[Duhok governorate/ Gawilan refugee camp (sector F)/ Kurdistan Region of Iraq]

Emergency WASH KAP Survey Report (Knowledge, Attitude and Practice)

[February, 2020]

[Peace Winds Japan]

[Iraq, Kurdistan Region, Duhok, Masike qtr. Z11/27/20/0, 1, 2, 3]

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Abbreviations and Acronyms

KAP  Knowledge, Attitude and Practice
WASH  Water and Sanitation Hygiene
UNHCR  United Nations High Commissioner for Refugees
PWJ  Peace Winds Japan
BRHA  Bored of Relief and Humanitarian Affairs in Duhok
KRI or KRG  Kurdistan Region of Iraq
CM  Camp management
HH  Household

I. Background and context

The military operation in northeast Syria resulted in the force displacement of over 1 million persons. Over 21,500 Syrians fled to the Kurdistan Region of Iraq and most have been accommodated in Bardarash and a new sector (sector F) in Gawilan camp. Bardarash camp was a former IDP camp that has been re-opened to accommodate newly arrived refugees. Currently hosts around 8,070 individuals/1,685 families. Gawilan Sector F was constructed to further accommodate additional refugees and now hosting approximately 296 Families living in tent shelters.

UNHCR requested to conduct a Rapid KAP Survey for Bardarash and Gawilan camp (Sector F) to determine the WASH needs in both locations. The Rapid KAP survey interviewed total members of 120 households in both camps, 60 HH per each camp selected by random selection according to emergency KAP survey guidance for Iraq.

II. Survey objectives

The main objective of this rapid KAP survey is to rapidly collect data in WASH regard, identify weather the services provided met the standards or not, as a mean of verification during emergency? What are areas of concerns (knowledge, attitude and practice)? Which will help in plan, implement WASH related projects, and facilitate understanding, action and required projects, as well as pose problems and effectiveness or create barriers development efforts. These surveys may be used to identify needs, problems and barriers in program delivery, as well as solutions for improving quality and accessibility of services. The collected data enable to set project priorities, estimate resources required, to select the most effective communication channels and messages, to establish baseline levels and measure change that results from interventions, and for advocacy needed.
Methodology

In 2018 and 2019 UNHCR through PWJ done fruitful KAP surveys in Domiz1 (2018 and 2019), Domiz2, Gawilan and Akre refugee camps, and in September, in 2019 a detailed training of WASH KAP survey in Erbil was given by UNHCR obtained the knowledge how to conduct and analyse the survey.

UNHCR Rapid WASH assessment is adapted to quickly assess water, sanitation, and hygiene services, 60 HHs per each camp / site are taken as samples according to Rapid KAP methodology. KOBO tool is used to collect data, data analyser of Rapid KAP is used to analyse data... etc.

The questionnaire and manual of emergency KAP survey shared by MDC and reviewed by PWJ and UNHCR.

Survey area and sample frame

During the process of the survey in both camps (Gawilan sector F, and Bardarash refugee camp) beneficiaries the first step was to obtain a recently updated camp population list and layout from BRHA information unit as well as camp management. Newly arrived families in those locations were not considered because the aim of KAP survey questionnaire is to collect as much information the refugee knows. We have many section that are applied in family level as well as in single shelters level, even if the respondent is a male and has a family he would know more about WASH sections more than a person who lives only by his own since these singles mostly spend most of the time at work.

Sampling size and methodology

The sample selection for the 60HH emergency KAP, which is 60 HH systematic method. Following a random start point from the population as the first sample, and then choose subsequent households using a constant skip value; for sector F in Gawilan camp 315 shelters / 60 = ~ 5) until the draw spans the entire camp for a total sample size of 60 HH.

The samples selected as to pass 5 shelters, and select the sixth shelter, covering all plots in the sector, even single plots, and skipping newly arrived families/ shelters

Ethics and consent

Ethics approval was obtained from BRHA in which is the main administrative focal point of all camps in the KRI. As well as to ensure gender balance and practicing protection guidance teams formed of one male and one female staff. While conducting the survey, teams made sure to introduce themselves, project review and goals, moreover, obtain their consent acceptance to answer the questions.

Data collection and quality control measures

To control the quality, of the collected data, data collectors shared concerns with relevant staff of KAP team; however, IT responsibility to check the data on daily basis for any human error, or technical problem. Adding to the fact, the assigned engineer monitored the process of data collection on the ground.
Data analysis plan

After conducting data collection of the survey of each camp, data cleaning and data analysis were performed, in order to have qualitative data, and extract useful information in which decision of needed intervention can be made upon.

III. Key results and findings

The major findings according to the main indicators for Gawilan Refugee Camp (Sector F) which was conducted on 10th and 16th of February are;

Gawilan Camp (Sector F) charts

Water supply

Indicator #1. Average litters of potable water/per person/per day collected at HH level, which calculates the quantity of protected and potable water of the HH, taking into account only water from improved/potable water sources (options 1-7 at question "SOURCE") and when the water is collected and stored in protected containers. It then divides this volume of the household by the number of people in the household to calculate the average for the household (litres/person/day). It includes all families that gave consent - even if they didn’t collect potable water the day before (=yesterday). Does the household have rather container(s) or water storage tank(s)?

All the 60 visited households reported to have container(s) to be able to fetch water at the water source, since some refugees claimed the water trucking comes 2 times per day in day time and during the evening, while others mentioned water trucking comes 2 times per week. And according to the collected data from the refugees, it shows only 1.7L of potable water is collected per day.
What is the principal water source for domestic use for members of your household?

- Tanker truck from unprotected water source: 2%
- Tanker truck from protected water source: 90%
- Piped connection to house (or neighbour’s house): 3%
- Other: 5%

Figure 01 90% of the respondent use water from protected tanker truck, while 2% use it from un-protected tanker truck, and only 3% use water from piped connection.

Average L/p/d of potable water collected at household level

Figure 02 the map shows the 60 visited shelters potable water collection status, and only one of them is able to collected 20L water, while 5 in the borderline of 10 to 20L, and 54 collecting less than 10L water per household.

Indicator# 2 - % HHs with at least 10 L/p protected water storage capacity, computes the protected (in a container that is protected) storage capacity per person. Then it computes the percentage of those having at least 10 litters/person by diving it by the total number of persons in the sample that gave consent.
Includes all families that gave consent - even if they didn't collect water yesterday. We should in theory have evaluated their storage capacity anyways.

All the 60 visited households reported to have protected water storage(s) to be able to fetch water at the water source, since some refugees claimed the water trucking comes 2 times per day in day time and during the evening, while others mentioned water trucking comes 2 times per week.

**Figure 03** 27% of the respondents reported possession of 3 container to store drinking water, whilst 2% have 11 containers for storing drinking water.
Households with at least 10 litres/person of potable water storage capacity

Figure 04: The 60 visited households, only one of them reported to collect 10L of potable water per person, while the 59 households reported to have less than 10L of potable water storage capacity.

Indicator# 3 - Average distance to water point (in meters) for the 2% of HHs with longest distance, calculates how many HH would be included in the 2% (based on total number of HH surveyed). Then averages the distance for those HH. If less than 50 HH, then it returns the largest value only.

Is there a water source available directly on the premises (in the courtyard, close to the house)?

Don't know
No
Yes

Figure 05: Out of 60 sample household, 67% of them reported the lack of water source in their premises, while 32% reported the availability of water source in their premises, this goes back that water network was still under construction.
95% of the refugees in sector F of Gawilan camp reported to fetch their daily needs of water walking by their own foot, while only 5% using other means in the cases of distant water source. And they collect drinking water from 90% protected water truck, and 2% unprotected water truck, while only 3% collect water from pipe connection, since water network construction not finalized yet in some plots, and not operated yet.

And the distant to collect he water average is 2,400 meter as it calculated by each one minute of walking to 80 meters of distance.
Water treatment

Indicator #4 - % HHs collecting drinking water from protected/treated sources, this indicator is based on the main water source only (=using only the indicator "SOURCE"), it doesn't include all other sources. The percentage here is computed by including households using the following list of sources considered as protected/potable as their main source: 1. Public tap/standpipe; 2. Handpumps/borehole

Apart from the water that has been collected from your main water source, do you usually also buy bottled water for drinking or domestic use?

![Pie chart showing percentage of households buying bottled water](chart.png)

Figure 06 37% of the refugees are buying bottled water for drinking purposes, and 63% reported using the water they receive, since some refugees claimed that water is not drinkable due to over usage of chlorine which give water wared smell or taste

If so, how many litters of bottled water did you buy for your household last week (past 7 days)?

<table>
<thead>
<tr>
<th>Bought drinking water in litters</th>
<th>3</th>
<th>5</th>
<th>6</th>
<th>12</th>
<th>17</th>
<th>25</th>
<th>35</th>
<th>42</th>
<th>48</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bought drinking water in litters</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>10%</td>
<td>19%</td>
<td>19%</td>
<td>19%</td>
<td>19%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Figure 07 from the 60-sample visited household, 5% of them reported to buy around 48L of bottled water, 19% bought 12, 17, and 35L, while 14% bought at least 3L of bottled water during the last week
Sanitation

**Indicator# 5 - % HHs with family latrine/toilet, Computes the percentage of households that have a private latrine or toilet. Shared latrines/toilets among households are not taken into account.**

**Indicator# 6 - % HHs reporting defecating in a toilet/latrine, Computes the percentage of households that have any type of latrine or toilet: 1. Household latrine; 2. Communal latrine; 9. Household shared latrine.**

All or 100% the 60 visited household KAP sample reported to have their own latrine, the construction of household latrines was in the final stage of construction, only lighting and connection of water remained, still the refugees were using the individual latrines by taking the water by water bucket. Though was difficult to be used at night due to lack of lighting especially for women.

**Some refugees reported the water leaking from the roof of the toilets,** sine water storages were installed on the roof of the toilets/sanitation units. Some water storages lack the valve or was not functioning thus when storage be full of water it flew from the storage to the roof of the latrines, which increase the risk of electrified since it’s made from cabinet.
E.1. Where do you and your household members (EXCLUDING children under 6) usually go to defecate?

Households with household or shared-family latrine/toilet
Hygiene

Indicator# 7 - % HHs with access to soap, Computes the percentage of households that were able to show any soap in their household within 1 minute (indicator PRESENCESOAP=1 meaning they have access to soap). Those not able to show a soap at all or not in a minute timeframe are not counted as having access.

Figure 09 only two households couldn’t not show soap within 1 minute, but still doesn’t mean the lack of soap
Indicator # 9 - % of recipients’ women of reproductive age who are satisfied with menstrual hygiene management materials and facilities, one woman of reproductive age is selected as representing the household in terms of menstrual hygiene. Ideally, we would choose a woman that agrees to respond to Menstrual Hygiene questions per household - however if all women in the household refuse to answer, the household itself is considered as refusing to answer. This indicator will compute the percentage of women out of the total number of women who have consented to reply to questions (1 woman = 1 household), that have provided the following answers:

Out of 60 household 46 are women in reproductive age, 95% of them whom felt safe to answer question for menstrual hygiene management reported:

- Privacy regard, since some are still using communal latrines and showers, as the individual latrines are under construction, reported crowded especially the first days of their arrival, doors locks broken or no lights, sometimes no water or soap as well.
- Even in shelters who have their own latrine and shower, the open space between shelters (no isolation between shelters) hindering women to private practices
- The usage of communal latrines and showers, it was in need to be regularly kept cleaned to be able to use it
- Before leaving Syria, they considered to have their own napkin needs with them; thus 41 of interviewed women used disposable pad or napkin
Are there any women of reproductive age in this household?

- Yes: 46
- No: 11

What materials did you use during your last monthly period?

- Disposable pad: 41
- Cotton: 1
- Reusable pad: 1
- Reusable cloth: 1
- Nothing/bleed into clothes: 0
- Menstrual cup: 0
- Layers of underwear: 0
- Tampon: 0
Would you have rather used something else?

- No: 36
- Yes, Reusable cloth: 4
- Yes, Other: 1
- Yes, Disposable pad: 1

During your last menstrual period were you able to wash and change in privacy while at home?

- No: 25
- Yes: 17
Figure 1 out of 60 households, 46 are women in reproductive age, 42 of them accepted to be interviewed, and 38 reported the non-availability of toilet paper/cleansing water, while only 3% reported the availability of cleansing water or toilet paper/water in the location of changing their menstrual hygiene management products.

**Households satisfied with menstrual hygiene management materials and facilities**

Figure 20: The satisfaction in managing the materials and facilities during menstrual, 18 of them have no data either the women was not in productive age to ask, or the female staff didn’t feel safe to ask, or the women refused to give consent.
Waste management

Indicator# 8 - % HHs with access to solid waste disposal facility, Computes the percentage of households having access to solid waste disposal facility, meaning having chosen one of the following choices: 1. Household pit; 2. Communal pit; 7. Street bin/container for garbage collection.

96.7% of the sample visited refugees in Gawilan reported their access to disposal facilities communal or domestic disposal pits, and only 3.3% are throwing the garbage to designated open area.

Where does your household dispose of domestic waste?

- Communal pit: 53.3%
- Designated open area: 3.3%
- Household pit: 43.3%

Figure 11 out of 60 interviewed households 3.3% of them are disposing their domestic waste in designated open area, 53.3% of them in communal pit, while 43.3% they have their own household pit.
IV. Recommendations

Wash facilities:

- Previously, the area been used as transit camp (temporary place) for occupying the families until completing from construction of permanent shelters, thus the water networks was designed depending on these data, further than lifting this water pipe without maintenance leaded to damage in some parts of network and valves and reduced the efficiency of networks. A new water network was under construction by Solidarity NGO during conducting emergency KAP in sector F till the KAP was finished in the KAP it wasn’t operated yet.

- When new refugees arrived, this area been used for occupying these families as a permanent place after modifying the layout of area to new one these water pipes were supplying only 7% of new shelters. The new water network was still under construction by Solidarity, and was not in operation yet.

- With the average HHs size (4) person according to survey, 90% depended on water trucking which supplied (1.7)L/Per/days which is less than emergency WASH standards, thus more than one third they buying water for drinking and looking for other source of water within 1 kilometer distance from their shelter in order to meet their domestic requirement.

- Our recommendation is to construct new network according to new layout and fixing the water tanks either on roof of Latrines or showers with float valve to get equal distribution of water for all shelters and increasing the supplied water per each person.

- The main source of water supply is well (borehole) inside the sector itself, and in order to increase the quality of supplied water and reducing the hazard of contamination; it’s recommended to clean the main water networks regularly, repairing the leakage in networks and main valves as soon as possible and consider the sterilization of water.

- Despite to existing about 7-commnual latrines and showers according to the survey no families are using them. And many of these sanitation units don’t have lighting.

- As for menstrual hygiene management to consider the below for protection concerns;
  - Privacy, since using communal latrines and showers, as well as being crowded especially the first days of their arrival, doors locks broken or no lights, sometimes no water as well.
  - Even in shelters who have their own latrine and shower, the open space between shelters (no isolation between shelters) hindering women private practices
  - The usage of communal latrines and showers, it was in need to be regularly kept cleaned to be able to use it

Limitations, challenges and lessons learnt
There are two main tools to be considered before taking any steps to ensure that those data would be applicable for the final analysing and mapping. The first one is the analyser tool which is used to automated calculations of all key indicators, furthermore, to compare two different data based on the
global indicator. However, the questionnaire and their answers should be similar when inserting them in this tool to work successfully, the tool will show the below results depending on the key indicators;

Emergency and Post-Emergency Standards level

The second one is the mapper; which is visualizing the results of certain key indicators on a map.

The weather snow days constrained conducted the survey for couple of days

V. Annexes

![Graph showing how many people permanently live in this shelter.](image_url)
## Gawilan Camp (Sector F) Data

**Legend on computed indicators' colors:**

- **Above Emergency and Post-Emergency Standards level**
- **Between Emergency and Post-Emergency Standards level**
- **Below Emergency and Post-Emergency Standards level**

### Main indicators for the surveyed population

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Average litters of potable water/person/per day collected at HH level</td>
<td>2 - % HHs with at least 10 L/p protected water storage capacity</td>
</tr>
<tr>
<td>2 - % HHs collecting drinking water from protected/treated sources</td>
<td>3 - Average distance to water point (in meters) for the 2% of HHs with longest distance</td>
</tr>
<tr>
<td>4 - % HHs with family latrine/toilet</td>
<td>5 - % HHs reporting defecating in a toilet/latrine</td>
</tr>
<tr>
<td>6 - % HHs with access to soap</td>
<td>7 - % HHs with access to solid waste disposal facility</td>
</tr>
<tr>
<td>8 - % of recipients women of reproductive age who are satisfied with menstrual hygiene management materials and facilities</td>
<td></td>
</tr>
<tr>
<td>9 - % of recipients women of reproductive age who are satisfied with menstrual hygiene management materials and facilities</td>
<td></td>
</tr>
</tbody>
</table>

**How many children less than 5 years old permanently live and slept in this shelter?**

- 0: 48%
- 1: 27%
- 2: 22%
- 3: 3%

Between Emergency and Post-Emergency Standards level

- 48%

Below Emergency and Post-Emergency Standards level

- 22%

How many children less than 5 years old permanently live and slept in this shelter?

- 0
- 1
- 2
- 3
**Emergency Standards**

<table>
<thead>
<tr>
<th></th>
<th>≥ 15</th>
<th>≥ 70%</th>
<th>≤ 500m</th>
<th>≥ 70%</th>
<th>-</th>
<th>≥ 60%</th>
<th>≥ 70%</th>
<th>≥ 70%</th>
<th>≥ 70%</th>
</tr>
</thead>
</table>

**Post Emergency Standards**

<table>
<thead>
<tr>
<th></th>
<th>≥ 20</th>
<th>≥ 80%</th>
<th>≤ 200m</th>
<th>≥ 95%</th>
<th>≥ 85%</th>
<th>≥ 85%</th>
<th>≥ 90%</th>
<th>≥ 90%</th>
<th>≥ 90%</th>
</tr>
</thead>
</table>

**Population surveyed (Gawilan-dataset 2)**

<table>
<thead>
<tr>
<th></th>
<th>1.7</th>
<th>1.7%</th>
<th>2400</th>
<th>93.3%</th>
<th>100.0%</th>
<th>100.0%</th>
<th>96.7%</th>
<th>96.7%</th>
<th>2.4%</th>
</tr>
</thead>
</table>

**Questionnaire**

Basically, after obtaining and reviewing the questionnaire those questions were uploaded on the server on KOBO website, then on the tablets or phones (android OS), download ODK application. To collect the data on the application a username of the account was developed in which the questionnaire is deployed, then to download that form and save as many data as needed and send them back to the online server. The primary data included formal interviews and personal observations.

GPS test+ is another crucial application used, during the data collection process, to check the GPS reception in the required area, update AGPS data for faster fix times all this and other GPS and Sensor data read from the used device.

<table>
<thead>
<tr>
<th>A. GENERAL INFORMATION AND DEMOGRAPHICS</th>
<th>A.3.a. How many people permanently live in this shelter?</th>
<th>A.3.b. How many children less than 5 years old permanently live and slept in this shelter?</th>
<th>B. WATER COLLECTION AND STORAGE</th>
<th>B.1.a. What is the principal water source for domestic use for members of your household?</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.1.a. If other, please specify</td>
<td>B.3. Please request the respondent to show you all the water storage tanks or containers that they have before you ask the following set of questions. Is it possible to see the water storage tanks or containers used for collecting and storing water?</td>
<td>B.3.0. Does the household have rather container(s) or water storage tank(s)?</td>
<td>B.3.a. How many water storage tanks or containers do you have to COLLECT and STORE drinking water for your house?</td>
<td>B3.g. Apart from the water that has been collected from your main water source, do you usually also buy bottled water for drinking or domestic use?</td>
</tr>
<tr>
<td>B.3.g.1 If so, how many liters of bottled water did you buy for your household last week (past 7 days)?</td>
<td>B.4.a. Is there a water source available directly on the premises (in the courtyard, close to the house)?</td>
<td>B.4.b. By what means do you usually go to fetch water at the water source?</td>
<td>B.4.c. How long does it take to go one direction to get water?</td>
<td>B.4.d. The distance to closest water point is therefore evaluated to be about.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>B.4.e. How many meters do you have to travel in order to fetch water from the water source (one direction)?</td>
<td>D. HYGIENE</td>
<td>D.6. Please show me the soap you have in the household. &lt;span style=&quot;color:red&quot;&gt;OBSERVATION&lt;/span&gt;: Was it presented within one minute?</td>
<td>E. SANITATION</td>
<td>E.1. Where do you and your household members (EXCLUDING children under 5) usually go to defecate?</td>
</tr>
<tr>
<td>E.17.1. Where does your household dispose of domestic waste?</td>
<td>I. MENSTRUAL HYGIENE</td>
<td>I.0. Does the enumerator feel safe asking any questions on Menstrual Hygiene in this household?</td>
<td>I.1. Are there any women of reproductive age in this household?</td>
<td>Request to talk privately with a woman of reproductive age in the household. Is it possible to interview her?</td>
</tr>
<tr>
<td>I.1.a Do you accept to answer to some questions related to menstrual hygiene?</td>
<td>I.2. What materials did you use during your last monthly period?</td>
<td>I.3. Would you have rather used something else?</td>
<td>I.4.a. During your last menstrual period were you able to wash and change in privacy while at home?</td>
<td>I.4.b. During your last menstrual period were you able to wash and change in privacy while at work or school?</td>
</tr>
<tr>
<td></td>
<td>I.5. Is toilet paper/cleansing water available where the women change their menstrual hygiene management products?</td>
<td></td>
<td>K.1. Do you accept that I take a GPS location?</td>
<td></td>
</tr>
</tbody>
</table>
Site map of Gawilan Camp