

**Endline Survey of Sustainable Water, Sanitation and Hygiene Action in Nepal
at Dhading and Sindhupalchowk
Final Report**



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Executive Summary

“Sustainable Water, Sanitation and Hygiene Action in Nepal at Sindhupalchowk and Dhading” is a Global Affairs Canada (GAC) funded the project which has been implemented by CARE International in the partnership with CSRC and RIMS Nepal. As per the new federal structures, the project covered 6 former VDCs which fall in 2 Rural Municipalities. The ultimate outcome of the project was to improve the well-being and resilience of women, men, girls and boys in targeted earthquake-affected areas of Nepal. An endline evaluation of the project was carried out to capture the performance and impact of the project. The study was carried out using both quantitative and qualitative methodologies. Six former VDCs where the project was implemented were sampled for the study. A total of 415 household survey, 24 FGDs and 26 KIIs were conducted to collect primary data. Besides these, spot assessments of 16 water supply schemes were also conducted.

“Sustainable Water, Sanitation and Hygiene Action in Nepal at Sindhupalchowk and Dhading” is a Global Affairs Canada (GAC) funded the project which has been implemented by CARE International in the partnership with CSRC and RIMS Nepal. As per the new federal structures, the project covered 6 former VDCs which fall in 2 Rural Municipalities of Dadhing and Sindhupalchok districts. The ultimate outcome of the project was to improve the well-being and resilience of women, men, girls and boys in targeted earthquake-affected areas of Nepal.

The major findings of indicators:

The project had one ultimate outcome and three intermediate outcomes. The following table summarizes the indicator wise progress of the project.

Table 1: Major finding of outcome indicators

Expected Results	Indicators	Target	Baseline Value	Endline Value	Remarks
Ultimate Outcome: Improved well-being and resilience of women, men, girls, and boys in targeted earthquake-affected areas of Nepal	% of resilient women, men, girls, and boys	80%	0%	40.48%	The target of the indicator was set very ambitious to achieve as the baseline data for this indicator was zero for this indicator. The project worked with rigorous efforts, and it is believed that the endline value(40.48%) for this indicator is still quite significant as compared to the baseline. Additionally, the achievement in the endline data will further rollover the positive changes, which can ultimately support to achieve the target.
	% of women & adolescent girls who make decisions on WASH	80%	3%	61.20%	Remarkable Progress The proportion of women and adolescent girls who

					make decisions on WASH has significant improvement increasing from 3% to 61.2%. Nevertheless, the target set for this indicator was also quite ambitious, given the social and cultural norms and patriarchal attitudes in the communities
Intermediate Outcome 1100: Increased consumption of potable water by EQ-affected population especially by women, men, girls, boys, elderly persons, PWD and members of the Dalit caste in targeted VDCs of Dhading and Sindhupalchowk.	# of EQ affected men and women with access to potable water	8250	NA	8867	Achieved.
	% of the target population reporting that they use the water and are satisfied	80%	1.2%	86.27%	The percentage was derived from respondents who met both the criteria. However, the respondents who met one of the two criteria is 95.90%
	% of female drinking water users committee members who feel they are able to participate in decision making	80%	NA	57.14%	This percentage was calculated based on the number of WUSC female FGD participants' responses during the FGDs.
	(G) % of female drinking water user committee members in leadership positions	>40%	N/A	25.22%	Remarkable progress
Intermediate Outcome 1200: Increased use of improved sanitation services by EQ-affected population especially by women, men, girls, boys, elderly persons, PWD, and members of the Dalit caste in targeted VDCs of Dhading and Sindhupalchowk	# of EQ-affected men and women with access to improved sanitation facilities	3250	NA	3423	Achieved
	% of the target population using latrines constructed/rehabilitated by the project that reports satisfaction with the facilities	80%	43.37%	84.10%	Achieved
	(G) % of women using latrines constructed/rehabilitated by the project that reports satisfaction with the facilities	N/A	N/A	78.86%	Achieved The percentage is derived from 175 female respondents only
	# of wards declared ODF	6	3	5	All Wards of Gangajamuna Gaupalika have been

					declared ODF including previously targeted 3 VDCs and in Sindhupalchok out 3 proposed VDCs, 2 had already been declared ODF during the time of the evaluation, and one was going to be declared in June of 2019.
	% of female WASHCC members who feel they are able to participate in decision making	50%	NA	50%	Achieved This percentage was calculated based on the number of WASHCC female FGD participants' responses during the FGDs
Intermediate Outcome 1300: Equally improved level of Hygiene Practices amongst all household members in targeted VDCs of Dhading and Sindhupalchowk	# men and women surveyed that report that they have been reached by CARE hygiene awareness campaigns	650	NA	29,858 84.8%	Achieved Among the 415 Survey respondents, 84.8% said that they had received promotional hygiene messages
	% of target populations in target area practicing the 6 key hygiene messages	60%	0	35.2%	This percentage was derived from the respondents who met all 6 criteria. However, the individual score for all six key hygiene related indicators is as follows: Use of latrine: 75% Hand washing: 65% Water treatment: 100% Food hygiene: 84% Waste Management: 99% MHM: 77% achieved
	% of female ward-level sanitation and hygiene promotion committee members who feel they are able to participate in decision making	50%	N/A	53%	Since no FGD was conducted with this group, the average was taken from WASHCCs and WUSCs female respondents
	(G) % or # of institutional and public WASH facilities (eg schools, health centers) constructed with consideration for MHM	TBD	0	100%	Achieved

	% or # of women, girls, men, boys with improved MHM practices	N/A	35.66%	88.43%	Achieved The percentage was calculated from respondents who used one of 10 sub criteria.
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The expected ultimate outcome of this project was the improved well-being and resilience of women, men, girls, and boys in targeted earthquake-affected areas of Nepal. The target was to reach 80% on both resilient women, men, girls and boys; and women & adolescent girls who make decisions on WASH. Compared to baseline, the progress is remarkable for both the indicators in the two year project period. From 0% to 3% baseline value, the end line value showed 40.48% and 61.20% for the resilient population and women & adolescent girls making the decision on WASH, respectively. Even though the achievement seemed lower than the target, looking at the transition period from unitary to federal state, the patriarchal mindset of the community and geographical terrain of the project area, the project made remarkable progress.

Coming to the intermediate outcomes, the end line values for the consumption of potable water by EQ-affected population, especially by women, men, girls, boys, elderly persons, PWD and members of the Dalit caste in targeted VDCs of Dhading and Sindhupalchowk, have increased than the baseline values. The outcome has been achieved by the participation of female in every drinking water users committee and also their involvement in leadership positions of these committees. Water supply has satisfied 86.27% of beneficiaries which is above the target. This is due to reasons such as quality water supply and reduced water fetching time. 88.43% of EQ-affected men and women were observed with access to improved sanitation facilities. The target was achieved as 86.27% of the target population using water are satisfied while 78.86% of women using latrines constructed/rehabilitated by the project were satisfied. 50% end line value was obtained for the female participation as WASHCC members who feel they were able to participate in decision making. The target of declaring 6 wards ODF seemed underachieved, as only 5 wards had been declared as ODF. Nonetheless, all Wards of Gangajamuna Gaupalika have been declared ODF including previously targeted 3 VDCs in Dhading and in Sindhupalchowk out of 3 proposed VDCs, 2 had already been declared ODF during the time of the evaluation, and one was going to be declared in June of 2019.

On the level of hygiene practices amongst all household respondents in targeted VDCs of Dhading and Sindhupalchowk, the target was under achieved. Though Men and women respondents reported that they have been reached by CARE hygiene awareness campaigns, only 35.2% of endline value showed that people were practicing 6 key hygiene messages. However, knowledge on six key hygiene messages was found excellent (85%). Since the behaviour change is the long term process, it will take time to change this knowledge into practice.

The access to institutional and public WASH facilities (such as schools, health centers) constructed with consideration for MHM has been achieved 100% while MHM practices have been improved among 88.4% of respondents meeting the expected outcome.

The overall average KAP score of the respondents in six key hygiene messages is found to be 78.2, which is greater than that of baseline (61.27). The overall KAP score of Sindhupalchowk (73.3) is less than that of Dhading (80.04)

The highest KAP score is evident in food hygiene (93.20) whereas the lowest one is in water treatment (50.59). The major increment in the KAP score between baseline and end line study is observed in waste management (30.8); which is an indicator of substantial improvement in practice. This confirms that people were adopting proper waste management practice promoted by the project. The overall highest KAP score is observed in the BCT group (80) while the least score is observed among Dalits (74.8) and other ethnic groups (74.4). The Janajatis in Dhading have the greatest KAP score (85.2) amongst all followed by BCT (80) in Dhading.

Use of Latrine:

Despite the provision of latrines for 94% of the total respondents, only 87% in Dhading and 93% in Sindhupalchowk said that they were satisfied by the facilities they had. Age and physical inability to use the latrines were given as the reasons for the dissatisfaction by the rest of the respondents.

Water treatment:

Traditionally, the water from the spring source is considered pristine and safe. Therefore, there was no emphasis given in the construction of treatment units in the water supply schemes. Nonetheless, there were few questions included in the tools to understand the treatment in the point of use. Among the respondents, only 35.7% have claimed to perform water treatments which are 51.5% in Dhading and 13.8% in Sindhupalchowk districts particularly during the rainy season. The remaining respondents seemed satisfied with the water quality and while only a few had complaints regarding smell and turbidity.

Food Hygiene:

Out of the total respondents the KAP score for food hygiene was found to be 93.661 in Sindhupalchowk and 92.891 in Dadhang. With a 99.5 knowledge score, 99.3 and 68.4 of positive attitude, the respondents were found to be highly aware of the food hygiene. When asked about the ways to manage the leftovers, apart from feeding to the cattle, about 30% of respondent accepted eating the leftover after reheating in Dadhing while this rate was found to be double in case of respondents from Sindhupalchowk.

Waste Management:

When the respondents were asked about the way they used to manage the wastes, majority of the respondents, 99.2% and 100% of the respondents from Dhading and Sindhupalchowk respectively reported they had been using the wastes for composting which was followed by the use of wastes for Kitchen gardening.

Menstrual Hygiene Management:

KAP score for MHM in Sindhupalchowk is 63.42 and for Dadhing it's 76.772. 87.7% had accesses to different facilities during menstruation like pads, clean clothes, washing station, dustbin. 46.5% of pad users and 73.2% of clean clothes users among the total respondents, had different methods of disposing pads and sanitary clothes. Majority of the users had agreed on washing clothes after the use while this percentage was higher in Sindhupalchowk district (40.8%) than in Dhading district (36.9%). Most of the women in Sindhupalchowk district were found to be burning the used pads followed by burying them in soil and throwing them into toilets. In the case of Dhading district, after washing most of the women preferred either burying or burning the pads.

Relevance:

The Sustainable Water, Sanitation and Hygiene Action in Nepal (SWASTHA Nepal) project was designed to address the critical needs of the earthquake affected communities in 3 wards of Dhading and 3 wards of Sindhupalchowk by supporting them to meet their needs for potable water, sanitation, and hygiene practices. This intervention was aligned with the government's policy and priority to provide support earthquake affected people through addressing critical WASH gaps. The project had been launched in a timely manner so as to recover and address the gap created from the disaster focusing on addressing the needs of the most vulnerable, poor and socially excluded groups. The project supported them through technical, financial and material assistance for building resilient WASH infrastructures. Overall, the interventions of the project were timely and contextual to the needs of the target communities.

Effectiveness:

The objective stated in the project document has been achieved with various interventions. Men, women, girls, boys have benefitted through WASH infrastructures and awareness raising activities, hence living quality of life and becoming more resilient. After the project intervention, 99.2 % of the respondents said that they had engineered systems of water supply systems. However, the average figure of the indicators which were lumped together for access to water was only 84.21%. All the Wards of the Gangajamuna Gaupalika and 2 among targeted 3 wards in Sindhupalchowk have been declared ODF. The public institutions have been supported with latrines and child and gender friendly tap stand. All the houses where the team visited had relatively clean water-sealed toilets. Public toilet and public tap, the team visited were well maintained with water and pad disposal facilities. The evaluation mission observed a huge shift in hygiene practices compared to baseline. The total KAP score during the baseline was noted as 61.27 and whereas the end line noted the total KAP score as 77.23 among the total respondents. The training and awareness raising programs played a vital role in changing the hygiene behavior of the community people. Women members in all WUSCs were at least in one key position and more than 40% of women were found in these committees. However, their decision-making capacity and leadership skills need to be further strengthened as the project duration was too short for bringing about expected change.

CARE's BCC activities were found to be effective in bringing about change in MHM practices including proper disposal of pads by burying or burning, washing and drying used cloths in the sun and consuming nutritious food. This can be attributed to the door to door visits by FCHVs and the promotional activities (BCC) conducted by CARE and its implementing partners. The institutions (school and health posts) have latrines built with consideration for MHM facilities. The ICT based IMS on WASH has been developed by the project for tracking existing water sources and DWSS. However, more capacity building to government stakeholders would be helpful for them to be able to use and update the IMS system properly. The evaluation mission noted that all the schemes were completed and functional during the mission's field visit. The project was able to meet its the objective by supporting over 40.48% women, men, girls, and boys to become resilient. In overall, the project was able to achieve its objectives.

Impact:

The project support for households' water supply connection has greatly impacted women's lives. As a result, beneficiaries' health and wellbeing have been improved. The evaluation mission noted that

community were adopting overall hygiene through the use of toilets, improved MHM practices, and eating fresh and clean food and by maintaining the cleanliness of their houses. The training on leadership, MHM, O&M, Mason, carpentry, plumber and technical as well as financial support to the community people have contributed to build resilient WASH infrastructure and adopt improved hygiene behavior. The quantitative data and discussions with the community revealed that there had been reduced incidence of water-borne diseases due to various promotional activities and BCC sessions, hence, contributing to the healthy lifestyle of the people.

Efficiency:

CARE's implementation modality and its highly efficient and result oriented staff and local partners contributed to implementing the project efficiently. This project demanded community contributions while constructing WASH infrastructures which contributed to the local ownership and led the project to be more efficient. This modality supported close monitoring at field level and a regular update from partner organizations to CARE for any immediate actions, if needed. Both technical and financial support along with training to WUSC and Mothers Group on construction, water safety, and environment management, training to local masons, plumbers, and village maintenance workers, and awareness-raising campaigns to build the capacity of local changemakers supported the the project efficiency. CARE's target vs achievement shows that the project has achieved a high level of project outputs. However, in some cases, the project has proposed either very low targets as of which the achievement seems extremely high or very ambitious target. Due to partner organizations credibility in the working districts, they could create a good working relationship with local authorities in the project areas and get their approval and support in a timely manner. As a result, all the activities were accomplished in a timely manner with expected results. Based on the field observations and the secondary data, the evaluation mission noted that some of the schemes had almost 4 times higher cost than the average per capita cost which also includes community contributions as well. However, this was due to remoteness, the timing of the construction material delivery, requirement of the types of pipes and availability of human resources. This reiterates that per scheme cost was justifiable and within the range as per the remoteness and local context.

Sustainability:

The project has placed some structures in place which support the sustainability of the project. CARE's coordination with VDC (now Palika) during area selection was a good initiative for creating a sense of ownership among the local stakeholders. Gaupalika authorities were found to be involved and coordinated through information sharing, meeting and scheme visits. The ODF plan that was developed in coordination with Gaupalikas will be used to maintain the ODF status and hygiene practice in these Gaupalikas in future. This will contribute to improved hygiene practices in the communities for a longer period of time. Communities were equally involved from the beginning of the project in DWS construction. They contributed in kind to complete the schemes. The training that the project provided on construction, leadership development, menstrual hygiene management, operation, and maintenance training and guideline will have a lasting impact in the lives of the beneficiaries through improved knowledge, skills, and hygiene behavior. Support for the creation of O&M fund through tariff collection will greatly support the maintenance of the schemes after the project phase out. The trained VMWs with regular salary from O&M fund will have the motivation to continue his/her work for a longer period of time. This will lead to

the sustainability of the project. However, more needs to be done in the communities where people are reluctant to pay the water tariff which is mandatory for the sustainability of the project.

Key Recommendations:

Through this project, the level of awareness among the beneficiaries has been increased on Sanitation and Hygiene. However, in future, the project should be designed to ensure the practices of those Sanitation and Hygiene behaviors through innovative strategies including felicitation and recognition for those who practice the most hygiene behavior in the community to encourage others and follow the same.

More sharing and review meetings among the beneficiaries, partner organizations, and CARE should take place for better understanding of the ground reality and lessons learned. This would also provide first-hand information to the management team on progress, outstanding payments, and challenges, if any. However, strong process and product documentation should be promoted for institutional learning.

CARE should take gender transformative approach to tackle some of the root causes of gender inequality and unequal power relations through some targeted interventions for women empowerment particularly on leadership skills, non-formal education and women rights along with other project activities. Men should also be provided training on gender equality and its advantage for the overall well being of their family. Only through such approaches, women would be respected and provided with opportunities for their growth. Otherwise, their participation in project activities will merely remain as token participation for many more years to come.

Regarding the hygiene of people, it is evident from the survey that a significant number of beneficiaries were yet to follow s heygine practices thoroughly. Therefore, the future projects should take a note from this fact and allocate additional resources for raising awareness in future so that cent percent of individuals practicetheir knowledge and adapt more heygine behaviour.

Interventions on MHM should also focus on WASH services available to adolescent girls in the schools. Schools girls have mostly complained about the deficit number of latrines for girls, access to pad facilities, water supply, and soap at hand washing stations. Provision of separate latrines, piped water supply into latrines, availability of soap at hand washing station, and waste bins within the latrine should be made mandatory in schools. The school management committees (SMCs) and parent-teachers' associations (PTAs) should be informed, capacitated and linked to seeking support from other projects that focuses on infrastructure development.

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List of Abbreviations

CDO	Chief District Officer
CHM	Complaint Handling Mechanism
DFD	Detail Documentation of System Diagram
DHO	District Health Office
FCHVs	Female Community Health Volunteers
GAC	Global Affairs Canada
GBV	Gender-Based Violence
HH	Household
IMS	Information Management System
KAP	Knowledge, Attitude and Practice
KII	Key Informant Interview
M&E	Monitoring and Evaluation
MUS	Multi-Use System
NDI	Nepal Development Initiative Consulting Pvt.Ltd.
PDNA	Post-Disaster Need Assessment
RM	Rural Municipality
SQA	Software Quality Assurance
ToR	Terms of Reference
VDC	Village Development Committee
VMW	Village Maintenance Workers
WASH	Water Sanitation and Hygiene
WBD	Water Borne Diseases
WSS	Water Supply Scheme

WSSDO

Water Supply and Sanitation Divisional Office

WUSC

Water User's and Sanitation Committee

SECTION A | BACKGROUND

1.1 Project Overview

On April 25, 2015, a 7.8-magnitude earthquake struck near Kathmandu, Nepal and was followed by a series of large aftershocks, including a further 7.3-magnitude earthquake on May 12. The disaster, which affected over 8 million people, led to more than 9,000 deaths, and temporarily displaced 2.8 million people, prompting a significant response from the international community. The devastating earthquakes caused severe damage to water, sanitation, and hygiene (WASH) services and infrastructure. Even though many national, international and Government Agencies have intervened in the WASH sector, gaps remain. CARE’s multi-sector needs assessment conducted in October 2015 showed major gaps in WASH, especially in Dhading and Sindhupalchowk. More than two years later, some of those gaps still exist.

The Global Affairs Canada (GAC) Project Sustainable Water, Sanitation and Hygiene Action in Nepal (SWASTHA Nepal) considered the specific rights, needs and vulnerabilities of marginalized people; in addition to the multiple barriers they face, in an effort to promote equitable access to WASH services and to strengthen community institutions and participation. Women and girls are disproportionately affected by the unavailability of improved water systems as they are responsible for fetching and managing water at the household level. The Project built on the Government of Canada’s response to the humanitarian crisis in Nepal and meet the remaining WASH needs in the targeted areas. The ultimate outcome of the project is to see improved well-being and resilience of women, men, girls and boys in targeted earthquake-affected areas of Nepal. The project has anticipated three intermediate outcomes:

Table 2: Project Profile

Project Name	Sustainable Water, Sanitation and Hygiene Action in Nepal (SWASTHA Nepal)
Project Donor	Government of Canada
Project Ultimate Outcome	Enhanced quality of life of earthquake affected women, men, girls, boys, elderly persons and those living with disabilities and members of the Dalit Caste through improved WASH services
Project Intermediate Outcome	<p>1: Increased consumption of potable water by EQ-affected population especially by women, men, girls, boys, elderly persons, PWD and members of the Dalit caste</p> <p>2: Increased use of improved sanitation services by earthquake affected population especially by women, men, girls, boys, elderly persons and those living with disabilities and members of the Dalit caste</p> <p>3: Equally improved level of Hygiene Practices amongst all household members</p>
Project Location & Local Implementing partner	Dhading (RIMS Nepal) and Sindhupalchowk (CSRC) Districts
Number of Project Beneficiaries	Sinduhpalchowk & Sindhupalchowk <ul style="list-style-type: none"> • Drinking Water Supply System (DWS): 9085 • Sanitation facilities:3874 • Hygiene facilities:29858

1.2 Study Area:

The project covered two districts, Dhading and Sindhupalchowk. The targeted Rural/Municipalities within two districts are listed in Table 1 and Figure 1.

Table 3: Project Districts and Former VDCs

Province /Districts	Rural Municipalities /Village development committee (VDC)
Dhading (former VDC-3)	Ganga Jamuna Rural Municipality: 5(Fulkharka), 6 (Baseri), 7 (Budathum),
Sindhupalchowk (Former VDC-3)	PachpokhariThangpalGuapalika (Baskharka, Baruwa, Bhotang)

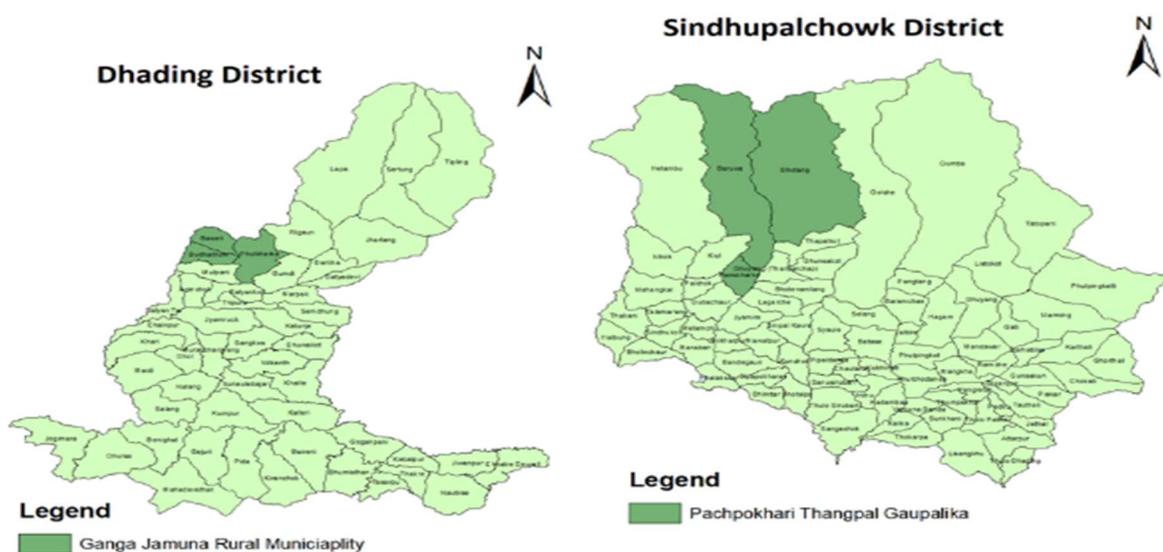


Figure 1: Project Districts and Former VDCs

1.3 Evaluation Objectives and Approach

1.3.1 Objectives of Evaluation:

The study aimed to assess the impact of SWASTHA Nepal project interventions in the working previous 6 VDCs across 2 districts at the end of the implementation period.

SECTION B |BACKGROUND |APPROACH AND METHODOLOGY

2.1 Data Collection Methods

To arrive at the answers to the key evaluation questions, the endline evaluation adopted a two-phase, mixed methods design using primary quantitative and qualitative data. Secondary data, principally from project reports were also used. The methods included the following approach:

- Documents Review of selected documents/items including project log frame. Key Informant Interviews (KIIs) at community, institutional and community-based organization (CBO) level, as well as CARE staff
- Focus Group Discussions (FGDs) at the community level
- Case Studies
- Observations in the field

2.2 Sampling Methods

The evaluation was conducted in 6 former VDCs (Dhading: Fulkharka, Baseri, Budathum; and Sindhupalcho: Baskharka, Baruwa, Bhotang) across Dhading District (3) and Sindhupalchok District (3). For quantitative data collection, the total sample frame for this assessment was 18,189 households. A random sampling approach was used. The total sample size with a confidence level of 95% and a margin of error of 5% was calculated to be 415 households. The sample size was determined using the following random sampling formula:

$$n = \frac{n'}{1 + \frac{n'-1}{N}}$$

Where,

n = sample size

N = total direct beneficiaries = 18189

$$n' = \frac{z^2 * p * q}{e^2}$$

z = error risk = 1.96 for 95% confidence level

p = expected prevalence = 0.5 (50%)

q = 1 – p = 0.5

e = margin of error = 0.05 (5%)

The above formula gave a sample size of 377. However, considering the non- response rate of 10%, the study team proposed to conduct 415 household survey.

The sample size was distributed in the sampled locations proportionally as per the number of beneficiaries in the particular location. The sample size was used for the HH level KAP survey as well.

For qualitative data collection, FGDs, KIIs, Case Studies and Observation were used. Focus group participants and key informants were purposively sampled by the evaluation team. Each focus group ranged from 8-10 participants and was of mixed gender. A total of 24 focus groups (twelve from each district) and twenty-six key informant interviews were conducted.

A list of organizations and individuals interviewed can be found in Appendix B.

2.3 Data Analysis and Reporting

Quantitative survey data were entered into Excel and subsequently cleaned. They were then exported to SPSS for statistical analysis. Simple frequency tables were generated and presented. Where relevant, tests for associations were conducted. Qualitative data was analyzed narrative by the evaluation team and the results of the analysis were then incorporated in this report to generate an end of line evaluation. For qualitative data, field scripts were transcribed manually. Further processing was done through data recorded in the form of audio and visual data (photographs). The findings were disaggregated as per gender, ethnicity, age, vulnerability, and location.

2.4 KAP Calculation

KAP refers to knowledge, Attitude, and Practice. KAP score has been defined as the average score of the positive responses estimated with a maximum value of 100.

The KAP score was computed using the data from the HH survey. Scores for each of knowledge, attitude and practice were calculated out of a total of 60 i.e. 10 for each hygiene message. Then, the scores were given a weight age of 50, 30 and 20 for knowledge, attitude and practice respectively and summed to obtain a KAP score out of 100. The individual weight age was agreed upon discussion with CARE Nepal during the preparatory phase. A detailed method for KAP calculation has been included in Appendix A.

2.5 Ethical Considerations and Consent Process:

For the soundness of the study, the evaluation team followed the ethics and consent process as specified by NDI. The following process was applied for gathering the consent of the respondents:

- The participants were given information about what and how their involvement in the study is required (time, topics of discussion, tasks, etc.), and a brief description of any political risks and benefits of association. They were also informed about the intended use of the provided data.
- The participants were requested to agree to discuss a certain topic for a specified amount of time.
- The participants were also requested to agree to the use of their data as outlined in the information given to them.

2.6 Limitations of the study:

- The study team was conscious of the potential difficulty in attributing observed impact and change to the project, due to the context for the project. There have been other initiatives by the other agencies in other sectors in the same project areas and on WASH in the communities adjacent to the project areas. Thus, these have had a considerable impact on these communities, often synergistic in nature, making it difficult to ascribe specific impact or outcomes to a single project. Attributing impact to a specific period of time, therefore, must be done with caution. However, in most cases project activities specific to WASH have been standalone, independent from external influence. As such, where strengthening the resilience and self-recover and restoring a sense of safety for earthquake-affected children and their communities has occurred, attributing impact and change to the project can be made with a fair degree of confidence.
- A thorough assessment regarding effectiveness has not been possible by establishing change between baseline and life of project achievement, given that some of the baseline values were not available. As such the evaluation had no reliable statistical data for all the listed indicators that could serve as a point of comparison to show that change has occurred.
- Because of its wider scope, assessment of impact is not always relevant for all evaluations, particularly those carried out during or immediately after an intervention. Changes in socioeconomic, resiliency and political processes may take many months or even years to become apparent.

SECTION C | FINDINGS

3.1 Demographic Information of the Respondents and Households:

Out of the 415 respondents in the HH survey of Endline, 43% were female and 57% were male. The average age of the respondents was found to be 49 while the youngest and oldest respondents were of the age 19 and 88 respectively. A comparison of the disaggregation of the number of respondents on the basis of age, sex, ethnic community and gender has been shown in Figure 2.

The comparison of household information is shown in Table 8.

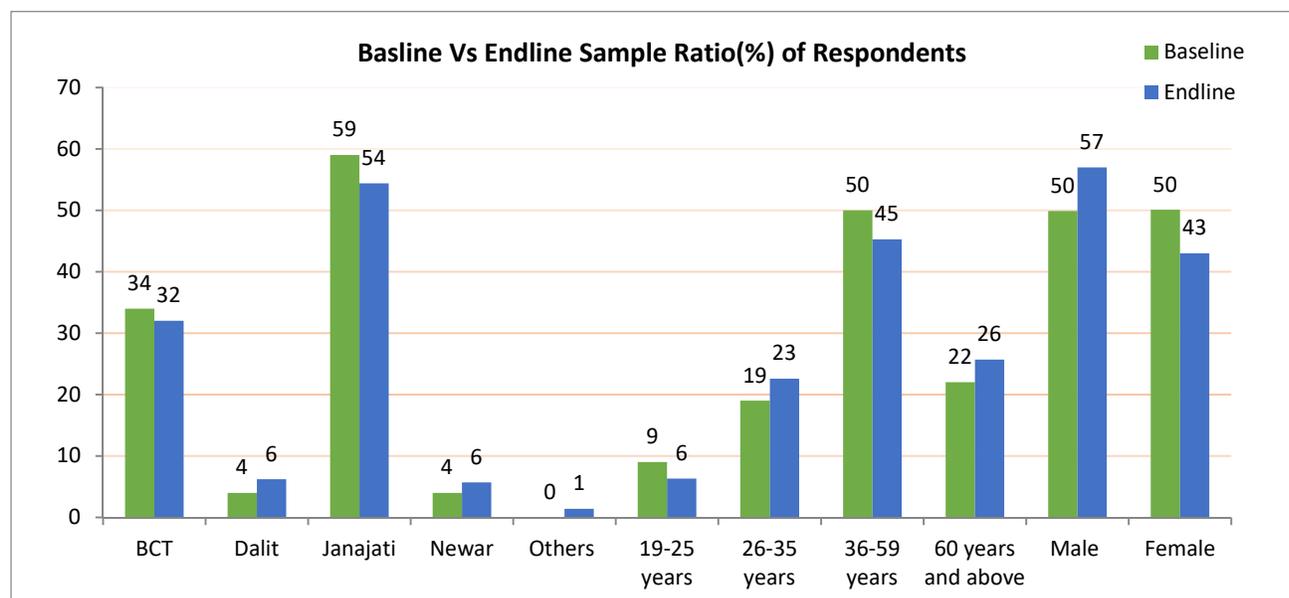


Figure 2: Sample ratio of the respondent

Table 4: Comparison of HH Information

Parameter	Baseline	Endline
Female-Headed HH	24.1%	11.3%
HH with members over the age of 60	41.2%	29%
HH with the pregnant woman	2.9%	4.1%
HH with a lactating woman	9.4%	85.2%
HH with disability	8.0%	8.7%
HH with a single woman	18.1%	18.4%

As per Table 8, in few of the respondents' categories, there is a notable difference on the percentage compared to baseline data particularly on female head HHs, HH with members over the age of 60 and one HH with the lactating woman. One of the reasons for this is due to the new respondents in the end line as some of the baseline respondents were located in the areas where CARE's DWS were not constructed. Similarly, another reason is that during the hh survey, the researcher had to survey most of the beneficiaries from the schemes to meet the allocated sample size from that area and in many cases most of the male head of the household was only available as respondents. This contributed to the decreased percentage of female respondents in the end line survey.

3.2 Socio-Economic

Out of the total 415 sampled HHs, 41.9% of the interviewed households were from Sindhupalchowk and 58% from Dhading. 42.1% of respondents were female and 56.6% were male. Agriculture was found to be the main source of income for the HHs of both districts with 90.8%. In Dhading, the main sources of income were as follows: skilled labour, such as a plumber, mason, construction work and agricultural worker 2%, traditional business (coat/tailoring) 0.4%. Similarly, in Sindhupalchowk these figures were found as skilled labour 3.4%, traditional business (coal/tailoring) and services 4%.

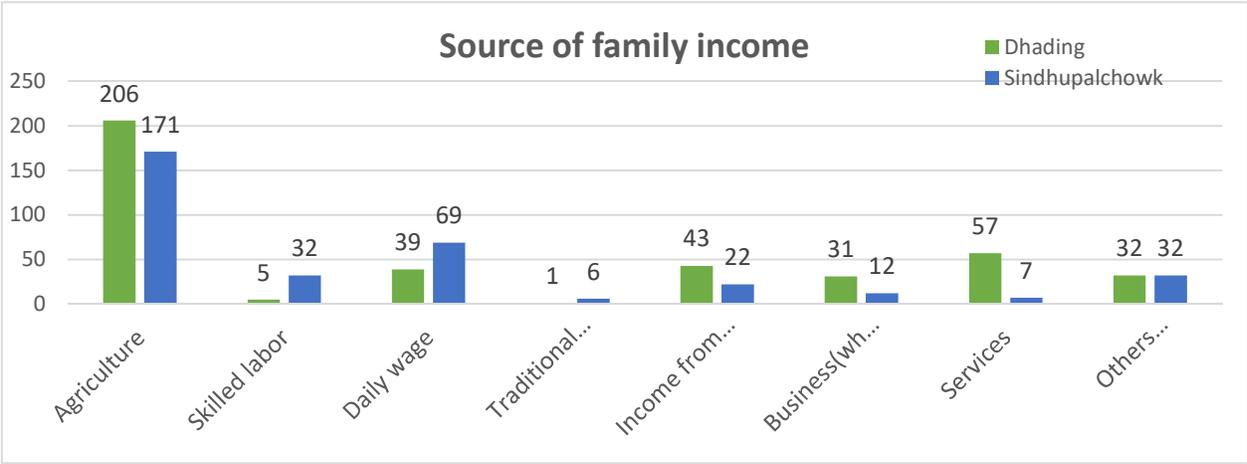


Figure 3: Source of family income of the respondents

3.3 Project Indicator:

The endline values of the indicators have been computed through analysis of data from the HH survey, FGDs, and KIIs.

3.3.1 Ultimate Outcome: Improved well-being and resilience of women, men, girls, and boys in targeted earthquake-affected areas of Nepal

Table 5: Indicators for the ultimate outcome

Indicators	Target	Baseline Value	Endline Value	Remark
% of resilient women, men, girls, and boys.	80%	0%	40.48%	Remarkable Progress
% of women & adolescent girls who make decisions on WASH.	80%	3 %	61.20%	Remarkable Progress

The project was able to increase the resiliency of women, men, girls, and boys through technical and financial support to build WASH infrastructures including awareness-raising campaigns for promoting hygiene behaviour. Women and adolescent girls who made decisions on WASH during baseline survey were almost equal to 3% compared to 61.20% in the end line. This is a great achievement in itself considering the patriarchal mindset of the communities in the project areas. However, 80% target on women and adolescent girls WASH decision making for the two-year project was quite ambitious as women empowerment is a gradual process and may take several years for women to be able to make a decision on the public affair. Nonetheless, this is remarkable progress compared to baseline value and project duration.

Water Supply

As compared to baseline, yard/HH connections have increased due to project interventions, as the project had focused more on One House One Tap policy, making people less dependent on other unsafe water sources. This has also resulted in an increased proportion of HH with women members having less than 5 minutes of fetching water, as the water source was easily accessible within the HH/yard. A total of 80% of the respondents were reported to have access to yard connection or community taps as their key source of water, which has increased from 63% in the baseline. At the Household level, the key source of drinking water for most of the respondents was piped water into the yard. Overall, 79.76% of the total respondents of both Dhadhing and Sindhupalchowk had access to piped water into their yard.



Figure 4: A tap stand post in Gangajamuna Gaupalika, Dhadhing

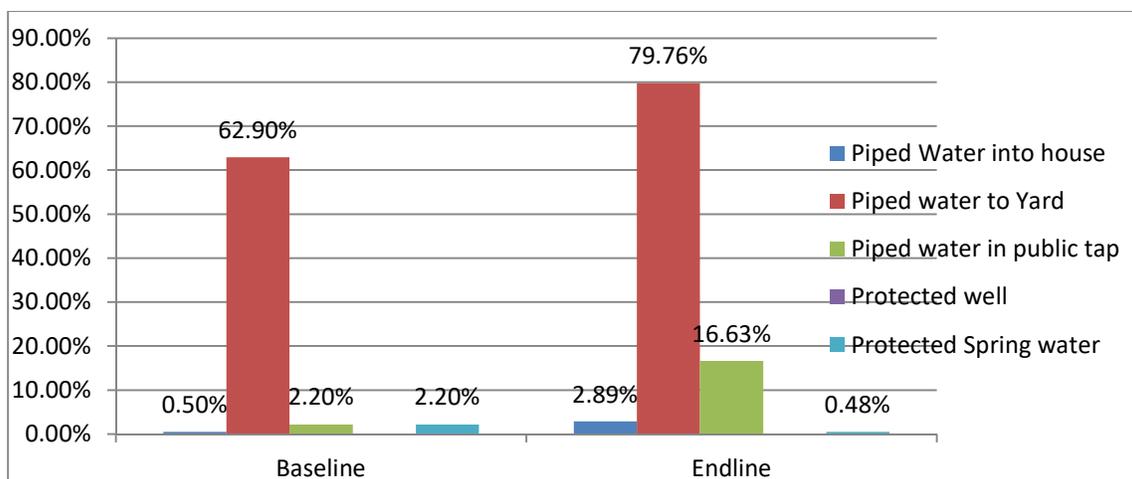


Figure 5: Percentage of respondents on key sources of drinking water

75.9% of the respondents from Dhadhing had piped water to the yard while in Sindhupalchowk, 85.07% of the respondents had access to piped water into their yard which gave them easy access to the drinking water as they did not need to travel far to collect water. Only around 21.5% of the households in Dhading and 9.7% of the households in Sindhupalchowk had to access the public tap as the main source of their drinking water (Figure 5).

3.3.2 Intermediate Outcome: Increased consumption of potable water by EQ-affected population especially by women, men, girls, boys, elderly persons, PWD and the members of the Dalit caste in targeted VDCs of Dhading and Sindhupalchowk.

Table 6: Indicator 1100.a

Indicators	Target	Baseline Value	Endline Value	Remark
# of EQ affected men and women with access to potable water.	8250	N/A	8867	Achieved This total figure was drawn from CARE's last Annual Progress report.

For 70.95% of the respondents in Dhadhing and 63.79% of the respondents in Sindhupalchowk took them less than 5 minutes to access the nearest water point as 92.1% respondents in Dhading and 88.5% in Sindhupalchowk had supplied water available throughout the year. Surprisingly 7.4 % of the

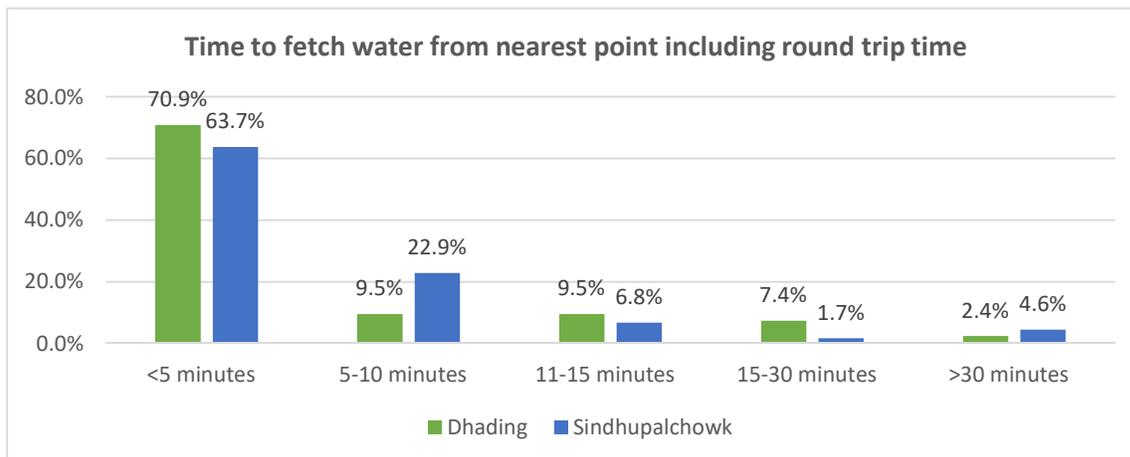


Figure 6: Percentage of respondents taking time to fetch water.

respondents in Dhading and 1.7 % of the respondents in Sindhupalchowk said that it took more than 15 mins to access the water source for them. This is because of the fact that some of the schemes included community water supply systems instead of individual taps. The percentage of respondents to access the nearest water point including the round-trip time, waiting time and fetching time has been shown in Figure 6. Moreover, 92.1% of the respondents in Dhading and. The findings showed that water was accessible from the tap for around 24 hours for 66.8% of the responders in Dhading, and for 87.3% of the responders in Sindhupalchowk. However, the water may not have been available for 24 hours for the rest of the respondents since the VMWs opened the gate valve for only around 4-5 hours per day to prevent wastage of water or, due to the lack of water at the source in the dry seasons.

The respondents felt that the available water was mostly sufficient for their daily needs, as evidenced by the 83.8% of the respondents of Dhading and 88.5% of the respondents of Sindhupalchowk saying the same.

Table 7: Indicator 1100.b

Indicators	Target	Baseline Value	Endline Value	Remark
Percentage of target population reporting that they use the water and are satisfied.	80%	1.2%	86.27%	Well Achieved

The respondents who reported that they had increased quality, quantity and accessibility to water supplied from 1.2% to 86.2% due to project interventions. Among all respondents, 86.2% of them reported that they were satisfied with the water they have been supplied. *“We are grateful to CARE Nepal and RIMS for constructing such a facility at our community. The water system has significantly contributed towards fostering water need of our community members. We feel satisfied with this project. Whatever that we wished for has come true” (UC member, Deurali Khola Majuwa DWS at Fulkharka in Dhading).*

Only 16.1% of respondents from Dhading and 10.3% from Sindhupalchowk showed their dissatisfaction towards the supplied water. The most common reason for their dissatisfaction in Dhading was insufficient water for daily needs and in Sindhupalchowk water was not being supplied through the available schemes. Some of the respondents in both the districts reported other reasons such as intermittent water supply, uneven water distribution, turbid water source, technical problems and not being able to access water even after the pipeline connection. Besides these, the survey results showed that people seemed discontent because still they had to fetch water from elsewhere and needed to pay tariff for water consumption.

The survey showed that there were no complaints regarding the physical quality of drinking water to a large extent. 85.5% of respondents had no complaints on turbidity and taste of water supplied. However, 2.5% of respondents from Dhading and 16.1% from Sindhupalchowk had complaints regarding turbidity. 10.3% of the respondents had problems with water taste in Dhading. Percentage of respondents on a complaint regarding drinking water quality by both districts has been shown in Figure 7.

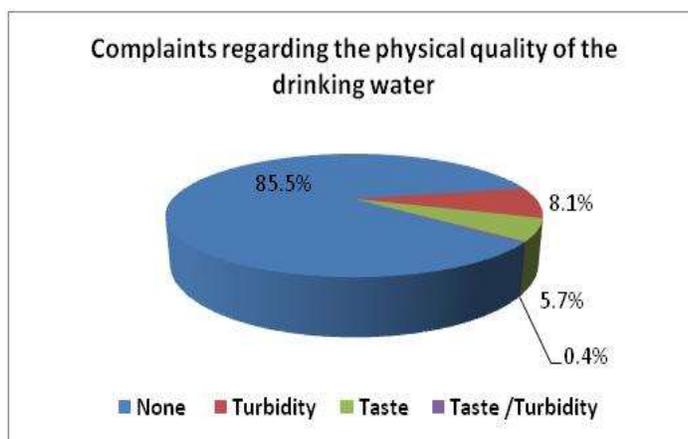


Figure 7: Grievances on water quality

Table 8: Indicator 1100.c

Indicators	Target	Baseline Value	Endline Value	Remark
% of female drinking water users committee members who feel they are able to participate in decision making.	80%	N/A	57.14%	Remarkable progress. Due to patriarchal mind set of the WUC members, it will take more effort and time for bringing substantial changes in the attitude of the male counterparts.

Interactions during FGDs and KIIs indicated that the female Water User Committee members have significant representation in all seven Water User Committee. Out of the 7 FGDs conducted, 100% of female members said they are in some of the key positions of WUSC. However, the evaluation mission noted that most women's role in decision making is still subservient. As there was no baseline value available to compare their participation and decision-making ability, it couldn't be compared. Nonetheless, in Fulkharka women raised their concerns about the time they were spending to fetch water from public taps, and asked for private taps, their concerns were addressed by WUSC. This shows that some women are now confident enough to raise their concerns in front of male members and this is one of the achievements of the project.

Table 9: Indicator 1100.d

Indicators	Target	Baseline Value	Endline Value	Remark
(Gender) % of female drinking water user committee members in leadership positions.	>40%	N/A	25.22%	Remarkable progress This percentage was calculated based on the information provided in the 1st annual report of CARE.

Qualitative tools FGD and KII indicated that out of the seven FGDs conducted with Water Users Committee in both Dhadhing and Sindhupalchowk, 100% of the Water Users Committee have at least one woman is in an executive position. In the Water Users Committee of Bhotang and Baruwa of Sindhupalchowk the team consulted, two female members were found to be in the executive positions, while in Banskharka there was only one female member in the executive position. Similarly, in one of the Water Users Committees of Baseri in Dhadhing, two female members were found to be in executive positions. All the WUSCs the evaluation mission consulted in Dhadhing and Sindhupalchowk, at least one female member was found to be in the executive position meeting the government's criteria. It was also noted that one woman was a member of the procurement committee among three within WUSC. The meeting minutes from the WUSC revealed that women are usually present in the meeting. However, their active participation and decision-making capacity need to be further strengthened.

3.3.3 Intermediate Outcome 1200: Increased use of improved sanitation services by EQ-affected population especially by women, men, girls, boys, elderly persons, PWD, and members of the Dalit caste in targeted VDCs of Dhadhing and Sindhupalchowk

Table 10: Indicator 1200.a

Indicators	Target	Baseline Value	Endline Value	Remark
Number of EQ-affected men and women with access to improved sanitation facilities.	3250	N/A	3423	Achieved

The majority of respondents in both the districts were found to have toilets in their households. 93.3% of HHs in Dhading and 93.6% in Sindhupalchowk reported that they had toilets in their houses. This confirmed that most of them had access to improved sanitation facilities through CARE’s support. Only 6% of respondents did not seem to have toilets in houses.

Among the respondents who had toilets in their houses, 83.1% of them had water-sealed toilets. The survey data showed that 82% of toilets did not have any facilities for physically weak, elderly and persons with disabilities; however, 17% of toilets had wider door facilities. Among all the respondents, 8.7% of HHs had PWD in their families but was found no disable friendly toilets in these households. This revealed that even though, the project targeted the most vulnerable people as their beneficiaries, they could support disable friendly WASH infrastructure at the household level to a limited extent only (Figure 8)



Figure 8: A modern toilet built at Baskharkha, Sindhupalchowk

Table 11: Indicator 1200.b

Indicators	Target	Baseline Value	Endline Value	Remark
% of the target population using latrines constructed/rehabilitated by the project that reports satisfaction with the facilities.	80%	43.37%	84.10%	Achieved

Overall, 84.1% of the respondents both in Dhading and Sindhupalchowk reported satisfaction with the latrines that had been constructed/rehabilitated by the project. In Dhading, 81.3% of the respondents reported satisfaction with the facilities while in Sindhupalchowk, 86.7% of the respondents reported their satisfaction. Only 10% of the respondents in both the districts reported dissatisfaction mostly due to lack of piped water supply in the latrines followed by the absence of light and door lock.

Table 12: Indicator 1200.b (G)

Indicators	Target	Baseline Value	Endline Value	Remark
% of women using latrines constructed/rehabilitated by the project that reports satisfaction with the facilities.	N/A	N/A	78.86%	Achieved The percentage is derived from 175 female respondents only.

It was noted that 74% of the women respondents in Dhadhing and 85.07% in Sindhupalchowk reported their satisfaction with the facilities of the latrines constructed/ rehabilitated by the project. 13.1% of the respondents were dissatisfied with the sanitation facilities. Of the ones dissatisfied, 39.1% are dissatisfied due to lack of door lock, 78.3% respondents due to no light and piped water supply and 26.1% due to other reasons such as damaged latrine and difficulty to use the toilets.

Table 13: Indicator 1200.c

Indicators	Target	Baseline Value	Endline Value	Remark
# of wards declared ODF	6	3	5	Remarkable progress

All Wards (N= 7.) of Ganga Jamuna Gaupalika have been declared ODF including previously targeted 3 project VDCs and in Sindhupalchowk out 3 proposed project VDCs, 2 had already been declared ODF during the time of the evaluation, and one was going to be declared in June of 2019. This confirms that the project remarkably progressed on ODF declaration.

Table 14: Indicator 1200.d

Indicators	Target	Baseline Value	Endline Value	Remark
% of female WASHCC members who feel they are able to participate in decision making	50%	N/A	50%	Achieved This percentage was calculated based on the number of WASHCC female FGD participants' responses during the FGDs

FGDs and KIIs indicated that the female WASHCC members have significant participation in decision-making processes. Out of the 3 FGDs conducted with them, 50% of female members said they had active participation. However, when asked for the specific examples of their

decisions, it was mentioned that the members make all the decisions jointly. As there was no baseline value available for this indicator, it was difficult to compare numerically.

3.3.4 Intermediate Outcome 1300: Equally improved level of Hygiene Practices amongst all household members in targeted VDCs of Dhading and Sindhupalchowk

Table 15: Indicator 1300.a

Indicators	Target	Baseline Value	Endline Value	Remark
# men and women surveyed that report that they have been reached by CARE hygiene awareness campaigns	650	N/A	5969 84.8%	Achieved, This information was drawn from CARE's project completion report

The survey result showed that only 84.8% of respondents reported that they had received promotional hygiene messages from CARE Nepal and its implementing partners. The proportions of respondents who had received promotional hygiene messages were 89.4% and 79.3% in Dhading and Sindhupalchowk respectively. It was also evident that 7.7% and 19.5% of total respondents had not received any promotional hygiene messages from CARE Nepal or its implementing partners.

Among the respondents who reported that they received promotional messages, 87% were found to receive those messages through a social awareness campaign. Similarly, 48% of them received through the door to door visits while there were about 26.5% of respondents who received promotional hygiene messages through various orientation programs conducted by the project.

Table 16: Indicator 1300.b

Indicators	Target	Baseline Value	Endline Value	Remark
% of target populations in target area practicing the 6 key hygiene messages	60%	0%	35.2%	Remarkable progress Food Hygiene – 93.203 Handwashing – 82.104

				Water treatment – 44.875
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The survey data showed that 93.3% of the respondents' families in Dhadhing and 94.8% of the respondents' families in Sindhupalchowk use the toilets. Generally, children under 5 years were found not to be using the toilets. The figure for this age was (7.6%) in Dhadhing and (7.9%) in Sindhupalchowk.

The survey results showed that only 63.4% and 65.5% of respondents in Dhadhing and Sindhupalchowk respectively were found to have the hand washing stations with water and soap nearby the toilet.

Although the majority of the respondents (64.3%) reported that they did not treat their water before drinking due to improved water quality, it was found that 35.6% of the respondents treated water at times particularly during the rainy seasons. The most common method of water treatment used in Dhadhing districts was filtration which was found to be used by 39% of respondents among those who treated and 8.05% used to boil water in Sindhupalchowk at times. 25.3% of total respondents from Dhadhing opted for boiling while only 4.3% of them reported that they use SODIS to treat water. The result showed no evidence of respondents using chlorination method for water treatment.

Relating to the food hygiene practiced by the respondents, 99.6% of the respondents in Dhadhing cover their cooked food and water container. Similarly, 92.5% of the respondents in Sindhupalchowk also cover their cooked food and water container. The survey data showed that 99.5% of the respondents bury the dead animals in a pit. A negligible number of respondents reported eating the meat of the sick or dead animal or selling it. They were highly aware of the risks of eating the meat of sick or dead animals. 99.2% of the respondents wash the raw vegetables and fruits before eating in both Dhadhing and Sindhupalchowk. This confirms that respondents were practicing proper food hygiene methods to maintain a healthy lifestyle.

Regarding the management of household waste, 11.8% of the respondents in both Dhadhing and Sindhupalchowk collected and burnt their wastes. The other majority, i.e 4.58% of the respondents disposed of their household wastes in pits. Composting was also practiced by 4.34% of the respondents in both districts. Around 0.2% of the respondents used the wastes for the kitchen garden. A few respondents collected and disposed off in dustbins installed by CARE or collected and threw by the riverside. Only 0.7% of the respondents threw the waste haphazardly, showing a heightened level of awareness among them. The percentage of respondents on Management household waste has been shown in Figure 9.



Figure 9: Household waste management practices

Table 17: Indicator 1300.c

Indicators	Target	Baseline Value	Endline Value	Remark
% of female ward-level sanitation and hygiene promotion committee members who feel they are able to participate in decision making.	50%	N/A	53%	Achieved Since no FGD was conducted with this group, the average was taken from WASHCCs and WUSCs female respondents.

The survey findings showed that the ward level sanitation and hygiene promotion committees had a low level of activeness. Since this question is also related to the Indicator 1100c and 1200d we could infer that women were empowered to some extent and were able to participate in the decision-making process together with their male counterparts. However, more needs to be done to strengthen their confidence and decision-making process.

Table 18: Indicator 1300.d (G)

Indicators	Target	Baseline Value	Endline Value	Remark
% or # of institutional and public WASH facilities (eg schools, health centers) constructed with consideration for MHM.	TBD	0%	100%	Achieved

47.2% of the total respondents reported that adolescent girls went to school/college during their period. The percentage of school/college going adolescent girls was higher in Sindhupalchowk

with 12.1% than that of in Dhading. However, 6.7% of respondents reported that adolescent girls still skip their school/colleges during menstruation. Besides this, around 46% of respondents did not answer the question. This requires more awareness-raising campaigns on MHM for parents and adolescent girls to support their full attendance in schools and colleges during menstruation. 88 out of 126 respondents in Dhading and 59 out of the 95 respondents in Sindhupalchowk reported that there were good MHM facilities in the schools. The survey data showed that 47.2% of the total respondents reported that adolescent girls go to school/college during their period. The percentage of school/college going adolescent girls was higher in Sindhupalchowk by 12.1% than that of in Dhading. However, 6.7% of respondents reported that adolescent girls skip their school/colleges during menstruation whereas 46% of respondents did not answer the question. 70% of the respondents from both districts reported that there was no restriction to use those facilities during the menstruation period, 56.1% of the respondents in Dhading and 88.3% of the respondents in Sindhupalchowk reported no restrictions to use the facilities during the menstruation. while 44% of the respondents in Dhading and only 11.7% of the respondents in Sindhupalchowk reported some restrictions. It can hence be inferred that there are lesser restrictions in Sindhupalchowk to use MHM facilities in school during one's menstrual period than in Dhading. However, more needs to be done to remove all these restrictions to ensure the full attendance of adolescent girls during menstruation.

Table 19: Indicator 1300.e (G)

Indicators	Target	Baseline Value	Endline Value	Remark
% or # of women, girls, men, boys with improved MHM practices	TBD	35.66%	88.43%	Achieved

Among the total respondents, 42.4% reported that they used clean clothes during their menstrual cycle. The proportion of women using disposable pads and re-usable cloth pads in Dhading was higher with 31.5% and 10.3% respectively than that of women in Sindhupalchowk. The survey results implied that Dhading had good MHM practices as data showed that the number of women using absorbent material was higher than that of Sindhupalchowk. Among the respondents, 17.2% did not respond to the question. The number of female respondents who used pad and cloths during the menstrual cycle has been shown in Figure 10. The survey result showed that 74.2% of respondents wash used clothes with water and soap and dry outside in the sun; while 12.7% of them reported that they washed them with water only and dry outside in the sun.

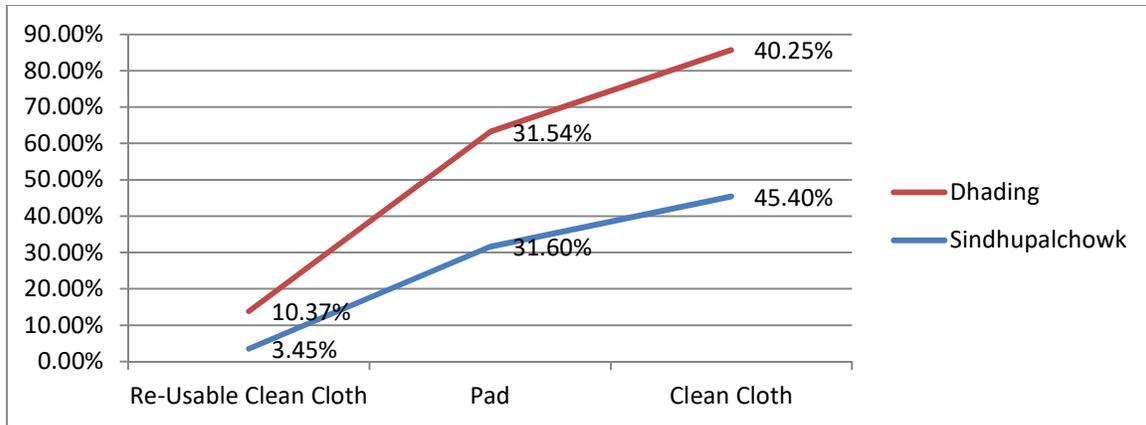


Figure 10: MHM practices among the respondents

Among those who used disposable pads nearly 33.2% said that they burn. About 28.4% of respondents reported that they use the burial method to dispose of the pads. The insignificant proportion of respondents were found to opt to throw outside haphazardly (1.52%) and in toilets (0.7%). Besides these, few respondents; i. e. 2.8% reported that they either use dustbins or riverside or dumping site for the disposal of used pads. The practice that women followed clearly showed that majority of the women were adopting proper use and disposal/cleaning of used clothes and pads used during the menstruation as promoted by the project through various means, hence, showing improved MHM practices.

The endline survey confirms that community people have been using improved MHM practices after the project interventions. The FGDs revealed that door to door campaigns, training, workshops and IEC materials played a significant role in raising awareness of the community people. Women and girls were found to be using clean clothes or pads and dispose them in a proper way. The aggregated endline value for this indicator was found to be 88.34% against 35.66% baseline value. The survey findings showed that Dhading had good MHM practices as the number of women using absorbent material is higher than that of Sindhupalchowk. This is a significant achievement as behavioural change is a continuous process and takes a longer period of time.

During the KIIs and FGDs it was revealed that men and boys were aware of improved MHM practices and impose fewer restrictions on food habits, use of sanitation facilities during menstruation at a household level compared to the past. Some of the husbands were also found to be supportive in buying pads to their wives. This supported the fact that men and boys promote improved MHM practices.

3.4 KAP Finding:

The KAP finding is the calculated average score of the positive responses reported by the participants out of the total weightage (100). The distribution of weightage among knowledge, attitude and practice are 50, 30 and 20 respectively.

Figure 11 shows the average KAP score for six key hygiene messages namely hand washing, use of latrine, water treatment, food hygiene, waste management, and menstrual hygiene management comparison to that of baseline. The overall average KAP score of the respondents in six key hygiene messages is found to be 78.2, which is greater than that of baseline (61.27). The overall KAP score of Sindhupalchowk (73.3) is greater than that of Dhading (70.8).

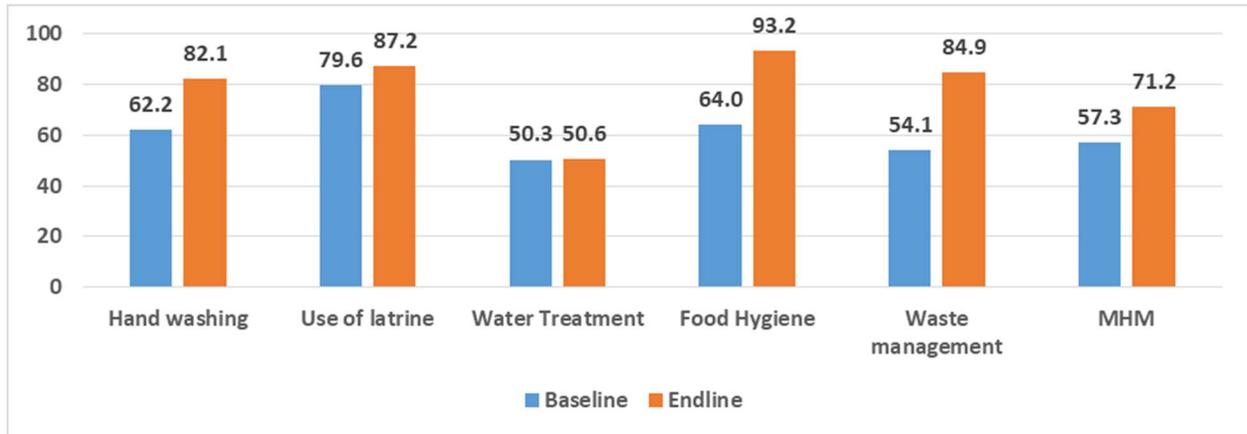


Figure 11: Average KAP score for six key hygiene messages

As shown in figure 11, the highest KAP score is evident in Food Hygiene (93.20) whereas, the least one is in Water treatment (50.59). The major increment in the KAP score between baseline and end line study is observed in waste management (30.8); which is an indicator of substantial improvement in hygiene practices. This confirms that people were adopting proper waste management practice promoted by the project.

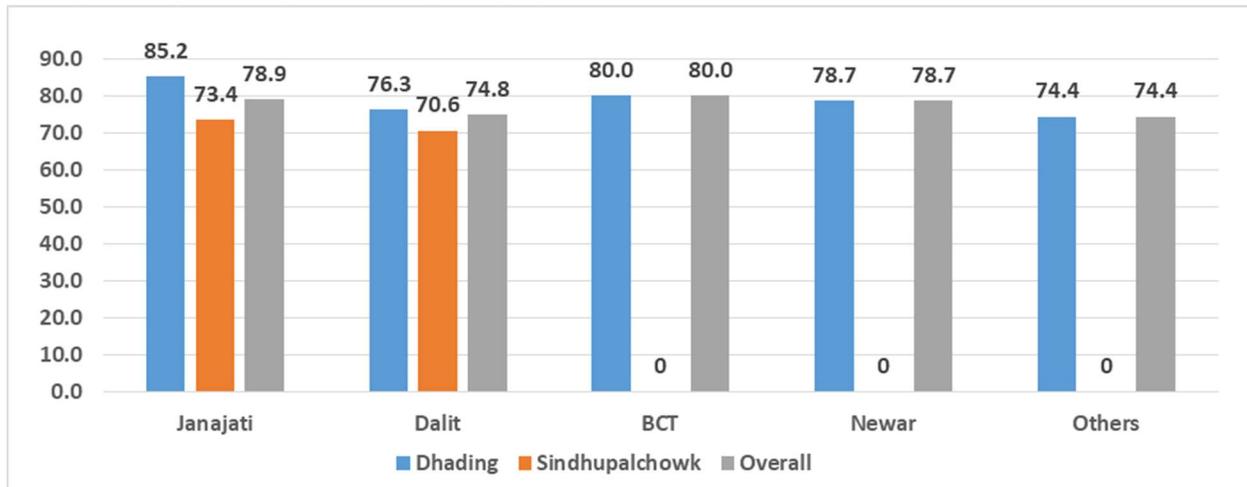


Figure 12: Average KAP score for different ethnic group

As seen in figure 12, the score for BCT, Newar and other ethnic groups in Sindhupalchowk is zero since there were no such respondents from this district. The overall highest KAP score observed among the BCT group is (80) while the least score is among Dalits (74.8). The Janajatis in Dhading

have the greatest KAP score (85.2) amongst all followed by BCT (80) in Dhading. It is evident that the overall KAP score ranges between 74 and 80 in all ethnic groups.

Figure 13 shows the comparison of individual scores of the respondents from different hygiene messages between baseline and end line. The graph illustrates that practice bears less score in comparison to knowledge and attitude. It confirms that despite the knowledge and positive attitude, there is no substantive progress observed in the practice of six key hygiene messages.

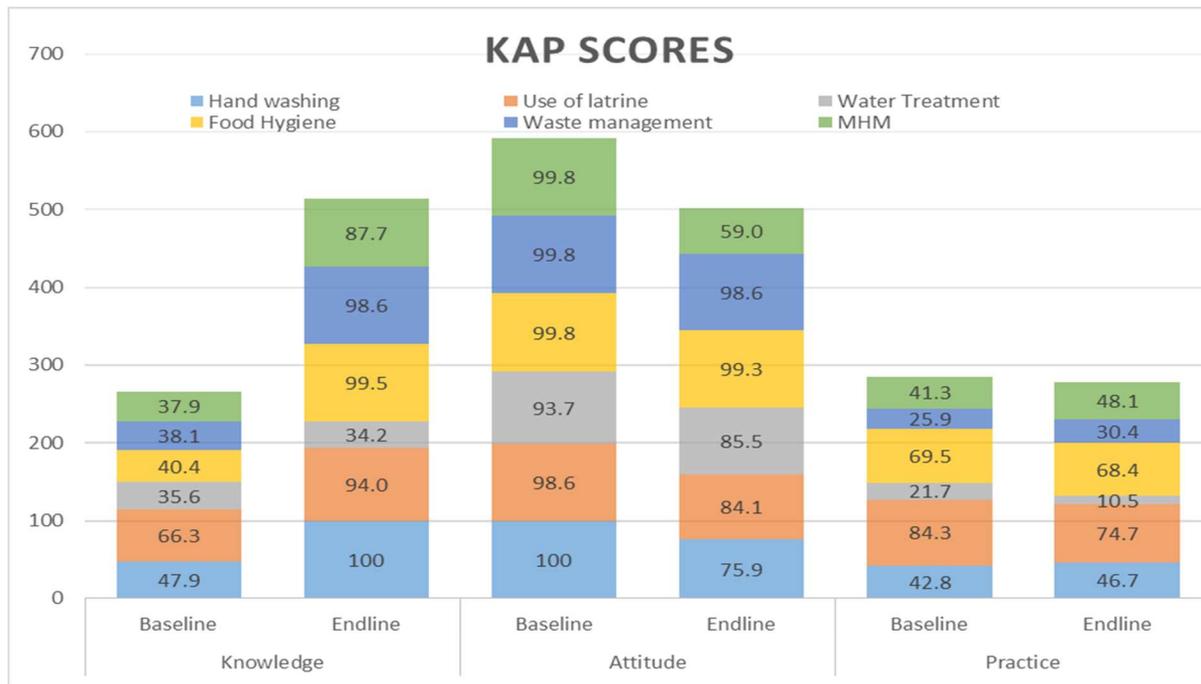


Figure 13: Comparison of Individual scores for Knowledge, Attitude, and Practice for six key hygiene messages between baseline and end line

The least score on practice was observed on water treatment which was because of only 44.9% of respondents reported that they treat water using any of the water treatment methods.

It is also evident that there is a substantial increase in the knowledge level of the respondents which indicates that the social awareness campaigns, door to door visits and orientation programs were successful in increasing the knowledge level of beneficiaries. The male and female respondents were found to have almost equal KAP average in this regard.

As observed in figure 13, the overall baseline KAP score for attitude was higher than that of end line. This is because questions related to attitude were rephrased in the end line as agreed during the questionnaire development. Since the questions related to attitude were asked in a different way, the score in attitude seems lower compared to the baseline. However, the overall KAP score in the end line survey is higher than that of the baseline.

3.4.1 Hand Washing

Hand washing had been given a high emphasis during project implementation, the score on this hygiene message carries great importance. The KAP score for hand washing has been obtained on their knowledge, attitude, and practice only during critical times of hand washing.

Knowledge

The survey data indicates that 100% of people had knowledge of critical times for hand washing. They were also well aware that clean water and soap is a must while washing hands.

Attitude

76% of the respondents reported that they had a definite hand washing station with soap and water supply in their house. This shows that the majority of the people had a positive attitude towards hand washing.

Practice

It was found that there was a good practice of washing hands with soap and water at critical times in both districts. Most of the respondents reported that they washed their hands before eating, after using the toilet and after touching the waste. It is evident from the following figure that there is the least practice of washing hands before feeding and breastfeeding. There were 48.19% of respondents in Sindhupalchowk who admitted that they washed their hands at least more than four critical times, whereas, there were only 45.58% who did so in Dhading.

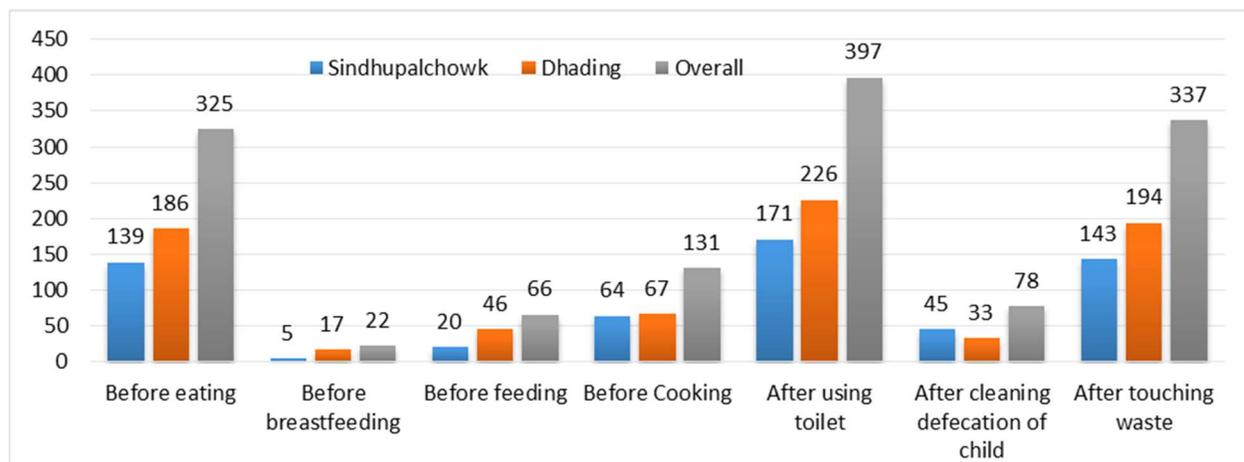


Figure 14: Respondents practicing hand washing during critical times

3.4.2 Use of Latrine

Creation of Open Defecation Free zones were started as a campaign in Nepal, which was also the focus of this project. As per the field observation, all wards in Dadhing were found to be ODF and two among proposed 3 wards were already declared ODF in Sindhupalchok during the field of the evaluation mission and one was going to be declared in June.

Knowledge

94% of respondents reported that they had toilets in their houses which implies that they had knowledge of the negative consequences of open defecation and they know about the importance of using latrines for defecation. Amongst the ethnic groups, Janajati were found to have the highest level of knowledge on the use of latrines as they are the major inhabitants in these districts.

Attitude

Out of the total respondents, only 84% of the respondents had a positive attitude towards the use of latrine. It was found that 87.93% of respondents in Sindhupalchowk and 81.32% in Dhading had a positive attitude towards the use of latrine.

Practice

The practice of using latrine was found to be satisfactory in both districts. Amongst all the respondents, 91% in Dhading reported that all members of their household used the latrine, whereas only 52.3% of respondents revealed that they used latrine in Sindhupalchowk. The showed that elderly members and children less than 5 years of age in their family did not use latrines regularly. This is due to difficulty in using the toilets by children and elderly people as they lack the habit of using the latrine and due to the absence of support rails for them.

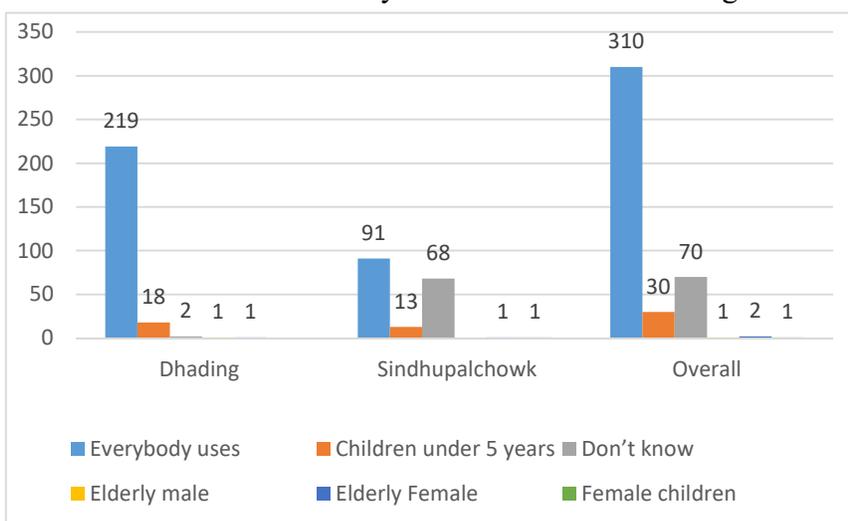


Figure 15: Number of respondents using latrines

Despite this, there is a good practice of using latrines for defecation.

3.4.3 Water Treatment

Traditionally, the water from the spring source is considered pristine and safe. Therefore, there was no emphasis given in the construction of treatment units in the water supply schemes. Nonetheless, there were few questions included in the tools to understand the treatment in the point of use.

Knowledge

Among all the respondents, only 34% found to be treating water using any of the methods of water purification. 50% of respondents in Dhading and 14% in Sindhupalchowk reported that they treat

water. As the quality of water was tested and found to be safe, people did not find necessary to treat it before using.

Attitude

The most relevant question regarding the water quality which would reflect the attitude of people regarding water treatment was included. Overall score in attitude for water treatment was found to be 85.54 among the respondents. 87.55% of population in Dhading had positive attitude towards the water treatment while 82.75% of the respondents had such attitude in Sindhupalchowk district.

Practice

In Dhading district, out of 241 respondents, 87.5% had no problem with the supplied water. While, 6 people had problem with turbidity and 24 had problem with the taste of water. However, 51.5% of respondents from Dhading and only 13.8% of total respondents from Sindhupalchowk were found to be treating drinking water using the methods of water treatment due to occasional water issues. Among the total respondents, only 35.7% of respondents were treating drinking water occasionally. Figure 16 shows the total portion of respondents using water treatment procedures in both districts where only 1/5th of the respondents from Sindhupalchowk expressed that they use water treatment methods compared to that of Dhading.

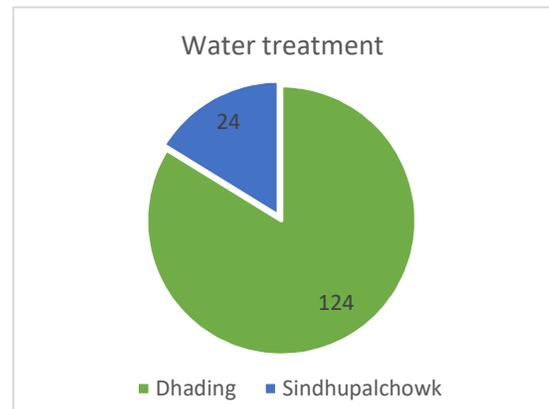


Figure 16: Portions of respondents performing water treatment in both districts

3.4.4 Food Hygiene

The improvement in food hygiene is expected after the availability of water in those areas. The KAP score of the end line study also shows highly significant increment in the knowledge, attitude, and practices on food hygiene.

Knowledge

The survey result showed that 99.5% of respondents had good knowledge on food hygiene. They were found to be aware of covering food, washing raw fruits and vegetables and avoiding consumption of stale food and meat of dead/sick animals.

Attitude

It was found that 99.3% of the population had a positive attitude towards food hygiene. They reported that they cover cooked food in order to avoid diseases.

Practice

When the respondents were asked about the ways they use to manage the leftover food, most of the respondents confirmed feeding the leftovers to the cattle. In Dhading, apart from feeding to the cattle, 30% of respondent accepted eating the leftover after reheating while this rate was found to be double in case of respondents from Sindhupalchowk. Very few

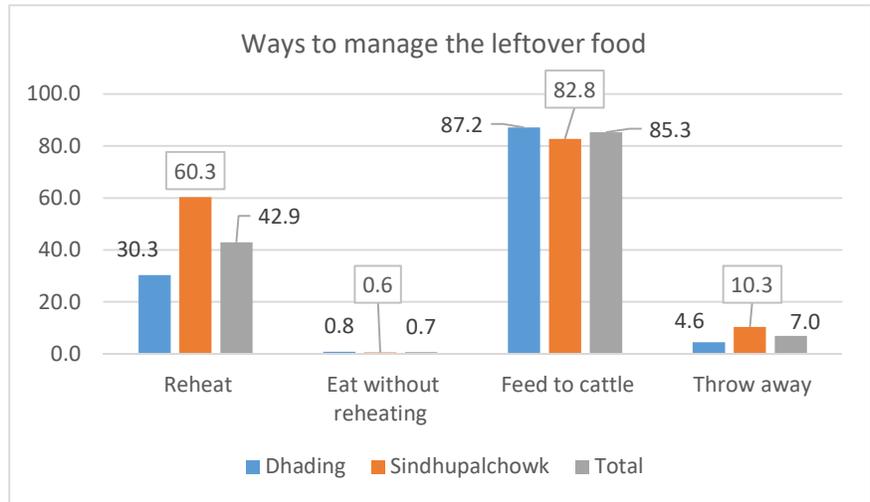


Figure 17: Individuals performing different ways to manage leftover food

of the total respondents (i.e, 7%) were found to be throwing away the leftovers while negligible numbers of respondents accepted eating the leftover occasionally without reheating.

Among the total respondents, no respondents were found to be eating the dead animal in Dhading, whereas one respondent from Sindhupalchowk was found to be eating that sort of food. Similarly,

one respondent had accepted selling the meat of the dead animal, while the majority of respondents in Dhading (99.2%) and 100% in Sindhupalchowk had responded generally burying the dead animals into the pit. Apart from that, some people had reported using other methods such as throwing either in dumping site or in riverside while managing the dead body of animals.

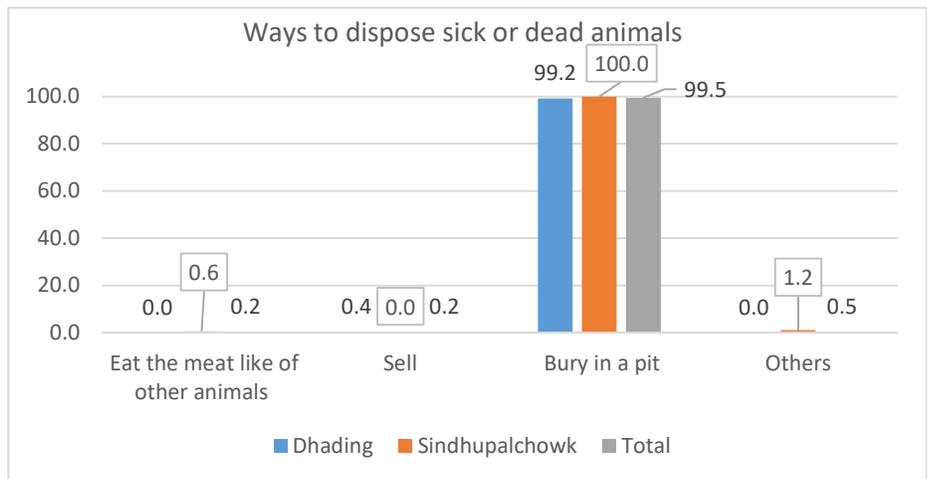


Figure 18: Individuals performing different ways to sick or dead animals' disposal

When asked about washing the raw vegetables before consuming, about 99.6% of people from Dhading and 98.9% of People from Sindhupalchowk and 99.3% overall respondents had a positive

response which indicated the higher knowledge among people on consuming properly washed fruits and vegetables in these districts.

The management of the washed utensil was not found satisfactory as only 49.8% of total respondents had the provision of drying racks for the utensil in Dhading District. Similarly, this rate further decreased to 39.1% in Sindhupalchowk district.

3.4.5 Waste Management

The beneficiaries in project areas are similar to other hilly areas of Nepal who use imported products like plastics. Therefore, waste management related issues are considered important in these areas.

Knowledge

Amongst all the respondents, 98.5% reported that they manage their household waste in a proper way as they know the consequences of throwing wastage haphazardly. There were 99.4% of respondents in Sindhupalchowk and 97.9% in Dhading who had good knowledge of waste management.

Attitude

As the majority of the respondents; i. e. 98.6% admitted that they manage the wastage from their households in an appropriate way; they had a positive attitude towards waste management.

Practice

The day to day activity is sure to produce waste products from every household. When the respondents were asked about the way they used to manage the wastes, majority of the people, 99.2% and 100% of the respondents from Dhading and Sindhupalchowk respectively reported they had been using the wastes for composting which was followed by the use of wastes for kitchen gardening 10.8% and 25.3% in Dhading and Sindhupalchowk districts respectively resulting overall 16.9% of total respondents favoring this method of waste management. This shows practice regarding waste management is high among the population in these districts. Very low or none of the respondents had performed the methods like the designation of a specific place for waste collection and segregation of waste. While 1.2% of total respondents had accepted throwing the waste in a haphazard manner.

Table 20: Individuals performing various ways of waste disposal

Methods of waste management	Dhading	Sindhupalchowk	Total
Designate a specific place for collection	0.0%	0.6%	0.2%
Segregate waste	0.4%	0.0	0.2%
Composting	99.2%	100.0%	99.5%
Throw in a pit	0.0	0.0	0.0
Collect and burn	0.0	0.0	0.0
Collect and sell	0.0	1.2%	0.5%

Use for kitchen garden	10.8%	25.3%	16.9%
Throw haphazardly	2.1%	0.0	1.2%
Others	0.0	0.6%	0.2%

3.4.6 Menstrual Hygiene Management

Menstrual hygiene is one of the small aspects, yet enough to deteriorate women's health. Change and improvement in other hygiene messages could lead to bringing improvement in the knowledge, attitude, and practice of MHM.

Knowledge

It was found that 87.7% of respondents had facilities like pads, clean clothes, washing space and dustbins in their households for menstrual hygiene management. There were 90.87% of respondents in Dhading and 83.3% in Sindhupalchowk who had knowledge regarding menstrual hygiene management.

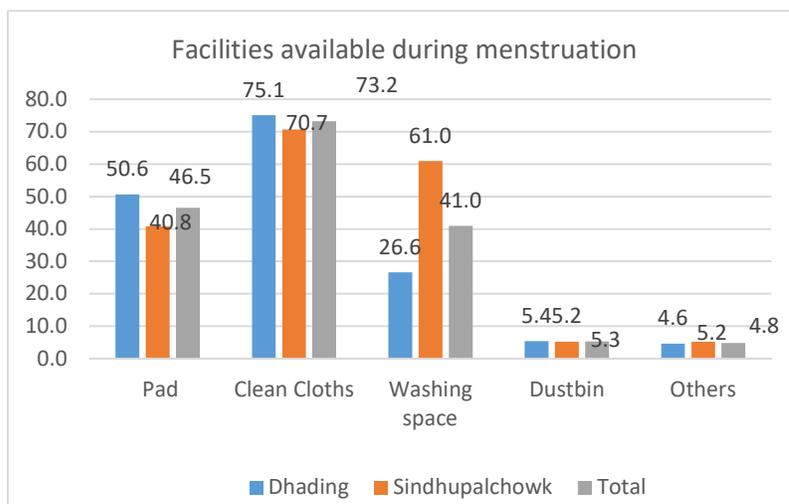


Figure 19: Access of MHM facilities to women during menstruation

The field data shows that most of the women in these areas preferred using clean cloths over pads as this percentage is 73.2% of total respondents. Use of pads are also found to be relatively higher in these two districts. On the other hand, facility of washing space for the used clothes during the menstrual period has been observed relatively low in Dhading (26.65% of total women being surveyed) than that of Sindhupalchowk district (61%). Similarly, the facilities of Dustbin was observed to be very low as only 5.3% of the total respondents had access to it. This shows that more needs to be done in terms of providing MHM facilities including washing facilities and proper places for pad disposal in each household as due to shame or prohibition, women are not able to use the regular washing space during the menstruation.

Attitude

Among all participants, the total attitude scores on MHM was obtained only 59.03 as many people are still not aware about menstrual hygiene. This requires more awareness raising campaigns for both men and women for changing their traditional beliefs and attitudes associated with menstruation.

Practice

46.5% of pad users and 73.2% of clean clothes users among the female respondents, had different methods for disposing of the pads and sanitary clothes. Majority of the users practiced on washing

clothes after the use while this percentage was higher in Sindhupalchowk (40.8%) than in Dhading (36.9%). Most of the women in Sindhupalchowk were found to be preferring burning the used pads or cloths followed by burying them in soil and throwing them into toilets. In the case of Dhading, after washing most of the women preferred either burying or burning the pads. A negligible number of women were found to be disposing the pad into toilets.

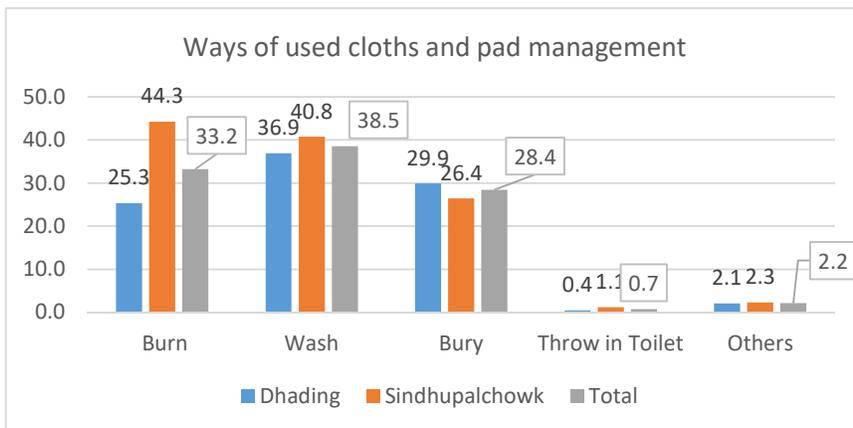


Figure 20: Individuals performing different ways of Pad disposal

Looking at the findings from the respondents, it was evident that the community people needed to improve their understanding on MHM as 6.7% of respondents reported that adolescent girls still skip their school/colleges during menstruation. Higher percentage of respondents from Dadhing admitted that they do not send adolescent girls to school during menstruation. This confirms that more awareness raising activities are needed for both parents and adolescent girls to ensure their attendance in school during their menstruation.

In a nutshell, it can be concluded that there has been a significant increment in overall KAP score among the people in project areas. However, even if there is high level of knowledge and attitude on overall hygiene, practice seems not to be very satisfactory. This requires more efforts through awareness-raising campaigns for a longer period.

3.5 Criteria of Evaluation

3.5.1 Relevance:

A devastating earthquake, measuring 7.8 on the Richter scale, hit Nepal on April 25, 2015. The PDNA report showed that out of a total 11,288 water supply systems in the 14 most-affected districts, 1,570 sustained major damages, 3,663 partial damages and that approximately 220,000 toilets were partially or totally destroyed. The Sustainable Water, Sanitation and Hygiene Action in Nepal (SWASTHA Nepal) project was designed to address the critical needs of the earthquake affected communities in 3 wards of Dhading and 3 wards of Sindhupalchowk by supporting them to meet their needs for potable water, sanitation, and hygiene practices. This intervention was aligned with the government's policy and priority to provide support earthquake affected people through addressing critical WASH gaps. CARE consulted the local government bodies during the community selection process and the schemes that were reported as damaged to the government were also taken into consideration. CARE worked within the Post Disaster Recovery Framework (PDRF) to strengthen WASH facilities in these areas. This project was vital to rehabilitate or reconstruct damaged water and sanitation facilities to restore Open Defecation

Free (ODF) status and to improve the quality of lives of the earthquake (EQ)-affected communities. Similarly, the project was built on the Government of Canada's response to the humanitarian crisis in Nepal to meet the post-recovery WASH needs in the targeted areas. The project was designed through community consultations, vulnerability needs assessment, and discussions with local bodies, which clearly showed the need to address the emerging WASH needs of the communities in the post-disaster context. *"I faced a lot of challenges in fulfilling my everyday water need and use of toilet as the earthquake damaged our water source and my toilet. No organization came to support us to restore our facilities. Now, at least I have been able to fulfill my water needs of my family and domestic animal through CARE support. This has been a great support for me."* (Female FGD participant, Baskharka). Similarly, almost all the FGD participants and KII respondents highlighted that urgency of the WASH infrastructures restoration in the post-earthquake situation, hence meeting their needs. This clearly outlines that the intervention was timely to address the pressing need of community people in the project areas. The project had been launched in a timely manner so as to recover and address the gap created from the disaster.

The low access of the earthquake affected communities to safe, adequate and equitable WASH services at baseline confirmed the need for the interventions in those communities. Thus, the project improved 30 DWS through repair, rehabilitation and reconstruction based on the vulnerability need assessment carried out earlier. The project worked with the needs of the most vulnerable, poor and socially excluded groups through providing technical, financial and material for building the household tap and toilets. As the project was relevant to the beneficiaries' needs, they had the motivation for community contribution in the construction of DWS.

Similarly, door to door campaigns and training on menstrual hygiene management and O&M were found to be particularly helpful for women to raise their awareness on women rights, develop their leadership skills and plumbing skills. *"Our family members also took part in different campaigns and training organized by this project. Now they very liberal with me during my menstruation and allow me to take part in community affairs. Before they were very conservative and wanted me to only do the household chore. This kind of interventions was much needed to transform our society"* (Female FGD participant, Panchpokhari, Sindhupalchok). These supports were much needed in the post-disaster context to address the WASH gaps in the project areas as revealed by the respondents. The evaluation team found that CARE's SWASTHA project contributed to restoring the WASH facilities and empowered the community people, particularly, through different campaigns, training, and door to door visits in a timely manner based on community needs and priorities in the post-recovery context.

3.5.2 Effectiveness:

The objective stated in the project document has been achieved with various interventions. Men, women, girls, boys have benefitted through WASH infrastructures and awareness raising activities, hence living quality of life and becoming more resilient. Findings from both quantitative and qualitative surveys confirmed that there is a significant increase in the household access to improved drinking water due to the rehabilitation of water points and renovation and reconstruction of water supplies. After the project intervention, 84.21% of households were able to fully meet their drinking water needs with national



Figure 21: A public toilet with inbuilt incinerator



Figure 22: A well-functioning reservoir tank, 14 cubic meter at Chisekhola Kaichalbot W/S

quality drinking water standard. Many women and girls benefited through improved WASH infrastructures and awareness raising activities. *"The earthquake damaged our water tap and toilet. We had a lot of difficulties while we didn't have easy access to water after the earthquake. Our workload increased immensely as we had to travel to the nearest water tap for fetching drinking water and washing our clothes. We could hardly manage water for cooking and cleaning. Now we have felt relief after the regular water supply through CARE support"* Female FGD participants, Budhathum, Dhading). Most of the women consulted during the FGDs mentioned that their time has been saved due to regular supply at home and they have

been able to support their children in their education, do the kitchen gardening and cooking and cleaning. This has led to an improvement in overall household management and cleanliness.

Beneficiaries from the project Gaupalikas/ wards expressed that they have been able to use improved sanitation services. Majority of the households have clean toilets with water and hand washing station around the corner or outside the toilet. All the Wards of Gangajamuna Gaupalika, Dhading and two out of three proposed wards in Sindupalchok had been declared ODF during the project period. The remaining one was going to be declared ODF in June 2019. The public institutions were found to be supported with latrines and child and gender friendly tap stand. The schools the evaluation team visited were found to have ramps for wheelchairs and child-friendly taps. Nonetheless, due to sloppy land and limited space, Jatan health post in Sindhupalchok had child and gender friendly tap stand at the edge of the health post which could cause safety concerns to children. Similarly, access to tap stand and toilet for people with disability needs to be taken into consideration in such places while providing support to WASH infrastructure in future.

The project had clearly oriented on the structure and the minimum construction cost to the beneficiaries before the yard connection. However, some of the beneficiaries chose to spend more and construct the tapstand post of their choice beyond the standard. The evaluation mission noted that one of the beneficiaries in Okharkhola Water Supply Project in Jatan, Panchpokhari Thankpal had to bear the high financial burden as much as NRs 50,000. This scheme had been originally designed to serve 31 taps. User's committee chairman had a feeling that the tapped discharge and the reservoir constructed were not enough to cater 31 taps which needs to be improved for regular water supply in all the taps. In overall, the evaluation mission noted that most of the schemes the team visited were constructed as per the design and standard.

On the accountability and dissemination of information, majority of the schemes had display boards with the number of total beneficiaries, total cost including community contribution and the hotline number to report the beneficiaries' concerns to CARE Nepal.

The evaluation team noted that community people had been provided with the construction of toilet and tap support including one-time toilet cleaning materials for PWD and some of the marginalized groups. Earthquake-affected men and women in 473 HHs in Dhading and Sindhupalchowk were provided with access to improved sanitation facilities through latrine construction. All the houses the team visited had relatively clean water-sealed toilets. During the FGDs with community people, all the participants revealed that they have hand washing stations, some with soaps and some without soap, bathing station, waste disposal container and utensil drying racks in their houses. Similarly, a total of 13 institutional latrines with separate units for male and female with separate gender friendly urinals were constructed. Public toilet and public tap the team visited were well maintained with water and pad disposal facilities. Community people take voluntary initiation to clean the public tap surroundings and burned the solid waste collected in the bamboo bin. This confirms that people have high level of awareness to maintain improved hygiene behaviour.

People expressed great satisfaction with the support they received from CARE in Nepal. However, they also raised concerns on maintaining the O&M fund as it would be difficult to impose a tariff

for the public tap beneficiaries and some of the poor people from the community were not able to contribute into the fund voluntarily. They had requested to the ward chair for the same but in vain. *"Since the scheme was built, no issue of maintenance as of yet. However, we are worried that the voluntary fund that we have established will get depleted easily after one or two maintenance. Had CARE contributed to this fund, it would have been very helpful for us as this is a public tap and impossible to impose a tariff to the users. We had communicated our problem with the Ward but in vain. They just ignored us saying that it would be impossible for them to provide support to all the schemes as Ward doesn't have that provision. If some things come we will let you know"* (FGD UC, Mathillo Besare, Dhading). This confirms that even if beneficiaries can raise their concerns with local authorities, they are not being heard by showing various reasons. On the other hand, all the schemes that had yard connections, some mechanisms were found to be in place for O&M fund through monthly tariff collection including an initial voluntary contributions. In those schemes where the meters are still being fixed, the WUSC have made the decision on tariff collection and O&M fund collection modality. The tariff ranged from Rs. 2 to Rs. 5 per unit or minimum Rs. 100 per hh. The tariff collected from the beneficiaries had been used to pay the salary of the VMWs and keep as O&M fund. This has supported the sustainability of the project and community ownership.

The evaluation mission observed a huge shift in hygiene practices compared to baseline. The overall average KAP score of the respondents in six key hygiene messages has been increased to 78.2, which is much higher than that of baseline by 27.6%. (refer to Annex-X)The total KAP score during the baseline was noted as 61.25 and whereas the end line noted the total KAP score as 77.23 among the total respondents. The training and awareness raising programs played a vital role in changing the hygiene behavior of the community people. Majority of the KII and FGD participants were found to be aware and practicing some of the key hygiene messages. Women and adolescent girls were found to be maintaining menstrual hygiene management by using clean clothes and pads. *"I use clean clothes during my menstruation and change them frequently. Unlike before, I dry them under the sun in an open place. I am not ashamed to do that. However, if I am going to the market or city I use the pad as it's comfortable to dispose of them in dustbins or safe place"*(FGD participant Baseri, Dhading).

However, women were found to be doing more farm work including collecting firewood and fodder



Figure 23: A typical dish drying station

during the menstruation as the Bramhin and Chettri community did not allow women in the kitchen during the menstrual cycle. Some of the families also admitted that the menstruating women had to follow some food restrictions in their houses. This shows that more awareness raising on menstrual hygiene management is required to allow women to live dignified menstrual cycle. Some of the FGD participants from schools revealed that there are pad vending machines provided to schools and they can use them without letting anybody know that they are menstruating. This has created some level of comfort to the adolescent girls. Though community people are aware of handwashing techniques, FGD participants revealed that they do not exactly follow the handwashing techniques as demonstrated by the project but simply use soap and wash their hands before eating food and after using toilets. One old woman in Mathillo Besare honestly said that her children might follow the hand washing techniques, but she never does so. Quite often, she didn't even wash her hands before eating food. This shows that behavioral change is a long-term process and there should be continuous awareness raising activities for a certain period of time to make the community people realize its importance and ensure they practice what they have learned from the project. On the other hand, people were found to be practicing dish drying as taught by the project. Most of the household had made dish drying corners next to the tap stand post (Fig. 23) and dried the utensils after washing. Dish drying was practiced by almost all the FGD participants and KII respondents.

Women representation in WUC was found to be satisfactory with one woman at least in one key position. In some of the WUCs women representation was more than 70% of total WUC members. The FGD participants revealed that this was due to the skill migration of men and youth from the community. 100% of the WUSCs have at least one woman in authority positions where their signatures are needed for banks, increasing their decision-making abilities. Women WUC members have higher level of confidence through various capacity building support provided by the project. For instance, in Majuwa scheme in Fulkharka, Dhadhing, only 6-8 public taps were to be provided. However, the women raised the issue about the time loss while fetching water and reiterated the need for private taps in the committee discussion. This led to the committee discussing with CARE which decided to install 28 taps for the 28 Households.

Change in MHM practices relating to the proper disposal of pads by burying or burning, washing and drying used cloths in the sun and consuming nutritious food has been observed. This can be attributed to the door to door visits by FCHVs and the promotional activities (BCC) conducted by CARE and its implementing partners. The institutions (school and health posts) have latrines built with consideration of MHM facilities. This has led to higher attendance of the female students as they now don't miss school during their menstruation. Most of the incinerators are installed at the school and has led to effective disposal of the pads, especially since they are connected directly to the latrines. Though 12.5% of respondents reported that adolescent girls still do not attend their schools during menstruation, there is a more open discourse in the schools about menstruation and schools are committed to making MHM facilities accessible to its students. FGDs also revealed

that the MHM training to the school teachers and adolescent girls have helped the girls maintain better hygiene. However, numbers of latrines for girls needs to be taken into consideration.

The evaluation mission also observed that in many cases, women's participation in the decision-making process was still very low and most of the decision within the committees were made by the chairperson himself. The meeting minutes confirmed that the presence of women in WUSC in the meeting was good. Most of the WSS have appointed VMWs (mostly men), under the payroll of the WUSC. When asked during the discussion, they revealed that it was due to the hardship and safety of women VMWs face while going to the sources and lifting the maintenance materials during the maintenance. However, training to VMWs has supported women VMWs to come forward and take part in the maintenance of water supply. More awareness raising activities are needed to change the attitude of the WUCs in providing opportunities for women to be able to work as VMWs. The awareness-raising activities also need to include the importance of having women VMWs and the basic safety measures and support systems for women VMWs to be able to work effectively.

The project has supported a mechanism to collect an O&M fund through regular tariff collection and initial voluntary contribution to the fund in some schemes. This ensured the regular supervision and maintenance of the schemes. The project provided training and awareness on the importance of tariff collection. In most of the scheme, the evaluation team visited beneficiaries were happily paying a tariff. However, places like in Bhotang, people were found to be reluctant to pay the tariff which was agreed Rs.20 per month. During the FGDs, they expressed resentment with the team. *"CARE did no good to us, we were drinking water for free before the scheme was constructed. Now, we are supposed to pay Rs. 20 per month which I am reluctant to"*(FGD participants, Bhotang). Their O&M fund was found to be very low as no one wanted to pay the tariff. This shows that awareness-raising activities for creating ownership and changing the community's attitude require a tailored made approach for different communities for a longer period of time.

The ICT based IMS on WASH has been developed by the project for tracking existing water sources and WSS. The training was provided to district and government stakeholders. This will have long term impact in maintaining water quality and sustaining existing water schemes. However, the IMS is yet to be updated with the information on water sources and water supply schemes and NMIP data have to be updated and integrated by this system. Thus, constantly follow-ups for regular updates and more capacity building to government stakeholders are needed to be able to use and update the IMS system properly.

Project display board with the name of the project scheme, total beneficiaries, and the cost; and public auditing contributed to the transparency and accountability of the project. This helped reduce the suspicion of corruption and created more trust among the beneficiaries and CARE itself, hence it led to community cooperation and support during the project implementation. *"We had no issue with CARE regarding the transparency of the budget and other information. They had*

provided us with their phone number in the project display board and their staff interacted with the community people during their field visits. They had also set up a suggestion box at the ward office. However, I am not aware of anyone putting their complaints in the suggestion box as we were not informed about what complaints were lodged in that box and how they were resolved. So I guess, no complaint had been lodged so far as I didn't notice major issues from my end (KII participant, Baseri).

The project was able to achieve the overall objectives of the project though it could not meet all target set forth in the project log frame. This is due to ambitious target set forth by the project. The data reveals that situation still needs to be improved in Dhading and Sindhupalchowk particularly in making people practice all the key hygiene messages

Though there was some delay in project implementation in the first year of the project due to political transition, t CARE completed all its activities and handed over the schemes to the communities in the presence of local authorities after completion within the time frame of the project. All these schemes were found to be fully functional during the mission's field visit.

3.5.3 Impact:

The project support for households' water supply connection has greatly impacted women's lives. Women now are able to provide time to their children, manage personal hygiene, maintain overall cleanliness of the house, and grow vegetable in the kitchen garden through the use of recycled water. As a result, beneficiaries' health and wellbeing have improved. Similarly, awareness on MHM through the door to door visits, training, and orientation to parents, teachers and adolescent girls has supported girls' school attendance during menstruation. Girls have also been provided with pad facilities so as to continue their studies during the menstruation in all the schools. Most of the incinerators were found to be installed at the school which led to effective disposal of the pads, especially since they were found to be connected directly to the latrines. This had helped to retain girls in schools and focus on their studies during their menstruation. *"I do not skip school during the menstruation nowadays as I use pads which are easy to change and dispose of. My parents encouraged me to attend schools during menstruation. If I get menstruated in school, I can easily get pads from the vending machine. Once I use a pad, I don't even think about my menstruation"*(FGD, Shree Bhim Vidyashram Secondary School, Sindhupalchowk). This confirms that training and awareness on MHM and availability of pads in school had supported girls' school attendance in the long term, though more needs to be done to support 100% girls' attendance during menstruation. The evaluation mission noted that community were adopting overall hygiene through the use of toilets, improved MHM practices, and eating fresh and clean food and by maintaining the cleanliness of their houses.

Women's participation in WUC has been observed to be increased. All the WUCs the team interacted were gender inclusive. Out of the 7 randomly selected meeting minutes in Dhading and Sindhupalchowk, significant participation and involvement of female members were seen in the meetings. Moreover, there was a complete representation of the female members in an executive

position. However, the minute contained only the general WASH-related decisions and no decisions exclusively related to women empowerment or support.

Women were trained on leadership skills, O&M and as construction workers. This has raised their confidence to some extent. However, their leadership skills have to be strengthened to be able to perform well in the WUCs as male domination in the discussion was obvious. The FGDs and KIIs revealed that mere inclusion may not be adequate and real empowerment of women. More awareness of WUC members on the importance of women participation and decision making in WASH activities has to be organized for the meaningful participation of women.

The training on leadership, O&M, Mason, carpentry, plumber and technical as well as financial support to the community people have contributed to being more resilient through building resilient WASH infrastructure and adopting improved hygiene behavior. The interventions through different faucets have thereby led to greater satisfaction of the community people after the earthquake. The project has provided opportunities for people from the same communities to work as VMWs and construction workers which has contributed to their financial status. However, it was observed that it will take some time for women to be trusted and appointed as VMWs as the patriarchal mindset of male WUCs was quite evident in the discussion.

3.5.4 Efficiency:

CARE's implementation modality and its highly efficient and result oriented staffs and local partners contributed to implementing the project efficiently. This project was managed by CARE at the central level and implemented and monitored by partner organizations at the district level. The process applied for implementation of project initiatives involved the execution of each activity by the local partners in coordination with local agencies/actors and community people. This project demanded community contributions while constructing WASH infrastructures which contributed to the local ownership and led the project to be more efficient. This modality supported close monitoring at field level and a regular update from partner organizations to CARE for any immediate actions, if needed.

A strong operational system for the project including district partners, human resources, schemes selection through local government bodies, consultation with local communities and their contributions in building WASH infrastructures, detailed design and estimation of the schemes, and formation of Water Users and Sanitation Committee (WUSCs) strongly supported the implementation of project activities in an efficient manner. CARE's target vs achievement shows that the project has achieved a high level of project outputs. However, in some cases, the project has proposed either very low or too ambitious targets as of which the achievement seemed either extremely high or under achieved. This shows that realistic targets should be proposed considering the project context and its duration.

Both technical and financial support along with training to WUCs and Mother's Group on construction, water safety, and environment management, training to local masons, plumbers and village maintenance workers, and awareness-raising campaigns to build the capacity of local changemakers contributed to becoming the project efficient. Nonetheless design and planning for the construction of the private tap stand posts should be tailored made. One house one tap supported government policy and community need. However, in some cases, taps should be designed and provided as per the need and context. For instance, if one tap could serve the need of both the families who are staying in the same house and the 2nd tap could be given to the family that is facing water scarcity in the nearby location.



Figure 24: Hoarding board displaying the water treatment technology

The implementation modality of the project through established partner organizations in the district is cost-effective as they already have established offices in districts with trained human resources, where CARE did not have to invest much time and cost to establish the offices, hire people and build their capacity. Similarly, this modality also assured the quality of program activities through close monitoring of the partner organizations on day to day basis. Due to partner organizations credibility in the working districts, they could create a good working relationship with local authorities in the project areas and get their approval and support in a timely manner. As a result, all the activities were accomplished in a timely manner with expected results.

Per capita cost of selected projects is shown in Table 25. A comparison has also been made with the per capita cost obtained from the ratio of the total actual cost obtained from the project document and the total beneficiaries. The per capita cost ranged from as low as NRs 3645 and as high as NRs 19624 depending on the remoteness, availability of the construction materials and labour cost.

Table 21: Comparison of per capita cost of the selected project

Name of the project	Location	Total cost, NRs	Total population	Per capita cost, NRs	Remarks
Maathillo besare	Gangajamuna, Ward no-7	5,21,357	143	3,645	<i>No transmission line/ the cost is justified less than average.</i>
Aaru dada	Panchpokhari, Thanpal, Ward no- 1	26,01,008	133	19,624	<i>The cost is too high.</i>
Chise Khola	Gangajamuna, Ward no-5	46,08,205	284	16,226	<i>The cost is too high.</i>
Chammer Okharkhola	Panchpokhari, Thanpal gaupaalika	42,86,132	482	8,892	<i>The cost is on the higher side.</i>
Total	Sindhupalchok and Dhading	2,66,82,328	4743	Rs. 5,626	

Based on the field observations and the secondary data, the evaluation mission noted that some of the schemes had almost 4 times higher cost than the average per capita cost which also includes community contributions. When inquired with the communities and the project staffs, they revealed that this was due to remoteness, the timing of the construction material delivery, requirement of the types of pipes and availability of the human resources. This reiterates that per scheme cost was justifiable and within the range as per the remoteness and context.

3.5.5 Sustainability:

Coordination with Gaupalikas: The project has placed some structures in place which support the sustainability of the project. CARE's coordination with VDCs during area selection was a good initiative for creating a sense of ownership among the local stakeholders. Gaupalika authorities were found to be involved and coordinated through information sharing, meeting and scheme visits. During the discussions with local authorities, it was revealed that while conducting Underlined Causes of Poverty and Vulnerable Analysis (UCPVA) of all the targeted wards in

Sindhupalchowk and Dhading districts, CARE coordinated and consulted with Ward office for the list of beneficiary households. Similarly, social audits were conducted in the presence of local authorities which ensured the transparency and credibility of CARE in front of the local authorities. CARE provided support for the two RMs in creating 5 years WASH strategic plan which has been approved. Moreover, the local elected representatives were trained on minimum gender commitments in WASH and national WASH policies. The evaluation mission noted that local authorities were thoroughly aware of CARE's interventions and progress in their wards. Similarly, it was revealed that the community people approached local authorities for their issues and concerns. This confirms that CARE had been successful in creating a link between local people and the authorities. However, whether the authorities' responded their matters seriously was in question. *"We had requested the Ward to support and contribute in our O&M fund as we were having difficulties collecting money from the local people for maintenance and paying salary to VMW as ours was a public tap. Some people voluntarily contributed to the fund which was not enough. We approached the Ward office for their support but was in vain"* (Mathillo Besare, Dhading). This shows that firm commitment should have sought from Gupalika during the scheme handover ceremony in the presence of other stakeholders. This would have obliged Gaupalika to support the scheme as requested.

The ODF plan that was developed in coordination with Gaupalikas will be used to maintain the ODF status and hygiene practice in these Gaupalikas in future. This will contribute to improved hygiene practices in the communities for a longer period of time.

Community ownership: Communities were equally involved from the beginning of the project in WSS construction. They contributed in kind to complete the schemes. During the discussions, the community people revealed that they had the realization that these WASH infrastructures were for their own benefits, hence, they would care them accordingly. Similarly, the WUC members mentioned that they would take care of the schemes they are involved in through regular inspection and maintenance. *"We will meet on a regular basis and take the necessary step to keep our water source and scheme intact. We have our operation and maintenance fund for doing so and if something big comes up we will discuss with community people and take necessary*



Figure 25: Students repairing the pipeline going to school (Chisekhola Kaichalbot Water Supply Scheme). The branch line to school was disrupted by road construction.

steps. Everyone in the community has felt that this was their own property as they were involved from the construction phase and have benefited a lot from a water tap in their own houses” (FGD participant, WUC, Dhading). However, in places like Bhotang, more awareness-raising activities and community involvement are needed to create a sense of ownership and sustainability of the scheme where beneficiaries felt that they were bearing the extra burden of paying water tariff due to the water scheme construction which they were getting for free before the scheme construction.

Training and Capacity building:

The training that the project provided on construction, leadership development, menstrual hygiene management, operation and maintenance training and guideline will have a lasting impact in the lives of the beneficiaries through improved knowledge and skills. These skills would be used even after the project phase out whenever there is a need. Moreover, the knowledge and skills that the beneficiaries have gained will not reverse back and community women will continue raising their voices for their partition and involvement in community affairs including in the WUC. Similarly, those women that took part in the pad making training in Sindhupalchowk have increased their skills for making pads which would help them in making less expensive pads and supporting menstrual hygiene management including raising their own income. The training and awareness raising activities will have long term impact on the behavior change of the communities. This will help to sustain the outcomes achieved by the project. Similarly, the trained VMWs in each scheme and the maintenance tool kits that CARE provided to Gaupalikas will help to repair the water schemes in a timely manner after the project phase out.

O&M fund: Support for the creation of O&M fund through tariff collection will greatly support the maintenance of the schemes after the project phase out. The trained VMWs with regular salary from O&M fund will have the motivation to continue his/her work for a longer period of time. This will lead to the sustainability of the project. However, in places like Bhotang, beneficiaries should be regularly reminded by WUC members that safe water is not a free commodity and maintaining quality and smooth operation of the system involves a cost for which tariff should be paid.

3.5.6 Governance and Accountability:

CARE aligned its project activities and language with the new federal structure of Nepal. Previously, the Water User and Sanitation Committees (WUSC) were associated with District WASH Coordination Committee governed by the central government. Therefore, in the changed context, the Water User and Sanitation Committees (WUSC) formed under the project were registered at the Rural Municipality. Thirty inclusive WUSCs were formed with 48% representation of women. The User Committees were formed through a participatory process with facilitation support from CARE. Major posts were allocated with the consensus of all the beneficiaries and women were also nominated in some of the key positions. All the WUSCs had formed procurement committees and monitoring committees for the effective and transparent procurement process. The procurement committees also had one-woman representative among the

three. However, their roles in the decision-making process need to be further strengthened. CARE Nepal provided the pipes and fittings to WUSCs from KTM following CARE's procurement guidelines whereas local construction materials were procured by WUSCs by local tender calls. The local quotations were opened in the presence of local entrepreneurs and partner organizations. Which ensured the transparency of the procurement process among the beneficiaries

The WUSCs had conducted gender-sensitive social auditing three times during the project duration particularly before requesting the next instalment from CARE. Beneficiaries acquired the knowledge of budget/expenditures through public hearings/ public audits and information boards were also displayed in all schemes which confirmed the transparency of the project. WUSC had kept a record of all goods including all the income and expenditure of the schemes in the project account book provided by CARE Nepal. All of the WUSCs were capacitated with O&M mechanisms to ensure sustainability and functionality of the schemes. Additionally, 100% of WUSCs have women in leadership positions who were also the bank signatories. The evaluation team observed that due to project compliance women were involved in committees and sub-committees, but their meaningful participation needs more awareness raising and capacity building activities, particularly, to boost their confidence and to change the patriarchal mindset of WUSC members. Though the WUSCs were supposed to meet on a monthly basis, the evaluation mission noted that they were meeting on a need basis after the project phase out.

The beneficiaries were found to be aware of the complaint mechanisms; however, most chose to contact the field staff of the implementing partners for complaints who they were in constant communication with during the project implementation stage. Project display boards containing information on the total cost of the scheme, total beneficiaries, hotline number for grievances, donor and project duration were placed in project locations. During the discussions, the community people also mentioned that CARE had also provided with the complaint boxes for expressing beneficiaries' grievances which were placed in the ward office. However, beneficiaries didn't have any ideas on where these boxes were used to express their grievances by anyone. Nonetheless, the



Figure 26: A display board with project information (Aarudanda Water Supply Project, Panchpokhari-Thangpal Gaupalika, Sindhupalchowk)

project had developed a strong mechanism for handling complaints and no major community grievances related to the project were observed during the field data collection

Lessons Learned:

- Child safety must be taken into consideration while constructing public taps. The location of the tap stand should be in a safer place with a safe pathway to the tap stand particularly where the institutions do not have wider space for constructing public taps.
- A thorough orientation to the beneficiaries on the minimum standard of the tap, its indicative cost and construction time would cause less financial burden to the community people as quite often beneficiaries tend to construct taller tap stand without knowing the consequences of time and cost. As a result, they end up spending a lot more than needed.
- Many roads and other physical infrastructures are under construction in villages. Hence, while putting project display boards in the project sites, the location and possibilities of removal of the display boards during the construction should be taken into consideration; as once the boards are removed, there is no practice of putting them back in the original place. Such consideration will keep the visibility of CARE intact for a longer period of time.
- Sharing the information on complains received from the complaint boxes and how they were addressed will encourage other people to share their grievances, hence, ensuring the transparency and accountability of the project. This would support the project to gain more trust from the community and other local stakeholders.
- More follow-ups and spot checks on whether schools have placed the pad vending machine on the toilet would make the school administration more accountable. This would force the administration to place the vending machines in an easily accessible place with adequate pads in them.
- Though the resilient infrastructure is built, they might get badly affected during big natural disasters and community may not be able to repair/reconstruct with the reserve O&M fund. Hence, accommodating provisions to minimize the risk due to the disaster and climate change impact should be a priority. A policy of mandatory insurance of WSS should be promoted.
- Periodic risk analysis should be a part of the project cycle to foresee any upcoming, contextual, political, operational, financial and other challenges. This would ensure the smooth implementation of the project with a proper mitigation plan in place, hence, ensuring the timely completion of the project activities without any hinderances.
- The trained CHVs, FCHVs and health post staffs could be engaged from the beginning on hygiene promotion activities led by the project. This could be continued after the project phase out as part of their regular duty as a health worker. Therefore, the sustainable hygiene behavior campaign should be linked with CHVs and FCHVs day to day regular works in coordination with local health posts. This could support the sustainability of the project activities. The project should facilitate to develop the institutional linkage between local health offices and WUSCs for the sustainability of hygiene behavior among the beneficiaries

SECTION D | CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion:

The project contributed to the strengthening of the WASH infrastructure and improved hygiene behavior by providing technical, and financial support, capacity building, and awareness raising activities and through community mobilization. This greatly improved the resilience and ownership of the WASH infrastructures of the earthquake affected communities in Dhading and Sindhupalchowk districts. The project rehabilitated and reconstructed damaged WASH infrastructures by the earthquake and improved the adoption of hygiene practices of community people.

The findings from field study showed that household access to community or private potable water has risen significantly and people had easy access to safe and quality drinking water. Majority of the people now take less than 5-minute time to collect water as most of respondents had yard connections. Among the total respondents 84.10% reported having toilets in their houses, hence, improved hygiene behavior among the respondents. The total KAP score increased compared to baseline and this means the overall hygiene promotion activities were effective. Hence, more needs to be done to improve hygiene practices among the communities as behaviour change is a gradual and long-term process

Women WUSC members' participation has been increased through mandatory provision of inclusion and holding one of the key positions in WUSCs. However, FGDs revealed that more needs to be done for women's active participation in decision making process as the male dominance was quite obvious in most of the discussions. Nonetheless, women got opportunities to participate in Mason, O&M and construction training and leadership training through this project which raised the skills and confidence of community women to some extent.

Communities were supported for improved hygiene behaviour through awareness-raising campaigns including door to door visits, BCC materials, celebrations of special days such as World water day and toilet days. Parents, teachers and school children were provided with orientations on MHM and supported with pad vending machines and separate toilets for boys and girls in some of the schools. As a result, more girls are attending schools during menstruation. However, for 100% attendance of adolescent girls during menstruation, more awareness raising activities to parents, teachers and students is needed as 12.5% of respondents reported that adolescent girls still skip their school/colleges during menstruation.

CARE's awareness raising activities on MHM to community people were effective to a great extent to change the MHM practices. Men and boys were aware of improved MHM practices and impose fewer restrictions on food habits, use of sanitation facilities during menstruation at a household level compared to the past. Some of the husbands were also found to be supportive in buying pads to their wives. This supported the fact that men and boys promote improved MHM practices promoted by the project.

A periodic risk analysis would have greatly supported to avoid any contextual, operational, and political risks that caused delay in the implementation of the project during the first year of its implementation. with appropriate measures in place providing enough time for project wrap up and a smooth handover to WUSC and Gaupalikas towards the end of the project. Similarly, the development of an exit strategy would have greatly supported the local resource mobilization including effective coordination among the local stakeholders for institutionalizing the outcomes of the project. Overall, the project has contributed a lot to improve the resilience of the earthquake-affected population in the two project districts with technical, financial and capacity building support.

4.2 Recommendations:

The following recommendations are proposed based on the findings:

4.2.1 Water Supply Scheme:

- The design and support to yard connection should be context specific. Location specific, need-based design would help to optimize the resources avoiding duplication of the tap stands in the same premises. Hence, these resources could be diverted to the needier people where there is a pressing need for water.
- For similar projects in the future, there should be a set standard for the construction of private tap-stand posts. The connection to the main line should be permitted only if the constructed tap-stand post meets the criteria and the standards. By doing this, a temporary tap-stand post at connection point or mounted on wooden posts will be discouraged.

4.2.2 Sanitation:

- A clear policy and guideline should be provided to the schools and health posts where public toilets are constructed. For an equal number of crowds, women facilities should be double in numbers compared to their men counterparts. Separate urinals and defecation pans should be made mandatory in the girls' toilet, particularly in schools so that girl students do not need to queue up for a longer period of time to use the toilets. The project must consider the fact that the most frequently used facilities in public domains are the urinals, not the defecation pans.
- The capacity development activities, such as on-site coaching and refresher training would keep VMWs motivated and help increase their knowledge and skills intact. Also, initial support for the seed fund particularly for the mobilization of VMWs would help retain the VMWs, since all WUSCs are not able to provide satisfactory payment to them.
- The cost provided to HH for construction of water sealed toilet, NRs. 5000 as an incentive did not seem to be enough, because the total expenditure of water sealed toilet is much higher which caused extra burden to the families particularly with low income. Hence, this should be increased on a case by case basis.

4.2.3. Hygiene:

- Interventions on MHM should also focus on WASH services available to adolescent girls in the schools. Schools girls have mostly complained about the deficit number of latrines for girls, access to pad facilities, water supply, and soap at hand washing stations. Provision of separate latrines, piped water supply into latrines, availability of soap at hand washing station, and waste bins within the latrine should be made mandatory in schools. The school management committees (SMCs) and parent-teachers' associations (PTAs) should be informed, capacitated and linked to seeking support from other projects that focuses on infrastructure development.
- Through this project, the level of awareness among the beneficiaries has been increased on Sanitation and Hygiene. However, in future, the project should be designed to ensure the practices of those Sanitation and Hygiene behaviors through innovative strategies including felicitation and recognition for those who practice the most hygiene behavior in the community to encourage others and follow the same.

4.2.4 Organizational level:

- More sharing and review meetings among the beneficiaries, partner organizations, and CARE should take place for better understanding of the ground reality and lessons learned. This would also provide first-hand information to the management team on progress, and challenges, if any. Nevertheless, strong process and product documentation should be promoted for institutional learning.
- Individual project should develop a clearly spelled out exit strategy with local resource mobilization and community mobilization plan including plan for coordination with local stakeholders. This will firmly support to institutionalize the outcomes achieved by the project.
- The women members in some of the WUSCs have effectively undertaken their roles in leadership positions. However, in many instances, inclusion has become a ritual only, not yielding the desired results. Therefore, in addition to inclusion criteria, ways and means should be explored on a contextual basis to provide with more responsibilities and make them accountable, hence, promoting real empowerment for them.
- CARE should take gender transformative approach to tackle some of the root causes of gender inequality and unequal power relations through some targeted interventions for women empowerment particularly on leadership skills, non-formal education and women rights along with other project activities. Men should also be provided training on gender equality and its advantage for the overall wellbeing of their family. Only through such approaches, women would be respected and provided with opportunities for their growth. Otherwise, their participation in project activities will merely remain as token participation for many more years to come.

SECTION E | CASE STUDY

“No more time waste for fetching water”

The community members at Budathum ward -7, Ganga Jamuna Rural municipality were facing the acute crisis of drinking water following the devastation of the earthquake. The available sources had dried up and the community members had to walk up to an hour to access water facilities.

Mathilo Baseri DWS was constructed by RIMS Nepal with support from CARE Nepal under WASH project. The scheme was projected to support 28 Households with the provision of potable water facilities. Currently, through CARE Nepal’s initiation and in collaboration with implementing partner RIMS, a public DWS tap was constructed for providing access to safe drinking water to the population of Ganga Jamuna Rural municipality ward -7. The quality of the water is tested and qualified according to National Drinking Water standard. The water supply system is built in the source with intake from groundwater and 6000 litres reservoir tank. Mathilo Baseri DWS has recently been completed and handed over to the beneficiaries of Ganga Jamuna Rural municipality ward -7.

“The rough terrain and topography made the walk more challenging which also affected our daily chores adversely. While we had to be away to fetch water lingering in a long queue compromising our household chores, farm activities and personal hygiene. We needed to allocate significant of our time just to bring drinking water home. However, after the construction of this scheme, we have sufficient access to clean drinking water in our own locality where we don’t have to waste much time to just fetch water,” mentioned Sangita Nepali, one of the beneficiaries of Mathilo Besare DWS. Due to the scarcity of water, it had also



Figure 27: Mathilo Baseri DWS at Budathum 7



Figure 28: FGD with Mathilo Baseri DWS at Budathum

affected the traditional cultivation critically since community people could not grow crops or vegetables in lack of proper recycle water facilities. Since CARE has also built recycled water reservoir, communities have benefited from it by using it for irrigation purpose to grow crop and vegetables throughout the year; hence leading to the increased family income. We were compelled to buy vegetables although we could grow them on our own land had there been systematic water supply system in the past.

“The scheme was projected to support 28 households with the provision of potable water facilities. But nearby of villagers also come to take water from the scheme as other sources of water dried up after the earthquake. Community people are very happy and satisfied with the scheme and people voluntarily clean around the surface areas of DWS and toilet.” added Hom Bahadur Adhikari, Chairperson of Mathilo Besare DWS User committee. *“We are grateful to CARE Nepal and RIMS for constructing such a great facility at our community. The water system has significantly contributed to community harmony and fostered economic aspects of our community members. We can use the toilet while washing our clothes and fetching water, it is convenient for us. Thanks to CARE Nepal for this support”* (Members of WUSC).

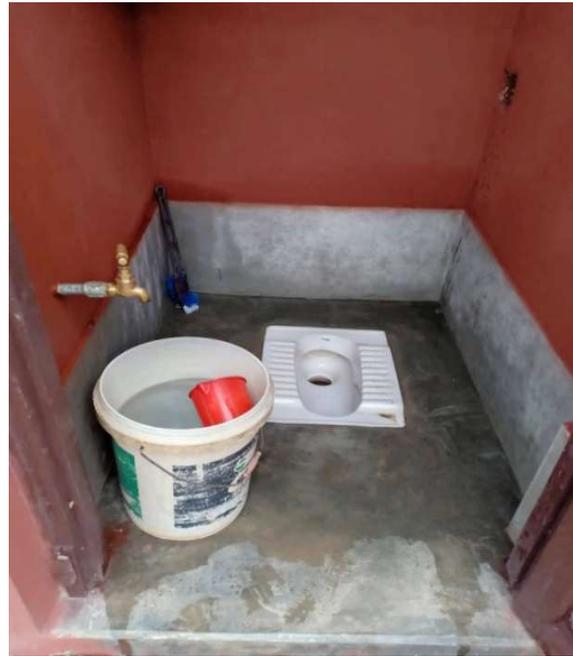


Figure 29: Toilet of Mathilo Baseri DWS at Budathum

“Change of knowledge to into practice”

Fulkharka ward -5, Ganga Jamuna Rural municipality, monthly periods are a secret and shameful thing for women in this community in the past. They hid their clothes by covering them with other clothes so that their fathers and brothers could not see them. *“We were told that things would go wrong if we touched many things, such as male members of the family, cows, fruit trees, and so on during our periods. So we refrained from touching food, entering kitchen, cooking utensils or the kitchen gardens”* says Sarita Adhikari, 27-year-old woman. *“And we can't go to the temple. Hindu girls can't touch cows or even the cow-*



Figure 31: FGD with Mother Group of Fulkharka 5

shed because cows are holy” added Ishwar Adhikari, 28 years old woman.: During menstruation

period they had to live outside from the home for 5 days. While many of these practices are not harmful, the widespread beliefs that menstruating women are impure and dangerous, and it's shameful, led to the social taboo that exposed women to health risks. As part of an improved hygiene practice initiative under the SWATHA Nepal (Sustainable Water, Sanitation and Hygiene Action in Nepal) project, CARE conducted different activities such as door to door visits, BCC session, and awareness campaign. FCHVs of our community meet regularly with mother groups to speak about hygiene, especially menstrual hygiene management. We are now aware that poor menstrual hygiene management leads to increased health risks including widespread vaginal and urinary infections and we now practice using clean cloths which are washed with soap and water and dried under the sun, eat nutritious food and dispose the pads properly” (FGD members, Fulkharka).



Figure 30: Waste Management at Fulkharka 5

Sarita Adhikari, 27 years old says that "Our community women didn't give priority to cover cooked food and water in the past and we never dried our utensils after washing. Now without any hesitation, we dry our used clothes under the sun without covering by other clothes during our periods. Keeping used clothes directly under the sun by not covering with other clothes would help to kill the bacteria and keep us safe from the vaginal and urinary infections. We also didn't



Figure 32: Awareness message at Fulkharka 5

have any ideas on how to manage household waste in a proper way. We also came to know how to manage solid waste in a proper way. After this project, we also learn that without covering the cooked food with lid we can't keep them safe to eat.

"In the past, I used to drink water directly from the tap. After participating in the door to door and BCC session, I started to either filter the water or keep the water in plastic bottles and put them under the sun. I had only knowledge of washing hands with soap but I usually didn't practice it before. Through these project activities, I realized the importance of hand washing in critical times with soap and water and practice other hygiene behavior to keep me and my family safe from suffering from the different kind of diseases including diarrhoea

We are thankful to CARE Nepal for providing the improved access to WASH facilities and knowledge for women and girls to better manage MHM practices" (Ishowari Adhikari, FGD participant).