



WASH Needs Assessment Report

In Wusab Al Ali District of Dhamar Governorate



Conducted by

RDP & SULWAN

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List of Acronyms

| | |
|--------|--|
| EOR | Emergency Operation Room |
| RRT | Rapid Response Team |
| FGDs | Focus Group Discussions |
| HC | Host Community |
| HF | Health Facility |
| HHs | Households |
| IDPs | Internally Displaced Persons |
| IPC | Integrated Phase Classification |
| KIIs | Key Informants Interviews |
| NA | Needs Assessment |
| NGO | Non-Government Organization |
| RDP | Relief and Development Peer Foundation |
| WASH | Water, Sanitation and Hygiene |
| AWD | Acute Watery Diarrhea |
| ARI | Acute Respiratory Infection |
| UNICEF | The United Nations International Children's Emergency Fund |
| HNO | Humanitarian Needs Overview |
| KM | Kilometer |

1. Executive Summary

This needs assessment was designed to be impartial, unbiased, comprehensive, context-sensitive, timely, and up-to-date. It provides sound evidence based on the existing WASH situation in Wusab Al Ali district of Dhamar Governorate in order to plan and prioritize the needs and adopt the appropriate and suitable methodology of intervention.

RDP along with Sulwan Foundation have conducted this WASH needs assessment from Jan 26th to Feb 18th, 2019 in Wusab Al Aali district aiming to define and determine the WASH needs by providing in-depth WASH operational information, statistical data about the WASH needs, and preferences of the affected community.

Wusab Al Aali district of Dhamar Governorate is one of the top 10 cholera priority districts according to cholera response updates in January, 2019 from the Emergency Operation Room (EOR) and the epidemiological situation at district level which considered Wusab Al Aali to be at highly risk level. Wusab Al Aali is also a district with score-5 in WASH severity as indicated in Yemen Humanitarian Response Plan 2019.

There is a gap of WASH sanitary assessment and response interventions in Wusab Al Aali in Dhamar, where only the RRT teams with UNICEF are working in WASH. The sample included a total number of 204 HHS interviews in 62 sub-districts which are distributed into 8 Makhaleef; singular Mikhlaf which is an administrative division, the sub districts are:

| Mikhlaf/ Division Name | Al-Jabajb | Al-Qayima | Bani Muslim | Bani Al-hadad |
|------------------------------|---|--|---|--|
| Sub-districts | <ol style="list-style-type: none"> 1. Ajbar Sawafil 2. Ajbar Awaly 3. Al-shuraka' 4. Al-manaruh 5. Bilad Alsadah 6. Eiraf 7. Yaris | <ol style="list-style-type: none"> 1. Albayade'a 2. Al-Zahir 3. Al-kalibin Al-Janubiu 4. Al-Mahajir 5. Bani Alnamar 6. Bani Shanif 7. Jabal Matahan 8. Sanuh 9. Zafran 10. Ghythan | <ol style="list-style-type: none"> 1. Al-dayadir 2. Al-sulul 3. Almuraba'ah 4. Qaeidah 5. Kalah Wa-Alahyam | <ol style="list-style-type: none"> 1. Al-Asluh 2. Al-Jaraniu 3. Al-Ruwduh 4. Al-Utab 5. Al-Kalbiyn 6. Al-Hijaruh 7. Dhallaf |
| Mikhlaf/ Division Name | Bani Shueayb | Jua'ar | Kabud | Naqadh |
| Sub-districts | <ol style="list-style-type: none"> 1. Al-Jadalu 2. Al-Sharqi 3. Al-Eanin | <ol style="list-style-type: none"> 1. Alsyf 2. Al-Shiraqiu 3. Al-Gharbiu Al-saafil | <ol style="list-style-type: none"> 1. Al-Ajbar 2. Al-Aawl 3. Zajid | <ol style="list-style-type: none"> 1. Al-Athlwth 2. Al-Ajoud 3. Al-Sanah |

| | | | |
|-----------------|-----------------------|--------------------|-------------------|
| 4. Al-Quati | 4. Al-Gharbiu Al-Aali | 4. Sabn Wa-Alraqei | 4. Al-Shuwaka' |
| 5. Al-Mawasatuh | 5. Bani Kanadah | 5. Shjb | 5. Bani Almusanaf |
| 6. Al-Hatari | 6. Habar | 6. Sharqii Kabud | 6. Bani Rabieuh |
| 7. Thi Hamd | 7. Khadman | 7. Gharbii Kabud | 7. Hemir |
| 8. Zahar | 8. Sharqii Jaer | | |
| 9. Qashat Rimae | 9. Maghram alwasat | | |
| 10. Mahzir | | | |

Community acceptance was captured from the FGDs and KIIs data which was directly fed into the findings and recommendations of the NA to ensure accountability to affected population.

RDP and Sulwan Foundation have deployed one team of field enumerators for the NA which were trained and led by RDP WASH Engineer, 14 enumerators in (9 male and 5 female) to conduct the FGDs and HHS interviews using Kobo Collect forms to ensure the reliability of data. The team leader conducted the KIIs, water sources assessment visits, and general information of each sub-district.

The comprehensive WASH NA included HHS interviews, Key Informants Interviews, Focus Group Discussions, RRT’s reports and updates and General Situation information collection using the WASH cluster tools and RDP customized tools. The sample covered high land and low land areas considering the geographical factors. Water sources were identified and mapped as a baseline and to consider further assessment during the intervention.

Key findings:

35.78% of the interviewed samples were IDPs where 18% of which are hosting other IDPs families. 32% of the remaining 64.22% interviewed samples were host community - HHS hosting IDPs in their houses.

Water

- Up to 34% of interviewed HHS in Wusab Al-Aali get water from unprotected wells, 92.86% of which are having issues related to taste, appearance or smell of the water they obtain. Only 27% are treating their drinking water using: water filters (14.55%), chlorine tablets (60%), and boiling water (27%). The remaining 73% of HHS don’t treat their drinking water mainly due to lack of treatment materials (84.56%) and lack of knowledge (30.20%).
- The average person uses from 15-40 liters of water per day according to sphere standards. In a district level, 49.51% of HHS are using less than 15 litter/person/day and 38.24% of HHS use between 15-40 litter/person/day which is much less than the minimum sphere standards. Only 12.25% of HHS use more than 40 litter/person/day. This means that the whole district is in acute need of water supply.
- 80% of HHS lack enough water for HH’s needs such as cleaning and other uses, and they adapt by reducing drinking water 35% of HHS, reducing hygiene water 31%, and reducing cleaning water 32%.

- HHs spend a lot of time to bring water. Women and children are the responsible HHs members for fetching water. In a district level, only 34% of HHs spend less than 30 minutes to bring water while 21% of HHs spend 1-2 hours to bring water and 38% spend between 30 minutes and 1 hour to bring water.
- 64% of HHs have a problem with fetching water due to far distance and queuing time.
- Women and children are the ones responsible for fetching water from water sources, and they spend long time in fetching water. Women are not separated in lines from men. Children don't go to schools due to this issue.

Sanitation

- In a district level, 22% of HHs don't have access to functioning latrines while 65% indicated that only some members of their families have access to latrines. Only 13% have enough latrines in the whole district.
- 27% of HHs use flush latrine to the open (unimproved), 28% use pit latrine-open/without slab (unimproved) and only 18% use pit latrine-covered/with slab (improved)
- Waste water and sanitation is a main issue in Wusab Al-Ali district. In a district level, 77% of households have issues with waste water around their houses and environment.

Hygiene

- 64% of HHs leave their garbage in public areas.
- 51% of HHs don't have soap and 38% said that they had soap, but the interviewer did not see it. The main reason for not having soap for 43% of HHs was because they couldn't afford it.
- 91% of HHs don't have hand washing facilities and 6% said that they had have hand washing facility, but the interviewer did not see it
- 88.7% of HHs did not receive any hygiene promotion messages in the last year.

Recommendations

- Rehabilitation of water scheme in the sub-district of Al-Jabjab Mikhlaf "Al-shuraka' and Ajbar Sawafil sub districts where the main water sources are (unprotected wells), Al-Qaimah Mikhlaf "Bani Shainif , Jabal Matahan, Al-kalibin Al-Janubiu, and Halbah Wa-Almeashar sub-districts where the main water sources are (Unprotected rainwater tanks), and Bani Al-Hadad Mikhlaf " Bani Al-Hadad sub district" where the main water source is (unprotected springs).
- As a first stage (pilot) and extend the intervention to other sub-districts, it is recommended to intervene as integrated WASH package in sub districts where there are health services supported by NGOs such as: Kabud Mikhlaf where 63% of HHs use less than 15Lit/person/day.

- Provision of communal water tanks/ install water points to be linked with the water scheme which will be rehabilitated to be in closer locations to beneficiaries.
- Provision of water filters for HHs with cholera cases or suspicious cases/ AWD for treatment of drinking water.
- Implement water quality tests.
- surveillance and mapping of water sources
- Construction of family latrines and rehabilitation of existing latrines in Al-Qaimah Mikhlaf Al-Qaimah Mikhlaf “Bani Shainif , Jabal Matahan, Al-kalibin Al-Janubiu, and Halbah Wa-Almeashar sub-districts as first stage of intervention.
- Distribution of basic and consumable hygiene kits for HHs
- Conduct cleaning campaigns in the selected sub-districts.
- Distribute hygiene kits to selected HHs.

2. Background

Yemen has undergone a series of successive socio-economic, political and security crises in the past years, accompanied by sharp deterioration of economic indicators, macroeconomic balances and people’s living standards, especially the most vulnerable segments of the population. The combined multi-faceted impact of the prolonged conflict, high food and nutrition insecurity, and widespread cholera outbreak has put Yemen at grave risk of worst and biggest humanitarian disaster in the world. The situation is dire with 22.2 million people requiring some kind of humanitarian assistance to meet their basic needs; an estimated 17.8 million are food insecure (including 8.4 million severely food insecure); 16.4 million lack adequate access to clean water or sanitation; 16.4 million people lack sufficient access to healthcare; an estimated 2 million children under the age of five are acutely malnourished.

Dhamar Governorate in Yemen is located to the south and southeast of Sana'a Governorate, to the north of Ibb Governorate, to the east of Al Hudaydah Governorate and to the northwest of Al Bayda' Governorate in the central highlands of Yemen. The governorate covers 7,935 km² with an estimated population of around one and a half million. Dhamar is divided among 12 districts (Al Hada, Al Manar, Anss, Dawran Aness, Dhamar City, Jabal Ash sharq, Jahran, Maghirib Ans, Mayfa'at Anss, Utmah, Wusab Al Aali, and Wusab As Safil) Districts and further divided into 314 sub-districts.

Wusab Al-Aali is one of the largest districts in Dhamar governorate. It is characterized by its high mountains, divided into nine subdivisions comprising 73 sub districts and 850 villages. It is located in the governorate of

Dhamar in the south-western part of which is bordered to the north by Utma district, Rima Governorate (Districts: Mezher, Kisma, Al- Jafariya), (Wusab Al-Safil district), and from the south, Wusab Al-Safil, Ibb (Al-Qafar and Hazem al-Udyn), from the east to Utma, Ibb (Al-Qafar) and from the west to Wusab Al-Safil. The area of the district is 592 km², with a population of 275,137 people.

According to 2019 HNO, Wusab Al-Aali district in Dhamar governorate was classified as score -5 in WASH severity where 206,353 individuals are in WASH PIN / Acute.

Dhamar Governorate



3. Objectives

RDP and Sulwan Foundation conducted this WASH needs assessment with a main objective of determining the current situation of WASH sector in the targeted district of Wusab Al-Aali in Dhamar Governorate to highlight the gaps between the current WASH situation as compared to sphere standards.

Specific Objectives:

- Define and quantify the WASH needs by providing more in-depth WASH operational information;
- Provide statistical data about the WASH needs;
- Capture representative views of the WASH situation from the affected population through joint consultation with them;

4. Approaches & Methodology

The work plan started by collecting the WASH assessment tools, cluster suggested methodology, general information about the targeted districts, and the other requirements of the Needs Assessment, RDP MEAL

department drafted an inception report describing the methodology and detailed work plan of the needs assessment. A meeting was arranged with all relevant departments to develop the detailed work plan.

This needs assessment involved systematic gathering and analyzing of information relating to the needs, conditions, and capacities of persons of concern in Wusab Al-Ali district targeting diverse women, men, girls, and boys of all ages, including people with special needs and marginalized people. The NA was conducted with active involvement of persons of concern and coordination with all relevant parties:

- Local authorities;
- Active local NGOs in the targeted area, to avoid over-assessment and duplication;
- WASH cluster (National and Hub-level);
- Community leaders and decision makers (as part of the accountability to affected population);
- RRT (Rapid Response Team) in Wusab Al-Ali.

Methodology of primary data collection:

The comprehensive WASH NA included:

- HHs Interviews;
- Focus Group Discussions (FGDs);
- Key Informants Interviews (KII);
- General situation data collection;
- Health and nutrition information collection (HF level);
- Rapid Response Team (RRT).

The Acute Watery Diarrhea/ Cholera cases were included in the sampling where health factors were assessed and samples of HHs were interviewed. The sample covered high land and low land areas considering the geographical factors. Water sources were identified and mapped as a baseline and to consider further assessment during the intervention.

The data was captured using both mobile phones and papers. The WASH assessment tools have been designed using Kobo Collect and installed into the enumerators' mobile phones to capture the data of:

- HHs interviews
- Focus group discussions

The other data collection tools were in papers.

5. Gender and Protection Mainstreaming

Gender and Protection aspects were mainstreamed into the needs assessment activities. The field enumerators were consisting of male and female:

- RDP and Sulwan Foundation trained one team for the NA in the district 14 enumerators (9 male and 5 female).
- The interviewed sample included male and female as heads of HHs. The sample included persons with special needs and marginalized people.
- The NA highlighted potential protection issues that may encounter female headed households and the risk of responsibility of women and children in bringing water from far areas which take a long time and where they have to wait in queues to get the turn in bringing water. Queues are not separating women from men and this also makes a risk of potential protection issues.
- The roles and dynamics of the people in the targeted areas were highlighted regarding responsibility between male and female in brining water and other duties of a household.
- The targeted beneficiaries will be gender specific and disaggregated.

6. Risk and Assumptions

62 percent of the districts in Yemen remain relatively accessible while 16 percent of the 333 districts in the country are perceived to have ‘high or extremely high access constraints’.

The security and safety measures were taken into account when conducting the field work of this needs assessment. The team has coordinated with all relevant parties regarding this Needs Assessment and to obtain the required clearances for movement through check points.

7.1 Field work

RDP and Sulwan Foundation have deployed a team of enumerators for the NA in the district who were trained and led by RDP WASH engineer, 14 (9 male and 5 female), to conduct the FGDs and HHs interviews. One training session was conducted for the field enumerators. The targeted locations were divided among the enumerators and a plan was set for the team. The field enumerators conducted the HH interviews and the FGDs, while RDP and Sulwan Foundation WASH Engineers conducted the KIIs, general information gathering, and the water sources visits and mapping.

7.2 Coverage area

The Needs Assessment covered eight Mekhlafs in Wusab Al-Ali district. Each Mekhlaf contains a number of sub-districts with a total of 62 sub-districts as listed below:

1. Al Jabjab Mekhlaf

- 1) Ajbar Sawalef sub-district
- 2) Ajbar Awali sub-district
- 3) Ash Shuraka'a sub-district
- 4) Al Manarah sub-district
- 5) Belad As Sadeh sub-district
- 6) Arraf sub-district
- 7) Yarees sub-district

2. Al Qa'emah Mekhlaf

- 8) Al Bayade'e sub-district
- 9) Adh Dhaher sub-district
- 10) Al Kalbayn Al Janobi sub-district
- 11) Al Mahjar sub-district
- 12) Bani An Nammar sub-district
- 13) Bani Shonaif sub-district
- 14) Jabal Mathan sub-district
- 15) Senwah sub-district
- 16) Dhafran sub-district
- 17) Ghaithan sub-district

3. Bani Muslim Mekhlaf

- 18) Ad Dayadeer sub-district
- 19) As Salool sub-district
- 20) Al Marba'ah sub-district
- 21) Qaedah sub-district
- 22) Kalah Wal Ahyam sub-district

4. Bani Al Haddad Mekhlaf

- 23) Al Aslooh sub-district
- 24) Al Jarrani sub-district
- 25) Ar Rawdah sub-district
- 26) Al Atab sub-district

27) Al Kalbayn sub-district

28) Al Hejrah sub-district

29) Dhalaf sub-district

5. Bani Sho'ayb Mekhlaf

30) Al Jadelah sub-district

31) Ash Sharqi sub-district

32) Al Aneen sub-district

33) Al Qowati sub-district

34) Al Mawsatah sub-district

35) Al Hatari sub-district

36) Dhi Ahmed sub-district

37) Dhahar sub-district

38) Qashd Rama'a sub-district

39) Mahzar sub-district

6. Go'or Mekhlaf

40) As Sayf sub-district

41) Ash Shraqi sub-district

42) Al Gharbi As Safel sub-district

43) Al Gharbi Al Ali sub-district

44) Bani Kendah sub-district

45) Habr sub-district

46) Khadman sub-district

47) Sharqi Go'or sub-district

48) Maghram Al Wasat sub-district

7. Kabood Mekhlaf

49) Al Ajaber sub-district

50) Al Awl sub-district

51) Zaged sub-district

52) Saben Wal Raqe'e sub-district

53) Shagab sub-district

- | | |
|---|---|
| 54) Sharqi Kabood sub-district 55) Gharbi Kabood sub-district 8. Noqoth Mekhlaf 56) .Al Athlooth sub-district 57) Al Ago’od sub-district | 58) As Sonnah sub-district 59) Ash Shawka’a sub-district 60) Bani Al Mosannef sub-district 61) Bani Rabee’ah sub-district 62) Hemyar sub-district |
|---|---|

The table below shows the sample size and distribution among the surveyed Mekhlafs:

| # | Mekhlaf Name | # of HHs Interviews |
|---|------------------------|---------------------|
| 1 | Al Jabjab Mekhlaf | 30 |
| 2 | Al Qa’emah Mekhlaf | 30 |
| 3 | Bani Muslim Mekhlaf | 15 |
| 4 | Bani Al Haddad Mekhlaf | 19 |
| 5 | Bani Sho’ayb Mekhlaf | 30 |
| 6 | Go’or Mekhlaf | 34 |
| 7 | Kabood Mekhlaf | 30 |
| 8 | Noqoth Mekhlaf | 16 |
| | Total | 204 |

7.3 Data collection from the field and quality control

This was through continuous monitoring of the enumerators team from the day of field survey until the end of the data collection period. Direct communication was ensured using all available means to deliver accurate data at the required quality and to review data and forms from enumerators.

7.4 Data management and analysis

RDP and Sulwan Foundation have designed the assessment tools in KoboCollect and shared it with WASH program for testing and approval of the tool. The collected data from the field into the KoboCollect database has been reviewed on a daily basis. An Excel database has been previously designed with certain formulas to obtain the required assessment results accumulatively and in a real-time manner. The KoboCollect tools were designed to be error free with predefined drop down lists and obligatory options to be filled. They were also designed to reject any illogical entry of data. Nevertheless, whenever a misleading data was entered, the data management officer notice it and provide feedback to the field enumerators to correct the data.

Data were analyzed in a district and sub-district level for more detailed and clear view of the figures and to identify the neediest sub-districts for WASH services.

8. Key Findings and Results

The most important findings and results from the needs assessment of the two districts regarding Water, Sanitation, and Hygiene are mentioned here in a district level and the selected locations for intervention are highlighted:

Water

- Up to 34% of interviewed HHs in Wusab Al-Aali get water from unprotected wells, 92.86% of which are having issues related to taste, appearance or smell of the water they obtain. Only 27% are treating their drinking water using: water filters (14.55%), chlorine tablets (60%), and boiling water (27%). The remaining 73% of HHs don't treat their drinking water mainly due to lack of treatment materials (84.56%) and lack of knowledge (30.20%).
- The average person uses from 15-40 liters of water per day according to sphere standards. In a district level, 49.51% of HHs are using less than 15 litter/person/day and 38.24% of HHs use between 15-40 litter/person/day which is much less than the minimum sphere standards. Only 12.25% of HHs use more than 40 litter/person/day. This means that the whole district is in acute need of water supply.
- 80% of HHs lack enough water for HH's needs such as cleaning and other uses, and they adapt by reducing drinking water 35% of HHs, reducing hygiene water 31%, and reducing cleaning water 32%.
- HHs spend a lot of time to bring water. Women and children are the responsible HHs members for fetching water. In a district level, only 34% of HHs spend less that 30 minutes to bring water while 21% of HHs spend 1-2 hours to bring water and 38% spend between 30 minutes and 1 hour to bring water.
- 64% of HHs have a problem with fetching water due to far distance and queuing time.
- Women and children are the ones responsible for fetching water from water sources, and they spend long time in fetching water. Women are not separated in lines from men. Children don't go to schools due to this issue.

Sanitation

- In a district level, 22% of HHs don't have access to functioning latrines while 65% indicated that only some members of their families have access to latrines. Only 13% have enough latrines in the whole district.
- 27% of HHs use flush latrine to the open (unimproved), 28% use pit latrine-open/without slab (unimproved) and only 18% use pit latrine-covered/with slab (improved)
- Waste water and sanitation is a main issue in Wusab Al-Aali district. In a district level, 77% of households have issues with waste water around their houses and environment.

Hygiene

- 64% of HHs leave their garbage in public areas.
- 51% of HHs don't have soap and 38% said that they had soap, but the interviewer did not see it. The main reason for not having soap for 43% of HHs was because they couldn't afford it.
- 91% of HHs don't have hand washing facilities and 6% said that they had have hand washing facility, but the interviewer did not see it
- 88.7% of HHs did not receive any hygiene promotion messages in the last year.

9 Analysis and Demonstration

This section explains the findings and the analysis of the collected data in a district and sub-district level. This is to provide analysis and interpretation of the obtained findings including tables and graphs demonstrating these results to help and assess decision makers prioritize the needs and decide what activities should be included in the intended project/s. Analysis will be ordered according to the sections on the HH interviews tool and the other tools will follow:

The data analysis of the General Situation, HHs interviews, FGDs, KIIs and their recommendations for the inventions in Wusab Al-Aali district is demonstrated below for each section of the HH interview form. The very important sections are highlighted with more briefing and demonstration to reflect the actual situation in a sub-district level/ Mikhlaf.

9.1.1 General Situation data

RDP and Sulwan Foundation WASH engineers have collected general information about the district using a customized tool. The information was collected from different locations and sources including health facilities and community leaders. The data included health, cholera, and humanitarian situation.

The General Information for some sub-district level/ Mikhlaf is summarized as follows:

| Mikhlaf Name | Sub-district Name | Location Name | Type of locality | Topography | The situation of people on the site | Any NGOs provide WASH services | Which NGOs | Kind of Support | Are there other NGOs? | What are they? | Their Support |
|---------------|--|---------------|------------------|------------------------------------|-------------------------------------|--------------------------------|------------|--------------------------------|-----------------------|----------------|---------------|
| Bani Muslim | - Al-dayadir - Almuraba'ah - Qaeidah | Qaeidah | Rural | Sharp slope | - Host Community - IDPs | No | | | No | | |
| | - Al-sulul - Kalah Wa-Alahyam | Samrah | Rural | Moderate to a sharp slope | - Host Community - IDPs | No | | | No | | |
| Bani Shueayb | - Al-Mawasatuh | | Rural | Plain field | | | | | | | |
| | - Al-Jadalu | | | Plain field | | | | | | | |
| | - Thi Hamd | Thi Hamd | Rural | Rugged mountains and steep valleys | - Host Community | No | | | Yes | Islamic Relief | Food Security |
| Al-Jabajb | - Al-shuraka' | Al-Barjah | Rural | Moderate slope | - Host Community | No | | | No | | |
| | - Ajbar Sawafil | Rbwa | Rural | Moderate slope | - Host Community | Yes | UNICEF | Soaps for water diarrhea cases | No | | |
| Bani Al-hadad | - Bani Al-Hadada | Al-Dan | Rural | Moderate slope | - Host Community | Yes | GARW SP | Soaps for water diarrhea cases | No | | |
| Kabud | - Zajid - Al-Ajbar - Al-Aawl | Al-Aqar HC | Rural | Mountains and Valleys | - Host Community - IDPs | No | | | No | | |

| | | | | | | | | | | | |
|---------------|---|---------------------------------------|-------|---|-------------------------------|----|--|--|-----|---------------------------|------------------|
| | - Shjb - Gharbii Kabud - Bani Al- Waely | Bani Al- Waely Al- Qharf | Rural | Hills, Moderate Sloop, and Plain Field | - Host Community - IDPs | No | | | Yes | UNICEF | Medicine |
| | - Sharqi Kabud | | Rural | Sharp slope And Hills | - Host Community | No | | | No | | |
| Naqadh | - Bani Rabieu | HC | Rural | Hills, Moderate Sloop | - Host Community | No | | | Yes | Islamic Relief | Food Security |
| | - Al-Sanah | Maghra bat Al- Wasat | Rural | Hills | | No | | | Yes | Islamic Relief, WFP | Food Security |

The table below show the needs for different sub-districts:

| Mikhlaf Name | Sub-district Name | Location | High prevalence of diseases | Low income | Less water quantity | Poor water quality | Water storage problems | Poor hygiene practices | Open defecation | Others |
|--------------|---------------------------------|----------|--|--|---|---|---|--|---|--------|
| Bani Muslim | Al-dayadir Almuraba' Al-dayadir | Qaeidah | <p>High</p> <p>Support statement for the key areas identified: Latrines and sewer Rehabilitation. Mosquito nets.</p> <p>Recommendations: Provision of mosquito nets, treatments, medical staff and support of health centers and units.</p> | <p>High</p> <p>Support statement for the key areas identified: Financial support as well as basic needs</p> <p>Recommendations: Food Security assistance.</p> | <p>Medium</p> <p>Support statement for the key areas identified: Install and build tanks, water barriers.</p> <p>Recommendations: Encourage people to participate in building tanks.</p> | <p>High</p> <p>Support statement for the key areas identified: Rehabilitation water ponds.</p> <p>Recommendations: Rehabilitation of the existed tanks and protection for water ponds.</p> | <p>High</p> <p>Support statement for the key areas identified: Provision of water storage tanks.</p> <p>Recommendations:</p> | <p>Medium</p> <p>Support statement for the key areas identified: Provision of hygiene kits.</p> <p>Recommendations: Hygiene promotion and distribution of hygiene kits.</p> | <p>Medium</p> <p>Support statement for the key areas identified: Hygiene Promotion</p> <p>Recommendations: Educate the community about the cause of the infection.</p> | |

| Mikhlaf Name | Sub-district Name | Location | High prevalence of diseases | Low income | Less water quantity | Poor water quality | Water storage problems | Poor hygiene practices | Open defecation | Others |
|--------------|---------------------------|----------|--|---|--|---|--|--|---|--------|
| | Al-sulul Kalah Wa-Alahyam | Samrah | <p>High</p> <p>Support statement for the key areas identified: Latrines and pits rehabilitation, mosquito nets Medicine</p> <p>Recommendations: Provision of medicine, mosquito nets and hygiene kits</p> | <p>High</p> <p>Support statement for the key areas identified: Food Security.</p> <p>Recommendations: Food Security assistance. Financial support (CASH assistance).</p> | <p>High</p> <p>Support statement for the key areas identified: Install and build tanks, provision of plastic tanks.</p> <p>Recommendations: Install and build tanks</p> | <p>High</p> <p>Support statement for the key areas identified: Provision of chlorine tabs/filters.</p> <p>Recommendations: Hygiene promotion on treatment methods.</p> | <p>High</p> <p>Support statement for the key areas identified: Provision of water storage tanks.</p> <p>Recommendations: Awareness sessions on hygiene practices.</p> | <p>Medium</p> <p>Support statement for the key areas identified: Provision of hygiene kits.</p> <p>Recommendations: Hygiene promotion and distribution of hygiene kits.</p> | <p>Medium</p> <p>Support statement for the key areas identified: Hygiene Promotion</p> <p>Recommendations: Educate the community about the cause of the infection.</p> | |
| | Al-Raiedee | | | | | | | | | |
| | AL-Shaberah | | | | | | | | | |

| Mikhlaf Name | Sub-district Name | Location | High prevalence of diseases | Low income | Less water quantity | Poor water quality | Water storage problems | Poor hygiene practices | Open defecation | Others |
|--------------|-------------------|----------|---|--|---|--|--|---|---|--------|
| Bani Shueayb | Al-Mawasatuh | | <p>High</p> <p>Support statement for the key areas identified: Provide the necessary medicine to eliminate the spread of diseases</p> | <p>Low</p> <p>Support statement for the key areas identified: Support activities that can support the most vulnerable HHs</p> <p>Recommendations: Financial support</p> | <p>Low</p> <p>Support statement for the key areas identified: Construction of rainwater collection tanks</p> <p>Recommendations: Water treatment methods are required.</p> | <p>Medium</p> <p>Support statement for the key areas identified: Construction of waterfalls/ rainwater collection tanks.</p> <p>Recommendations: To support these activities.</p> | <p>Low</p> <p>Support statement for the key areas identified: Building barriers and water tanks.</p> <p>Recommendations: To support these activities.</p> | <p>low</p> <p>Support statement for the key areas identified: Hygiene promotion.</p> <p>Recommendations: Hygiene promotion and distribution of hygiene kits.</p> | <p>Medium</p> <p>Support statement for the key areas identified: Construction of sewage projects.</p> <p>Recommendations: To support these activities.</p> | |

| Mikhlaf Name | Sub-district Name | Location | High prevalence of diseases | Low income | Less water quantity | Poor water quality | Water storage problems | Poor hygiene practices | Open defecation | Others |
|--------------|-------------------|----------|---|---|---|--|---|--|---|--------|
| | Al-Jadalu | | <p>High</p> <p>Support statement for the key areas identified: Provide the necessary medicine to eliminate the spread of diseases</p> | <p>Low</p> <p>Support statement for the key areas identified: Support activities that can support the most vulnerable HHs</p> <p>Recommendations: Financial support</p> | <p>Low</p> <p>Support statement for the key areas identified: Construction of rainwater collection tanks</p> <p>Recommendations: Water treatment methods are required.</p> | <p>High</p> <p>Support statement for the key areas identified: Construction of waterfalls/ rainwater collection tanks.</p> <p>Recommendations: To support these activities.</p> | <p>High</p> <p>Support statement for the key areas identified: Building barriers and water tanks.</p> <p>Recommendations: To support these activities.</p> | <p>low</p> <p>Support statement for the key areas identified: Hygiene promotion.</p> <p>Recommendations: Hygiene promotion and distribution of hygiene kits.</p> | <p>Medium</p> <p>Support statement for the key areas identified: Construction of sewage projects.</p> <p>Recommendations: To support these activities.</p> | |
| | Thi Hamd | Thi Hamd | <p>High</p> <p>Support statement for the key areas identified: Provide the necessary medicine to eliminate the spread of diseases</p> | <p>High</p> <p>Support statement for the key areas identified: Support activities that can support the most vulnerable HHs</p> <p>Recommendations: Financial support</p> | <p>Low</p> <p>Support statement for the key areas identified: Construction of rainwater collection tanks</p> <p>Recommendations: Water treatment methods are required.</p> | <p>Low</p> <p>Support statement for the key areas identified: Construction of waterfalls/ rainwater collection tanks.</p> <p>Recommendations: To support these activities.</p> | <p>Low</p> <p>Support statement for the key areas identified: Building barriers and water tanks.</p> <p>Recommendations: To support these activities.</p> | <p>Medium</p> <p>Support statement for the key areas identified: Hygiene promotion.</p> <p>Recommendations: Hygiene promotion and distribution of hygiene kits.</p> | <p>Medium</p> <p>Support statement for the key areas identified: Construction of sewage projects.</p> <p>Recommendations: To support these activities.</p> | |

| Mikhlaf Name | Sub-district Name | Location | High prevalence of diseases | Low income | Less water quantity | Poor water quality | Water storage problems | Poor hygiene practices | Open defecation | Others |
|--------------|-------------------|-----------|---|---|--|--|--|--|---|---|
| Al-Jabab | Al-shuraka' | Al-Barjah | <p>High</p> <p>Support statement for the key areas identified: Contaminated area, contaminated water and open sewage.</p> <p>Recommendations: The provision of medicines, install/ build tanks and digging pits.</p> | <p>High</p> <p>Support statement for the key areas identified: Food Security.</p> <p>Recommendations: Food Security assistance. Financial support (CASH assistance)/ CASH for work activities.</p> | <p>Low</p> <p>Support statement for the key areas identified: Building barriers and tanks.</p> <p>Recommendations: To support these activities.</p> | <p>High</p> <p>Support statement for the key areas identified: Surface wells are not suitable for drinking</p> <p>Recommendations: Provision of tanks for water filtration.</p> | <p>High</p> <p>Support statement for the key areas identified: Surface wells are not suitable for drinking</p> <p>Recommendations: Provision of tanks for water filtration.</p> | <p>High</p> <p>Support statement for the key areas identified: Lack of water.</p> <p>Recommendations: Hygiene promotion and distribution of hygiene kits.</p> | <p>High</p> <p>Support statement for the key areas identified: No latrines for some HHs.</p> <p>Recommendations: To build latrines and dig pits.</p> | <p>IDPs</p> <p>Support statement for the key areas identified: Small houses.</p> <p>Recommendations: Shelters and camps for IDPs</p> |

| Mikhlaf Name | Sub-district Name | Location | High prevalence of diseases | Low income | Less water quantity | Poor water quality | Water storage problems | Poor hygiene practices | Open defecation | Others |
|---------------|-------------------|-------------------|--|---|---|---|--|---|--|--------|
| | Ajbar Sawafil | Rabwa'a Al-Jabjab | <p>Low</p> <p>Support statement for the key areas identified: Provide vaccines for childhood and fatal infectious diseases</p> <p>Recommendations: Support health facility by medicines, medical supplies and staff support</p> | <p>High</p> <p>Support statement for the key areas identified: Providing work for cash opportunities</p> <p>Recommendations: Improving income and housing and supporting education</p> | <p>Low</p> <p>Support statement for the key areas identified: Preserving and harvesting the water.</p> <p>Recommendations: Support the construction of tanks and the rehabilitation of water wells</p> | <p>Medium</p> <p>Support statement for the key areas identified: Awareness and guidance on the importance of water.</p> <p>Recommendations: Awareness and guidance on the importance of water.</p> | <p>High</p> <p>Support statement for the key areas identified: Providing tanks or constructing protected harvesting rainwater</p> <p>Recommendations: Building sewage far away from the water source.</p> | <p>High</p> <p>Support statement for the key areas identified: Support and education of maternal and child health, and attention to food and housing condition and safety.</p> <p>Recommendations: Hygiene promotion and distribution of hygiene kits.</p> | <p>Medium</p> <p>Support statement for the key areas identified: Build latrines.</p> <p>Recommendations: Promotion.</p> | |
| Bani Al-hadad | Bani Al-Hadad | Al-Dan | <p>Medium</p> <p>Recommendations: Support health facility.</p> | <p>Low</p> <p>Recommendations: Support community.</p> | <p>Medium</p> <p>Recommendations: Support the construction of tanks and water barriers.</p> | <p>Medium</p> <p>Recommendations: Save rainwater and use filters for drinking water.</p> | <p>High</p> <p>Recommendations: Building water collective tanks.</p> | <p>High</p> <p>Recommendations: Hygiene promotion</p> | <p>High</p> | |

| Mikhlaf Name | Sub-district Name | Location | High prevalence of diseases | Low income | Less water quantity | Poor water quality | Water storage problems | Poor hygiene practices | Open defecation | Others |
|--------------|----------------------------------|------------------------|---|--|---|--|---|--|--|--------|
| Kabud | Zajid Al-Ajbar Al-Aawl | Al-Aqar HC | <p>High</p> <p>Support statement for the key areas identified: Provide the necessary medicine to eliminate the spread of diseases</p> | <p>High</p> <p>Support statement for the key areas identified: Food Security</p> | <p>Medium</p> <p>Support statement for the key areas identified: Construction of tanks.</p> | <p>High</p> | <p>High</p> <p>Support statement for the key areas identified: Awareness sessions, Hygiene promotion.</p> | <p>High</p> <p>Support statement for the key areas identified: Awareness sessions, Hygiene promotion.</p> | | |
| | Shjb Gharbii Kabud Bani Al-Waely | Bani Al-Waely Al-Qharf | <p>High</p> <p>Support statement for the key areas identified: Provide the necessary medicine to eliminate the spread of diseases</p> | <p>Low</p> | <p>Low</p> | <p>High</p> <p>Support statement for the key areas identified: Unprotected water ponds.</p> <p>Recommendations: Cover the water sources</p> | <p>Low</p> <p>Support statement for the key areas identified: Provide water tanks</p> | <p>Medium</p> <p>Support statement for the key areas identified: Leave the trash in front of the waterway</p> <p>Recommendations: Hygiene promotion</p> | <p>Medium</p> <p>Support statement for the key areas identified: Public areas are not clean</p> <p>Recommendations: Latrine construction.</p> | |
| | Sharqi Kabud | | <p>High</p> | <p>High</p> | <p>High</p> | <p>High</p> | <p>High</p> | <p>High</p> | <p>High</p> | |

| Mikhlaf Name | Sub-district Name | Location | High prevalence of diseases | Low income | Less water quantity | Poor water quality | Water storage problems | Poor hygiene practices | Open defecation | Others |
|--------------|-------------------|--------------------|---|------------|---------------------|---|--|--|---|--|
| Naqadh | Bani Rabieah | | Medium Support statement for the key areas identified: Health care. | High | High | High Support statement for the key areas identified: Wells are needed | High Support statement for the key areas identified: Provision of water tanks and distribution of filters. | High Support statement for the key areas identified: Provision of water tanks. | High Recommendations: Hygiene promotion | High Recommendations: Construction of sewage projects. |
| | Al-Sanah | Maghrabat Al-Wasat | Medium | | Low | Medium | Low | Medium | High | |
| Al-qaimah | Bani Shainif | Musina'ah | | | | | | | | |
| | Jabal Matahan | Al-Haljom HU | | | | | | | | |

Ranking of Need

| Key for Ranking Severity of Need (including data) | |
|---|---|
| High | Severe Situation: Urgent intervention required |
| Medium | Situation of concern, or lack of data/unreliable data: further assessment and/or surveillance required |
| Low | Relatively normal situation (or good data) or local population able to cope with crisis; no further action required |

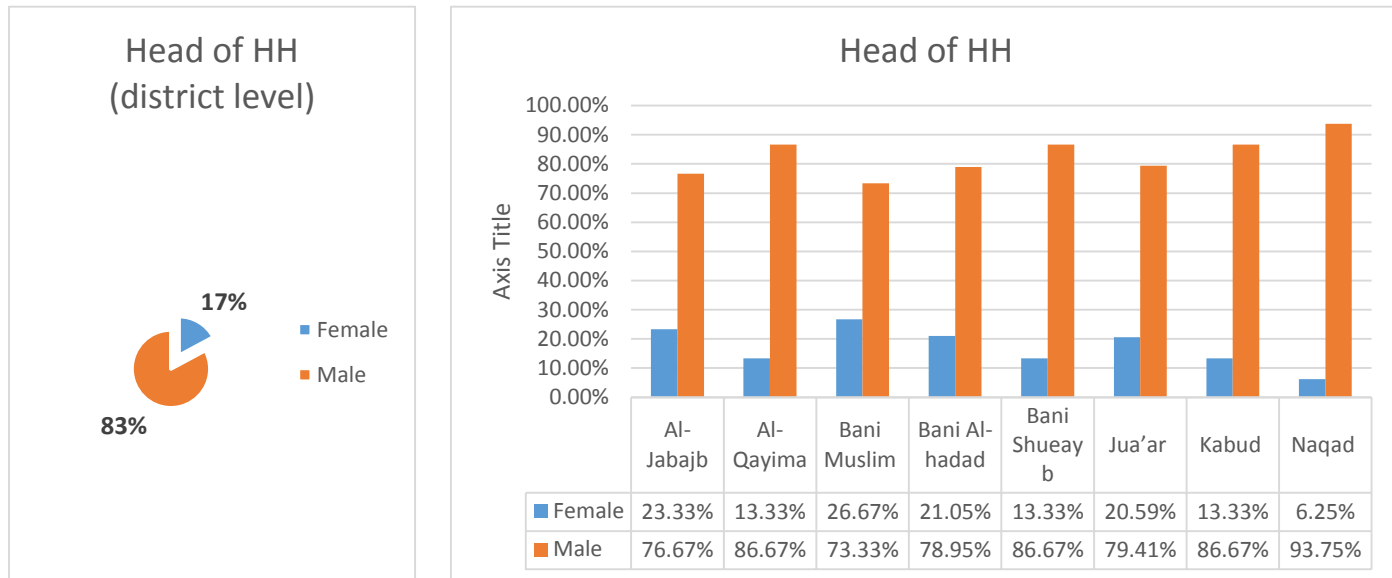
- The district needs are not fully covered by NGOs.
- The sub-districts are in need for emergency interventions including but not limited to WASH interventions and services.
- The sources indicated that the need is high for outbreak responses, income generation response, water, hygiene, and sanitation response and awareness.
- The recommendations included:
 - o Water services for HHs and rehabilitation of water schemes
 - o Solutions for sanitation facilities
 - o Distribution of water filters and chlorine tablets to treat drinking water
 - o Hygiene kits distribution
 - o Latrines construction and rehabilitation
 - o Distribution of new water jerry cans for HHs

9.1.2 HH Interviews:

The data analysis of the household interviews is demonstrated below for each section of the HH interview form. The very important sections are highlighted with more briefing and demonstration to reflect the actual situation in a sub-district level.

9.1.2.1 General Information

14% of HHs are headed by women. This percentage is significant in Bani Muslim Mikhlaf/division then Al-Jabjab which is an indication of potential protection issues of female headed households.

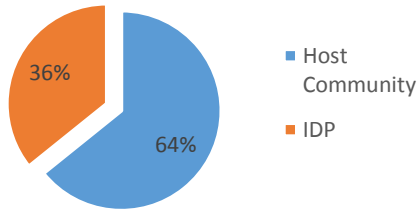


Almost 13% of the interviewed samples are people with disabilities. The table below show the district of people with disabilities, Children under 5 years old, PLW, and Adult over 60 years old:

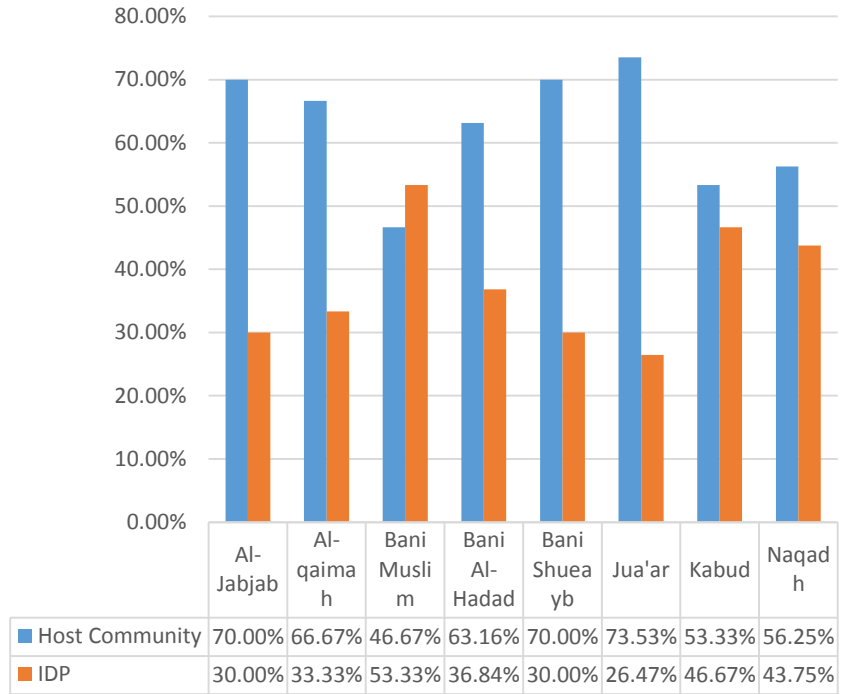
| Family | Children under 5 years old | Pregnant / lactating women | Adult over 60 years old | Person with disability |
|--------------------|----------------------------|----------------------------|-------------------------|------------------------|
| Female | 7% | 3% | 4% | 3% |
| Male | 34% | 17% | 21% | 10% |
| Grand Total | 42% | 20% | 25% | 13% |

35.78% of the interviewed samples were IDPs where 18% of which are hosting other IDPs families. 32% of the remaining 64.22% interviewed samples were host community HHs hosting IDPs in their houses.

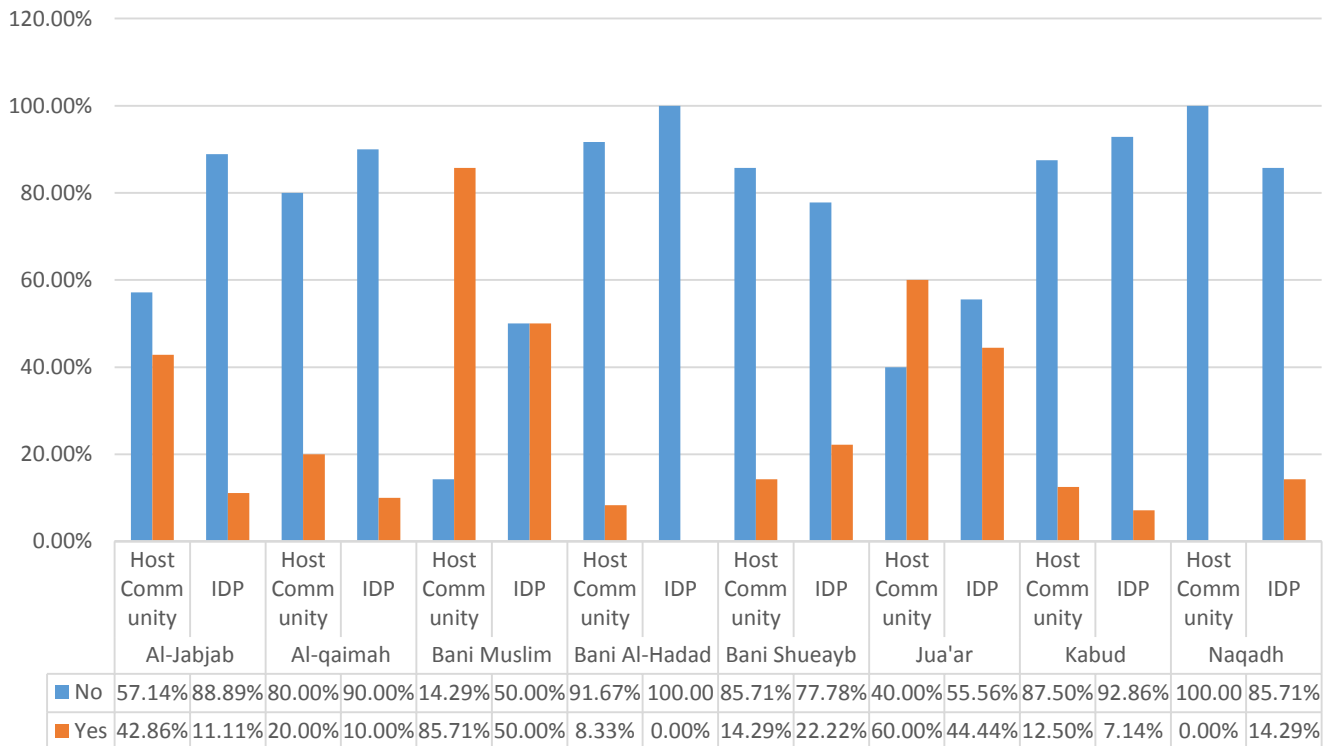
Residence stauts (district level)



Residence stauts (Mikhlaf level)

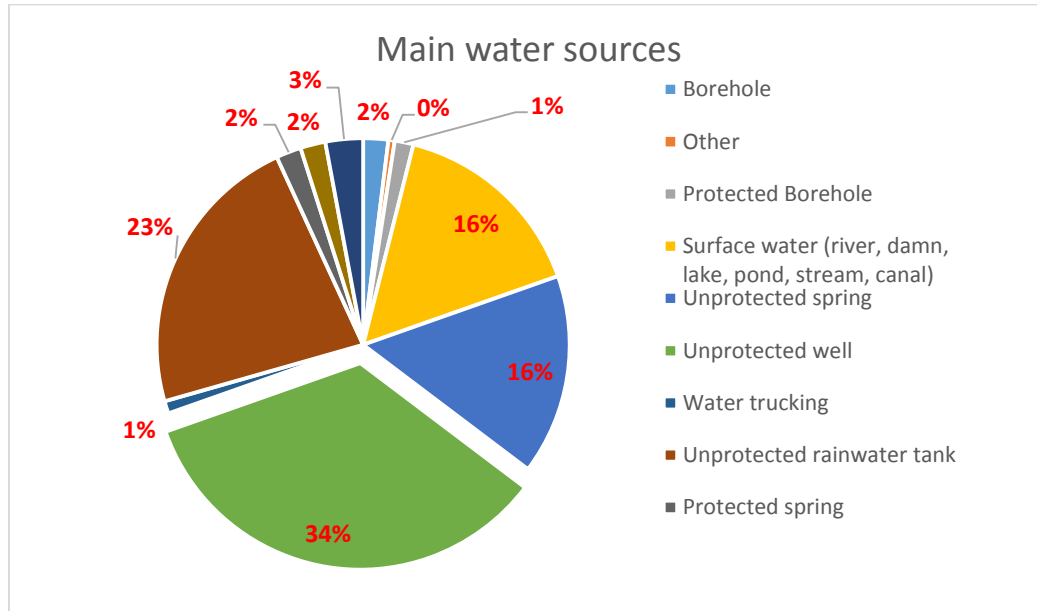


Residence stauts

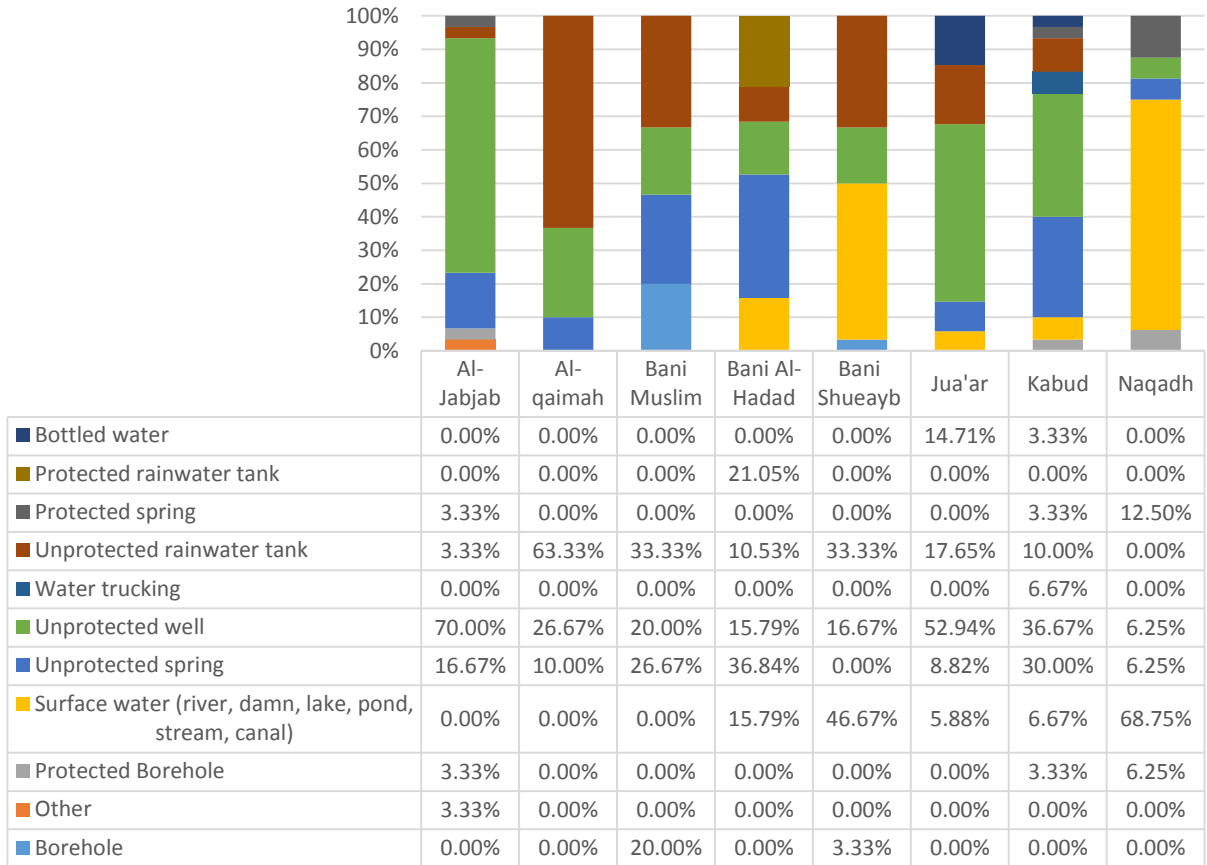


9.1.2.2 Water

It was concluded from the obtain data and results of the analysis that the main water source in the district is unprotected wells 34%. The highest percentage of people depending on unprotected wells mainly are in Al-Jabjab Mikhlaf and Jua’ar Mikhlaf respectively as shown in the sub-district figure below:



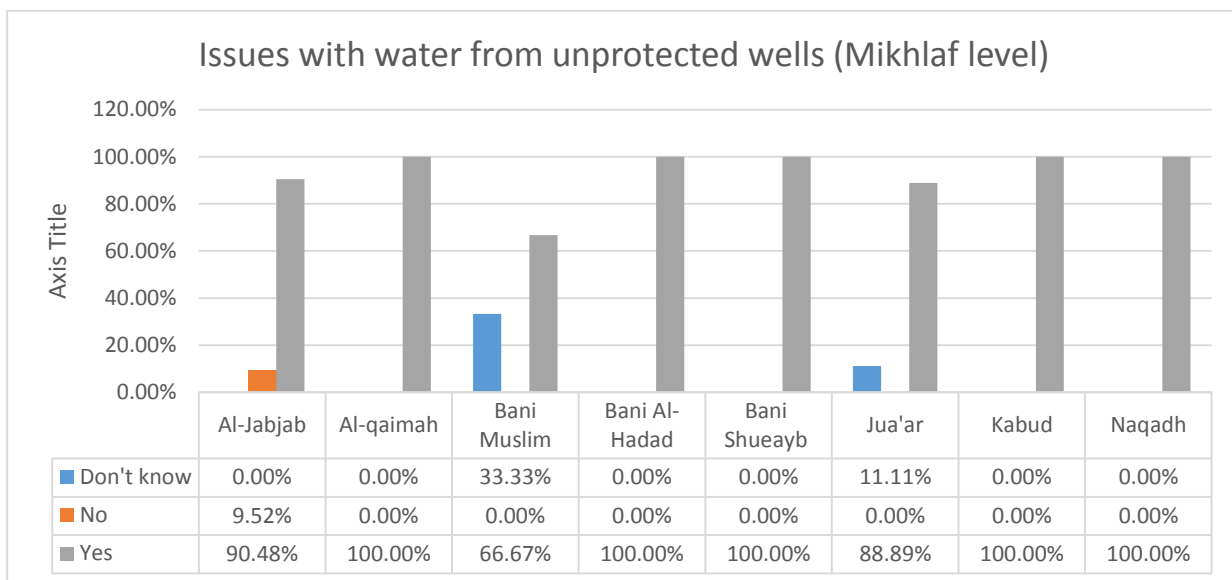
Main water sources (Mikhlaf level)



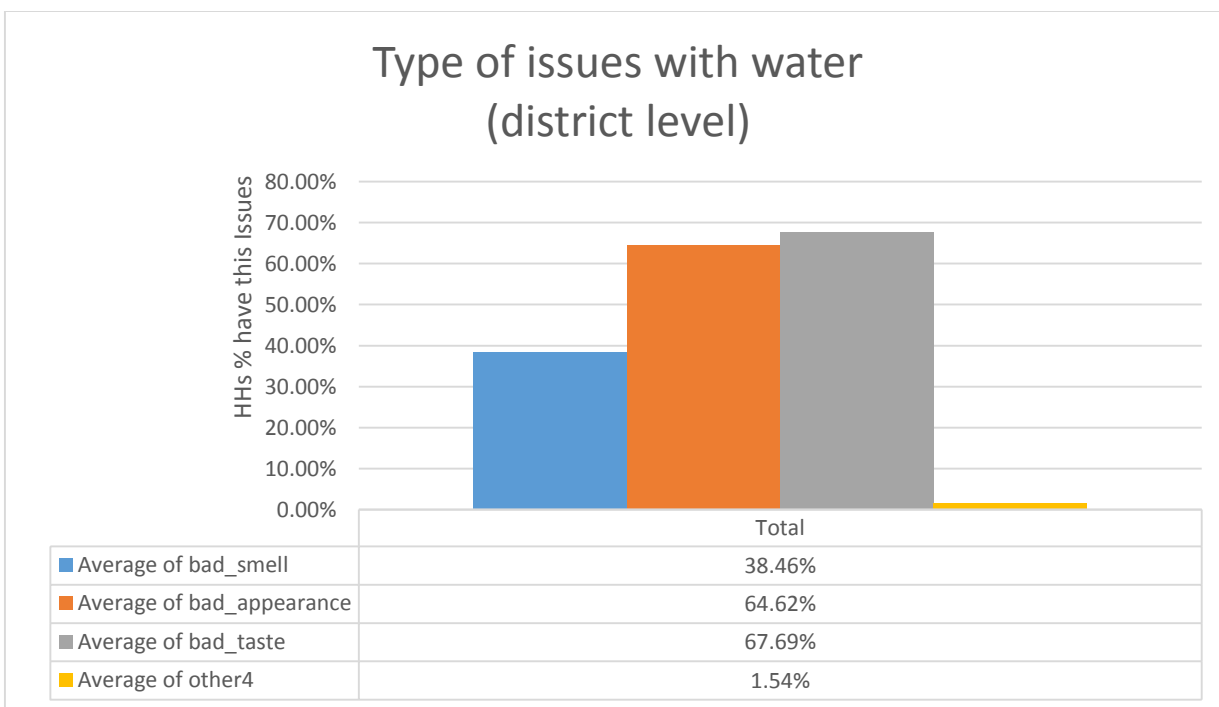
93% of people reported that they have issues with the water they obtain from wells in terms of smell, color and taste. This was concluded when filtering the data and analyzing those depending mainly on unprotected wells as a main source for drinking water. The below figures show this in more details:

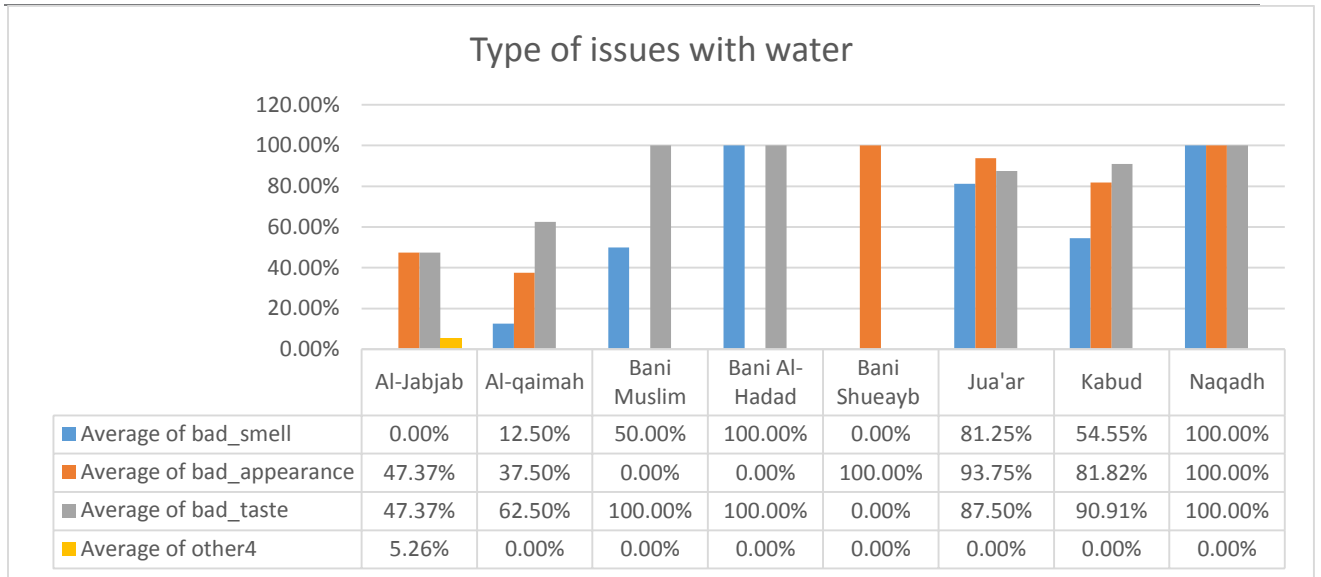
Issues with water from unprotected wells (district level)



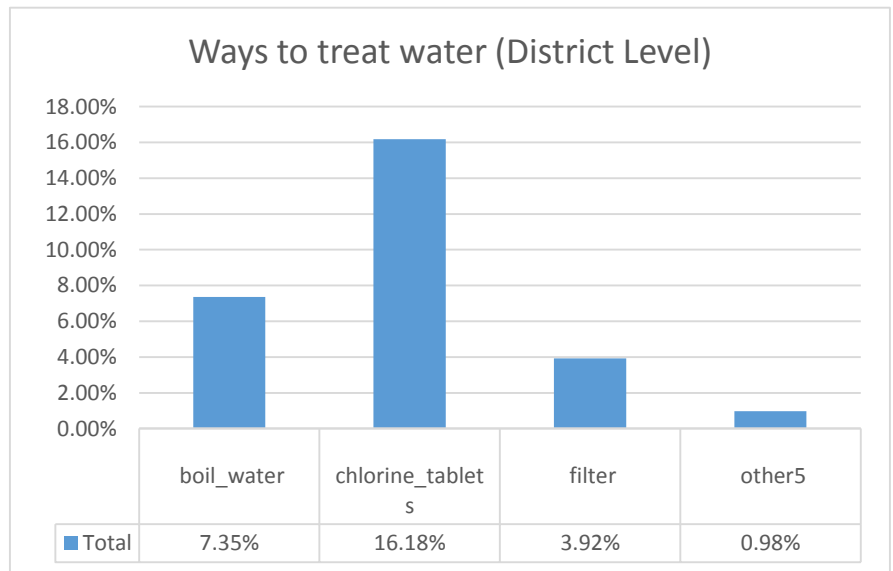
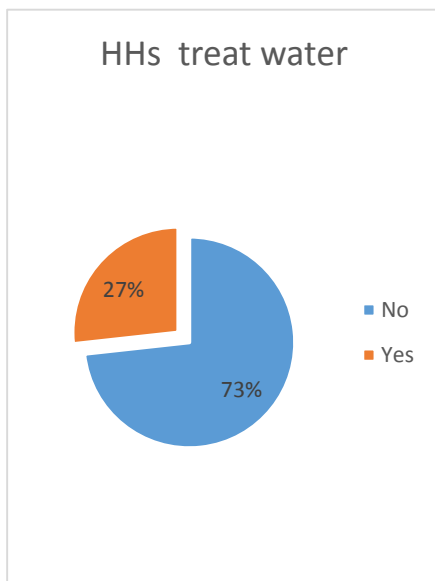


The taste and appearance are the main two issues with un-protected wells' water in the district.

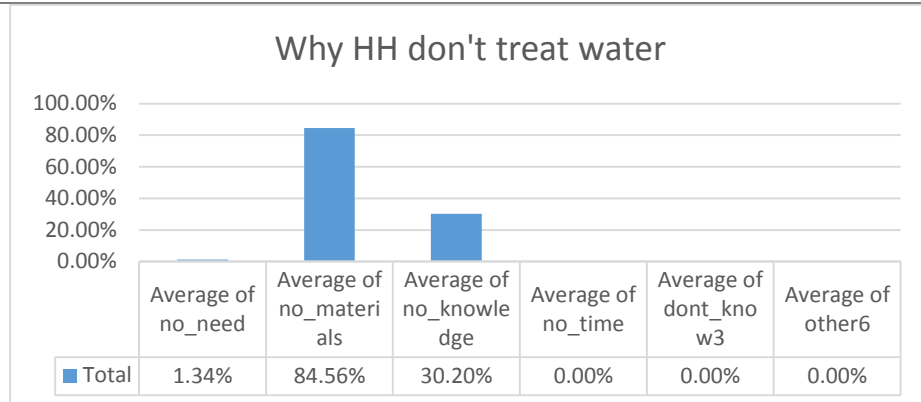




73% of HHs in the district don't treat their water mainly due to lack of treatment materials (84.56%) and lack of knowledge (30.20%). Only 27% are treating their drinking water using: water filters (14.55%), chlorine tablets (60%), and boiling water (27%). This is an indication for the need for the water filters and chlorine tablets as a method for interventions to respond to the water treatment need.

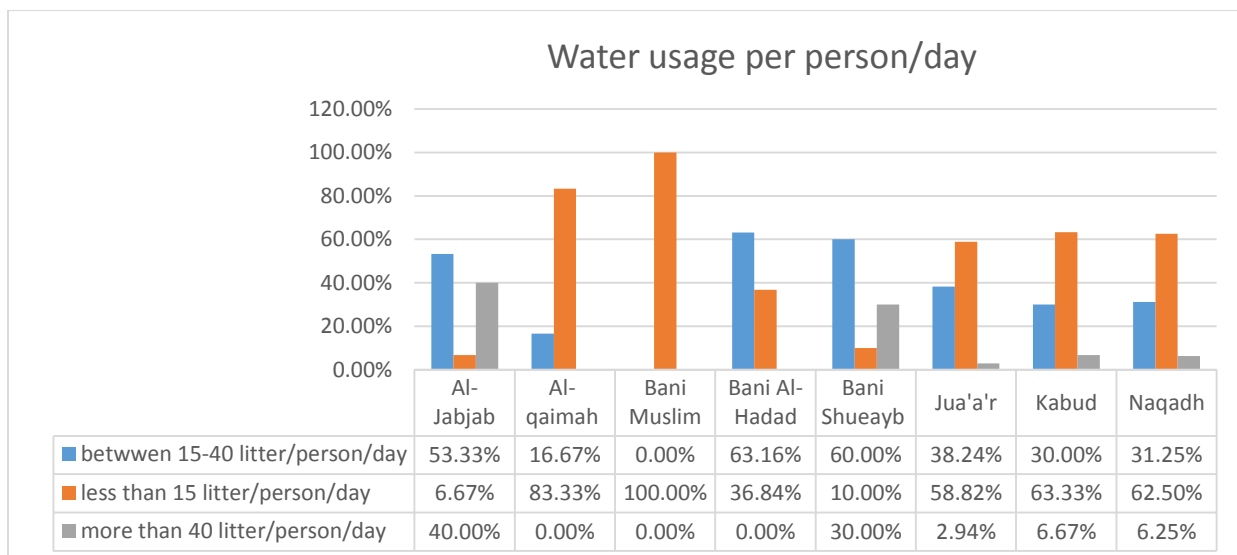
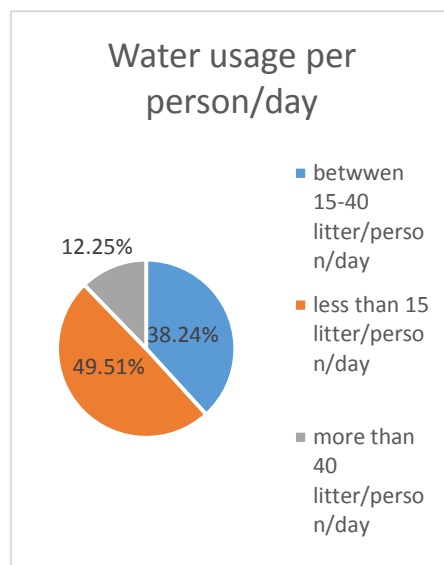


The need for awareness and water filters and chlorine is very obvious in a district level.

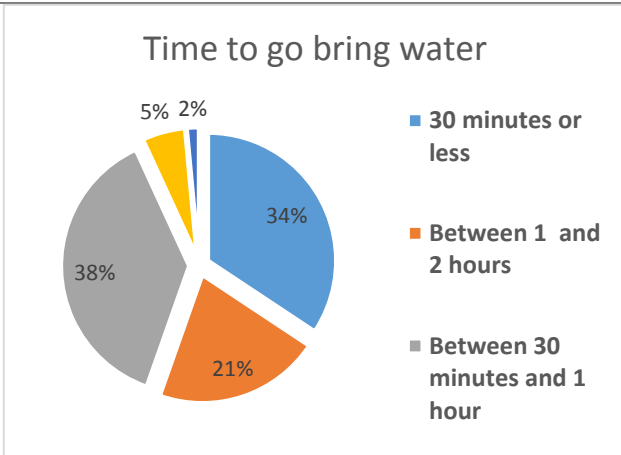


The average person uses from 15-40 liters of water per day according to sphere standards. In a district level, 49.51% of HHs are using less than 15 litter/person/day and 38.24% of HHs use between 15-40 litter/person/day which is much less than the minimum sphere standards. Only 12.25% of HHs use more than 40 litter/person/day. This means that the whole district is in acute need of water supply.

In a sub-district level, 63% of HHs, 60% HHs and 53% HHs respectively in Bani Shueayb, Bani Muslim, and Al-Jabjab Makhaleef and use less than 15 litters/person/day.



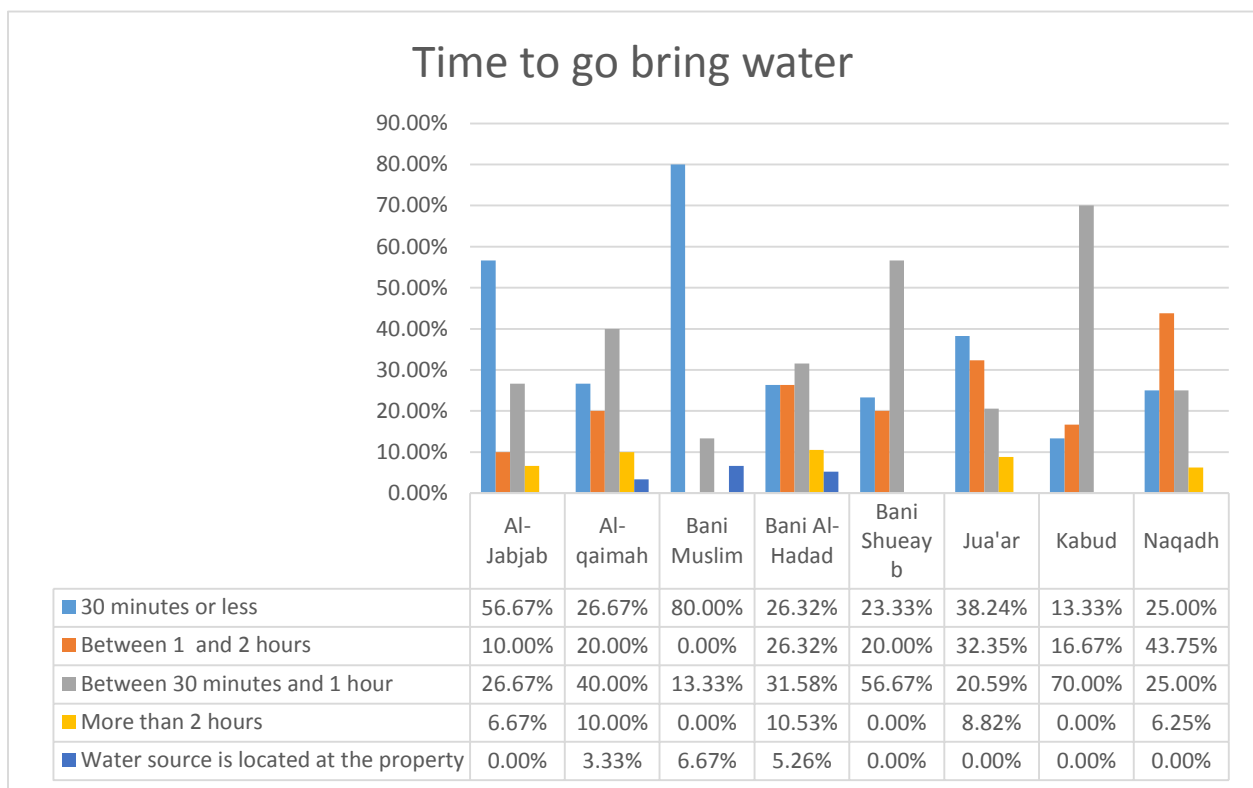
In a district level, HHs spend a lot of time to bring water. Women and children are the responsible HHs members for fetching water. In a district level, only 34% of HHs spend less that 30 minutes to bring water while 21% of HHs spend 1-2 hours to bring water and 38% spend between 30 minutes and 1 hour to bring water.



In a sub-district level, a significant percentage of HHs in each sub-district spend between 30 minutes

to 1 hour to bring water from the available water sources.

In Kabud Mikhlaf, 70% spend 30 minutes of les to bring water,



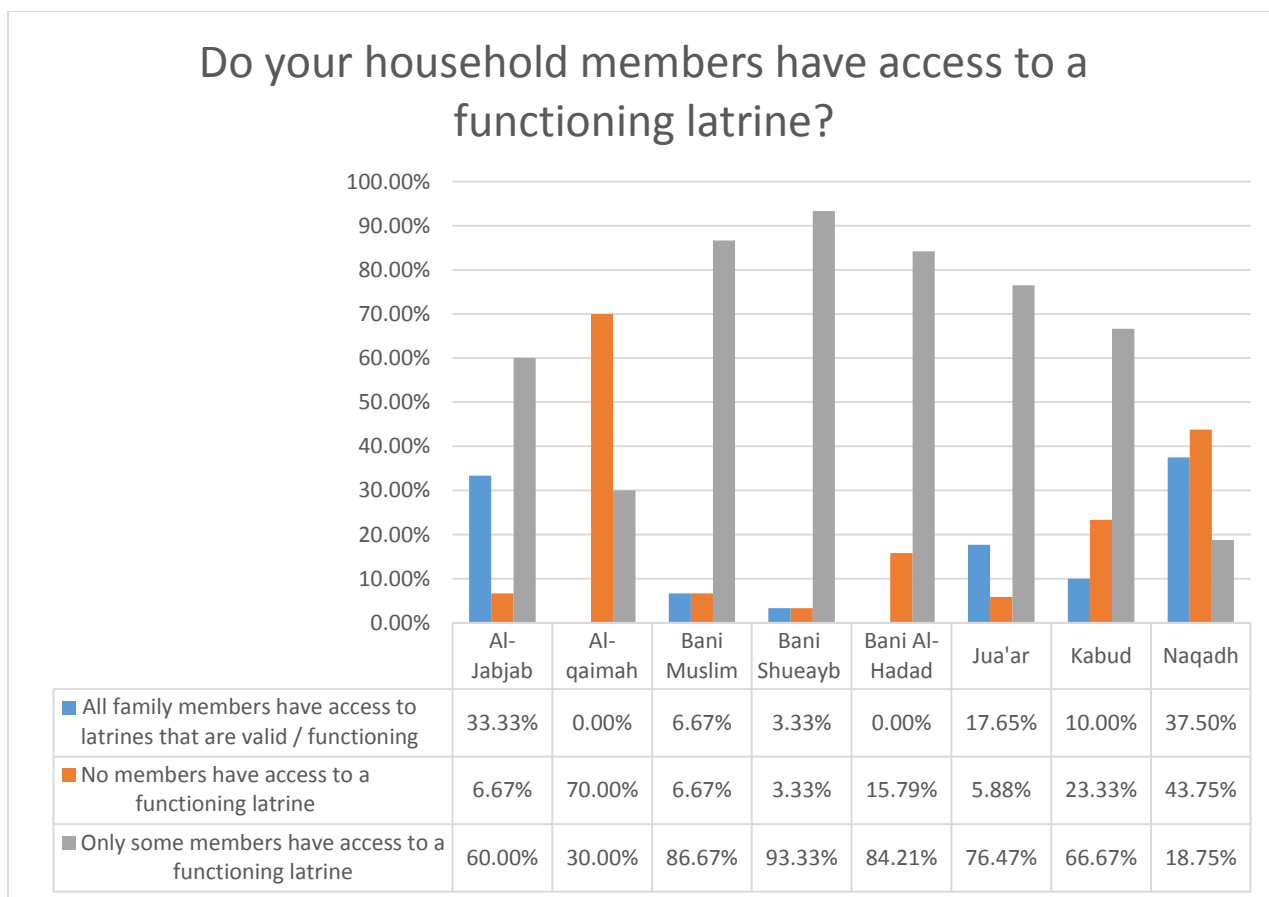
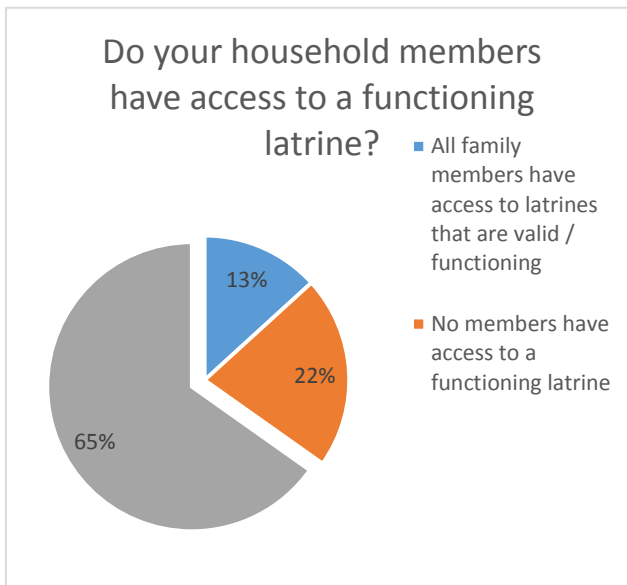
64% of HHs have a problem with collecting the water in terms of far distance and queuing time.

80% of HHs lack enough water for HH’s needs such as cleaning and other uses, and they adapt by reducing drinking water 35% of HHs, reducing hygiene water 31%, and reducing cleaning water 32%.

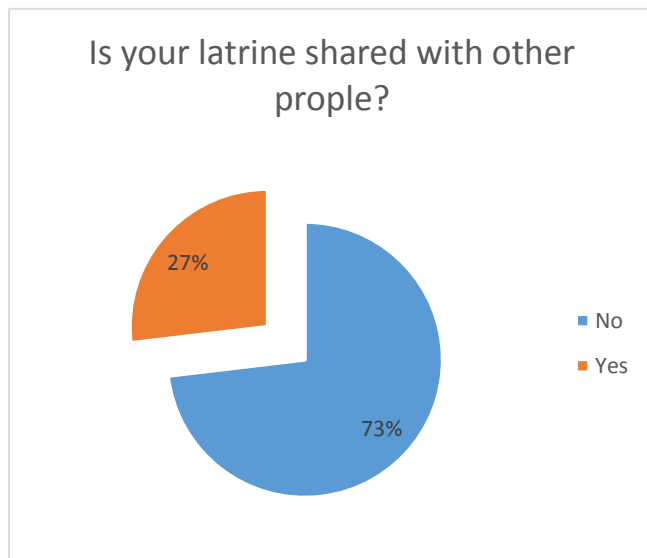
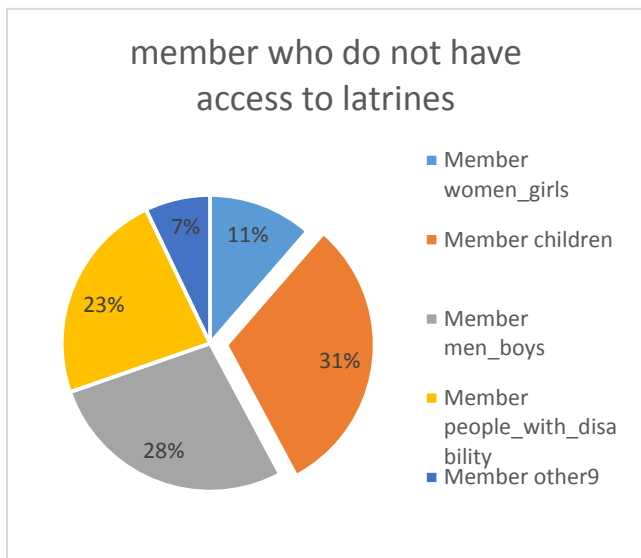
9.1.2.3 Sanitation

In a district level, 22% of HHs don't have access to functioning latrines while 65% indicated that only some members of their families have access to latrines. Only 13% have enough latrines in the whole district.

In a sub-district level, the acute need is obvious in Al-qaimah Mikhlaf where 70% of the households have no access latrines then Naqadh and Kabud Makhalf. Some members of households have access to functioning latrines in Bani Shueayb, Bani Muslim, and Al-Jabjab Makhalf with 93%, 86% and 60%.



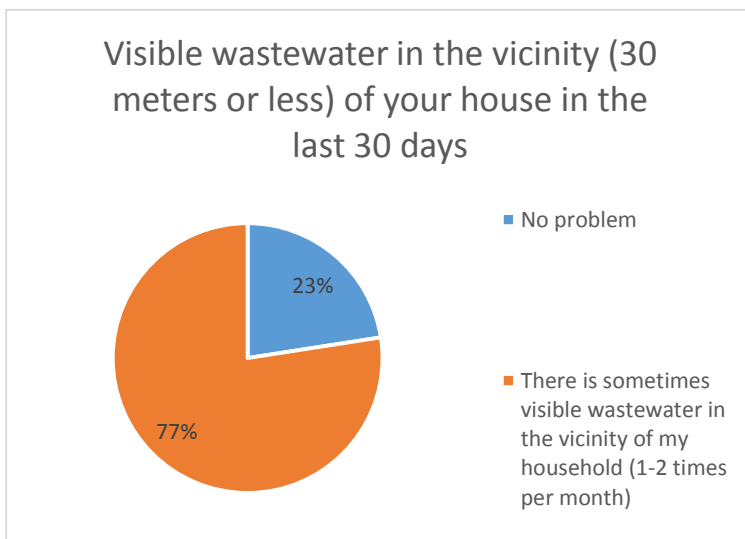
In district level, 73% of HHs who have access to latrines shared their latrines with others. 31% of household’s members who do not have access to latrines are children then persons with disabilities with a percentage of 28%



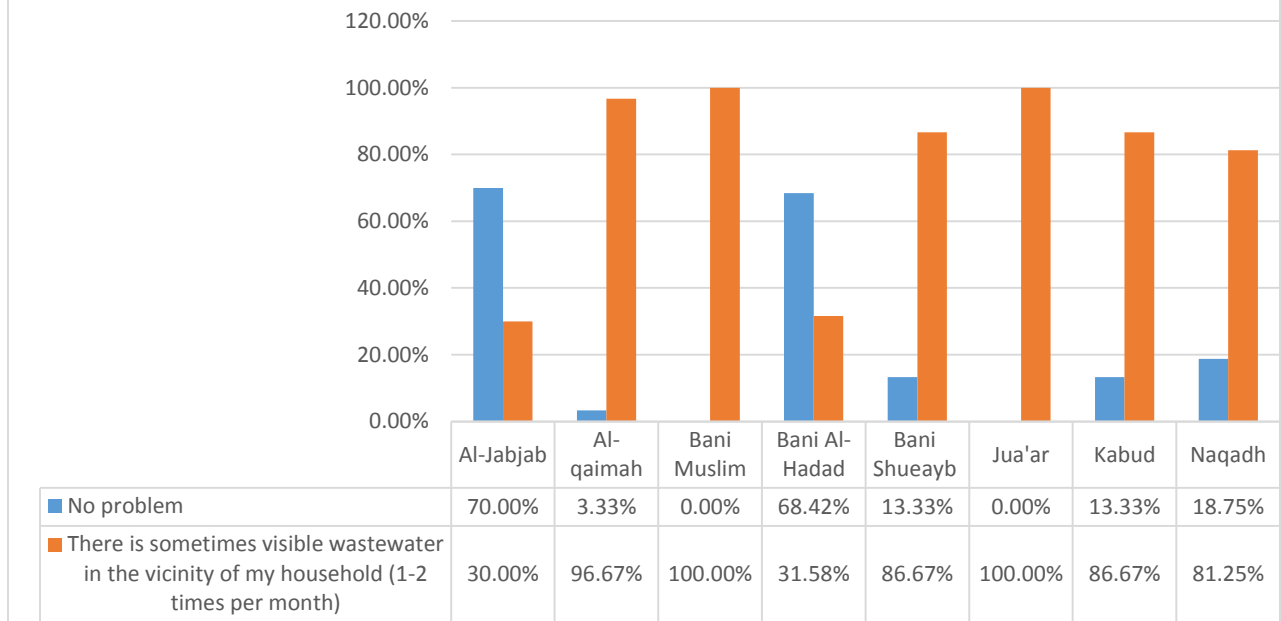
No water and lack of privacy are the main problems that face most households.

In district level, 27% of HHs use flush latrine to the open (unimproved), 28% use pit latrine-open/without slab (unimproved) and only 18% use pit latrine-covered/with slab (improved).

Waste water and sanitation is a main issue in Wusab Al-Aali district. In a district level, in a district level, 77% of households have issues with waste water around their houses and environment. It is very obvious that Bani Muslim and Jua’ar are the two main Makhalf most affected by the sanitation in in the open problem.

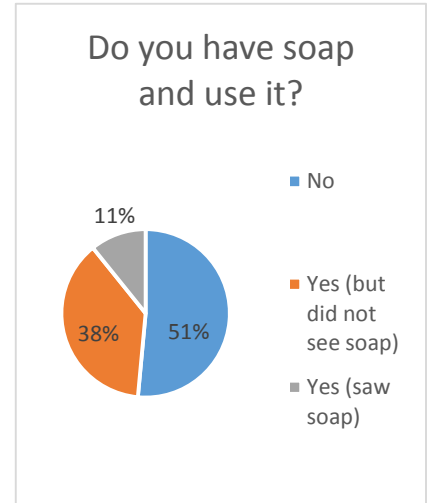
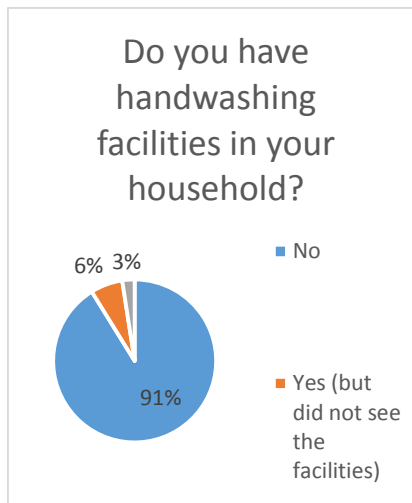


Visible wastewater in the vicinity (30 meters or less) of your house in the last 30 days

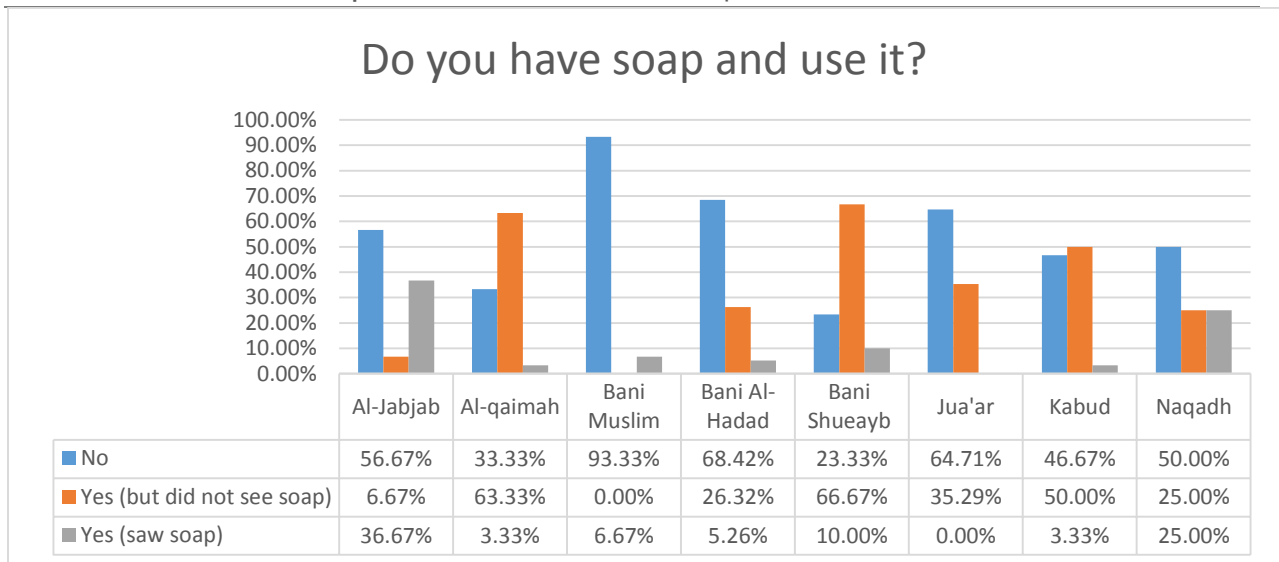


9.1.2.4 Hygiene

91% of HHs don't have hand washing facilities in a district level. 51% of HHs don't have soap and 38% said that they had soap, but the interviewer did not see it. The main reason for not having soap for 43% of HHs was because they couldn't afford it.

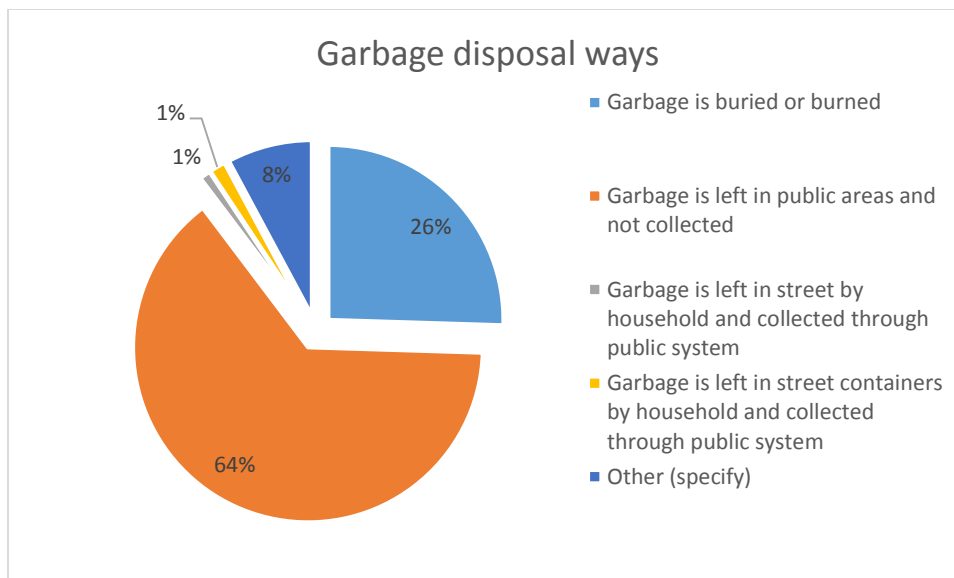


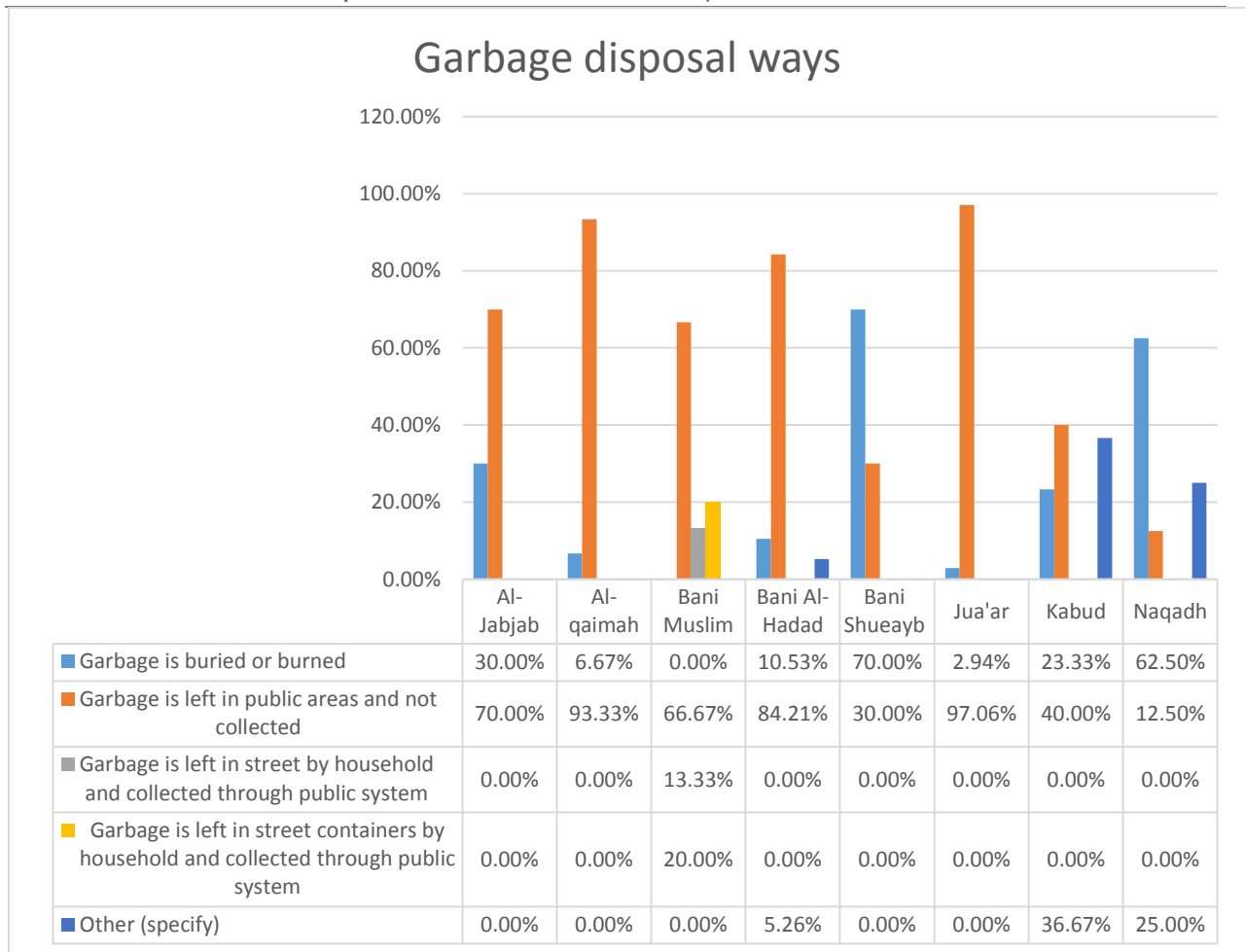
In a sub-district level, the analysis show that Bani Muslim, Bani Al-Hadad, and Jua'ar Makhalf are the two sub-districts where 93% .68%, 64% of HHs respectively don't have soap at all in their houses.



In a sub-district level, Jua’ar and Bani Al-Hadad is the most affected Makhalf of the garbage problem and thus it is recommended to have cleaning campaigns as part of the intended intervention.

64% of HHs leave their garbage in public areas.





88.7% of HHs did not receive any hygiene promotion messages in the last year.

9.1.3 FGDs

The field enumerators conducted 33 FGDs in 62 sub-districts of Wusab Al-Aali. The FGDs data was analyzed and they have confirmed the finding of the individual HHs interviews findings. The following are the highlights and important notes concluded from people’s discussions:

- The main water source for most of the HHs is also unprotected rainwater tanks which were used for the last 30 days by 43% of the FGDs participants then surface water with percentage of 33%
- 79% of participants confirmed that people are having issues with the taste, smell, and appearance of the water they obtain.
- 61% of participants confirmed that most of people don’t treat drinking water. Almost 21% of the households use boiling water as a mean for treatment and some of them use water filters for water purification. The main reason for not treating water was due to lack of required materials or knowledge of how to treat it.

- It was stated by the community in general that access to water is changing since sometimes it is easy to reach water sources and sometimes it is not.
- People use different coping strategies to adopt with lack of drinking water. A significant percentage of people go to further water point than the usual.
- 91% of participants feel the activity of fetching water (distance and queuing time) constitutes a problem for members of the community.
- 43% of participants stated that minority of the population does not have access to a latrine ($\pm 15-30\%$).
- 70% of participants stated that garbage is left in the open and most of areas of the community have many piles of garbage everywhere on the surroundings of houses and public areas.
- 61% of participants stated that most areas of the community/site have constant sewage problems (visible wastewater constantly in the streets).

9.1.4 KIIs

RDP WASH engineers conducted two Key Informants Interviews in the district with a local council member and doctor in the Epidemiological surveillance of the district. Below is a summary of the conducted KIIs and their highlights:

Challenges in accessing Water, Sanitation and Hygiene (WASH) services

- The main challenges experienced by men, women and children in the district in accessing water:
Water sources are not enough for drinking and other daily uses of HHs in the district, unclean and exposed to contamination.
- The main challenges experienced by men, women and children in this district related to sanitation:
The number of latrines in the district is very limited and most of the villages don't have latrines. Almost all of the available latrines are not safe especially for women. There are no doors or roofs for these latrines. Due to this issue, people have adopted by defecation in the open which is a big problem in the district. The existed latrines are not rehabilitated, are considered as a source of contamination, and there is lack of privacy.
- Risks while accessing Water, Sanitation and Hygiene services for men, women, and children:

Water sources are exposed to contamination during collecting water in the rainy seasons where waste water enter the water channels leading to contamination in water springs and dam. Sewage waste accumulates with rainwater into the water source. Other contamination can occur in:

1. Protected water ponds: they are exposed to contamination during fetching water. Some jerry cans are also used in latrines, other are packed on animals, and the rest of them are placed on the ground and then used for fetching water. All these factors cause water pollution.
2. Unprotected water ponds: they are subject to contamination all time, also some people leave garbage there.
3. Springs: for the protected sources, the contamination happens when unclean jerry cans are used. While the unprotected springs, unclean jerry cans and waste water are the main reasons for the contamination.

To solve the problem of water source contamination, the treatment of open sewage should be considered during any intervention through the digging pits and cover them. Also by distributing water filters and jerry cans.

Impact of Water, Sanitation and Hygiene (WASH) services

The impact of the current status of basic Water, Sanitation and Hygiene (WASH) services in the district on men, women and children:

With the increase in the number of population and the scarcity of water resources, water amount has been decreased. Lack of water has also led to poor hygiene practices.

There are no hygiene awareness sessions or water treatment methods trainings so all households have a water pollution problem. The low level of awareness has led to a lack of use of hygiene items like (soap, menstrual pads, water containers...etc.).

Coping mechanisms

Lack of water negatively affects the proper use of water in drinking and cleanliness; therefore, people are coping with situation by reducing water consumption or go to further water sources to fetch water.

There are a number of protected latrines; however, they are few. Therefore, some people use unprotected latrines or open defecation.

Menstrual Hygiene Management

- Most of HHs cannot afford buying the basic hygiene items of soap and detergents.

9.1.5 Health Section

Water /Sanitation/ Hygiene borne disease prevailing – Cholera Cases:

According to the epidemiological situation at district level highly risk for RDT positive during January 2019, Wusab Al-Aali district was one of the top 10 districts with high confirmed Cholera cases. In this assessment, Cholera cases were included and Water /Sanitation/ Hygiene borne disease numbers were gathered. Information was gathered from health facilities and the Rapid Response Team Reports.

- a) Below a table show number of cases Water /Sanitation/ Hygiene borne disease prevailing – Cholera Cases from health facilities:

| Mikhlaf Name | Bani Muslim | | | | Bani Shueayb | | | | Al-Jabajb | | | Kabud | | | Naqadh | | Al-qaimah | |
|------------------------------------|------------------------------------|-----------------------|------------|-------------|--------------|-----------|----------|-----------|-------------|---------------|---------------|-------------------------------|---|----|-----------------------|-----------|-----------------|------------------|
| Sub-district Name | Al-dayadir Almuraba' Qaeidah | Al-sulul Kalah Wa- | | | | | | Thi Hamd | Al-shuraka' | Ajbar Sawafil | Bani Al-Hadad | Zajid Al-Ajbar Al-Aawl | Shjib Gharbii Kabud Bani Al-Waely | | Bani Rabieah | Al-Sanah | Bani Shainif | Jabal Matahan |
| Location | Qaeidah | Samrah | Al-Raiedee | AL-Shaberah | Al-Mawasatuh | Al-Jadalu | Thi Hamd | Al-Barjah | Rbwa | Al-Dan | Al-Aqar HC | Bani Al- Waely Al-Qharf | Sharqi Kabud | | Maghrabat Al-Wasat | Musina'ah | Al-Haljom HU | |
| Number of Cholera Suspicious cases | | | | | | 5 | | | | | | | 60 | | | | 500 | 300 |
| Number of Cholera Suspicious cases | | | | | | 17 | 10 | | | | | | 45 | | | | | |
| Diarrhoea | Affected | <5 | 150 | 76 | 80 | 15 | 16 | 5 | 74 | 48 | 30 | 49 | 110 | 45 | 77 | 1250 | 640 | |
| | | >5 | 85 | 94 | 70 | 61 | 23 | 4 | 85 | 19 | 36 | 28 | 250 | 25 | 181 | 720 | 313 | |
| | Deaths | <5 | 0 | 2 | | | | | | | 57 | | 15 | | | | 7 | 327 |
| | | >5 | 1 | 3 | | | | | | | 37 | | 8 | | | | | 302 |
| Acute water Diarrhoea (AWD) | Affected | <5 | 50 | 60 | 50 | 6 | 7 | | 32 | 21 | 20 | 15 | 80 | 63 | | 800 | 314 | |
| | | >5 | 20 | 121 | 20 | 3 | 11 | | 27 | 15 | 26 | 10 | 150 | 17 | | 633 | 170 | |
| | Deaths | <5 | | 4 | 2 | | | | 1 | 1 | 27 | | 6 | | | 10 | 193 | |
| | | >5 | | 5 | 7 | | | | 1 | | 16 | | 5 | | | 3 | 134 | |
| Acute respiratory infection (ARI) | Affected | <5 | 100 | 137 | 115 | 75 | 3 | 10 | 75 | | | 70 | 60 | 75 | 93 | 920 | | |
| | | >5 | 50 | 492 | 134 | 150 | 8 | 6 | 55 | | | 100 | 40 | 40 | 136 | 2420 | | |
| | Deaths | <5 | | | | | | | | | | | | | 3 | 4 | | |
| | | >5 | | | | | | | | | | | | | 5 | | | |
| Malaria | Affected | <5 | 20 | 11 | | | 7 | 3 | 18 | 8 | 1 | 9 | 45 | 5 | | 2400 | 354 | |
| | | >5 | 25 | 32 | 12 | | 13 | 2 | 81 | 11 | 1 | 28 | 80 | 8 | | 3330 | 123 | |
| | Deaths | <5 | | | | | | | | | 2 | | | | | 14 | 98 | |
| | | >5 | | | | | | | | | 1 | | | | | 8 | 73 | |

| | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|----------|----|-----|-----|-----|----|--|--|----|---|--|----|--|--|--|--|--|-----|-----|----|
| Dengue | Affected | <5 | | | | | | | | | | | | | | | | 1 | 190 | |
| | | >5 | | | | | | | | | | | | | | | | | | 35 |
| | Deaths | <5 | | | | | | | | | | | | | | | | | | 78 |
| | | >5 | | | | | | | | | | | | | | | | | | 64 |
| Any other water borne diseases | Affected | <5 | 30 | 65 | 90 | 2 | | | 1 | 5 | | 25 | | | | | | 400 | | |
| | | >5 | 150 | 235 | 250 | 25 | | | 21 | 8 | | 19 | | | | | | | 320 | |
| | Deaths | <5 | | | | | | | | | | | | | | | | | 10 | |
| | | >5 | | | | | | | | | | | | | | | | | 1 | |

From the table below, it is obvious that some districts have a high number of disease related to water/sanitation/hygiene such as: Bani Shainif and Jabal Matahan sub-districts in Al-qaimah Mikhlaf, Shjb and Gharbii Kabud sub-districts in Kabud Mikhlaf, Bani Al-Hadad sub-district.

b) Below are results from RRT evaluation study in affected areas:

| Mikhlaf/ Division Name | Al-Jabajb | Al-Qaimah | Bani Muslim | Jua'a r | Bani Al-hadad |
|--|---|---|-------------|-----------|---------------------|
| Sub-districts | Ajbar Sawafil | Al-kalibin Al-Janubiu Halbah Wa-Almeashar | Qaeidah | Bani Hafs | Bani Al-Hadad Noman |
| Reasons of Cholera Outbreak: | - Unprotected water source, - No hand washing, - 45.6% of cases use open defecation - Waste water. | | | | |
| Most places with epidemic: | | | | | |
| Algharbiu Alaali, Bani shanif, Bani namar, Ajbar sawafil, Alshuraka', Alhitari, Eiraf, Bani alhadad, Alkalibin aljanubiu, Noman, Alshiraqiu, Qaeida, Bilad alsadah, Ajbar Awaly, Habar, Yaris sun districts. | | | | | |

9.1.6 Recommendations

After deep analysis from the different data sources and analysis and demonstration above, we have concluded the following recommendations for the kind of activities and services to be provided in the intended intervention:

- Rehabilitation of water scheme in the sub-district of Al-Jabjab Mikhlaf “Al-shuraka' and Ajbar Sawafil sub districts where the main water sources are (unprotected wells), Al-Qaimah Mikhlaf “Bani Shainif , Jabal Matahan, Al-kalibin Al-Janubiu, and Halbah Wa-Almeashar sub-districts where the main water sources are (Unprotected rainwater tanks), and Bani Al-Hadad Mikhlaf “ Bani Al-Hadad sub district” where the main water source is (unprotected springs).
- As a first stage (pilot) and extend the intervention to other sub-districts, it is recommended to intervene as integrated WASH package in sub districts where there are Health services that are supported by NGOs such as: Kabud Mikhlaf where 63% of HHs use less than 15Lit/person/day.
- Provision of communal water tanks/ install water points to be linked with the water scheme which will be rehabilitated to be in closer locations to beneficiaries.
- Provision of water filters for HHs with cholera cases or suspicious cases/ AWD for treatment of drinking water.

- Implement a water quality tests.
- surveillance and mapping of water sources
- Construction of family latrines and rehabilitation of existing latrines in Al-Qaimah Mikhlaf Al-Qaimah Mikhlaf “Bani Shainif , Jabal Matahan, Al-kalibin Al-Janubiu, and Halbah Wa-Almeashar sub-districts as first stage of intervention.
- Distribution of basic and consumable hygiene kits for HHs
- Conduct cleaning campaigns in the selected sub-districts
- Distribute hygiene kits to selected HHs.

10 Photos



Photo (1) Contaminated water sources (unprotected water sources)



Photo (2) latrines to the open



Photo (3) Women go to obtain water – RRT photo



Photo (4) Pit latrines digging by HHs – RRT photo

11 References

Yemen Humanitarian Needs Overview 2019

ISAC – Operational Guidance for Coordinated Needs Assessments Handbook

WASH Cluster Needs Assessment tools and Guidelines - January 2019

2019 HNO/HRP

Minimum Standards in Water Supply, Sanitation and Hygiene Promotion -The sphere project Handbook

RRT report