CARE Endline Evaluation

WEST MOSUL – NINAWA GOVERNORATE

November 2020

Project Title: Restoring Water Supply System and improved Sanitation and Hygiene Practices in West Mosul, Iraq – Phase III

Funded by

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CONTENTS

LIST OF ACRONYMS

CFW	Cash for Work
COVID-19	Coronavirus disease - 2019
CFRM	Community Feedback and Response Mechanism
DoM	Directorate of Municipality
DoW	Directorate of Water
FGD	Focus group discussions
FRC	Free Residual Chlorine
GBV	Gender Based Violence
IDP	Internally Displaced Person
PHCC	Public Health Care Centre

EXECUTIVE SUMMARY

Since the military campaign against Da'esh undertaken by a coalition of Iraqi and international forces concluded in November 2017, the public government services have resumed at a slow pace, with the support of international donors through the Global Coalition to counter Da'esh, although coverage is haphazard and large gaps remain. An estimated 4.1 million, including 1.13 million displaced persons were projected to require humanitarian assistance in 2020. The Iraq 2020 HRP projects that 1,366,505 persons are need of WASH humanitarian assistance with women and girls representing 27% and 23% respectively. According to IOM Data Tracking Matrix, by end of October 2020, the governorate was hosting to 1,857,222 returnees, with about 60% of them concentrated in Mosul. This puts extreme pressure on the meagre resources in Mosul and the inadequate Governorate capacity to provide basic needs including WASH services that suffered extensive damages during the period of conflict. The protracted provision of inadequate service delivery or sub-standard access to basic services (health and water/sanitation) increases public health hazards and susceptibility of IDP's, returnees and host populations. Lifesaving and life sustaining services in areas of return are necessary to meet basic needs

In January 2020, a team of CARE WASH technical staff met with the Directorates of Water (DOW) and Municipality in West Mosul, to identify critical WASH gaps in Mosul. The Directorate of Water identified priority WASH gaps in water treatment plant, network and booster pump station. CARE's WASH team conducted technical assessments of the 02-water infrastructure sites prioritized by DOW to ascertain the work scope and inform the preparation of the Bill of quantity for non-functional components/elements within the two plants.

With funding support from the Ministry of Foreign Affairs, Government of Czech Republic (MoFA Czech), CARE implemented a six-months project aimed at restoring water supply system and improved sanitation and hygiene practices in West Mosul, Iraq. The project is implemented in West Mosul in Al-Zanjili, Al-Ghazlani, Rajam Hadeed and Al-Jadeed neighbourhoods targeting IDPs, host communities and returnees with 47,500 direct beneficiaries. Through the approval of a modification in October 2020 the scope of work was expanded on both the environmental sanitation and water rehabilitation components of the project, increasing the project target population by an additional 25,000 beneficiaries, making the total number of the beneficiaries 72,500.

The project engaged the community in hygiene promotion activities to improve hygiene practices, efficient water uses and handling for drinking, cooking and personal use, with the aim of contributing to reduction of water borne and related diseases. The project supported cleaning campaigns and removal of solid waste through inclusive cash for work approach that ensure engagement of communities through sensitization to raise their appreciation on the need to maintain a clean environment. The project provided the requisite gear and cleaning tools such as wheelbarrows, rakes, shovel etc. for cleaning campaigns. In-close collaboration with the Directorate of Municipality (DoM), two tractors were repaired to support the sustainability of solid waste collection in two targeted neighbourhoods of Al-Zanjili and Al-Ghazlani beyond the life of the project. The project provided Water Safety training to 20 members of the Directorate of Water to enhance their capacity to maintain the water infrastructure to remain in serviceable state.

The endline evaluation seeks to analyze the endline values for key water, hygiene and sanitation project indicators planned in the proposal and to assess the impact and effectiveness the project, relevance and sustainability. The study used a mixed methodology, including a quantitative survey on 560 respondents in Al-Ghazlani (271) and Al-Zanjili neighbourhoods (289), and qualitative interviews with key informants from the neighbourhoods and the stakeholders from the government.

The findings presented in this summary hereafter, are divided into four parts: primary project indicators; key evaluation questions (effectiveness, coverage and appropriateness, and accountability); activity-specific findings; and conclusions.

The evaluation reports show that almost all the targets were achieved. The summary of achievements against the targets is attached in "Annex A" to this report. At the end of the project data shows 100% of targets been achieved (72,500 planned versus 72,500 reached).

Almost all of the 20 project indicators were met with the exception of one indicator, which is the overall outcome indicator of the project, that is 70% survey respondents report decrease of diseases related to poor water quality and environmental sanitation, and evaluation concludes partially met at 58% out of the planned 70%, calculated based on the value captured during the baseline survey.

The tested samples of water at the supply station and the spot checks at the neighbourhoods were within the recommended ranges with regard to free residual chlorine (0.2-0.5 mg/l at households), and the bacteriological and indicators were below the minimum levels.

About 92% (n=514) of the respondents showed improved solid waste collection and disposal behavior, compared to the 17% report during the baseline survey. Also, 82% (n=464) of the respondents knew at least 4 of the critical timings of handwashing, which is 22% increase from the 67% of the baseline.

The project was effective in various aspects; according to the survey and out of 560 (291 F, 269 M) respondents; 78% (n=437) of the respondents had a positive change in their lives with the interventions of the project, the changes included financial help through the hygiene kits distribution and CFW activity, better personal and environmental hygiene and with COVID-19 information. The rehabilitation of pumps and garage collection trucks also contributed to this change, by providing better water supply and better environmental sanitation.

The services provided by the project were "needed" or "highly needed" according to 99% (554) of the respondents and were in line with their current basic needs in the WASH sector. This is also true for the government directorates, the service provision contributed to addressing the most acute WASH needs.

According to the key informants, most individuals were able to benefit from the offered services irrespective of their age and gender. The selection of the beneficiaries for the hygiene kits distribution and the hygiene awareness was appropriate and were coordinated well with the Mukhtars of the neighborhoods. Almost all of the quantitative survey respondents 99% (n=557), thought that the services were provided at the appropriate time.

The coordination with the DoW and the DoM was also strong from the needs assessment phase and throughout the completion of the project.

Overall, 57% (n=317) of the respondents reported "satisfied" with the assistance received during the project period and 42% (n=239) were "partially satisfied", only 1% (n=3) were not satisfied. From the DoW and DoM point of view, the project participated stakeholders in the design of the activities and determination of needs.

With regards to accountability, about 43% (n=242) were aware of the available mechanism for the community feedback and response mechanism (the hotline number primarily). Also, 82% (n=460) were satisfied about the level of information they receive from CARE's services and the project's services specifically.

The most preferred way to deliver hygiene promotion information is via house visits, according to 97% (n=291) of the respondents, and they satisfaction with the hygiene promotion experience was 74% (n=220) (satisfied) and 26% (n=79) (somewhat satisfied) in both Al-Ghazlani and Al-Zanjili neighborhoods.

The hygiene kits distribution mostly problem-free and an adequate notification was given to the beneficiaries according to 99% (n=356) of the survey respondents. The quantity of the items provided was sufficient for a month or less for 95% (n=341) of the residents.

Regarding the activities that involved the government directorates, the key informants were very satisfied with the coordination of the project team with them at the different stages of the project cycle including design, implementation, monitoring, evaluation, handing over the rehabilitated water supply activities to DOW and repaired garbage collection tracks to DOM.

Of the 27 persons that participated in the cleaning campaigns as cleaners within the CFW activity, 25 participated in the survey and 88% (n=22) were satisfied with the opportunity they received, while 12% (n=3) were somewhat satisfied. 76% (n=19) had no knowledge of the criteria for the selection of the candidates for the CFW activity.

In conclusion, the most effective activities were the rehabilitation of the pumps at the water pressure boosting stations and water treatment plant, hygiene kits distribution, hygiene promotion (particularly the topics related to COVID-19 prevention). The water safety plan training for the selected DoW staff was also highly accepted.

The two main recommendations are a implementing a stronger approach for delivering the information specific to the project's activities (such as selection criteria and available services) and better dissemination of the CFRM available from CARE.

1 PROJECT INTRODUCTION

The project included hygiene promotion activities aimed to improve hygiene practices, efficient water uses and handling for drinking, cooking and personal use, and ultimately contributing to reduction of water borne and related diseases. The project also implemented cleaning campaigns for the removal of solid waste through the cash for work (CFW) approach with the intended purpose of ensuring engagement of the community through sensitization to raise their appreciation on the need to maintain a clean environment. The project provided the requisite gear and cleaning tools such as wheelbarrows, rakes, shovel etc. for cleaning campaigns. At the end of the project, the tools were handed over to the community and / or Municipality. The project rented 9 trucks to collect and dispose the solid waste at dumping site(s) designated by the Directorate of Municipality (DoM).

Two tractors owned by the DoM, were repaired with the aim to support the sustainability of solid waste collection in two targeted neighbourhoods of Al-Ghazlani and Al-Zanjili. Water pumps were rehabilitated at two boosting stations and two water treatment plants for the provision of adequate water quantity to the beneficiaries of the targeted locations. The project also provided Water Safety Training to 20 members of the Directorate of Water (DoW) with the intended purpose of enhancing the water supply sustainability.

Through the project, CARE aimed to address four critical gaps in Water, Sanitation and Hygiene Promotion (WASH) and sector infrastructure and equipment rehabilitation and services in 4 locations of West Mosul contributing to the overall project objective/goal: To reduce the risks of diarrhoeal diseases- contribution to morbidity and mortality among conflict effected vulnerable community of West Mosul- Iraq by increasing their access to safe drinking water, improve hygiene behaviour and environmental sanitation services:

- Rehabilitation of water infrastructure (Water treatment plant and booster pump stations).
- Provision of Water Safety Training and a corresponding action plan to sustain the rehabilitated infrastructure in serviceable condition.
- Support of solid waste management through cleaning campaign using Cash for work (CFW) approach.
- Support the Directorate of Municipality through repair of non-functional garbage collection trucks for sustainable solid waste collection and disposal.
- Delivery of COVID-19 risk communication and prevention awareness raising targeting 3,000 beneficiaries in two neighbourhoods in West Mosul.
- Through complementary Surge funding from CARE USA, the distribution of 3,000 COVID-19 prevention Hygiene kits in two target neighbourhoods in order to ensure the most vulnerable targeted beneficiaries have supplies to uphold high hygiene practices to protect themselves from contracting the virus. Hygiene volunteers were selected and trained to accomplish the hygiene promotion tasks.

The specific project objectives are to 1) provide equitable and sustainable access to safe drinking water to vulnerable women, men, boys and girls in conflict-affected communities in West Mosul. 2) improve the environmental sanitation of targeted area. 3) the conflict affected population adopt positive hygiene behaviour.

Output 1: Rehabilitation of Al-Ghazlani and Al Ayman Al Jaded water treatment plants (WTPs) a booster pumps (BS) of Al-Yarmouk and Rajim Hadeed was completed, providing clean water in sufficient quantity and quality for 72,500 vulnerable men, women, girls and boys in targeted neighbourhoods

Output 2: Women, men, girls and boys have improved access to safe environment through clean ups and repair of solid waste collection non-functional trucks from directorate of municipality.

Output 3: Vulnerable men, women, boys and girls adapt good hygiene practices and show behavioural improvement related to general hygiene, handwashing and proper disposal of solid waste.

2 PURPOSE OF THE ENDLINE EVALUATION

The main purpose of the Endline Evaluation is to assess the progress made by the project in the targeted area against the indicators determined in the donor approved project document. The endline survey will help CARE to measure the effectiveness and efficiency of the intervention to reach planned outcomes comparing the baseline values with the endline situation. The study also considers criteria such as coverage, appropriateness, coordination and implementation processes to evaluate the quality of the interventions.

More specifically, the evaluation looks at the following evaluation questions:

2.1.1 EFFECTIVENESS

- To what extent has this project generated positive changes in the lives of targeted communities?
- To what extent did the project meet WASH needs of communities? Are there any WASH issues that still need to be taken into consideration for the future projects?
- What internal and external factors contributed to the achievement and/or failure of the project

2.1.2 COVERAGE, COORDINATION AND APPROPRIATENESS

- To what extent do all individuals regardless of age, gender and ability have access to improved water and sanitation services and practice safe hygiene?
- To what extent was gender equality taken into consideration among the different project components?
- To what extent did CARE coordinate with Directorate of Water, Mukhtars, and municipalities across the targeted locations and other WASH actors?

2.1.3 ACCOUNTABILITY

- To what extent beneficiaries and other stakeholders were involved in the design of the project, implementation and monitoring throughout the project cycle?
- Are beneficiaries aware of a feedback mechanisms, are they comfortable/willing and using them? Do they have other preferences in terms of using other ways of providing feedback? Are they satisfied with the response to their concerns?

3 SAMPLING AND METHODOLOGY

3.1 SAMPLING

A sample size of 560 beneficiaries determined based on a 95% confidence interval and a 5% margin.

A systematic random sampling technique was used to select the respondent The sample size is summarized in the Table 1 below.

Table 1: Sampling and Sample Size Breakdown (Quantitative Survey)

Neighborhood	Project component	# beneficiaries (Household)	Sample size	Actual	Responses[1]
Al-Zanjili	Hygiene awareness messaging	3,252	145	**289** (134 F, 155 M)	**152** (88 F, 99M)
	Distribution of waste bins				
	Cleaning campaigns				
	Distribution of hygiene kits (Surge funding from CARE USA)	2,576	142		**114** (67 F, 78 M)
Al-Ghazlani	Hygiene awareness messaging	2,877	143	**271** (157 F, 114 M)	**174** (98 F, 76 M)
	Distribution of waste bins				
	Cleaning campaigns				
	Distribution of hygiene kits (Surge funding from CARE USA)	424	100		**214** (126 F, 88 M)
Total			**530**	**560 (291 F, 269 M)**	

[1] Some respondents answered questions related to more than one component, therefore numbers given here are number of responses, not unique informants.

Table 2: Sampling and Sample Size Breakdown (Qualitative Method)

Method	Source/Respondents	Quantity
Desk Review	Relevant project documents, including the project proposal and log-frame and secondary literature about the WASH cluster strategy and gender reports	N/A
Key informant Interviews	- Directorate of Water for rehabilitation Al-Yarmouk booster pump station (1) - Directorate of Water for rehabilitation of Rajim Heeded BS-1 and WTP Al Ayman Al Jadeed (2) - Directorate of Water for rehabilitation of the Ghazlani water treatment plant (1) - Directorate of municipality for rehabilitation of solid waste collection trucks (1) - Mukhtars (2) - Key informants from Al-Ghazlani and Al-Zanjili (4) - Water safety plan training (trainer and 2 participants) (3)	14 Total

3.2 METHODOLOGY

Mixed methodology combining quantitative and quantitative data collection techniques was used to answer the aforementioned endline evaluation questions.

3.2.1 THE DATA COLLECTION TOOLS INCLUDE KEY INFORMANT INTERVIEWS (KIIS), SEE TABLE 2, AND QUANTITATIVE SURVEY, DESK REVIEW

The unstructured desk review analysed internal and external documents to allow the evaluation team to better understand the context, to draw on the knowledge gained from previous evaluations and other research, draw on the knowledge captured in project monitoring documents/reports, implementation data on progress accumulated, identify potential key issues to be considered during fieldwork, and identify potential judgement criteria, sources, and methods for the evaluation matrix.

After completion of the data clean-up and data analysis, the findings from the evaluation are linked with findings from the literature about WASH. This information is triangulated and used to further strengthen the recommendations for the future programming.

3.2.2 QUANTITATIVE DATA COLLECTION AND OBSERVATION

Following the completion of the survey tool, the evaluation team translated, scripted and programmed the survey, uploading it to smartphones/tablets using KoBoCollect mobile data collection software part of the KoBoToolBox. KoBoToolBox provides a web and mobile app that allows the monitoring of real-time field data.

Data collection team (enumerators) conducted the quantitative survey utilizing computer-assisted personal interviewing (CAPI) methodology. The CAPI methodology is an interviewing technique in which the respondent or interviewer uses an electronic device (mobile device) to answer the survey questions. In the current assessment enumerators/interviewers utilized tablets. This methodology allows for logic checks, skip patterns, and validations during the interview, thus increasing the efficiency of the interview as well as the quality of data. Because data collected through the CAPI methodology can be uploaded daily, the consultant was be able to conduct quality control at the end of every day.

3.2.3 QUALITATIVE DATA COLLECTION: KEY INFORMANT INTERVIEW

Qualitative interviews, key informant interviews (KIIs) are used in the evaluation to provide rich and in-depth information considering the context and objectives of this evaluation. Qualitative interviews are especially useful to gain an understanding of underlying reasons, opinions, and motivations among a group of people with regards to the topic under research as well as to triangulate information with quantitative data collected. Consultant was responsible to conduct qualitative interviews with the support of CARE's MEAL Assistant.

3.2.4 DATA COLLECTION AND ANALYSIS

The CARE endline evaluation survey data collection took place from November 18, 2020 to November 24, 2020 and updated based on this project activities in November 2020 in West Mosul – Ninawa governorate to utilize existing information as much as possible and to prevent duplication of efforts.

The questionnaires were translated into Arabic and administered by data collection team who explained the questions to the responders and then recorded their answers. The survey conducted using Kobo Collect platform. However, KIIs and individual interviews conducted through semi-structured questionnaires open-ended discussions using papers. The consultant and MEAL team supervised survey coordination, planning, and implementation. Quantitative data was analysed using KoBoToolbox and Microsoft excel. The analysis focused on identifying the most significant findings.

3.2.5 ENSURING DATA QUALITY

In order to ensure data quality, MEAL and technical staff coordinated to train the enumerators on the survey's objective, the specific questions, the survey design along with a detailed explanation of each question and participants' selection procedures.

All aspects of the data collection process and supervision were led by a consultant. In addition, regular close contact with the enumerators was maintained to ensure that procedures and instructions were being followed.

Throughout the data collection process, data quality was verified by consultant and MEAL assistant who were supervising the process in order to ensure that it contained all needed data and that there had been no technical issues

- All enumerators were trained on how to administer the questionnaires prior to data collection.
- Orientation was provided to all enumerators on the evaluation methodology.
- Quantitative data were collected through mobile data collection mechanism using KoBoCollect app to maintain data integrity and avoid unnecessary data entry which can result in errors.
- Data cleaning was conducted to ensure correct and complete data prior to the analysis.
- Spot checks and supervision of the data collection and entry process were conducted by the consultant and the MEAL team.

3.2.6 LIMITATIONS

The evaluation did not use focus group discussions (FGDs) as part of COVID19 mitigation measures

The mixed methodological approach adopted for this survey sought to address many of the inherent limitations of social research; nonetheless, it is rarely possible to achieve a completely true and accurate understanding of any context being researched, particularly when faced with the myriad cultural and language challenges this assignment had to contend with. So long as such challenges are borne clearly in mind when reading this report, the multiple sources, discussions, and findings included herein can provide a strong indication of the current state of those areas being researched.

Some of the project activities where completed shortly before the evaluation, therefore, it was not possible to evaluate their long-term effectiveness, these included the waste containers distribution and water safety training.

4 FINDINGS

This chapter presents the key findings of the evaluation, the findings is grouped into four main thematic categories (demographic information, measurement of project indicators, key evaluation questions, and activity-specific findings).

4.1 DEMOGRAPHIC INFORMATION

In total, 560 persons responded to the quantitative survey, 271 (f: 58%, m=42%) of them in Al-Ghazlani and 289 (f: 46%, m: 54%) in Al-Zanjili.

In both neighborhoods, more than half (56%, n=314, f: 50% m: 50%) of the respondents fell into the 18-40 age category. Around 37% (n=205, f:54 %, m:46 %) were in the 41-50 years old category and the remaining were over 60 years old (see Figure 1).

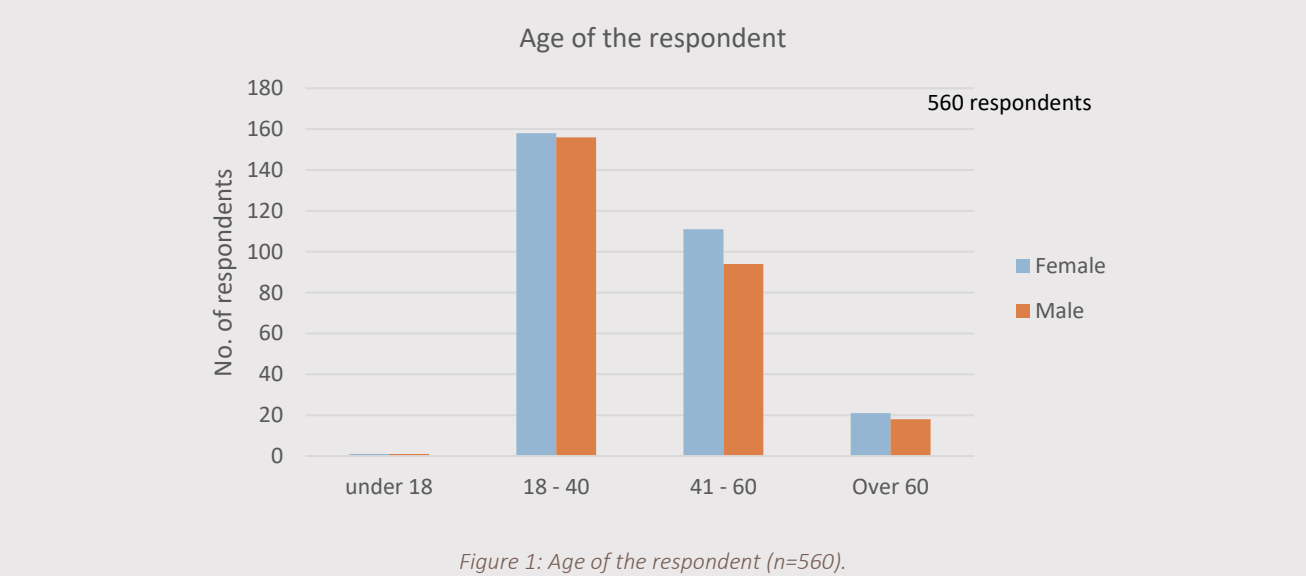

Figure 1: Age of the respondent (n=560).

The formal education level in both neighborhoods was similar, just under half of the respondents (n=252, f: 54%, m: 46%) had completed a primary school education, around 20% (n=114, f: 54%, m: 46%) had no formal education and 26% (n=144, f: 51%, m: 49%) had completed a high school education, See (Figure 2).

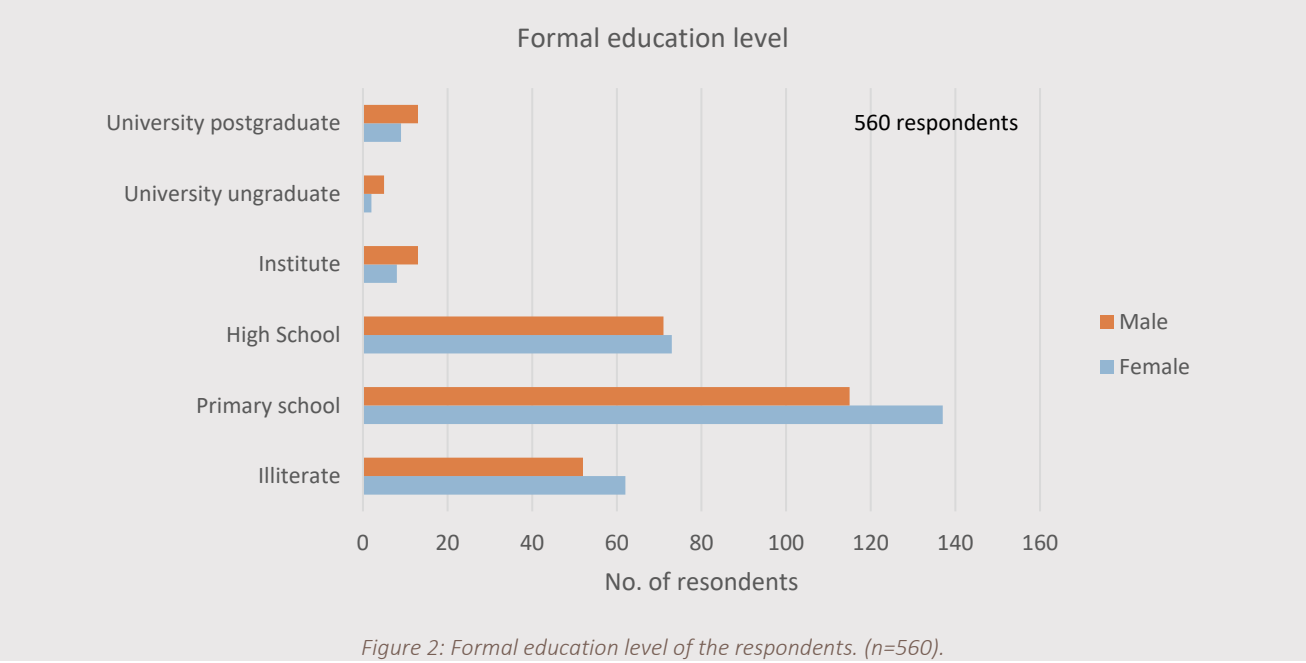

Figure 2: Formal education level of the respondents. (n=560).

The number of family members for 62% (n=347) of the households was between 4 to 7 members, 20% (n=110) families had between 8 to 10 members, 12% (n=65) had 1 to 3 members and about 7% (n=38) had more than 10 members.

One third (33%, n=184) of the families had at least one elderly (over 60 years old) family member. 62% (n=142) of those 184 families had only one elderly person, 36% (n=82) had 2 elderly members, the remaining 2% had 4.

As much as 17% (n=94) of the families had a member with a disability, 75% (n=82) of those had one person with disabilities, 15% (n=16) had two persons, while 11% (n=12) had 3 persons with disabilities.

4.2 MEASURING PROJECT INDICATORS

Project Goal /Impact Indicator/: 70% survey respondents report decreases of diseases related to poor water quality and environmental sanitation in target area.

Indicator Endline Status	○ Target is partially reached (58%)

To measure this indicator, during the baseline survey, respondents were asked about the diseases that their family members had in the past four weeks prior to the survey that were caused by poor water quality or environmental sanitation, and about 19% (n=50) of the 263 respondents in Al-Ghazlani and Al-Zanjili neighbourhoods reported having family members that have suffered from such diseases. The diseases list included:

- Prevalence of diarrhea (poor water quality)
- Skin deasses (environmental pollution)
- Dysentery (poor water quality)
- Malaria (environmental pollution)

In the end-line survey, a similar question asked but with an observed period of two months instead of the baseline's four weeks, and around 8% (n=47, 17 in Al-Ghazlani and 30 in Al-Zanjili) of the 650 survey participants reported having at least one of the diseases in their families in that period. They reported cases such as diarrhea (59%, n=32), skin diseases (26%, n=14), dysentery (6%, n=3) and other diseases (9%, n=5). See Table 3.

Table 3: Has anyone in your family had a disease due to poor water quality and environmental sanitation in the past two months? (n=560)

Questions	Options	Al-Ghazlani			Al-Zanjili			Grand Total	Percentage
		F	M	Total	F	M	Total		
Has anyone in your family had a disease due to poor water quality and environmental sanitation in the past two months	Yes	11	6	**17**	12	18	**30**	**47**	**8%**
	No	146	108	**254**	122	137	**259**	**513**	**92%**
If yes, what disease?	Prevalence of diarrhea	5	3	**8**	9	15	**24**	**32**	**59%**
	Skin deasses	5	2	**7**	4	3	**7**	**14**	**26%**
	Dysentery	0	0	**0**	0	3	**3**	**3**	**6%**
	Others	4	1	**5**	0	0	**0**	**5**	**9%**

Calculating the difference between the baseline and end-line survey's findings, the decrease percentage is 58%.

$$\%\ decrease = \frac{19\% - 8\%}{19\%} \times 100 = 58\%$$

Outcome indicator: 90% of targeted households provided with safe drinking water having FRC, 0.2 to 0.5, 0 coliform/ 100ml and free from chemical contamination (arsenic)

100% of water samples tested and meet SPHERE Standards (free residual chorine - FRC ranges between 0.2 - .5 mg/l, sample of 100 ml with 0 coliforms at HH and water points).

Indicator Endline Status	✓ Target is reached (Indicator value: 100%)

The entire population of 72,500 of the targeted neighbourhoods are provided with the required quantity of 80 liters/person/day as per the estimation of the DoW.

All of the samples tested in the households is within the standard (0.2 to 0.5 mg/l for the free residual chlorine (FRC) and 0 Coliform/100 ml). No chemical contamination was found in any testing points in Al-Ghazlani and Al-Zanjilli. The tests were conducted by the Central Laboratory of the DoW.

Outcome Indicator: 65% of men, women, boys and girls in targeted neighbourhoods are sensitized about solid waste collection and disposal behavior.

Indicator Endline Status	✓ Target is reached (Indicator value: 92%)

The analysis of the findings show that this outcome indicator has exceeded the minimum 65% and the percentage of men, women, boys and girls in the targeted neighborhoods that are sensitized about solid waste collection and disposal has reached about 92%.

The measurement of this indicator is done through a series of question that aim to quantify the percentage of households that are considered sensitized about solid waste collection and disposal behavior. A score is assigned to each answer, and those scores are summed to find the "environmental hygiene index" which evaluates how clean is the environment in front of each surveyed home and categories it to hygienic, pre-hygienic, unhygienic or very unhygienic. Only "hygienic" and "pre-hygienic" scores are calculated towards the sensitized populations, see Box 1 for more details.

Box 1: Household environmental hygiene index based on the surveyor's observation	
Environmental hygiene index: 0 = hygienic, 1-2 = pre hygienic, 3 = unhygienic, 4 = very unhygienic	
Do you see garbage piles in front of the house? [1] • No, **(0 point)** • Yes, some **(1 point)** • Yes, a lot **(2 points)**	*How clean is the street in front of the respondent's house?* [1] • hygienic (clean street and water channels) **(0 points)** • pre hygienic (clean streets but water channel is dirty) **(1 point)** • unhygienic, (dirty streets and channel) **(2 points)** • very unhygienic (dirty streets and channel and solid waste speeded all over) **(3 points)**
[1] *Based on the enumerators' observation for each surveyed household.*	

In Al-Zanjili and parts of Al-Ghazlani, the municipality collects garbage only from certain collection points. Therefore, households take any garbage directly to the collection points and a few houses have their own containers as carrying small bags is more convenient than moving a larger container. Also, the garbage bins are susceptible to theft, it was observed that most households either have their waste bins inside of their houses

(because they are susceptible to theft, according to key informants) or not have the bins at all, since they take the garbage directly to the collection point using smaller bags.

In total, 55% (n=308) of the households had either their own garbage bin or a communal one near the house or in the same street. About 42% (n=129) of those (308) households had bins at the same street (short walk distance), while 58% (n=179) had public bins in area (long walk distance).

Based on enumerators' observation , 58% (n=323) of the surveyed household had no garbage pile up in front of the house, while 39% (n=218) had some garbage piled up and only 3% (n=19) had a lot of garbage piled up.

The enumerators also observed the cleanliness of the street right in front of the house, and 19% (n=108) observed entirely clean streets and drain channels on the sides of the streets, a higher percentage of the areas 72% (n=401) had clean streets but some garbage and debris in the drains, while only 9% (n=51) of the areas were observed to have both dirty streets and drains.

Figure 3: Photos of typical streets in Al-Ghazlani (left) and Al-Zanjili (right) showing the relatively clean streets.

In Al-Ghazlani, 55% (n=150) of the respondents stated that the garbage is being collected frequently enough, reported by 65% (n=214) in Al-Zanjili.

Based on the environmental hygiene index scores in Table 4, about 18% (n=98) of the households are in the "hygienic" range and 74% (n=416) are in the "pre-hygienic" range, combined together, 92% of the population can be considered sensitized about the solid waste collection and disposal practices as concluded by the observation of the solid waste in front of the house and the street directly in front of it.

Table 4: Environmental Hygiene Index Scores. (n=560).

	Al-Ghazlani		Al-Zanjili		Total	
Waste Container Index	#	%	#	%	#	%
hygienic	54	20%	44	15%	98	**18%**
pre hygienic	197	73%	219	76%	416	**74%**
unhygienic	16	6%	19	7%	35	**6%**
very unhygienic	4	1%	7	2%	11	**2%**
Total	271	100%	289	100%	560	100%

Outcome Indicator: 80% of targeted community know 4 out 5 critical timing for handwashing

Indicator Endline Status	✓	Target is reached (Indicator value: 82%)

The critical times for washing hands as promoted during the hygiene promotion visits where:

1. After using the toilet;
2. After cleaning children's bottoms /changing diapers;
3. After touching dirty objects;
4. Before eating food;
5. Before preparing food, and
6. Before breast feeding.

The 560 respondents were asked about those timings (without listing) and about 82% (n=463) could recall 4 to 5 of these critical times, 17% (n=93) were able to recall 3 timings and 1% (n=3) were able to recall only 2 critical times, see Table 5.

Table 5: No. of Critical timings for handwashing mentioned by the respondents. n=560.

Number of correct critical timings mentioned	Al-Ghazlani			Al-Zanjili			Grand Total
	F	M	Total	F	M	Total	
2 timings	0%	0%	0%	0%	1%	1%	1%
3 timings	1%	7%	8%	1%	7%	8%	17%
4 timings	20%	10%	29%	10%	15%	25%	54%
5 timings	7%	4%	11%	13%	5%	18%	28%
6 timings	0%	0%	0%	0%	0%	0%	0%

There were challenges in collecting the data for this indicator, as adults were expected to get offended with this question, and enumerators resorted to rephrasing the question to something like "when you teach your kids about the critical times for handwashing, what times do you teach them?". This might potentially make parents skip some of the times mentioned above which are not applicable to children. Another challenge was due to the dominant roles of men and women in childcare and food preparation, as 4 of these critical handwashing times were not relevant to many of the male respondents for them to mention.

4.3 KEY EVALUATION QUESTIONS

4.3.1 EFFECTIVENESS

The effectiveness of the project was assessed through the accomplishment of outputs and outcomes indicators and the responses from the beneficiaries about the quality and usefulness of services provided to them.

Key evaluation question: To what extent has this project generated positive changes in the lives of targeted communities?

According to the quantitative survey, about 78% (n=437) of the respondents had noticed a positive change in their lives, some of them specified certain areas where they had seen the change, others reported positive change in general related to WASH needs of the community. For instance, 31% (n=176), felt that the project helped them, financially, either through CFW opportunities or hygiene kits distribution, with better hygiene awareness, cleaner environment, and others as shown in Figure 4.

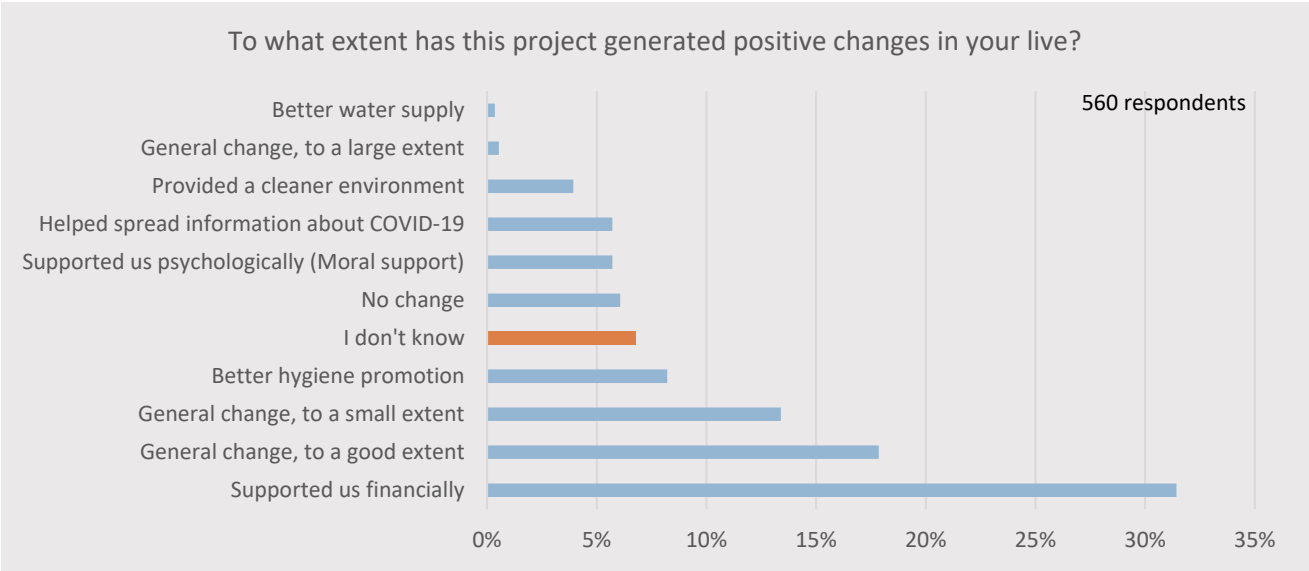

Figure 4: To what extent has this project generated positive changes in your live? n=560.

The key informants from the DoW and DoM have reported that the completed activities contributed towards better WASH services in the region. The rehabilitated pumping stations helped with better water supply to the neighbourhoods and helped minimizing the health risks associated to shortage of water. The repair of the vehicles for garbage collection contributed to improvement in environmental sanitation of the neighbourhoods and by increasing the capacity to remove solid waste and rubble. Additionally, the distributed garbage containers allowed for better control on the waste generated from the households and the market area.

Participants of the water safety plan training were eager to compile the water safety plan for their stations to be submitted to the higher management for implementation. They felt that they obtained new knowledge and the implementation of the plan should reduce future risks related to the vital water supply.

Also, the key informants were very optimistic about the effect hygiene promotion had especially on young children and especially with the COVID-19 prevention information.

The cleaning campaigns provided a cleaner environment but only for a limited period of time, and waste started to accumulate again soon after. The absence of garbage bins for households coupled with collection from within the neighbourhood rather than certain collection points has adversely affected the sustainability of those campaigns.

Key evaluation question: To what extent did the project meet WASH needs of communities? Are there any WASH issues that still need to be taken into consideration for the future projects?

About 34% (n=93) in Al-Ghazlani and 62% (n=180) Al-Zanjili found that the services provided by this project were “highly needed”, 65% (m=177) and 37% (n=107) in both neighbourhoods thought the services were “needed”, and similar numbers thought that these services will also be needed in the future, see Table 6.

Table 6: Were the services you received needed by you and your community? Will these services be needed in the future? n=560

	Al-Ghazlani		Al-Zanjili		Total	
	#	%	#	%	#	%
Were the services you received needed by you and the community?						
Highly needed	93	34%	180	62%	**273**	**49%**
Needed	177	65%	107	37%	**284**	**51%**
Not needed	1	0%	2	1%	**3**	**1%**
Do you need these services in future?						
Highly needed	89	33%	175	61%	264	47%
Needed	181	67%	112	39%	293	52%
Not needed	1	0%	2	1%	3	1%
Total	**271**	**100%**	**289**	**100%**	**560**	**100%**

When asked about the remaining needs related to WASH, the respondents in both neighbourhoods had different answers. In Al-Ghazlani, the top needs were the distribution of garbage bins to households (n=79), distribution of more hygiene kits (n=35), cleaning campaigns (n=34) and water purification tablets or devices (n=24). In Al-Zanjili the top needs included water purification devices or tablets (n=69), increasing water supply (n=57), more cleaning campaigns (n=60), and more hygiene kits distributions (n=47), see Figure 5.

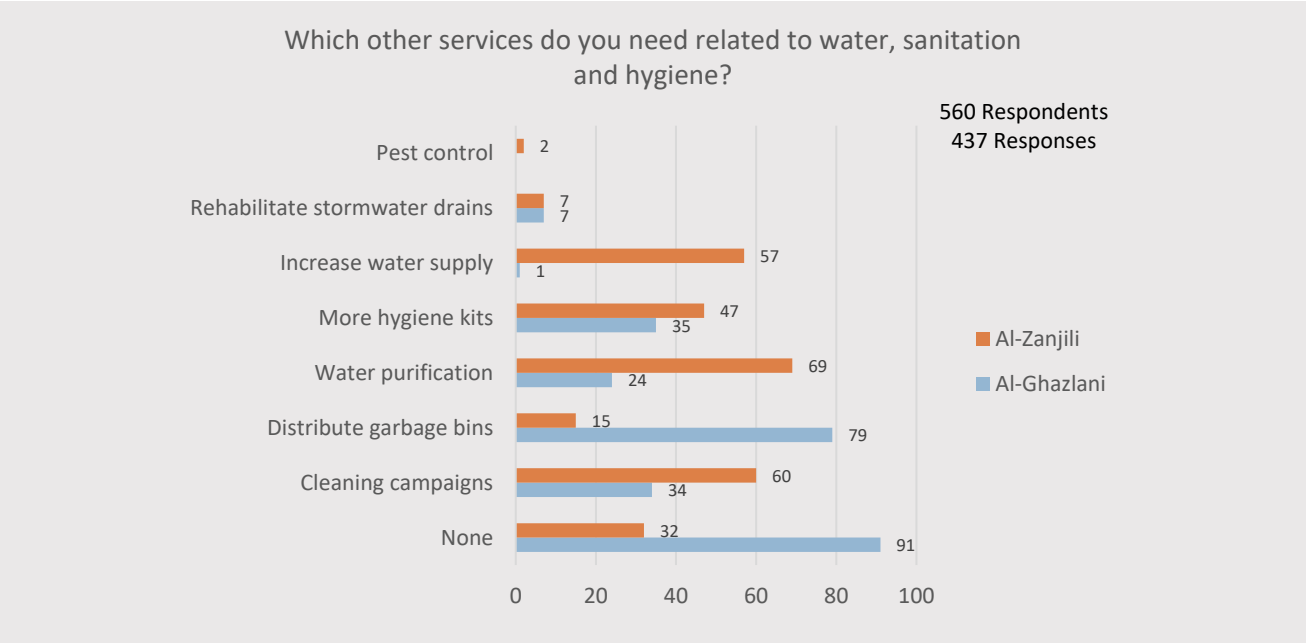

Figure 5: Which other services do you need related to water, sanitation and hygiene? n=560, 437 responses.

Key evaluation question: What internal and external factors contributed to the achievement and/or failure of the project

One of the most important external factors that affected the timeline and modes of intervention of the project was undoubtfully the COVID-19 pandemic. It delayed the project activities, for instance the Al-Yarmouk booster station was on the verge of failure and complete shutdown of one of its two lines when the rehabilitation started, while it was scheduled to be completed around 4 months prior to the actual start date.

Another implication of the pandemic was the cancellation of most of the group activities, such as the focus group discussions (FGDs).

Annex A – Project Logframe Matrix – November 2020 presents in more details the list of indicators for baseline and endline with the following results:

✓	Target is reached (100% or above)	95%	For 19 indicators / 20
○	Target is partially reached (50-100%)	5%	For 1 indicators / 20
✗	Target is not reached (0-50%)	0%	For 0 indicators / 20

4.3.2 COVERAGE, COORDINATION AND APPROPRIATENESS

Key evaluation question: To what extent do all individuals regardless of age, gender and ability have access to improved water and sanitation services and practice safe hygiene?

According to the qualitative survey with the key informants, most individuals irrespective of their age and gender had the ability to benefit from the offered services.

The hygiene promotion served the specified locations, but all family members had the opportunity to benefit from the information provided.

The hygiene kits distribution was organized with the Mukhtars to select the most vulnerable people. However, one key informant pointed out that the beneficiaries in Al-Zanjili were in a greater need to the kits than those in Al-Ghazlani.

Almost all of the quantitative survey respondents 99% (n=557), thought that the services were provided at the appropriate time. The remaining 1% (n=3) thought that the services were needed sooner. Also, 49% (n=272) believed that the services were appropriate to a large extent, 51% (n=286) believed that they were appropriate to some extent, less than 1% (n=2) did not find the services appropriate to their needs.

The quality of the services was ranked "high quality" by 31% (n=85) in Al-Ghazlani and 59% (n=171) in Al-Zanjili, while it was ranked "acceptable" by 69% (n=186) in Al-Ghazlani and 39% (n=114) in Al-Zanjili. Only about 1% (n=4) ranked the quality of the services as "poor" in Al-Zanjili, mainly because their dissatisfaction with some of the hygiene kits items.

Nearly 54% (n=304) were "highly satisfied" with the behavior of the staff that delivered the services to them, and the other 46% (n=256) were "satisfied" with it. No respondents reported being dissatisfied with the behavior of the staff.

The respondents were asked about their overall satisfaction with the assistance they received through the project and 57% (n=317), were fully satisfied, 42% (n=239) where partially satisfied, only 1% (n=3) were not satisfied, see Table 7.

Table 7: Overall satisfaction with the assistance received from CARE over the period of the project. n=560.

Questions	Options	Al-Ghazlani			Al-Zanjili			Grand Total	Percentage
		F	M	Total	F	M	Total		
Are you satisfied with CARE's assistance you received over the last 6 months?	Yes, fully satisfied	91	56	147	73	97	170	317	57%
	Partially satisfied	66	58	124	59	56	115	239	42%
	No, Not satisfied	0	0	0	2	1	3	3	1%
	Do not know/unsure	0	0	0	0	1	1	1	~0%

Key evaluation question: To what extent was gender equality taken into consideration among the different project components?

Gender equality was taken into consideration in selecting the hygiene promotion volunteers equal number of female and male volunteers participated (4 females and 4 males).

For the CFW component only men were selected for the cleaning campaigns due to the nature of the work involved and the norms of the region. The participants of the water safety training were also all men, since most of the technicians and operators' positions are predominantly held by men.

Key evaluation question: To what extent did CARE coordinated with Directorate of Water, Mukhtars, and municipalities across the targeted locations and other WASH actors?

Regarding the activities that involved the government directorates, the key informants were very satisfied with the coordination of the project team with them at the different stages of the project, starting with the design of the activities and ending with their implementation.

Both Mukhtars where not entirely sure about the criteria for the selection of the candidates for the CFW activity for the cleaning campaigns. Al-Ghazlani Mukhtar preferred the workers to be from the neighbourhood itself (although only a few of them were selected from the surrounding areas whom matched the criteria). Al-Zanjili Mukhtar preferred if the selection criteria were better communicated.

4.3.3 ACCOUNTABILITY

Key evaluation question: To what extent beneficiaries and other stakeholders were involved in the design of the project, implementation and monitoring throughout the project cycle?

According to the key informants from the government directorates, the activities that involved the rehabilitation and installation of pumps to improve the water supply were designed in coordination with the related directorates, from the needs assessment, development with the bills of quantities and the implementation of the works.

Key evaluation question: Are beneficiaries aware of the availability of feedback mechanisms, are they comfortable/willing and using them? Do they have other preferences in terms of using other ways of providing feedback? Are they satisfied with the response to their concerns?

Although the key informants from both neighbourhoods reported that CARE has distributed the complaints and feedback hotline number during the hygiene promotion and hygiene kits distribution, the percentage of respondents aware of the complaints and feedback mechanism was only 43% (n=242), 10% (n=56) of them in Al-Ghazlani, and a higher percentage in Al-Zanjili at 33% (n=186). The rest of the respondents were unsure or did not know the feedback mechanism.

Those 242 persons that were aware of the feedback and complaints, where asked about the mechanism they currently use (or have access to), and from 234 answers, 75% (n=176) reported using the hotline, 18% (n=41) use complaint box (during distributions), and 7% (n=16%) complain or give feedback to the employees or volunteers face-to-face.

They were also asked whether they had complained or provided feedback using any mechanism, 71% (n=172) reported they did, but only 54% (n=93) of those felt that CARE acted upon their complaints or feedback, while 42% (n=73) stated that they were not acted upon and the remaining 3% (n=6) were unsure.

Regarding the information the beneficiaries receive about the CARE's service, about 82% (n=460) are satisfied with the level of information they get, while 17% (n=96) where not sure about or had no answer, while 1% (n=4)

where not satisfied with the information they get. The major complaints from this 1% was that they were not sure where to find the related information about the services.

4.4 ACTIVITY-SPECFIC FINDINGS

This section aims to present the findings specific to the activities that targeted the beneficiaries in Al-Ghazlani and Al-Zanjili neighbourhoods.

The quantitative survey on the community targeted the beneficiaries that have received the different services of the project. About 64% (n=359) where those received the hygiene kits, 53% (n=299) where those who received the hygiene promotion. The beneficiaries of the cash for work (CFW) program that worked on cleaning campaigns were interviewed as well, which were 25 in total (see **Error! Reference source not found.**).

Table 8: Services received by the respondents. n=560, multiple choices.

Which services did you receive from the project?	Al-Ghazlani			Al-Zanjili			Grand Total	Percentage
	F	M	Total	F	M	Total		
Distribution of hygiene kits	126	88	214	67	78	145	359	64%
Hygiene promotion messages	97	62	159	72	68	140	299	53%
Job opportunity with the cleaning campaigns (within the CFW program)		12	12		13	13	25	4%

4.4.1 HYGIENE PROMOTION

Of the 560 survey participants, 261 did not receive the hygiene promotion service for various reasons. About 59% of them did not know about the service, 36% had not agreed to participate due to time restrictions, 5% where not interested in the topics offered.

The respondents were asked four major questions about the topics discussed during the hygiene promotion visits, they were: What topics were covered, which were the most useful topics, which were the least useful and which topics content are remembered the most.

The top covered topics according to the 298 respondents were COVID-19 related session (86%), handwashing (70%) and personal hygiene (52%). The top topics that they could remember their contents were similarly matched, for the 297 respondents that answered the question, COVID-19 related topics were remembered by the most (76%), personal hygiene (46%) and handwashing (43%), see Table 9 for the rest of the topics.

Regarding the favorite topics, 297 respondents answered this question, and rated COVID-19 related session as the most useful topic by (69%), personal hygiene (36%), followed by handwashing sessions (30%). While the least favorite topics were rated by 263 respondents as handwashing (49%), solid waste management (37%) and extra water storage (17%), see Table 9.

Table 9: Hygiene promotion topics. Percentages shown are calculated based on the number of respondents for each question.

Questions	Which Topics were covered?		Most useful topics		Least useful topics		Most remembered topics	
Topics	#	%	#	%	#	%	#	%
Environmental hygiene	101	34%	59	20%	18	7%	78	26%
Solid waste management	91	31%	21	7%	96	37%	54	18%
Extra water storage	61	20%	22	7%	44	17%	49	16%
Handwashing	208	70%	89	30%	128	49%	127	43%
Diarrhoeal transmission roots and prevention	66	22%	32	11%	12	5%	37	12%
Personal hygiene	156	52%	108	36%	13	5%	138	46%
COVID-19 related session	256	86%	205	69%	7	3%	226	76%
	298		297		263		297	

In general, however, 99% (n=297) of the 299 survey participants, found the hygiene promotion useful and of value and 98% (n=296) believed that the topics in general were relevant to their community.

The beneficiaries were satisfied with the overall experience of the hygiene promotion, 74% (n=220) were satisfied (65%, n=103 in Al-Ghazlani and 84%, n=117 in Al-Zanjili) and 26% (n=79) where somewhat satisfied (35% (n=56) in Al-Ghazlani and 16%, n=23 in Al-Zanjili). No respondents were dissatisfied.

The performance of the facilitators in Al-Ghazlani was "excellent" according to 29% (n=46), "good" according to 70% (n=112) and "normal" according to 1% (n=1), while in Al-Zanjili 79% (n=94) though that the facilitators were excellent in their knowledge and preparation of the topics, 31% (n=43) though they were "good" and 2% (n=3) thought they were ok "normal", see Figure 6.

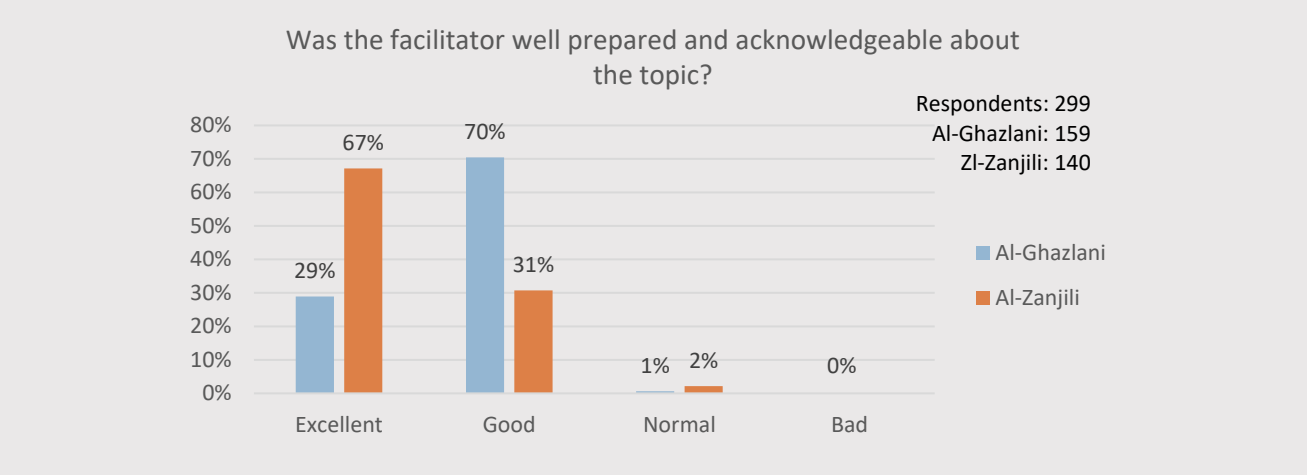

Figure 6: Was the facilitator well prepared and acknowledgeable about the topic? n=299

All of the respondents (100%, n=299) were able to get answers when they asked questions from the facilitators and 99% (n=297) had the opportunity to actively participate in the discussion during the sessions.

House visits remain the most preferred methods of delivering hygiene promotion and awareness messages to the public, according to 97% (n=291) of the survey participants. Other top choices where public sessions in schools (20%, n=60), printed flyers (12%, n=37), see Figure 7 for the rest of the methods.

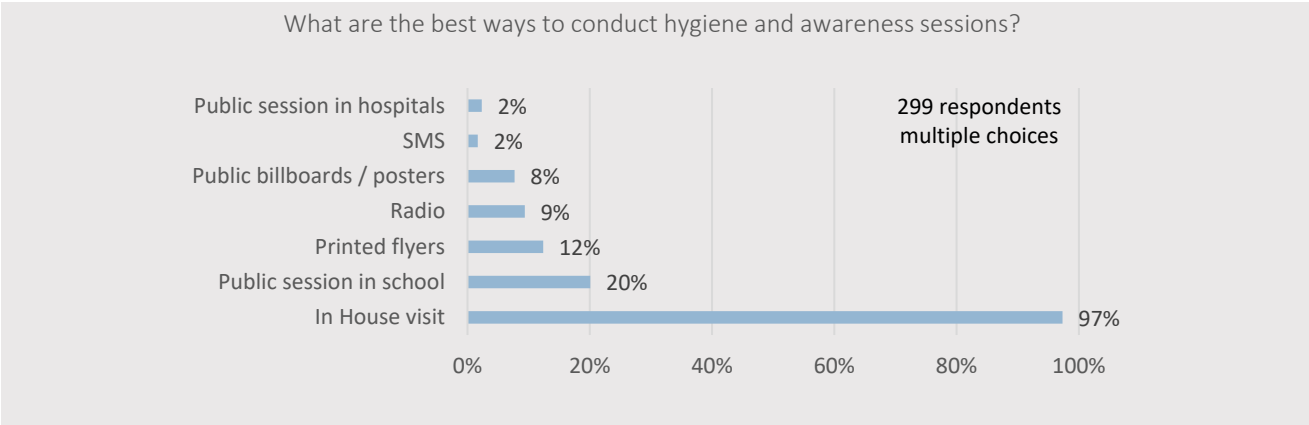

Figure 7: Preferred methods of conducting hygiene promotion sessions. n=299, multiple choices.

4.4.2 CASH FOR WORK – CLEANING CAMPAIGNS

Beneficiaries that have got a job opportunity through the CFW program working in cleaning campaigns were asked about their experience with the program, there were originally 27 beneficiaries, but during the survey only 25 of them were available for the interviews, 12 of them in Al-Ghazlani and 13 in Al-Zanjili.

In Al-Ghazlani 83% (n=10) where "satisfied" with the job opportunity provided to them, and 17% (n=2) where "somewhat satisfied", while 92% (n=12) in Al-Zanjili where "satisfied" and only 8% (n=1) was "somewhat satisfied". No participants were dissatisfied.

About two-thirds (64%, n=16) of the participants were not aware of the exact criteria for the selection of CFW program candidates. The remaining 36% (n=6) had various opinions, such as "Unemployment" and "poor living conditions". However, 92% (n=23) agreed that the selection process ensured that the most relevant CFW candidates were selected for the opportunity?

4.4.3 HYGIENE KITS DISTRIBUTIONS

During this survey 359 beneficiaries whom had received the hygiene kits were interviewed, 214 of them in Al-Ghazlani and 145 in Al-Zanjili.

Almost all (99%, n=357) of the respondents agreed that they had received an adequate notification about the time and place of distribution. About 98% (n=352) of them got the notification from the project's team, the remaining 2% got their notification from the Mukhtar(s).

The distribution team members were "friendly" according to 95% (n=203) in Al-Ghazlani and 97% (n=141) in Al-Zanjili, while the remaining 5% (n=11) in Al-Ghazlani and 3% (n=4) in Al-Zanjili thought they were "moderately friendly", there were no complaints about the behavior of the team during the distribution. The distribution was free of problems according to 99% (n=356), only 3 people thought it was crowded and lacked organization.

About 74% (n=265) reported that it was not communicated to them why they were selected as beneficiaries of the hygiene kits distribution. The remaining 26% (n=94) said that the selection criteria were communicated to them and most of them (91%) thought that the main criterion was the low-income households, the remaining believed that widows and people with disabilities were selected.

In Al-Ghazlani 32% (n=69) reported that the quantity of the items in the hygiene kits is sufficient for a period less than a month, and 60% (n=129) thought that it is sufficient for a month, while in Al-Zanjili, 77% (n=111) said the quantity was sufficient for less than one month and 22% (n=32) said it was sufficient for a whole month. Only 4% (n=18) in both neighbourhoods thought that it is sufficient for more than one month.

The 359 respondents were asked about the quality of the distributed hygiene items, 14% (n=30) and 43% (n=62) in Al-Ghazlani and Al-Zanjili respectively thought that it was very good, other 80% (n=172) and 43% (n=62) in those neighborhoods thought the quality was good, while 6% (n=12) and 14% (n=20) said the quality was ok. Only 1% (n=1) in Al-Zanjili were dissatisfied with the quality (see Figure 8).

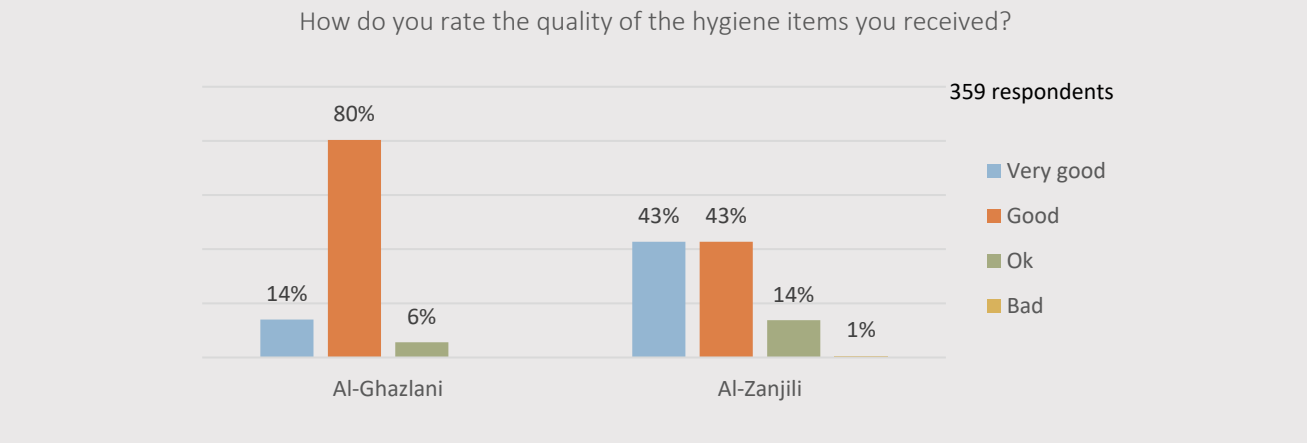

Figure 8: Quality of the items distributed in the hygiene kits. n=359

About 97% (n=347) of the respondents agreed that the hygiene kits responded to their needs, the remaining 3% (n=12) disagreed.

Bleach (54%, n=194), dishwashing liquid (34%, n=122), disinfectants (16%, n=56) where the top items suggested to be added to the hygiene kits in the future related distribution (see Table 10).

Table 10: The suggested items to be added to the hygiene kits for future distributions. n=359, multiple choices.

	Items	Al-Ghazlani			Al-Zanjili			Grand Total	Percentage
		F	M	Total	F	M	Total		
What other hygiene items do you suggest being included on the list for the future distributions?	Bleach	69	46	115	40	39	79	194	54%
	Dishwashing liquid	39	33	72	26	24	50	122	34%
	Disinfectants	10	4	14	18	24	42	56	16%
	Garbage bags	8	4	12		1	1	13	4%
	Diapers	3		3	5	1	6	9	3%
	Clothes detergent	1		1	1	5	6	7	2%
	Masks and gloves	4	2	6			0	6	2%
	Water purification tablets	1	1	2	1	2	3	5	1%

An issue during the distribution was mentioned by the key informants, was counterfeit attempts on the vouchers used for receiving the hygiene kits. Individuals attempted to make copies of their vouchers to get more than one kit. The issue was addressed, however, during the distribution using a type of photocopier-proof ink to prevent these attempts, according to the project's team.

5 CONCLUSIONS

- The activities related to the rehabilitation of the water purification and distribution stations were well designed within the allocated budget and aligned well within the most acute needs of the Directorate of Water in the targeted area.
- The water safety training changed the attitude of the related personnel at the DoW and its stations towards bringing more resilience to the water supply system, however, its effectiveness is bound to the availability of future funds from the government or external fund in order to put the developed safety plans into actions.
- The rehabilitation of the garbage trucks increased the capacity of the responsible section of the DoM in garbage collection and responded to their needs to a certain extent.
- The distributed solid waste containers have improved the environmental hygiene of the neighbourhoods especially in the garbage collection points designated by the DoM, however, long-term behavioural changes could not be measured since the distribution was completed soon before the start of the evaluation process.
- The aspect of delivering information about the project to the beneficiaries and other stakeholders is somewhat lacking in regard to the criteria for the selection of CFW candidates and the selection of hygiene kits receivers. There is also a need for stronger awareness on the community feedback and response mechanism of CARE amongst the beneficiaries.

6 RECOMMENDATIONS

- A complaint regarding the information about the services of the project where not readily available to some of the beneficiaries. A suggestion maybe is to prepare a leaflet that is unique to the project itself, stating all the activities that are involved in the projects, the services that are available to the public, the feedback mechanism and any necessary contact information.
- Rechargeable, compact size and mobile-phone-compatible projectors are expected to be very effective in showing short videos and other interactive materials to people especially children during hygiene promotion and other similar activities. These devices are easy to setup, require no external power source and audio can be amplified using Bluetooth speakers if necessary.
- Clarify the selection process for any selective distributions or work opportunity to avoid conflicts between the beneficiaries and ensure accountability.
- Based on the demographics of the area in question, more customized hygiene kits maybe designed to address the needs of each household more appropriately. For instance, households that have no female members can have a kit with sanitary pads replaced with another item.

ANNEX A – PROJECT LOGFRAME MATRIX – NOVEMBER 2020

✓	Target is reached (100% or above)	✗	Target is not reached (0-50%)
○	Target is partially reached (50-99%)	?	Data not available to draw conclusion

	PROJECT DESCRIPTION (Intervention logic)	INDICATORS	TARGET	BASELINE	ENDLINE STATUS	RESULT	DATA SOURCES
AIM	To reduce the risks of diarrhoeal diseases- contribution to morbidity, mortality among conflict effected vulnerable community of West Mosul-Iraq by increasing their access to safe drinking water, improve hygiene behaviour and environmental sanitation services	70% survey respondents report decrease of diseases related to poor water quality and environmental sanitation in target area.	70% decrease	Reported 19%	**58%** - Endline evaluation findings shows that among Al-Ghazlani and Al-Zanjili neighbourhood populations; 58% of survey respondents reported decrease of diseases related to poor water quality and environmental sanitation in target area.	○	Endline evaluation, November 2020
OUTCOMES	Provide equitable and sustainable access to safe drinking water to vulnerable women, men, boys and girls of conflict-affected communities in West Mosul.	72,500 of persons provided with enough safe water for drinking, and other domestic use (The amount of water received per person /day is 80 litres)	80 litres/ person/ day	N/A	**80 litres/person/day** is the minimum amount of water received by the beneficiaries. **72,500** (44,374 F & 41,090 M) individuals are provided with enough safe water for drinking, and other domestic use	✓	Endline evaluation, November 2020 & Performance tracking table
		90% of targeted households provided with safe drinking water having FRC, 0.2 to 0.5, 0 coliform/ 100ml and free from chemical contamination (arsenic)	90%	75%	**100%** of the samples tested within the allowable range in the households' test points.	✓	Pre and post water quality analysis reports & Endline evaluation, November 2020

	PROJECT DESCRIPTION (Intervention logic)	INDICATORS	TARGET	BASELINE	ENDLINE STATUS	RESULT	DATA SOURCES
	To improve the environmental sanitation of targeted area.	6,000 conflict affected (3000 from each neighbourhood) men, women, boys and girls benefit from environmental sanitation activities.	6,000 individuals	N/A	**6,260** (3,012 (in Al-Zanjili & 3,248 in Al-Ghazlani) individuals benefited from environmental sanitation activities	✓	Clean-up campaign beneficiary's database
		65% of men, women, boys and girls in targeted neighborhoods are sensitized about solid waste collection and disposal behavior.	65%	17%	**92%** (52% M, 48% F) are sensitized about the solid waste collection and disposal behavior. Achievement towards target is over 100% (plan was 65%, but reached to 92%)	✓	Endline evaluation, November 2020
		Number (02) of solid waste collection trucks are repaired and deployed in solid waste collection activates.	2 trucks	-	**2** tractors were repaired and put back into services for the purpose of the daily collection of garbage and removal of rubble.	✓	Work completion certificate from Directorate of Municipality – for truck repair
	The conflict affected population adopt positive hygiene behaviour.	6,000 beneficiaries reached under hygiene promotion activities in the targeted neighbourhoods	6,000 individuals	N/A	**6,704** (3,228 M & 3,576 F) individuals are reached under hygiene promotion activities in the targeted neighbourhoods.	✓	Awareness raising trackers, monthly monitoring report
		3,000 (1,500 beneficiaries per each neighborhoods) reached with messages to prevent spread of COVID-19, including hand washing, social distancing, reporting suspected cases, COVID-19 symptoms, how to use the mask, what to do when someone shows these symptoms, etc.	3,000 individuals	N/A	**3,255** (1,595 in Al-Ghazlani & 1,660 in Al-Zanjili) beneficiaries reached with messages to prevent spread of COVID-19, including hand washing, social distancing, reporting suspected cases, COVID-19 symptoms, how to use the mask, what to do when someone shows these symptoms by the end of the project	✓	Awareness raising trackers, monthly monitoring report

	PROJECT DESCRIPTION (Intervention logic)	INDICATORS	TARGET	BASELINE	ENDLINE STATUS	RESULT	DATA SOURCES
		80% of targeted community know 4 out 5 critical timing for handwashing.	80%	67%	**82%** (40% M, 60% F) of the beneficiaries know at least 4 of the critical timings for handwashing. **22%** increase from the baseline.	✓	Endline evaluation, November 2020
		8 community hygiene volunteers are identified, trained and equipped with hygiene training toolkits	8	-	**8** (4 M, 4 F) community hygiene volunteers.	✓	- Volunteer identification and training report. - Training attendance sheets.
OUTPUTS	Rehabilitation of the Ghazlani water treatment plant and Al-Yarmouk booster pump station is completed, providing clean water in sufficient quantity and quality for 72,500 vulnerable men, women, girls and boys in targeted neighbourhoods.	The damaged / nonfunction part of water treatment plant and booster pump station are rehabilitated and functional.	1	-	**1** The pump at the water treatment plant was rehabilitated and pumps at the booster pump stations are rehabilitated.	✓	Work completion and monitoring certificate / report.
		100% of water samples tested and meet SPHERE Standards (free residual chorine – FRC ranges between 0.2 - .5 mg/l, sample of 100 ml with 0 coliforms at HH and water points).	100%	75%	**100%** of the samples tested within the allowable range in the households' test points.	✓	Pre and post water quality test results.
		Water safety plan training is conducted and mitigation plan for identified risk is prepared.	1	-	**1** Water safety plan training is conducted for 20 of the DoW staff.	✓	Water safety plan training reports and mitigation plan for identified risks.
		Directorate of Water in West Mosul report being satisfied with rehabilitation and functionality of damaged parts of water treatment.	-	-	The DoW is satisfied with the rehabilitation of the pumps, measured with the qualitative survey.	✓	Endline evaluation, November 2020

	PROJECT DESCRIPTION (Intervention logic)	INDICATORS	TARGET	BASELINE	ENDLINE STATUS	RESULT	DATA SOURCES
	The rehabilitation of Rajim Heeded BS-1 and WTP Al Ayman Al Jadeed is completed and providing potable drinking water in sufficient quantity to 25,000 vulnerable men, women, girls and boys in targeted neighbourhoods.		1	-	**1** The rehabilitation works are completed according to the monitoring records.	✓	Work completion and monitoring certificate / report.
	Women, men, girls and boys have improved access to safe environment through clean-ups and repair of solid waste collection non-functional trucks from directorate of municipality.	14 clean ups campaigns conducted per each neighbourhood.	28	N/A	**28** cleaning campaigns are completed	✓	CFW distribution lists
		6000 residents participate in cleaning campaigns.	6000	N/A	**6,260** (3,063 M, 3,198 F) residents benefitted from the cleaning campaigns.	✓	Project monitoring report and attendance sheets
		02 garbage collection trucks repaired (from Directorate of Municipality)	2	N/A	**2** tractors rehabilitated	✓	- Endline evaluation
	3.1 Vulnerable men, women, boys and girls adapt good hygiene practices and show behavioural improvement related to general hygiene, handwashing and proper disposal of solid waste.	Number (8) of gender-balanced Community Hygiene Volunteers are identified and trained.	8	N/A	**8** CARE community hygiene volunteers trained on 20 July 2020 on hygiene promotion and on 15 September 2020 Community Feedback and Response Mechanism.	✓	- Attendance records.
		800 hygiene awareness house visits are conducted.	800	N/A	**1,112** (550 in Al-Ghazlani & 562 in Al-Zanjili) hygiene awareness house visits are conducted by the end of the project	✓	Project monitoring report and endline evaluation, November 2020