days in which 74% complained of its bad look, and 38% complained of its bad taste.
• 74% of HHs do not have access to safe drinking water.
• 88% of HHs do not have hand washing facilities, and 29% of HHs do not have soap.
• 51% of HHs buried or burned the garbage while 33% of HHs leave garbage in public areas.

Recommendations
The following activities are recommended for humanitarian interventions:
• Installation of water tanks and provision of water trucking as an emergency response for newly IDPs moved to Far Al Udayn district.
• Installation of temporary latrines for IDPs.
• Provision of basic and consumable hygiene kits.
• Conducting awareness sessions on key hygiene messages.
• Provision of water filters to affected community for safe drinking water.
• Chlorination of the existed water sources.
• Conducting cleaning campaigns in public places.
• Rehabilitation or constructions of protected wells.
• Connecting piping system from the main water source to the nearest places of HHs.
• Construction of rain water tanks.
• Community Led Total Sanitation (CLTS) activities for HHs who do not have latrines.
Background

Ibb governorate is located in the inland South of Yemen and is divided into 20 districts. Far Al Udayn is one of those districts, it is located in the west of Ibb with Al Udayn district to its East, Hais district to its West, Al-Hazm and Jabil Ras districts to its North, and Shara'ab Al-rona and Shara'ab Al-Salam to its South. As of 2017, the district had a population estimated at around 123,542 inhabitants. It has an area of 275 Km² and has nine sub-districts.
Far Al Udayn is one of the furthest districts in Ibb where literacy, poverty, and unemployment rates are very high. The majority of the population live in high mountains, hills and valleys. They depend on casual work for living such as raising cattle and farming which produce red corps only and cannot meet their needs. Its people suffer from difficult economic situations and it is considered as a poor district with weak and non-existent infrastructure in many of its villages.

The three selected areas have few interventions in food security, one of which has a WASH intervention (Hygiene Kits), while all three areas have a (Health & Nutrition) intervention that was integrated with (Food Security). Some of those areas have IDPs which indicate that Far Al Udayn is facing a huge displacement of IDPs moving towards its villages from Al-hudidah and Taiz Governorates, the number is increasing day by day.

The table below shows the general situation in those areas:

<table>
<thead>
<tr>
<th>Key areas</th>
<th>Bani Ahmed</th>
<th>Al-Ahmol</th>
<th>Al-Aqiba</th>
</tr>
</thead>
<tbody>
<tr>
<td>High prevalence of diseases</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Low income</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Severe Situation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less water quantity</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor water quality</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>High</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor hygiene practices</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Water storage problems</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Severe Situation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open defecation</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Methodology and Coverage Area

For the purpose of credibility and reliability, this needs assessment was conducted by using quantitative and qualitative approaches where quantitative and qualitative data was collected in various forms including key informant interviews, focus group discussions (FGDs) and households’ surveys.
A training has been conducted for the assessment team explaining the main objectives of the needs assessment, how to use these tools to collect the data, the assessment team has taken into consideration the following steps:

- WASH assessment to Households in some locations of the district.
- WASH assessment to Focus Groups in some locations of the district.
- IDPs and affected host community have participated in the needs assessment.
- Meeting with local authority representatives in the targeted areas.
- Coordination with the government health office.
- Visiting water sources in district.

The evaluation team conducted the assessment in the district for 16 days starting on December 23th, 2017 to January 7th, 2018.

19 locations in three sub-districts have been selected to conduct this WASH needs assessment. All locations are rural in nature (Bani Ahmad, Al Ahmol, and Al Aqiba sub-districts of Far Al Udayn district). The following table shows the basic data of the sampling:

<table>
<thead>
<tr>
<th>Description</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of districts</td>
<td>3</td>
</tr>
<tr>
<td>No. of Locations</td>
<td>19</td>
</tr>
<tr>
<td>No. of HHs sample</td>
<td>100</td>
</tr>
<tr>
<td>No. of individuals in the selected HHs sample</td>
<td>924</td>
</tr>
<tr>
<td>No. of Children under 5 years old in the selected HHs sample</td>
<td>199</td>
</tr>
<tr>
<td>No. of Pregnant/lactating woman PLW in the selected HHs sample</td>
<td>77</td>
</tr>
<tr>
<td>No. of Adult over 60 years old in the selected HHs sample</td>
<td>74</td>
</tr>
<tr>
<td>No. of IDPs in the selected HHs sample</td>
<td>10</td>
</tr>
<tr>
<td>No. of Returnees in the selected HHs sample</td>
<td>18</td>
</tr>
<tr>
<td>No. of Persons with disability in the selected HHs sample</td>
<td>21</td>
</tr>
<tr>
<td>Sex of the respondent % - Female</td>
<td>80</td>
</tr>
<tr>
<td>Sex of the respondent % - Male</td>
<td>20</td>
</tr>
<tr>
<td>Sex of the head of HHs % - Female</td>
<td>10</td>
</tr>
<tr>
<td>Sex of the head of HHs % - Male</td>
<td>90</td>
</tr>
</tbody>
</table>
This WASH needs assessment has covered three main components. Each component was composed of specific data and information that are essential to achieve the objective of the assessment. Different tools were used to collect the data that would be presented in the following sections of this report.

1. **Key informant interviews** were conducted with the managers of the three main Health Centers (HC) in Far Al Udayn district
   - Musina HC in Bani Ahamd sub-district
   - Huthifa HC in Al Ahmol sub-district
   - Dhunaa HC in Al Aqiba sub-district

   The key informants gave general information on the vulnerability of the areas which was a main reason behind conducting this needs assessment. They provided data on morbidity rates for their coverage areas. Information on the number of population on the level of sub-districts were also given. The number of children under 5 years old who had diarrhea during the year, and any prevailing Water /Sanitation/ Hygiene borne disease in their areas was taken down as well.

2. **The household survey questionnaire** was conducted by using a random sampling of 100 HHs from high lands, low lands, and center of the district - including 10 % of the new IDPs. The questionnaire focused on collecting data of the main water source for HHs and ways of water treatment, water consumption for a person per day, time spent to get water, hygienic behaviors, availability of latrines, garbage disposal.

3. **FGDs** provided information on every sub-district. Two FGDs were conducted in each sub-district, with a total of 6 FGDs. Each group consisted of 6 members whom were asked about the most common water sources accessed by people in the community, and how to access water? How people in those communities cope with the lack of water, and other main issues regarding sanitation and hygiene that will be discussed in the following sections in details.
Findings

- Unprotected rainwater wells are the main sources of water for 26\% of households while 25\% of HHs depend on Protected Rainwater tanks, while 34\% of HHs use surface water (Lakes and shallow wells). The main water sources are not enough for 41\% of the respondents; therefore, 38\% of them use another Protected Rainwater tanks while 29.8\% use Unprotected Well.

<table>
<thead>
<tr>
<th>Main water source that household used mostly in the last 30 days</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>-----------------------</td>
<td>----</td>
</tr>
<tr>
<td>Surface water (river, dam, lake, pond, stream, canal)</td>
<td>29.00</td>
</tr>
<tr>
<td>Improved Protected Rainwater tank</td>
<td>26.00</td>
</tr>
<tr>
<td>Unimproved Unprotected well</td>
<td>23.00</td>
</tr>
<tr>
<td>Improved Borehole</td>
<td>9.00</td>
</tr>
<tr>
<td>Unimproved Unprotected Rainwater tank</td>
<td>6.00</td>
</tr>
<tr>
<td>Improved Protected Well</td>
<td>5.00</td>
</tr>
<tr>
<td>Unimproved Unprotected Spring</td>
<td>1.00</td>
</tr>
<tr>
<td>Unimproved Water Trucking</td>
<td>1.00</td>
</tr>
</tbody>
</table>

- The main water sources are not enough for 41\% of the respondents; therefore, 38.3\% of them use another protected rainwater tanks while 29.8\% use unprotected wells. The table below shows the other water sources that have been used in the last 30 days.
Main water source that household used the most in the last 30 days

![Pie chart showing the percentages of different water sources used by households.]

- **Improved Protected rainwater tank**: 38.3%
- **Unimproved Unprotected well**: 29.8%
- **Improved Protected well**: 12.8%
- **Unimproved Unprotected rainwater tank**: 12.8%
- **Surface water (river, dam, lake, pond, stream, canal)**: 12.8%
- **Improved Borehole**: 10.6%
- **Unimproved Water Trucking**: 6.4%
- **Improved Protected Spring**: 4.3%
- **Unimproved Unprotected Spring**: 4.3%
- **Improved Bottled water**: 2.1%

Other water sources household used the last 30 days beside the main water sources

<table>
<thead>
<tr>
<th>Water Source</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved Protected rainwater tank</td>
<td>38.3</td>
</tr>
<tr>
<td>Unimproved Unprotected well</td>
<td>29.8</td>
</tr>
<tr>
<td>Improved Protected well</td>
<td>12.8</td>
</tr>
<tr>
<td>Unimproved Unprotected rainwater tank</td>
<td>12.8</td>
</tr>
<tr>
<td>Surface water (river, dam, lake, pond, stream, canal)</td>
<td>12.8</td>
</tr>
<tr>
<td>Improved Borehole</td>
<td>10.6</td>
</tr>
<tr>
<td>Unimproved Water Trucking</td>
<td>6.4</td>
</tr>
<tr>
<td>Improved Protected Spring</td>
<td>4.3</td>
</tr>
<tr>
<td>Unimproved Unprotected Spring</td>
<td>4.3</td>
</tr>
<tr>
<td>Improved Bottled water</td>
<td>2.1</td>
</tr>
</tbody>
</table>
72.5% of HHs do not have enough water in the last 30 days to meet their household needs reduced water for hygiene practices to cope with the lack of water.

51% of HHs use less than 15 liters/person/day, and 47% use 15-35 liters/person/day.
- 42% of HHs spend more than 30 minutes up to 1 hour as an amount of time to go to the main water point, fetch water, and return while 15% take 1 – 2 hours. 29% of these HHs indicated that distance constitutes a problem.

The amount of time to go to the main water point, fetch water, and return (at peak time) the amount of time take to go to the main water point, fetch water, and return (at peak time)

- 42% of HHs spend more than 30 minutes up to 1 hour as an amount of time to go to the main water point, fetch water, and return while 15% take 1 – 2 hours. 29% of these HHs indicated that distance constitutes a problem.

- 72% of HHs stated that the long time consumed for fetching water results in reducing time usually spent on other daily tasks.

- 35.42% of HHs have issues related to taste, look and smell of the main water source which they depended on during the last 30 days. 71% of the respondents indicated that water has bad look, and 40% indicated that it has bad taste, while 15% complained of it is bad smell.

- 71% of HHs do not treat drinking water, and 48% of them indicated that the water they collect is clean and does not need to be treated, while 35% don’t
have materials for water purification/treatment, the rest of them do not know how to treat water and some do not have time to do so.

- 50% of HHs treat their drinking water using chlorine tablets, powder or liquid, and out of 19% of them boil the water. On the other hand, 43.24% stated that they do not treat water because they don't have filters, while 42.89% feel that the water they collect is clean and does not need to be treated.
- 21% of HHs have no access to latrine, 13% of all HHs members have an access to latrine but some use it, 30% only some members of HHs have an access to latrine, 36% all members have access to latrine.
Household members have access to and use a functioning latrine

- 36%: All members have access and use it
- 21%: All members have access but only some use it
- 13%: Only some members have access to a latrine
- 30%: No members have access

The problem(s) related to the latrine?

- The structure is damaged
- Connection to sewage blocked
- Pipes are blocked
- Cess pit is full
- It is not safe (no door, no lock, etc)
- Lack of privacy/no separation between men and women
- Latrines are unclean/unhygienic
- Absence/insufficiency of water
- There is not enough facilities/too crowded
• 33% of HHs who have access to latrine and use Flush latrine-open (unimproved). 17% use Pit latrine-covered/with slab (improved), but 17% use Pit latrine-open/without slab (unimproved).

• Children, women, and disabled people have less access to latrine.

**Type of latrine household members have access to**

- Flush latrine to the open (unimproved)
- Flush latrine to a tank/sewer system/pit (improved)
- Pit latrine-covered/with slab (improved)
- Pit latrine-open/without slab (unimproved)
- Other

- 32.61% of HHs stated that there is always visible wastewater in the vicinity of their houses.

- 50.35% of HHS bury garbage or burn it, while 32.63% leave it in public areas and it has not been collected.

- 29% of HHS do not have soap in their houses.

- 88% of HHS do not have hand washing facilities.

**%HHS have handwashing facilities**

- Yes (saw the facilities)
- Yes (but did not see facilities)
- No

- 88%
- 4%
- 8%
Health Section:

Water /Sanitation/ Hygiene borne diseases prevailing:
The poor condition of the Water, Sanitation and Hygiene in Bani Ahmed, Al Ahmol and Al Aqiba sub-districts of Ibb governorate, has made people in these areas very vulnerable to diseases prevailing. Acute watery diarrhea is the most prevailing disease, which is a very alarming indicator especially during the current Cholera epidemic in Yemen. Further details revealed that almost half of AWD cases are among children under 5 years old (see chart below), which strongly contributes to the abnormally low nutritional status of most children in these areas. Malaria also is a very serious disease that spreads by infected mosquitoes, which live on stagnant water and opened water containers as well. This aggressive disease is considered an epidemic in Al Ahmol and Al Aqibah sub-districts (see chart below). Other diseases such as kidney stones and typhoid fever were reported in Al Ahmol and Al Aqiba as well.

Table 6: Common WASH-related diseases in the three sub-districts

<table>
<thead>
<tr>
<th>Disease</th>
<th>Bani Ahmed</th>
<th>Al-Ahmol</th>
<th>Al-Aqiba</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute watery Diarrhea (AWD)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Acute respiratory infection (ARI)</td>
<td></td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>Malaria</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Dengue fever</td>
<td>X</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>-----</td>
<td>Kidney stones, Typhoid fever</td>
<td>Urinary Tract Diseases Typhoid fever</td>
</tr>
</tbody>
</table>

Table 8: Number of cases and deaths for Common WASH-related diseases in 2017 in the three sub-districts

<table>
<thead>
<tr>
<th>Disease</th>
<th>Bani Ahmed</th>
<th>Al-Ahmol</th>
<th>Al-Aqiba</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diarrhea</td>
<td>350</td>
<td>130</td>
<td>310</td>
</tr>
<tr>
<td>Acute Watery Diarrhea ARI</td>
<td>200</td>
<td>6</td>
<td>80</td>
</tr>
<tr>
<td>Malaria</td>
<td>2</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>Any other water borne diseases (please specify): Typhoid</td>
<td>40</td>
<td>0</td>
<td>67</td>
</tr>
<tr>
<td>Kidney stones</td>
<td>2</td>
<td>70</td>
<td></td>
</tr>
</tbody>
</table>
Figure 8: Cases of Diarrhea in the three sub-districts disaggregated by age

Figure 9: Cases of Malaria in the three sub-districts disaggregated by age
Key findings according to FGDs:

- All FGs indicated that the main water source (well) is unprotected.
- All FGs indicated that people have issues related to the taste, look, and smell of their main water source for the last 30 days.
- 83% of FGs mentioned that people in their areas do not sanitize drinking water.
- 50% of the respondents indicated that only people who have money can get enough water (affordability problem) while 50% of FGs indicated that the situation changes all the time. Sometimes water access is easy, but sometimes it is hard (intermittent access problems).
- 67% of FGs illustrated that the only way for community members to cope with water shortage is by reducing water consumption for hygiene practices (bathe less, etc...) while 33% said it is by going to fetch water from a further water point than the usual one.
- All FGs realized that distance and long queues for getting water are major issues for the community members.
- 50% of FGs said that almost half of the population do not have access to a latrine (±50%). However, 33% said that the majority of the population do not have access to latrines (±75%), and yet 17% said that nobody has access to a latrine (0%).
- 67% indicated that the problem related to latrines is not having enough facilities/too crowded while 50% said it is because of absence/insufficiency of water.
- 67% of FGs said that most areas of the community/site have many piles of garbage everywhere in the street while 33% said that some areas are clean, but some areas have piles of garbage.
- 67% of them indicated that most areas of the community/site have constant sewage problems (visible wastewater constantly in the streets) while 33% said that some areas do not have wastewater problems (never) while other areas do (sometimes or always).
Recommendations

The following activities are recommended for humanitarian interventions:

- Installation of water tanks and provision of water trucking as an emergency response for newly IDPs who fled from Hoddieh governorate.
- Installation of temporary latrines for IDPs.
- Provision of basic and consumable hygiene kits.
- Conducting awareness sessions on key hygiene messages.
- Provision of water filters to affected community for safe drinking water.
- Chlorination of the existed water sources.
- Conducting cleaning campaigns in public places.
- Rehabilitation or constructions of protected wells.
- Connecting piping system from the main water source to the nearest places of HHs.
- Construction of rain water tanks.
- Community Led Total Sanitation (CLTS) activities for HHs who do not have latrines.
References:
- Minimum Standards in Water Supply, Sanitation and Hygiene Promotion - The sphere project Handbook

Contact Details:
For further information please contact:

Engineer: Rania Rassam
Title: WASH, Shelter & NFI Officer
Organization: Relief and Development Peer Foundation (RDP)
Title: rrassam@rdpf.org
Phone number: +967-73955349