



RELIEF AND DEVELOPMENT PEER FOUNDATION
(RDP)

WASH NEEDS ASSESSMENT REPORT
In
Al Udayn District, Ibb Governorate



August, 2018

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List of Acronyms

WASH	Water, Sanitation and Hygiene.
HHs	Households.
FGDs	Focus Group Discussions.
RDP	Relief & Development Peer Foundation.
HU	Health Unit.
AWD	Acute Watery Diarrhea.
ARI	Acute Respiratory Infection.
CLTS	Community Led Total Sanitation.
PLW	Pregnant/lactating woman.
CFR	Case Fatality Risk
KII	Key Informant Interview.

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Executive Summary

August 20th, 2018, RDP conducted the Water, Sanitation and Hygiene (WASH) Needs Assessment in five areas (Shalaf, Wadi Al-dor, Qesa'a Halian, Jabal Bahri, Bilad Al-Muliki) of Al Udayn district, Ibb Governorate. .

The purpose of the WASH Needs Assessment is to:

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

The World Health Organization (WHO) warned earlier that Yemen may be on the verge of a third wave of cholera epidemic, which could be deadlier than previous ones because of widespread malnutrition in the war-torn country. (WHO) reported that an increasing number of cases in several heavily populated areas over the past few weeks indicate the country may be on the cusp of a third major wave of this deadly disease. Yemen Emergency Operations Center (EOC) also reported that since the beginning of January to August 5th, 2018, there have been 111,528 suspected cholera cases and 108 associated deaths, (CFR 0.09%). That report was followed by a weekly update for the period Aug 5th- Aug 11th, which indicates that the total number of EOC cases was 6891 cases, of which 1571 have been confirmed by culture.



According to Yemen Rainfall Assessment issued on Monday 13th of August 2018, the largest rainfall accumulations were estimated to be across some cities, Ibb one of them, and will be dominated by the daily cycle of afternoon showers and thunderstorms through the next weeks. Al Udayn district is a Cholera priority district, has a heavy rainfall and upcoming rainy days which

increase the fear of spreading Cholera. Al Udayn district is also classified as one of the famine priority districts of Ibb Governorate. Therefore, this assessment has been conducted to determine the current situation of WASH gaps and recommendations that contribute to improve public health.

Throughout 17 locations in Al-Udayn district, the WASH surveys covered 110 HHs of 1103 individuals – including 110 children under five, 96 people with disabilities, 54 pregnant/lactating women, and 91 adults over 60 years old). Clearly, the assessment data has been collected from household questionnaires, focus group discussions, key informants, and observation. It includes the methodology of assessment, key findings and recommendations.

The WASH Needs Assessment indicated that the conditions in Al Udayn district does not meet multiple Sphere minimum standards and indicators as shown below:

- Water Quantity: 24% of households surveyed in five areas (Shalaf, Wadi Al-dor, Qesa'a Halian, Jabal Bahri, Bilad Al-Muliki) use less than 15 liters/person/day while 49% use 15-40 liters/person/day, bearing in mind that the assessment has been conducted in a rainy season where there was abundant water in the targeted areas. Additionally, most households have livestock which shared water with them.
- Up to 25% of HHs spend more than two hours to go to the main water point, fetch water, and return, 19% spend 30 minutes up to 1 hour while 11% spend (1 – 2hours).
- 34% of HHs indicated that the timing of distance and queuing is considered as a problem.
- 28% of households surveyed in the five areas use unprotected rainwater tanks and 27% use unprotected spring.
- 51% of households use other sources of water as 43% of them collect the rain water from houses' roofs to jerry cans.
- 55% of HHs do not have enough quantity of water in the last 30 days. Besides, 48% of them reduce water for hygiene practices, 47% go to fetch water from a further water point.
- 63% of HHs have issues related to the taste, look, and smell of the main water source for the last 30 days in which 97% of them complained of its bad taste.
- 81% of HHs do not treat the drinking water because 74% of them don't have materials for water purification/treatment.
- 44% of HHs surveyed use flush latrine to the open and 34% use Pit latrine-open/without slab which considered as unimproved latrine types that lead to increase contamination.
- 85% of HHs in need to procure hygiene items, but they could not find or afford during the last 30 days.

- 95% of HHs do not have hand washing facilities, and 34% of them do not have soap.
- 48% of HHs bury or burn the garbage while 34% of HHs leave garbage in public areas.

Recommendations

The following activities are recommended for humanitarian interventions:

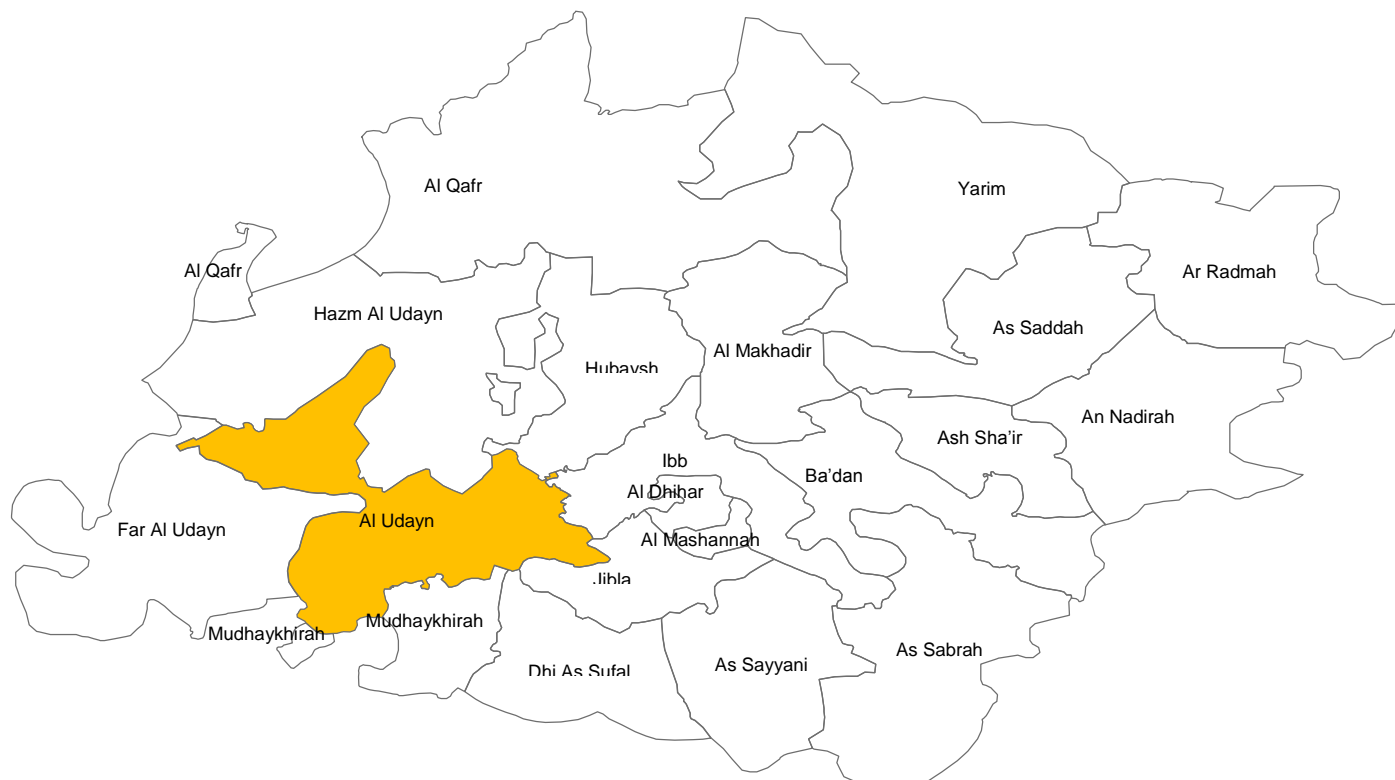
- Provision of basic and consumable hygiene kits.
- Training for community volunteers on hygiene promotion and community engagement approaches.
- Hygiene promotion / community mobilization.
- Provision of water filters / or chlorine tablets for household level water treatment.
- Chlorination of the existed water sources.
- Conducting cleaning campaigns in public places.
- Water quality surveillance and water supply treatment.
- Community Led Total Sanitation (CLTS) activities for HHs who do not have latrines.
- Providing operational support: fuel provision, disinfecting agents and repairs to water supply systems in some areas as Shalaf sub-district.
- Rehabilitation of water schemes in the sub-districts according to the main source type (rainwater tanks, small dams, unprotected spring, and wells) with outlet pipe from catchment, tap-stand, and piped distribution system.
- Connecting piping system from the main water source to the nearest places of households.
- Households' latrine rehabilitation/ desludging.
- Households' latrine construction.

Background

Ibb:

Ibb governorate is located in the inland South of Yemen and is divided into 20 districts. Al Udayn is one of those districts with a population of 199,020. It is located in the south-western part of Ibb and is about 40 km away. It is bordered to the north by Hubaysh and Hazm Al Udayn districts, from the south Mudhaykhirah, Dhi As Sufal, Jibla and Shara'ab As Slam districts, from the East Jibla and Ibb districts and Al Udayn district from the West,

Ibb Governorate Map



Al-Udayn District:

Al Udayn district is a plateau in which a number of mountains and historic castles. It has 22 sub-districts. 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. Agriculture in Al Udayn district depends on rainwater and some of the famous valleys as Annah valley.

The five selected sub-districts (Shalaf, Wadi Al-dor, Qesa'a Halian, Jabal Bahri, Bilad Al-Muliki) do not have any interventions, and they are facing difficult situation which varies from one area to another. The table below shows the general situation in those areas according to the general situation forms which were filled in each area:

Key areas	Shalaf	Wadi Al-dor	Qesa'a Halian	Jabal Bahri	Bilad Al-Muliki
High prevalence of diseases	Medium	High Severe Situation	High Severe Situation	High Severe Situation	Medium

Low income	High Severe Situation	High Severe Situation	Low	Low	Low
Less water quantity	Low	Medium	High Severe Situation	Medium	Low
Poor water quality	Medium	Medium	Medium	Medium	High Severe Situation
Water storage problems	High Severe Situation	High Severe Situation	High Severe Situation	Medium	High Severe Situation
Poor hygiene practices	High Severe Situation	High Severe Situation	High Severe Situation	Medium	Medium
Open defecation	High Severe Situation	High Severe Situation	High Severe Situation	High Severe Situation	High Severe Situation

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 informants, household questionnaires, focus group discussions, and observation.

There was a training conducted for the assessment team, explaining the main objectives of the needs assessment, how to use assessment tools for collecting the data, and how to use the Kobo collect tool to enter data. The assessment team has taken into consideration the following steps:

- WASH assessment for households in some locations of the district.
- WASH assessment for focus groups in some locations of the district.
- Interviewing key informants.
- Coordination with the government health office.
- Observing some water sources in the district.

From Aug 20th to Aug 23rd, 2018, the assessment team conducted the WASH Needs Assessment for 17 locations in five sub-districts of Al Udayn district, Ibb governorate.

All locations are rural in nature (Shalaf, Wadi Al-dor, Qesa'a Halian, Jabal Bahri, Bilad Al-Muliki sub-districts of Al Udayn district). The following table shows the basic data of the sampling:

Description	No.
No. of individuals in the selected HHs sampling	1103
No. of Children under 5 in the selected HHs sampling	110
No. of HHs sampling	110
No. of People with disabilities in the selected HHs sampling	96
Sex of the head of HHs% - Male	92
No. of People over 60 years old in the selected HHs sampling	91
No. of Pregnant/lactating women PLW in the selected HHs sampling	54
No. of Locations	17
Sex of the head of HHs% - Female	8
No. of sub-districts	5

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 (KII) were conducted with the managers of the five main Health Units (HU) in Al Udayn district.
 - Shalaf HU in Shalaf sub-district.
 - Al-Wadi HU in Wadi Al-dor sub- district.
 - Al-Majil HU in Qesa'a Halian sub-district.
 - Al-Jemjam HU in Jabal Bahri sub- district.
 - Al-Gharbi HU in Bilad Al-Muliki sub-district.

The key informants gave general information on the vulnerability of the areas. They provided data on morbidity rates for their coverage areas. Information about the number of population on the level of sub-districts, the number of children under 5 who had diarrhea during the year, and prevailing Water /Sanitation/ Hygiene borne diseases in their areas were also given. ,

- 2- The household survey questionnaire was conducted by using a random sampling of 110 HHs from high lands, low lands, and center of the district. 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, and garbage disposal.

3- FGDs provided information on every sub-district. Two FGDs were conducted in each sub-district with a total of 10 FGDs. Each group 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.



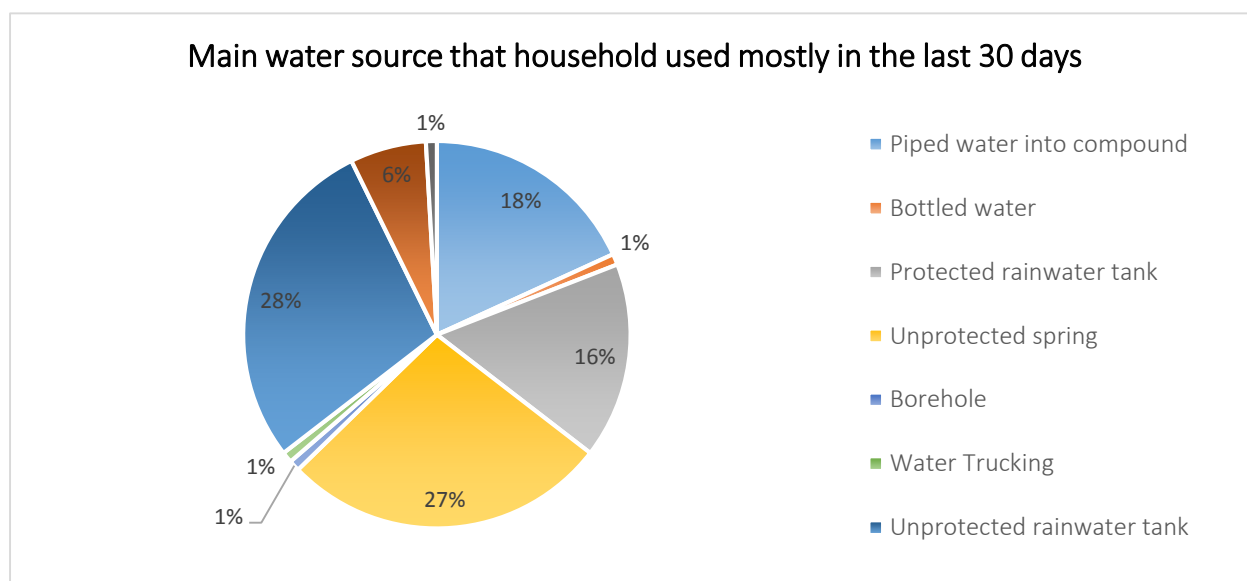
4- Observation: Each researcher took a walk to record his/her observations about the target area, the nature of the topography, the pattern of fetching water, how households consume water, and other main issues regarding sanitation and hygiene that will be discussed in the following sections in details.

Key Findings

Water:

- Unprotected spring is the main source of water for 27% of households. 28% of HHs depend on unprotected rainwater tank while 18% of HHs use piped water into compound.

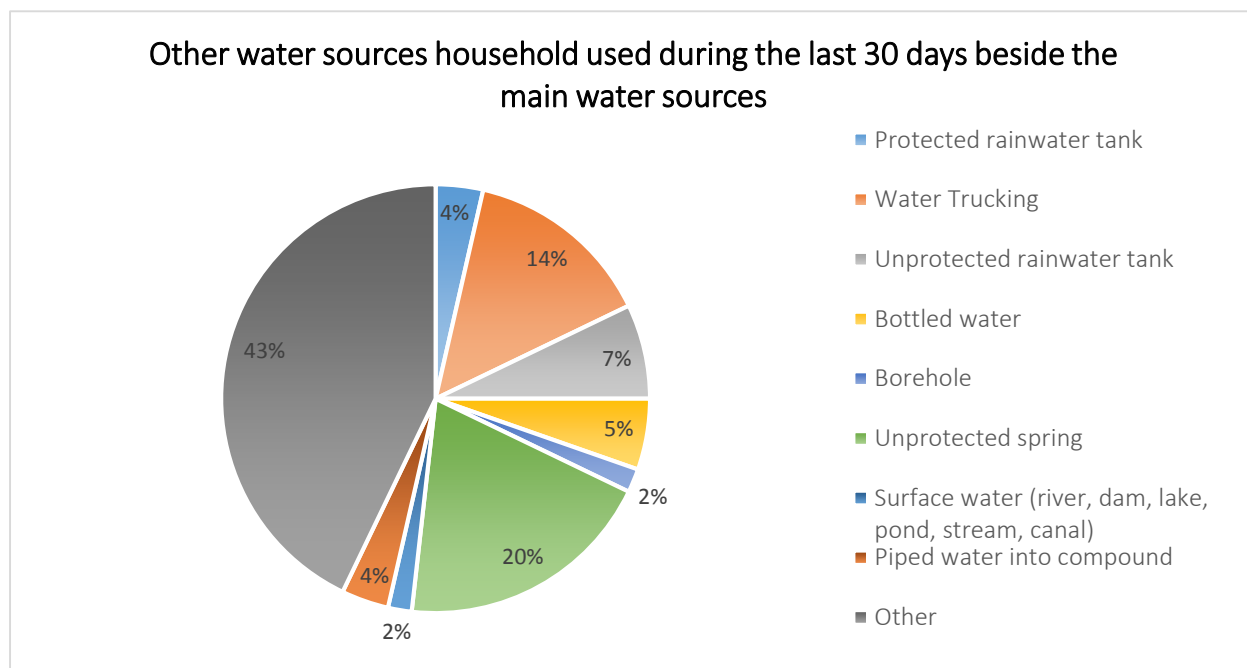
Main water source that household used mostly in the last 30 days		%
Unimproved	Unprotected rainwater tank	28%
Unimproved	Unprotected spring	27%
Improved	Piped water into compound	18%
Improved	Protected rainwater tank	16%
-----	Surface water (river, dam, lake, pond, stream, canal)	6%
Improved	Borehole	1%
Unimproved	Water Trucking	1%
Improved	Bottled water	1%
	Other	1%



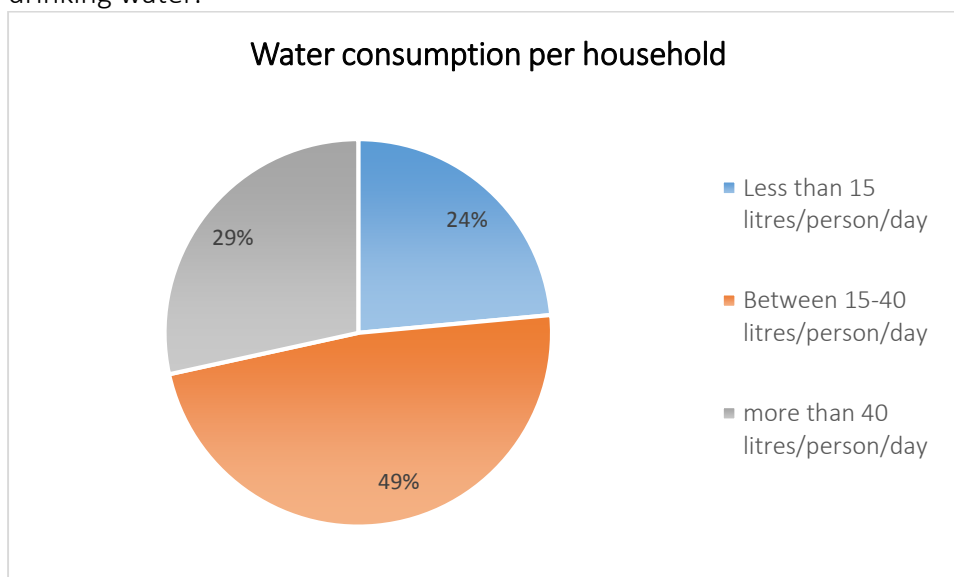
- The main water sources are not enough for 51% of the respondents, so 43% collect the rain water from houses' roofs to jerry cans.



Other water sources household used the last 30 days beside the main water sources		%
Unimproved	Others collect the rain water from houses' roofs to jerry cans	43%
Unimproved	Unprotected spring	20%
Unimproved	Water Trucking	14%
Unimproved	Unprotected rainwater tank	7%
Improved	Bottled water	5%
Improved	Piped water into compound	4%
Improved	Protected rainwater tank	4%
Improved	Borehole	2%
-----	Surface water (river, dam, lake, pond, stream, canal)	2%

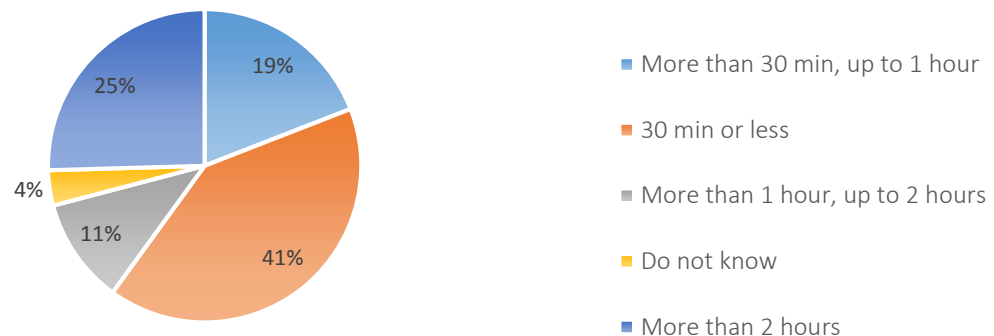


- 55% of HHs do not have enough water in the last 30 days to meet their household needs. They reduce water for hygiene practices to cope with the lack of water.
- 24% of HHs use less than 15 liters/person/day, and 49% use 15-40 liters/person/day. This percentage does not indicate the actual consumption since livestock share with HHs the drinking water.



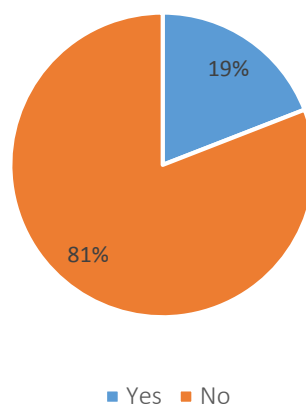
- Up to 25% of HHs spend more than two hours to go to the main water point, fetch water, and return, 19% spend 30 minutes up to 1 while 11% spend (1 – 2hours).

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



- 55% of HHs do not have enough quantity of water in the last 30 days. Besides, 48% of them reduce water for hygiene practices, and 47% of them go to fetch water from a further water point.
- 63% of HHs have issues related to the taste, look, and smell of the main water source for the last 30 days in which 97% complained of its bad taste.
- 81% of HHs do not treat the drinking water because 74% don't have materials for water purification/treatment, and 15% of them don't know any treatment methods. However, 7% of HHs feel that the water they collect is clean and does not need to be treated.

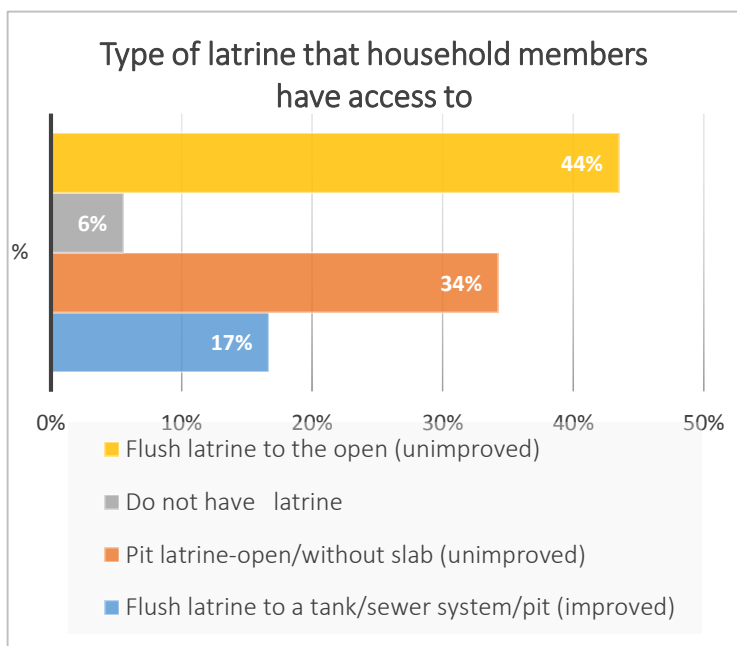
HHs treat drinking water



- 48% of HHs treat their drinking water by boiling the water, and out of 10% of them use chlorine tablets, powder or liquid. On the other hand, 74% stated that they do not treat water because they don't have filters, while 15% don't know any treatment methods.

Sanitation and Hygiene:

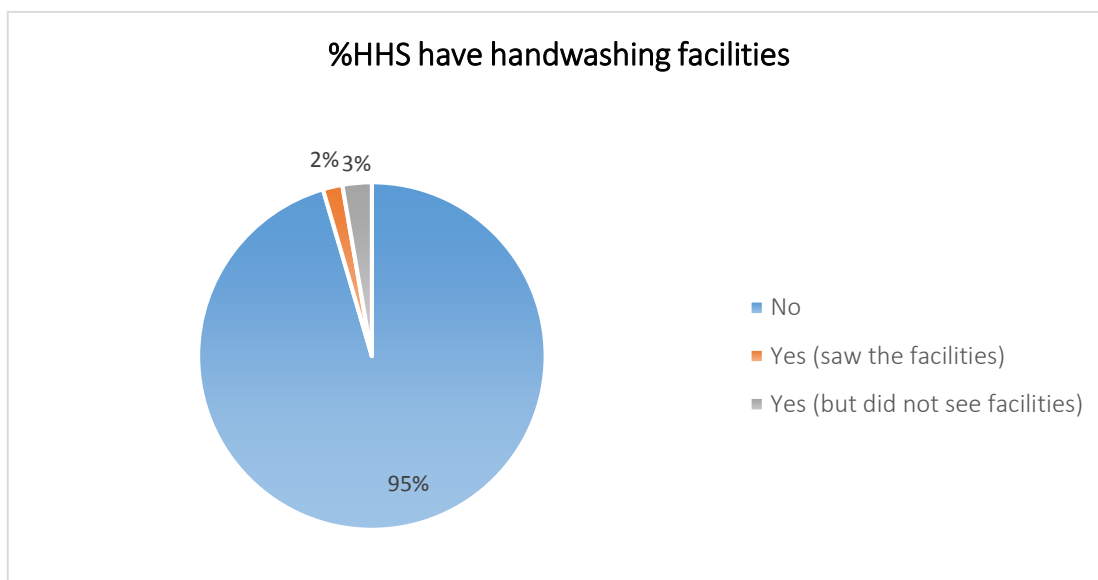
- 44% of HHs surveyed use flush latrine to the open and 34% use pit latrine-open/without slab which considered as unimproved latrine types that lead to increase contamination.



- 85% of HHs in need to procure hygiene items, but they could not find or afford during the last 30 days.

Item	Bar of soap	Jerry can/ Bucket	Sanitary pads	Disposable diapers	Laundry Powder	Washing Basin	Toothpaste	Toothbrush	Shampoo	Other
I don't Know	1	0	0	0	0	0	0	0	0	0
Could not Afford	59	80	62	47	75	65	69	74	70	49
I didn't need	7	11	29	45	18	20	23	20	22	30
Could not Access	1	3	3	2	1	9	2	0	2	15

- 95% of HHs do not have hand washing facilities, and 34% of HHs do not have soap.



- 48% of HHs bury or burn the garbage while 34% of HHs leave garbage in public areas.



Health Section:

Water /Sanitation/ Hygiene Borne Diseases Prevalence:

The poor condition of the Water, Sanitation and Hygiene in Shalaf, Wadi Al-dor, Qesa'a Halian, Jabal Bahri, Bilad Al-Muliki sub-districts of Al Udayn district, in Ibb governorate, has made people very susceptible to diseases prevailing. Diarrhea is the most prevailing disease, which is a very alarming indicator especially during the current Cholera epidemic in Yemen.

Table 6: Common WASH-related diseases through five sub-districts.

Disease	Shalaf	Wadi Al-dor	Qesa'a Halian	Jabal Bahri	Bilad Al-Muliki
Diarrhea	√	√	√	√	√
Acute Watery Diarrhea (AWD)	√	X	√	X	X
Acute Respiratory Infection (ARI)	√	√	√	√	√
Malaria	X	X	√	√	√
Dengue fever	X	√	X	X	X
Others	-----	-----	Bilharzia	-----	-----

Table 7: Number of cases and deaths for common WASH-related diseases in 2018 in five sub-districts.

Disease	Shalaf				Wadi Al-dor				Qesa'a Halian				Jabal Bahri				Bilad Al-Muliki			
	Affected		Deaths		Affected		Deaths		Affected		Deaths		Affected		Deaths		Affected		Deaths	
	<5	>5	<5	>5	<5	>5	<5	>5	<5	>5	<5	>5	<5	>5	<5	>5	<5	>5	<5	>5
Diarrhea	40	30			400	800	3		70	45			70	65			12	25		
Acute Watery Diarrhea	10	5							50	37										
ARI	20	10			200	300			25	18			85	60			13	23		
Malaria									150	100			10	20			5	38		
Dengue fever																				
Bilharzia									90	100										

Figure8: Cases of Diarrhea in five sub-districts disaggregated by age.

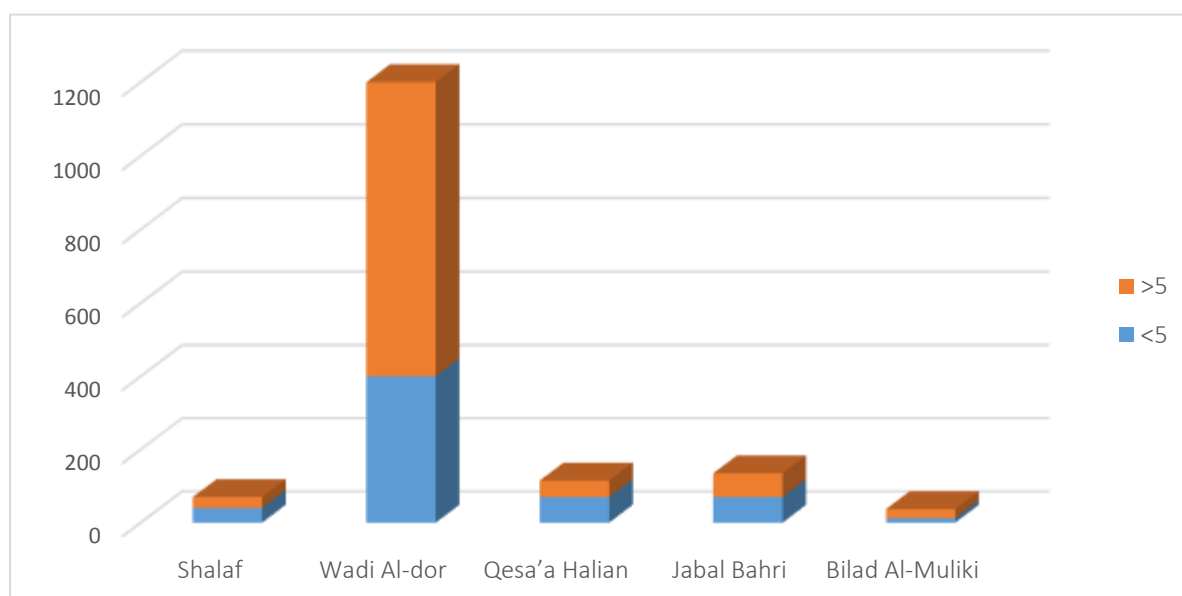
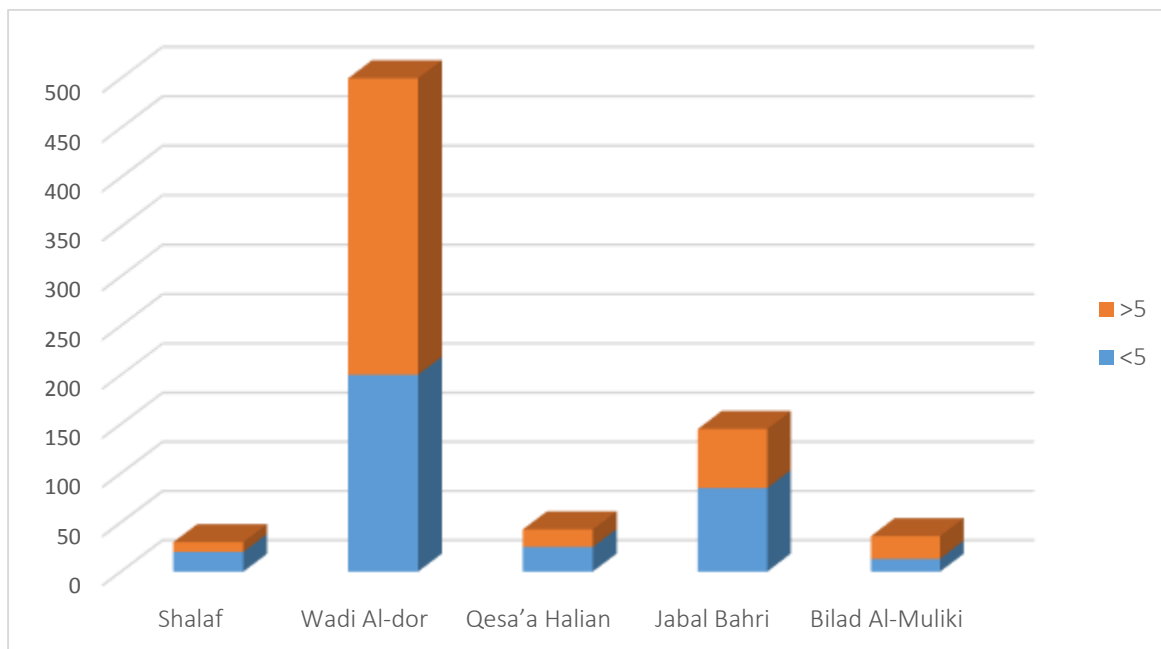


Figure 9: Cases of Acute Respiratory Infection (ARI) in five sub-districts disaggregated by age.



Key Findings Based on FGDs & Observation:

Shalaf sub-district:

- No interventions in the area;
- There is a water project which has been stopped for more than 8 months due to a technical defect in the pump.
- Some people have more than one type of containers and are filled with reservoirs to be used for drinking, but the jerry cans are used for washing, and watering livestock.
- The biggest problem for people is that Shalaf sub-district is very far from the center of Al Udayn district, approximately three hours by car. The road is bumpy and risky when driving during the time of rain.
- Lack of water is a fundamental problem, especially when people neglect and misuse the previous water project.

Wadi Al-dor sub-district:

- No interventions in the area.
- There are three main water sources: rainwater, canal, and a project.
- During winter, people depend on the project as a main water source.
- Water consumption includes: drinking, washing, other usages like livestock drinking.
- Most HHs cannot afford the cost of hygiene items.
- The area is about half an hour far, by car, from the center of the district;
- Rehabilitation or constructions of rainwater tanks (direct collection from tanks, pumped piped system), piping system, and rehabilitation or constructions of protected wells will help HHs in getting efficient water quantity.



Qesa'a Halian sub-district:

- No interventions in the area.
- HHs depend on a project as a main water source, but it is only pumping water once per week or per 12 days; therefore, the quantity of water is not enough to cover the need of additional quantity of water, people go to fetch water from a spring which takes one hour to reach it.
- Most HHs cannot afford the cost of hygiene items.
- The area is about half an hour far, by car, from the center of the district.
- Water consumption includes: drinking, washing, other usages like livestock drinking.
- Rehabilitation of the unprotected spring catchment (outlet pipe from catchment, tap-stand at catchment, piped distribution system), piping system, and rehabilitation or constructions of protected wells will help HHs in getting efficient water quantity.



Jabal Bahri sub-district:

- No interventions in the area;
- The main water sources are protected ponds, and they have tanks for storage.
- The water consumption during these days, rainy season, is high comparing with winter where the consumption decreases to half.
- During other seasons, people depend on rain water tanks and canal as main sources of water; however, these sources are about two hours far away (going and returning).
- Most HHs cannot afford the cost of hygiene items.
- The area is about 45 minutes far, by car, from the center of the district.
- Water consumption includes: drinking, washing, other usages like livestock drinking.
- They are suffering from the lack of latrines.

- Rehabilitation or constructions of rainwater tanks (direct collection from tanks, pumped piped system) and unprotected spring catchment (outlet pipe from catchment, tap-stand at catchment, piped distribution system) will be very useful for the area.

Bilad Al-Muliki sub-district:

- No interventions in the area.
- The only water source is rainwater which is collected from houses' roofs or in unprotected rainwater tanks.
- The water consumption during these days, rainy season, is high comparing with winter where the consumption decreases to half.
- During other seasons, people depend on rain water tanks and canal as main sources of water; however, these sources are about two hours far away (going and returning).
- Most HHs cannot afford the cost of hygiene items.
- The area is about 45 minutes far, by car, from the center of the district.
- Water consumption includes: drinking, washing, other usages like livestock drinking.
- Rehabilitation or constructions of rainwater tanks (direct collection from tanks, pumped piped system), piping system, and rehabilitation of the unprotected spring catchment will help HHs in getting efficient water quantity.

Recommendations

The following activities are recommended for humanitarian interventions:

- Provision of basic and consumable hygiene kits.
- Training for community volunteers on hygiene promotion and community engagement approaches.
- Hygiene promotion / community mobilization.
- Provision of water filters / or chlorine tablets for household level water treatment.
- Chlorination of the existed water sources.
- Conducting cleaning campaigns in public places.
- Water quality surveillance and water supply treatment.
- Community Led Total Sanitation (CLTS) activities for HHs who do not have latrines.
- Providing operational support: fuel provisions, disinfecting agents and repairs to water supply systems in some areas as Shalaf sub-district.
- Rehabilitation of water schemes in the sub-districts according to the main source type (rainwater tanks, small dams, unprotected spring, and wells) with outlet pipe from catchment, tap-stand, and piped distribution system.
- Connecting piping system from the main water source to the nearest places of households.
- Households' latrine rehabilitation/ desludging.
- Households' latrine construction.

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 Program Officer

Organization: Relief and Development Peer Foundation (RDP)

Title: rrassam@rdpf.org

Phone number: +967-739555349