

SUSTAINABLE AND INCLUSIVE WASH PROJECT

End-line Survey



Submitted to:
IFRC
Kathmandu, Nepal

Gobinda Bahadur Basnet, PhD

March, 2024

Project Identification

| | |
|----------------------------------|--|
| Project Name | Sustainable and Inclusive WASH |
| Project Location | Dharakhola and Barnalu Rai Tol of Ward No 5 of Siddhicharan Municipality of Okhaldhunga; Balkanaya and Likhu Majhigaun of Rampur of Ward No 5 of Ramechhap Municipality and Ward No 1 of Manthali Municipality in Ramechhap district; Bhalayotar and Gounkharka of Ward No 6 of Sunkoshi Rural Municipality of Sindhuli district |
| Project Start date | September 1, 2021 |
| Project completion date | August 31, 2023 |
| Implementing organization | Nepal Red Cross Society |
| Funding Organization | IFRC, British Red Cross |
| Budget | NPR 88,707,270 |
| Final Evaluation Period | Dec 2023 to 28 February 2024 |
| Evaluator | Gobinda B Basnet, PhD and Ujjal Acharya |

ACKNOWLEDGMENTS

I would like to express my deep sense of gratitude to the people of study area (Okhaldhunga, Ramechhap, and Sindhuli districts) who willingly shared their experiences, knowledge, and concerns without which this study would not have been complete. Members of Water User Committees, Women's groups, Officials of the Local Governments, Technicians, users both male and female, schoolteachers and students, and social mobilizers shared their experiences and opinions with the study team.

I would like to thank IFRC for entrusting this interesting assignment. I would like to thank Ms. Manorama Gautam Senior PMER and Communication Officer, Mr. Khem Raj Nepal Programme Manager from the IFRC Country Delegation Nepal, Mr. Birendra Shahi WASH Coordinator, Mr. Achyut Koirala WASH Engineer, and Ms. Suvechhya Manandhar PMER Officer from NRCS Headquarters for their inputs on conduction of this study.

I would like to thank NRCS officials of districts chapters, especially Sambhu Budhathoki, Ramechhap; Khilraj Guragain, Okhaldhunga; and Hasta Raj Thapa, Khalte, Sindhuli for their excellent management in conduction of the field study and for sharing their candid insights into the project. I would also like to thank data analyst Mr Ujjal Raj Acharya and enumerators for successful completion of household survey.

Gobinda Basnet

Abbreviations and Acronyms

| | |
|-------|--|
| CCA | Climate Change Adaptation |
| DAC | Development Assistance Committee |
| DRR | Disaster Risk Reduction |
| DWSS | Drinking Water Supply Scheme |
| FGD | Focus Group Discussion |
| GoN | Government of Nepal |
| GSI | Gender Social Inclusion |
| IFRC | International Federation of Red Cross and Red Crescent Societies |
| KII | Key Informant Interviews |
| MHM | Menstrual Hygiene Management |
| MUS | Multiple Use System of water |
| NPR | Nepalese Rupees |
| NRCS | Nepal Red Cross Society |
| OECD | Organization for Economic Cooperation and Development |
| PHAST | Participatory Hygiene and Sanitation Transformation |
| RM | Rural Municipality |
| SDG | Sustainable Development Goals |
| ToR | Terms of Reference |
| WASH | Water Sanitation and Hygiene |
| WUC | Water User Committee |

Executive Summary

Project Overview

Nepal Red Cross Society (NRCS) implemented a two-year long Sustainable and Inclusive WASH project with the financial and technical support from the International Federation of Red Cross and Red Crescent Societies (IFRC), the British Red Cross and the Finnish Red Cross in three districts of Okhaldhunga, Ramechhap, and Sindhuli. The Project had two outcomes as: (i) access to water, sanitation and hygiene services among targeted community members is improved, and (ii) Capacity of Communities and NRCS units in delivering WASH services is improved. The project was implemented in Sunkoshi RM, Ward No 6, Sitalpalti of Sindhuli district; Ramechhap Municipality, Ward No 5 (Rampur) and Ward No 1, (Manthali) of Manthali Municipality, Ramechhap district; Ward No 3 and 4 of Molung RM, and Ward No 5 of Siddhicharan Municipality of Okhaldhunga District. The project targeted to reach out to 6,183 population with its hardware (construction) and software (such as sanitation and hygiene promotions, training) activities. Similarly, behaviour change campaigns on safe water usages and water purification, sanitation and hygiene promotion were launched.

Endline survey

As the Project came to an end, NRCS commissioned an Endline Survey in December 2023 to measure and critically assess changes that project has brought out in two years of implementation. The purpose of the survey is to measure and critically assess changes that project has brought out in two years of implementation mainly in its relevance, effectiveness, efficiency, and sustainability. The study was to assess the knowledge, attitude, and practices of the people from the community in relation to WASH.

The study team conducted a review of relevant documents, a field study (which included Focus Group Discussions (FGD), Key Informant Interviews (KII), activity observation), and Household survey. A household survey was conducted with 300 beneficiary households. The field study was conducted in January in all the completed water supply schemes.

Findings

The summary of the evaluation is presented in the following table while the detailed discussion with the supporting information on each of the criteria is in the main body of the report.

| SN | Criteria | Rating | Key features |
|----|---------------|---------------------|--|
| 1 | Relevance | Relevant | The project addressed the needs identified in the lookback study conducted following earthquake response operation phase. Water availability has increased in all the schemes. In three lifting type schemes blending with photo voltaic cells, water tariff has greatly reduced (with the reduction of electricity tariff) making water affordable to all the households. Measures adopted to protect water sources from the risks of climate and disaster risks made the water supply schemes more reliable. Implementation of one house one water tap policy contributed to meet the SDG 6.1 in the local context. The project design to leverage the resources from the local governments added to the ownership of these schemes by the local governments as well. The hygiene and sanitation component of the project helped to improve the knowledge and practices on sanitation. The institutional basis for implementation and operation of these schemes were strengthened. The Project outcomes, outputs, and activities were consistent with the Local government's priority on improving drinking water supply. |
| 2 | Effectiveness | Highly satisfactory | The project was effective in enhancing availability of water round the year in all the schemes. The time spent by households fetching water has decreased. The cost of water was reduced in three lifting systems making it affordable to all the households and improving the sanitation condition as well. Water is being used for multiple purposes including for kitchen gardening and small-scale economic activities. The institutional capacity of WUCs in managing waters supply schemes has been strengthened with the human and financial resources/mechanism in place to effectively operate the systems. The quality of work done, and transparency maintained added to the effectiveness of project. |
| 3 | Efficiency | satisfactory | As work on three schemes were still ongoing the actual programme and management expenses and financial delivery is not available as of reporting time. The project plan allocated 77% for programme expenses and 23% on management. Human resources were efficiently utilized. The project also coordinated with the local governments and local governments contributed 20% of the construction cost amounting to a sum of NPR 5,615,207. The project adopted adaptive management |

| | | | |
|---|----------------|-------------|---|
| | | | practices in the events of COVID pandemic and adjusting implementation to the local context. |
| 4 | Sustainability | Likely | The project developed a strong institutional basis (WUCs) with strengthened network with local governments which will contribute towards sustainability. The WUCs have been registered with the local governments and developed constitution and operation plan. These WUCs have maintained operation and maintenance fund, trained technicians. Some of these WUCs are run very efficiently like a corporate house. The quality of the work, addressing of the most felt needs and the transparency measures adopted in the implementation will enhance the sustainability of the project effects. The enhancement of gender equality, and empowerment of women, especially in the context of increasing male migration will also contribute towards sustainability. |
| 4 | Impact | Significant | The project has already shown the positive impact on availability of water, its use, and in improving sanitation and hygiene conditions of the communities. The solar system combined with the electricity and registering water supply system as “community’ system reduced the cost of water leading to increased use. Water is being used for multiple purposes such as watering kitchen garden, fruits, drinking livestock beside domestic use. As such greenery even in dry months has increased. The effect of adoption of Multiple Use System will likely become prominent in near future. Shifting from community tap system to one- house one water- tap has contributed in enhancing social harmony minimizing conflicts and quarrels. Water use efficiency has also changed. |
| <p>Rating scales (UNDP 2012): Relevance (1. Not relevant, 2. Relevant); Effectiveness (1. Highly Unsatisfactory (HU), 2. Unsatisfactory (U), 3. Moderately Unsatisfactory (MU), Moderately Satisfactory (MS), Satisfactory (S), Highly Satisfactory (HS); Efficiency: 1. Highly Unsatisfactory (HU), 2. Unsatisfactory (U), 3. Moderately Unsatisfactory (MU), Moderately Satisfactory (MS), Satisfactory (S), Highly Satisfactory (HS); Impact (1. Negligible, 2. Minimal, 3. Significant). Sustainability (1. Unlikely (U), 2. Moderately Unlikely (MU), 3. Moderately Likely (ML), and 4. Likely (L))*</p> | | | |

Recommendations

As the project has already completed the implementation phase, these recommendations refer to sustaining the project effects and in design of similar future initiatives.

With the adoption of 'one house one water-tap policy' water use efficiency will increase. There is a likelihood of increased demand for and adoption of the Multiple Use System of water. Future designs should consider incorporating promotion of MUS, which will also help in economic empowerment of the vulnerable households and overall communities.

The learning on the positive effects of incorporating DRR and CCA issues in project design; cooperating with the local governments and leveraging resources; and encouraging community contribution should be strengthened and continued.

As several environmental and social processes and factors have contributed in decline of water sources, future design should emphasize on comprehensive water sources conservation and improving local hydrology.

The WUCs should be encouraged to upscale the measures to water conservation such as constructing more water recharge ponds, planting water conserving species, and measures to retain water in rainy seasons.

Although, DWSS schemes were handed over to the communities after all the operational mechanism were in place in seven of the schemes, in the case of two schemes the operational mechanism was not fully functional after a few months of handing over the schemes. Handing over should be done only after ensuring all the operational plan is functional.

WUCs should be encouraged to network with Federation of Drinking Water and Sanitation Users Nepal (FEDWASUN).

Table of Contents

| | |
|--|------------|
| PROJECT IDENTIFICATION | II |
| ACKNOWLEDGMENTS | III |
| ABBREVIATIONS AND ACRONYMS..... | IV |
| EXECUTIVE SUMMARY | V |
| TABLE OF CONTENTS..... | IX |
| 1. INTRODUCTION | 1 |
| 1.1 BACKGROUND..... | 1 |
| 1.2 PURPOSE AND SCOPE OF THE STUDY | 1 |
| 1.3 METHODOLOGY | 1 |
| 1.4 ORGANIZATION OF THE REPORT | 4 |
| 2. PROJECT OVERVIEW | 5 |
| 2.1 INTRODUCTION | 5 |
| 2.2 PROJECT OBJECTIVES | 5 |
| 2.3 PROJECT SITE..... | 6 |
| 3. FINDINGS | 8 |
| 3.1 GENERAL FEATURES OF HOUSEHOLD SURVEY..... | 8 |
| 3.2. RELEVANCE | 8 |
| 3.3 EFFECTIVENESS..... | 9 |
| 3.4 EFFICIENCY..... | 14 |
| 3.5 SUSTAINABILITY..... | 15 |
| 3.6 IMPACT | 16 |
| 4. CONCLUSION AND RECOMMENDATIONS..... | 18 |
| 4.1 CONCLUSION | 18 |
| 4.2 RECOMMENDATIONS..... | 21 |
| SECTION II: HOUSEHOLD SURVEY..... | 22 |
| ANNEXES | 38 |
| ANNEX 1: TARGETS AND ACHIEVEMENTS | 38 |
| ANNEX 2: COMPARATIVE OVERVIEW OF PARAMETERS IN BASELINE AND ENDLINE SURVEY | 40 |
| ANNEX 3: ITINERARY OF FIELD STUDY | 41 |
| ANNEX 4: LIST OF PEOPLE INTERACTED | 42 |
| ANNEX 5: HOUSEHOLD SURVEY TEAM..... | 46 |
| ANNEX 6: EVALUATION MATRIX..... | 47 |
| ANNEX 7: LIST OF DOCUMENTS REFERRED | 50 |
| ANNEX 8: CHECKLIST FOR INTERACTION | 51 |
| ANNEX 9: HOUSEHOLD SURVEY QUESTIONNAIRE | 55 |

1. INTRODUCTION

1.1 Background

Nepal Red Cross Society (NRCS) implemented a two- year long Sustainable and Inclusive Water Sanitation and Hygiene (WASH) project with the financial and technical support from the International Federation of Red Cross and Red Crescent Societies (IFRC), the British Red Cross, and the Finnish Red Cross in the selected communities of Okhaldhunga, Ramechhap, and Sindhuli districts. The goal of the project is to enable safer, healthy, and resilient living with technological endorsement and better WASH service extension.

As the Project came to an end, NRCS commissioned a endline study to measure and critically assess changes that project has brought out in the two years of implementation mainly in its relevance, effectiveness, efficiency, and sustainability.

1.2 Purpose and scope of the Study

The purpose of the survey, as outlined in the Terms of Reference (ToR), is to measure and critically assess changes that project has brought out in two years of implementation mainly in its relevance, effectiveness, efficiency, and sustainability. The study will also assess the knowledge, attitude, and practices of the people from the community in relation to WASH.

The specific objectives of this assignment, as stated in the ToR are:

- To assess the level of knowledge, attitude and practices of the community people which are interlinked between i) water, sanitation, and hygiene and ii) climate change adaptation and disaster risk management.
- To measure actions taken by the people from the communities that show the interlinkages (mention in the above point) and generate recommendations for future use.

1.3 Methodology

General Approach

Overall methodology was guided by the defined purpose of the study as outlined in the Terms of Reference (ToR) and the specific questions along the IFRC Criteria for evaluation following OECD DAC's revised evaluation criteria of relevance, efficiency, effectiveness, impact, and sustainability. The consultant adopted an approach considering evaluation as facilitating documentation of achievement, processes, and learning together with the project implementation team. The diversity existing within beneficiaries/ participants of the Project in terms of gender, ethnicity, locality was recognized, and such diversity was reflected in selecting the respondents. Both quantitative and qualitative methods were applied to generate information and analysis.

Specific Methods

i. Preparatory Phase

Document review: Relevant documents such as Project proposal, Lookback Study report, Monitoring and Evaluation Plan, quarterly progress reports, and baseline report, and DRR and CCA assessment report were thoroughly reviewed (Annex 7). The review of the documents helped to tease out not only the contents of the Project but also the context of the implementation.

Tools Development: An assessment matrix (Annex 6) was developed taking into account the specific questions for the evaluation criteria of relevance, effectiveness, efficiency, sustainability, and impact. Similarly, checklists (Annex 8) for Focus Group Discussions (FGDs) and Key Informant Interviews (KII) for different groups of stakeholders were also prepared. These qualitative methods helped to generate the information at community level and to understand the changes and processes. Questionnaire for household survey (Annex 9) was preprepared and revised in consultation with the project team.

ii. Field study

A Field study was conducted in all the eight communities served by the water supply schemes in three districts (Annex 3). Three drinking supply schemes were still under construction in Molung Rural Municipality of Okhaldhunga district and thus not included in the study. Field methods included Focus Group Discussions, Key informant interviews, and observation of activities.

Consultation with stakeholders: Altogether, 12 FGDs (8 WUCs, 2 schoolteachers and students, 1 women group, and 1 NRCS officials) were conducted with different group of stakeholders. A total of 142 individuals (both male and female) participated in these FGDs. In addition to FGDs, key informant interviews (KII) were organized with 22 individuals during the field study. KIIs were held with Ward Chairs, Technicians, NRCS officials, Social Mobilizer, and WSS care takers. KIIs were organized with the Project team in Kathmandu as well. The list of people interacted is on the Annex 4. All the group meetings and individual interviews in the field study were audio-recorded with prior information and consent and later transcribed.

Observation of activities: Activities like installed Photo Voltaic (PV) sets, water taps, multiple uses of water (vegetable production), source protection, infrastructure and sanitation activities were observed in participation of the respective community members, usually after the consultation meetings.



A group meeting in progress

Household Survey:

A household survey was conducted among the beneficiary households. The sample size for the household survey has been calculated with 5 percent margin of error at 95 percent level of confidence for the total households of all the water supply schemes. Following this guideline, a sample of 272 households was to be collected from 664 beneficiary households. Considering topographical variation and scattered settlement, the household survey was conducted in 300 households. Within a Water Supply Schemes some households (such as of elderly, single women, under-represented groups) were purposively selected and remaining households were selected following a proportionate stratified random sampling method, in consultation with the WUC officials. The sample was selected in proportion to ethnic composition of the beneficiary communities. The detail of the sample size for household survey under different schemes is presented in Table 1.1.

Table 1.1: Households sampled in different water supply schemes

| SN | District | Scheme | Address | Benefitted HHs | Sampled HHs |
|----|-------------|---|----------------------------------|----------------|-------------|
| 1 | Sindhuli | Valayatar | Sunkoshi RM-06 | 28 | 13 |
| 2 | | Gaukharka -1 | Sunkoshi RM-06 | 61 | 30 |
| 3 | | Gaukharka -2 | Sunkoshi RM-06 | 58 | 25 |
| 4 | Ramechhap | Jaldevi Community Lifting DWSS | Hatechaur, Manthali -01 | 91 | 41 |
| 5 | | Balkanya Community Lifting DWSS | Rampur, Ramechhap -05 | 182 | 81 |
| 6 | | Likhu Majhi Gaun Community Lifting DWSS | Majhigaun, Rampur, Ramechhap -05 | 51 | 24 |
| 7 | Okhaldhunga | Dharakhola DWSS | Siddhicharan Municipality-05 | 126 | 56 |
| 8 | | Barnalu Raitole DWSS | Siddhicharan Municipality-05 | 67 | 30 |
| | Total | | | 664 | 300 |

The Survey was conducted using KoboCollect Tool. The questionnaire was prepared drawing information from the baseline study, indicators as suggested in ToR and Progress reports, and revised in consultation with the project team. The questionnaire was further revised during the enumerators' training and field testing. A total of seven (four females and three males) enumerators (Annex 5), were selected and trained online. The Data analyst of the study team guided the training and supervised the data collection process. The use of KoboCollect allowed checking of the quality of the data once uploaded, usually every day in the evening. The collected data were analysed creating Pivot table in EXCEL.

Ethical Consideration

The endline study incorporated ethical consideration in methodological approaches. The questionnaires were worded in a way that they are not offending to the participating households and are culturally sensitive. The field study team members including the enumerators were oriented on cultural sensitivity. School children were interviewed in group-meeting in the presence of schoolteachers. Verbal consents were obtained while taking photographs and audio records of the meetings, of both individual and group meetings.

1.4 Organization of the Report

The study report consists of four chapters. The first chapter provides an overview of the project, objectives of the evaluation, and methodology followed. The Second chapter provides general information about the project, its objectives, and expected outcomes and outputs. The Third chapter assesses the project in terms of the criteria set forth in the methodology section. The final Fourth chapter is on conclusion and recommendation. The result of the household survey is presented in the second section separately.

2. PROJECT OVERVIEW

2.1 Introduction

The Sustainable and Inclusive WASH project was built on the findings of the WASH lookback study conducted in June 2021. The Lookback Study on Sustainability and Replicability of WASH projects was carried out in Okhaldhunga, Ramechhap, and Sindhuli, districts to assess the functionality and sustainability of the drinking water schemes at the community level following Earthquake Response Operation Phase. The study found that most of the water supply schemes were functioning partially. The users of the lifting type schemes, especially in Ramechhap district, were reluctant to use water because of the heavy monthly tariff owing to high expenses on electricity bill to operate the water supply schemes. In all these water supply schemes, four or more households would draw water from a community tap. Water sources of then existing water supply schemes were also facing the problem of declining discharge, especially in Sindhuli and Ramechhap districts. The study also revealed the need for consideration of disaster risk and climate change issues in the design of the schemes. The study recommended using photovoltaic cells (solar system) in combination with electricity supply in lifting drinking water supply schemes to make the water more affordable. The Recovery Development Programme implemented in Sindhuli district also demonstrated the willingness of the Local Governments in contributing funding to undertake drinking water supply schemes which would help in enhancing the ownership of the local governments to the WASH schemes, in addition to leveraging resources. Against this backdrop the two-year long Sustainable and Inclusive WASH project was launched in September 2021 with the financial and technical support from the International Federation of Red Cross and Red Crescent Societies (IFRC), the British Red Cross and the Finnish Red Cross.

2.2 Project objectives

The goal of the project is to Enable Safer, Healthy and Resilient Living with technological endorsement and better WASH service extension. The project also aims to consolidate the achievement of service delivery in the Earthquake Recovery operation.

The Project had two outcomes as: (i) access to water, sanitation, and hygiene services among targeted community members is improved, and ii) Capacity of Communities and NRCS units in delivering WASH services is improved. Outcome 1 had four outputs as: (i) Existing water schemes in targeted communities are extended /rehabilitated/constructed; (ii) Sanitation facilities in the target communities are improved; (iii) Hygiene promotion activities/session conducted in the communities/ schools; and (iv) DRR /CCA and COVID consideration/issues are mainstreamed into all components. Similarly, outcome 2 had two outputs: (i) Financial management, CEA, and WASH related trainings are provided to NRCS staff/volunteers and

WUCs members; and (ii) Coordination and collaboration with local government and other stakeholders in targeted communities/municipalities is maintained.

2.3 Project Site

The project was implemented in Molung RM, Ward No 3, 4 and Siddhicharan Municipality Ward No 5 (Barnalu Rai Tol and Dharakhola) of Okhaldhunga District; Ramechhap Municipality, Ward No 5 (Rampur) and Manthali Municipality, Ward No 1, (Manthali) of Ramechhap district; and Sunkoshi RM (Bhalayatar and Gounkharka), Ward No 6 of Sindhuli district. The project targeted to reach out to 6,183 population with its hardware (construction) and software (such as orientations, training) activities. Similarly, behaviour change campaigns, sanitation campaigns, and demonstration of hand washing practices were launched. This Endline Survey covered only eight drinking water supply schemes (table 2.1) as the construction/rehabilitation of water supply schemes in Molung Rural Municipality is still ongoing.

Learning from Earthquake Recovery Operation, the schemes were implemented in partnership with the local governments. The Local Governments in the respective Rural/Municipalities contributed 20 % of the construction cost of the schemes. Local communities also contributed in the implementation of the schemes.

Table 2.1: Details of the Drinking Water Supply Scheme completed

| SN | Scheme | Name of source | Address | Benefitted HHs | Schools | People benefitted | | |
|----|---|------------------------------|--|----------------|---------|-------------------|--------|-------|
| | | | | | | Male | Female | Total |
| 1 | Valayatar DWSS | Royele Paakhaa | Sunkoshi RM-6, Sindhuli | 28 | 0 | 65 | 59 | 124 |
| 2 | Gaunkharka DWSS-1 | Bhandari Khola | Sunkoshi RM-6, Sindhuli | 61 | 0 | 186 | 159 | 345 |
| 3 | Gaukharka DWSS-2 | Dhobi Khola | Sunkoshi RM-6, Sindhuli | 58 | 1 | 150 | 186 | 336 |
| 4 | Jaldevi Community Lifting DWSS | Dug well near Sunkoshi River | Hatechaur, Manthali Municipality-1, Ramechhap | 91 | 0 | 245 | 189 | 434 |
| 5 | Balkanya Community Lifting DWSS | Dug well near Gurung Khola | Rampur, Ramechhap municipality -5, Ramechhap | 182 | 2 | 868 | 846 | 1714 |
| 6 | Likhu Majhi Gaun Community Lifting DWSS | Dug well near Likhu Khola | Majhigaun, Rampur, Ramechhap municipality-5, Ramechhap | 51 | 1 | 202 | 222 | 424 |
| 7 | Dharakhola DWSS | Dhara khola | Siddhicharan Municipality-5, Okhaldhunga | 126 | 1 | 333 | 337 | 670 |
| 8 | Barnalu Raitole DWSS | Nigale Khola | Siddhicharan Municipality5, Okhaldhunga | 67 | 1 | 194 | 178 | 372 |
| | Total | | | 664 | 6 | 2,243 | 2,176 | 4,419 |

3. FINDINGS

This chapter forms the crux of the report and analyzes the project performance. This will assess the project performance in terms of the criteria of relevance, effectiveness, efficiency, sustainability, and impact, following OECD- DAC project evaluation criteria (OECD-DAC 2019) and the objective of the study. The information on this section is drawn from the Household survey (in the second section of this report) and Focus Group Discussions and Key informant interviews.

3.1 General features of Household survey

The survey was conducted among 300 households from a total household of 664. The surveyed households had a total population of 1,808 (864 male and 938 female) with a average family size of 6.06. In terms of ethnicity, 76% of the respondents were Janajatis, 16% BCTS (Brahmin, Chhetri, Thakuri, and Sanyasi), and 7.7% Dalits. Out of the total households, 77% were male headed and 23% were female headed households.

3.2. Relevance

The relevance of the project is viewed against its ability to address the needs of the local people and coherence with the national policies and priorities of the local governments. This project built on the learning of Earthquake Response Operation and findings of the Lookback Study on Sustainability and Replicability of WASH projects. The study assessed the functionality and sustainability of the drinking water schemes at the community level following Earthquake Response Operation. The study found that most of the water supply schemes were functioning partially. The users of the lifting type schemes, especially in Ramechhap district, were reluctant to use water because of the high monthly tariff owing to high expenses on electricity bill to operate the water supply schemes. In all these water supply schemes, four or more households would draw water from a community tap. Water sources of then existing water supply schemes were also facing the problem of declining discharge, especially in Sindhuli and Ramechhap districts. The study also revealed the need for consideration of disaster risk and climate change issues in the design of the schemes.

The project addressed the needs/issues identified in the lookback study. With the installation of photovoltaic units for operating motors in conjunction with electricity in two DWSS (Balkanaya and Jaldevi) in Ramechhap district, access to water became affordable. The Water User Committees registered the water supply schemes as “community” system which also helped in reducing the electricity tariff. Another lifting water supply scheme, Likhu Majhi Gaun, also ensured access to water for vulnerable Majhi communities who were until then fetching water from the Likhu Khola. Communities in Bhalayatar and Gounkharka in Sunkoshi RM faced

scarcity of water and the problem of drying water sources. The Project supported to draw water from the sources which are more stable. In Barnalu Rai Tol of Sidhdicharan Municipality in Okhaldhunga district as well, water sources were not supplying enough water owing to declining water discharge in the source. The project, in addition to rehabilitating the distribution system, implemented measures to mitigate the risks of climate change and disaster risks to the water sources.

The project also contributed to meeting the national development objective in the local context. As per the Constitution of Nepal, access to safe drinking water is a basic human right. A [“one-house one water-tap” policy](#) is being implemented to progressively realize universal access to safe drinking water by 2030, to meet the Sustainable Development Goal (SDG) targets for drinking water. In all these schemes, one-house one water- tap policy has been practiced which will have far reaching implications described in later section as well.

The project design that incorporated contribution of the local governments and the local communities not only helped to leverage the resources for implementation but also provided basis for enhancing ownership of multiple stakeholders and thus contributing to the sustainability of the schemes. The project design incorporated activities like reformation/ strengthening of Water User Committees, Pre- and Post- Construction Management Training for WUCs, Plumbing and meter reading training. Under sanitation component, the activities included construction/rehabilitation of school latrines, Motivational support for construction of latrines in the vulnerable households, conduction of hygiene promotion sessions, training to FCHV on WASH, Menstrual Hygiene Management orientation to adolescent girls, Participatory Hygiene and Sanitation Transformation Training to School teachers. Arrangements were made to ensure that vulnerable households (such as elderly people) were exempt from contributing labor. The project also ensured that no households in the project community were left behind. The project addressed the local needs and contributed to meeting the national priorities underlying the relevance of the project.

The Project was thus very relevant.

3.3 Effectiveness

The achievement of the project against the target under different outputs as presented in the Logframe is in Annex 1. Analysis of the achievements reveals that for most of the indicators the achievements exceed the target. For example, number of schools supported with sanitation facilities, number of households supported with improved toilets, number of hygiene promotion sessions conducted, number of people reached through hygiene promotion sessions, number of people reached through DRR/CCA awareness activities exceeded the targets. Out of the total 11 water supply schemes planned for construction/rehabilitation, eight were completed during the time of field study. Three water supply schemes in Molung Rural Municipality of Okhaldhunga

were still under construction. Comparison of various WASH parameters during baseline and endline is in annex 2. Effectiveness of activities in different components is discussed below.

The major component of the project was construction/rehabilitation of water supply schemes. There has been a change in the round the year water availability, time spent fetching water, tariff paid (especially in lifting type), and water uses. The household survey revealed that 85% of the households have sufficient water supply round the year against the baseline value of 68.75%. Excluding the figures in Gounkharka in Sunkoshi, the percentage of households reporting round the year sufficiency of water is 94%. Although water availability is enough round the year in the water sources in seven schemes, users in Gounkharka 2 DWSS reported that there is not enough water in dry months of March to May in the source. They have to rely on the goodwill of the Gounkharka 1 scheme to let them use the spill over water.

The survey also revealed that 34% of households use 150-200 liters of water per day, 24% use between 200 and 300 liters, 21% use more than 300 liters, and 20% use less than 150 liters per day. Adoption of one-house one water-tap and water tariff in proportion to use also implication on incentive on water use.

The time spent fetching water has greatly reduced with all the households having water taps within their premises. Now, 91% of households spend less than 2 minutes to fetch water whereas in the baseline 77% of households spend 15 minutes when they collected water from community taps generally shared by four or more households. In a place like Majhigaun, Likhukhola people would have to spend more than an hour to fetch water from the River prior to implementation of this project.

There has been a marked change in gender role in collection of water. In 72% of households all family members collect whereas only females are responsible for water collection in 24% of the households. During the baseline, only females were responsible for water collection in 58% of the households.

The project has been effective in reducing the water tariff, especially in the lifting systems. Three water supply schemes supported in Ramechhap district were lifting type with the use of photo voltaic units. In Balkanya lifting DWSS, solar panels were installed in two phases: first in February 2022 and second in February 2023 as it is a three-stage lifting scheme. Prior to installment of solar system, individual households would have to pay as much as NPR 1,500 to 2,000 per month for water tariff discouraging the use of water. Now they have to pay NPR 250 per month plus Rs 50 per unit over 4 units of usage. In Jaldevi lifting DWSS a solar system was installed in February 2022. Another lifting type of DWSS is Likhu Majhigaun DWSS in Rampur and the construction was completed in May 2023.

The remaining five water supply schemes, Barnalau Rai Tol and Dharakhola in Okhaldhunga district; Valayatar, Gounkharka-1, and Goukharka-2 in Sindhuli districts are gravity flow type. All the schemes have water-tap at household premise and enough water as required. The tariff rate is as follows:

Table 3.1: Tariff rate in different schemes

| SN | DWSS | Minimum Monthly charge | Additional charge | Remarks |
|----|---|------------------------|--|---|
| 1 | Valayatar DWSS | 50 | Rs 20/unit after first 5 units | |
| 2 | Gaukharka DWSS-1 | 40 | Rs 10 for each unit of water | |
| 3 | Gaukharka DWSS-2 | | | WUC has yet to decide on the tariff |
| 4 | Jaldevi Community Lifting DWSS | 150 | | No meter reading done, hhs other than 24 labor contributing hhs pay Rs. 450 per month |
| 5 | Balkanya Community Lifting DWSS | 250 | Rs 50 per unit after first 4 units | |
| 6 | Likhu Majhi Gaun Community Lifting DWSS | 100 | Rs 100 for each unit of use | |
| 7 | Dharakhola DWSS | 125 | 50 for each unit of water above 10,000 lts | |
| 8 | Barnalau Raitole DWSS | 30 up to 5 units | 50 (5 to 10 units) 100 (more than 10 units) | |



Likhu Khola Majhi Gaun had only option of lifting system for DWSS



Solar system in Rampur, Ramechhap 5

One scheme (Gounkharka 2) has yet to decide on the tariff rate. As households have to pay tariffs proportionate to water use (except in Jaldevi) water is used more efficiently thus opening the window of opportunity for multiple use system. In the case of Jaldevi DWSS, individual meter reading is not done. There are two groups of households: (i) 24 households contributing labor for construction of the scheme, and (ii) remaining households not contributing labour. The first group of households pay NPR 150 per month and the second group of households pay NPR 450 per month. The WUC (executive committee) has been formed only from the first group of households.

A total of 87% of the households reported of receiving clean water round the year and 12.7 % reported of muddy water during the rainy season. In addition to drinking and cleaning purposes, water is used for livestock and irrigating kitchen gardens. A total of 92% of the households were using water for livestock production and 59 % using water for kitchen gardening.



Protection of water sources against climate and disaster risk in Dharakhola, Okhaldhunga



Multiple use of water has increased

The project conducted a climate change and disaster risk reduction assessment, and these issues were incorporated in the design of the project. Protective measures were constructed to protect the water sources of Dharakhola, Baranalu Rai Tol, and Goukharka 1 schemes. Support was provided to construct one water recharge pond in Balkanya DWSS. However, construction of water recharging ponds needs to be scaled up to result in tangible effects. Incorporation of DRR and CCA issues on design and implementation contribute to longevity of the schemes and effective service delivery.

The second component was sanitation. Several activities were carried out under this component. The activities included (i) Construction/rehabilitation of school and health post latrines (7 in number); (ii) motivational support to construct latrines of 115 households identified by the respective wards; (iii) organization of hygiene promotion sessions in schools and communities; (iv) hand washing training to school children and teachers; (v) training to community level FCHVs and health workers on WASH; (vi) MM training/ orientation to school going adolescent girls; (vii) PHAST training to SM and School teachers. Conduction of these several hygiene and sanitation promotion activities together with improvement in water availability and affordability have contributed positively in hygiene and sanitation condition in these communities.

Community members and schoolteachers and students expressed drastic changes happening in sanitation and hygiene conditions in their communities and schools. Students regularly engage in clean-up of the school premises and in personal hygienic behavior. The household survey revealed that 99% of households store water in lid covered pitchers whereas during the baseline it was found that 85% respondents stored water in open containers. A total of 98% of households have toilet facilities in their premises against the baseline data of 96%. The survey also revealed that 81 % of the households have water seal toilets and 17% have pit toilets against the baseline value of 64% and 23 % respectively. A total of 84% of the households were found to maintain clean environment in an around toilets. The percentage of households using soap water for handwashing has increased to 98 percent from 95 percent during the baseline. The detail of households responses in various sanitation and hygiene parameters is in the second section.



Cleaning session in progress in a school in Barnalu, Okhaldhunga



Support for latrine construction

Another component of the project was to enhance the capacity of communities and NRCS units in delivering WASH services. In order to strengthen the capacity of the WUCs on construction management two- day long pre-construction management training were conducted in all the WUCs participated by both male and female. In addition, three-day Plumbing and meter reading training was organized for the care takers, WUC members, and social mobilizers in each district. The plumbers who were trained were also engaged during the construction of the systems, thus honing their skill. All the WUCs were also given two-day long post-construction management training. Altogether 261 community members were trained. These different training contribute to effective management of drinking water supply schemes. A total of 67 NRCS volunteers were trained on WASH service delivery. Several coordination/collaboration meetings organized with the local governments were helpful in smooth functioning of the project and leveraging resources which also contribute in sustainability.

The household survey revealed that 47% of the respondents were highly satisfied 40 percent were satisfied with the project.

The Project was thus highly effective.

3.4 Efficiency

The total proposed budget of the project was NPR 88,707,270. Out of which Program expenses was NPR 60,626,344 (77%). As the project was still continuing the construction of three drinking water supply schemes, the expenses is yet to be calculated. The project mobilized human resources efficiently. Social mobilizers were trained on conducting sanitation and hygiene sessions at the schools and communities in addition to mobilizing communities for construction/rehabilitation of water supply schemes.

The project also mobilized resources from communities and the local governments. Beneficiary households contributed in cash for maintenance fund. The average cash contribution was NPR 2,653. They also contributed labor for the construction/rehabilitation of water supply schemes. Average labour contribution was 31 person days with males contributing 28 days and females contributing 35 days.

The project coordinated with the local governments in constructing/rehabilitating the water supply schemes. Besides contributing financially (about 20% of the construction cost), Local Governments also provided technical advice during the design phase and implementation. The table below presents the amount of contribution of the local governments and communities for the implementation of these schemes. The Local Government officials expressed that the collaborative works could be undertaken more efficiently than undertaken solely by the governments.

Table 3.2: Fund contribution from different sources

| SN | DWSS | Contribution (NPR) | | | Total (NPR) |
|----|--------------------------|--------------------|-------------------|--------------|--------------|
| | | NRCS | Local Governments | Communities | |
| 1 | Valayatar | 857,131.71 | 298,322.26 | 383,265.00 | 1,538,718.97 |
| 2 | Gaunkharka 1 | 1,821,886.80 | 1,088,724.49 | 1,224,000.00 | 4,134,611.26 |
| 3 | Gaunkharka 2 | 1,562,493.73 | 674,824.70 | 1,063,350.00 | 3,300,668.43 |
| 4 | Jaldevi Lifting | 800,000.00 | 00 | 98,000.00 | 898,000.00 |
| 5 | Balkanya Lifting | 3,200,000.00 | 300,000 | 640,000.00 | 4,140,000.00 |
| 6 | Likhu Majhi Gaun Lifting | 4,186,674.10 | 567,769.55 | 1,285,298.49 | 6,039,742.14 |
| 7 | Dharakhola | 4,746,619.60 | 1,700,000.00 | 2,670,000.00 | 9,116,619.60 |
| 8 | Barnalu Raitole | 2,995,192.66 | 985,565.75 | 1,420,000.00 | 5,400,758.41 |

The project adopted adaptive management practices during the immediate aftermath of lock down as a result of COVID 19 pandemic, utilizing digital technology where possible. The project also adopted humanitarian approach and vulnerable households who were not in a position to contribute labor were exempted from labour contribution.

3.5 Sustainability

Sustainability of these schemes will be based on several factors such as institutional base for governance, incentive for sustaining the schemes, and technical considerations.

All of these water supply schemes were built on the high degree of local need and demand for these schemes. There are not alternative sources of drinking water (except drawing water from Dhobi Khola in Gounkharka or from the Likhukhola in Majhi Gaun), as such local communities have high incentives to sustain the water supply schemes.

The intervention in lifting types of schemes helped to reduce the cost of water tariff with the installation of solar system thus the Water User Committees and users have strong incentives to ensure the continuous maintenance of solar system. Although the lifting systems have one spare motor for running the system, the need for repair might pose risks of disruption. Protection of water sources from the landslide risks and debris flow from road construction as in Dharakhola, Rai Tol, and Gounkharka 1 also help to improve the sustainability of the systems. Similarly, measures adopted to address the decline in water discharge in

| क्र.सं. | विवरण | सिद्धिकृत रकम | कुल लागत रकम |
|---------|-----------------------|---------------|--------------|
| १. | ने.ने.सो. योगदान | २८,८१,३९३/८५ | २८,८१,३९३/८५ |
| २. | समरपालिकाको योगदान | १,००,९८३/१८८ | ८,८८,३६२/९८ |
| ३. | उपमोता समितिको योगदान | १,९०,०२२/५२ | १,९०,०२२/५२ |
| | जम्मा रकम रु. | ३०,७२,४००/१२५ | ३९,६९,७७८/९५ |

उपमोता समितिको अध्यक्षको नाम : भक्तबहादुर राई
सचिव : रत्नमती राई सम्पर्क नं. ९८५५८८८६०
उपमोता समिति सदस्य : १९ संख्या महिला : ७ पुरुष : ४

Transparency measures contribute in sustainability
Transparency measures

the source (construction of recharge pond in Balkanya, shifting the source and protection measures in Bhalayatar, Barnalu Rai Tol) also contribute towards sustainability of these systems. The main basis of sustainability of the schemes is the institutional basis for operating these schemes. In all the schemes 9 or 11 member- WUCs were re/formed. These WUCs are inclusive. Out of the total 80 members, 40 are female. Out of these, two are vice chairperson, three are secretaries, and six are treasurers. All The WUCs and their constitution have been registered at the respective Local Governments. These WUCs have maintained operation and maintenance fund. These WUCs have caretaker(s) (*Heralu*) for regular operation of the system. All of the schemes have trained plumbers and meter readers. These WUCs (except Gounkharka 2) have started collecting the tariff for water use from the member households. The WUC in Gounkharka 2 has yet to begin fixing the rate and the collection of tariffs. This poses a threat to sustainability in this scheme. Some of the WUCs, like in Balkanaya, water management is done in a highly efficient manner with three staffs. The WUCs also have been trained on post-construction management. Communities' involvement during the construction (through cash contribution for maintenance fund and labour contribution) also enhanced the ownership of communities. Community members have been practicing multiple use of water with contribution in household economy which also contributes to the sustainability.

Involvement of Local governments in the rehabilitation/construction of the schemes also strengthens the institutional network of the WUCs contributing to sustainability. The enhancement of gender equality, and empowerment of women, especially in the context of increasing male migration will also contribute towards sustainability. The adoption of 'no-one-left-behind' in the community and improved social harmony contributes to sustainability of the schemes.

The quality of the work done and transparency maintained during the implementation also contribute to sustainability of the schemes.

3.6 Impact

The project was implemented for two years with the water supply service from the rehabilitated system functioning for less than a year, yet some impacts are already seen while others will manifest in the future. Since the Project implemented 'one-house one water- tap' policy, all the households have tap stand within their premises. Enhanced availability of water besides meeting the consumption needs of the households has improved the hygiene and sanitation condition in the households and communities. The solar system combined with the electricity and registering water supply system as "community" system reduced the cost of water leading to affordability and increased use.

Water is being used for multiple purposes such as watering kitchen garden, fruits, drinking livestock beside domestic use. Vegetable production has increased in the communities. Other small-scale economic activities include poultry and vegetable production for market. As such greenery even in dry months has increased in these communities. Participants of group discussions in Barnalu Rai Tol, Bhalayatar, Balkanya reported that one would not see such greenery in the winter and dry months earlier. Cultivation of vegetables has changed the system of leaving animals stray in winter months to stall feeding system in Balkanya, Rampur in Ramechhap. The effect of adoption of Multiple Use System will likely become prominent in near future.

Shifting from community tap system to on- house one water tap has contributed in enhancing social harmony. Earlier, while sharing water from a common tap, individuals had disputes over water turn, more so when the water supply was limited. Quarrels over the water were frequent, sometime to the extent of damaging infrastructures. Now such disputes have ceased as households have water-stand in their premises and pay according to the volume of use.

Water use efficiency has also changed. In the earlier phase, with the community tap stand, people would leave the tap open all the time and there used to be water shortage or not properly used. With the tap stand at household and tariff proportionate to water use people open the tap only when necessary and water is used more efficiently. This will have implications on water conservation as well in the longer run. The project has also enhanced the goodwill towards NRCS.

4. CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

Nepal Red Cross Society (NRCS) implemented a two-year long Sustainable and Inclusive WASH project with the financial and technical support from the International Federation of Red Cross and Red Crescent Societies (IFRC), the British Red Cross, and the Finnish Red Cross in three districts of Okhaldhunga, Ramechhap, and Sindhuli. The Project had two outcomes as: (i) access to water, sanitation and hygiene services among targeted community members is improved, and ii) Capacity of Communities and NRCS units in delivering WASH services is improved. The project was implemented in Sunkoshi RM, Ward No 6, Sitalpalti of Sindhuli district; Ramechhap Municipality, Ward No 5 (Rampur) and Manthali Municipality, Ward No 1, (Manthali) of Ramechhap district; Molung RM, Ward No 3, 4 and Siddhicharan Municipality Ward No 5, Barnalu and Dharakhola of Okhaldhunga District. The project targeted to reach out to 6,183 population with its hardware (construction) and software (such as sanitation and hygiene promotions, training) activities. Similarly, behaviour change campaigns on safe water usages and water purification, sanitation and hygiene promotion were launched.

The Project had two outcomes: (i) access to water, sanitation, and hygiene services among targeted community members is improved, and ii) Capacity of Communities and NRCS units in delivering WASH services is improved. These two outcomes had and six outputs within them. The major component of the project was construction/rehabilitation of water supply schemes. Three water supply schemes supported in Ramechhap district (Balkanya, Likhu Majhigaun in Ramechhap Municipality and Jaldevi in Manthali Municipality) were lifting type with the use of photo voltaic units in combination with electric system. The remaining five water supply schemes (Barnalau Rai Tol and Dharakhola in Siddhicharan Municipality in Okhaldhunga district, Valayatar, Gounkharka 1 and Gounkharka 2 in Sunkoshi Rural Municipality of Ramechhap district) were gravity flow system. The second component focused on sanitation and hygiene. Several activities were carried out under this component. The activities included (i) Construction/rehabilitation of school and healthpost latrines; (ii) motivational support to construct latrines of vulnerable households identified by the respective wards; (iii) organization of hygiene promotion sessions in schools and communities; (iv) hand washing training to school children and teachers; (v) training to community level FCHVs and health workers on WASH; (vi) MM training/ orientation to school going adolescent girls; (vii) PHAST training to SM and School teachers. Another component of the project was to enhance the capacity of communities and NRCS units in delivering WASH services. Several training and workshops were organized for community members and NRCS volunteers. The project also emphasized on organizing coordination/collaboration meetings with the local governments.

The chapter three discussed in detail the project performance in terms of the several criteria for endline survey. The Summary of project performance against those criteria is presented in the following table.

Table 4.1: Summary of Findings

| SN | Criteria | Rating | Key features |
|----|---------------|---------------------|--|
| 1 | Relevance | Relevant | The project addressed the needs identified in the lookback study conducted following earthquake response operation phase. Water availability has increased in all the schemes. In three lifting type schemes blending with photo voltaic cells, water tariff has greatly reduced (with the reduction of electricity tariff) making water affordable to all the households. Measures adopted to protect water sources from the risks of climate and disaster risks made the water supply schemes more reliable. Implementation of one house one water tap policy contributed to meet the SDG 6.1 in the local context. The project design to leverage the resources from the local governments added to the ownership of these schemes by the local governments as well. The hygiene and sanitation component of the project helped to improve the knowledge and practices on sanitation. The institutional basis for implementation and operation of these schemes were strengthened. The Project outcomes, outputs, and activities were consistent with the Local government's priority on improving drinking water supply. |
| 2 | Effectiveness | Highly satisfactory | The project was effective in enhancing availability of water round the year in all the schemes. The time spent by households fetching water has decreased. The cost of water was reduced in three lifting systems making it affordable to all the households and improving the sanitation condition as well. Water is being used for multiple purposes including for kitchen gardening and small-scale economic activities. The institutional capacity of WUCs in managing waters supply schemes has been strengthened with the human and financial resources/mechanism in place to effectively operate the systems. The quality of work done, and transparency maintained added to the effectiveness of project. |
| 3 | Efficiency | satisfactory | As work on three schemes were still ongoing the actual programme and management expenses and financial delivery is not available as of reporting time. The project plan allocated 77% for programme expenses and 23% on management. Human resources were efficiently utilized. The project also coordinated with the local governments and local governments contributed 20% of the construction cost amounting to a sum of NPR |

| | | | |
|---|----------------|-------------|--|
| | | | 5,615,207. The project adopted adaptive management practices in the events of COVID pandemic and adjusting implementation to the local context. |
| 4 | Sustainability | Likely | The project developed a strong institutional basis (WUCs) with strengthened network with local governments which will contribute towards sustainability. The WUCs have been registered with the local governments and developed constitution and operation plan. These WUCs have maintained operation and maintenance fund, trained technicians. Some of these WUCs are run very efficiently like a corporate house. The quality of the work, addressing of the most felt needs and the transparency measures adopted in the implementation will enhance the sustainability of the project effects. The enhancement of gender equality, and empowerment of women, especially in the context of increasing male migration will also contribute towards sustainability. |
| 4 | Impact | Significant | The project has already shown the positive impact on availability of water, its use, and in improving sanitation and hygiene condition of the communities. The solar system combined with the electricity and registering water supply system as “community’ system reduced the cost of water leading to increased use. Water is being used for multiple purposes such as watering kitchen garden, fruits, drinking livestock beside domestic use. As such greenery even in dry months has increased. The effect of adoption of Multiple Use System will likely become prominent in near future. Shifting from community tap system to one- house one water- tap has contributed in enhancing social harmony minimizing conflicts and quarrels. Water use efficiency has also changed. |
| <p>Rating scales (UNDP 2012): Relevance (1. Not relevant, 2. Relevant); Effectiveness (1. Highly Unsatisfactory (HU), 2. Unsatisfactory (U), 3. Moderately Unsatisfactory (MU), Moderately Satisfactory (MS), Satisfactory (S), Highly Satisfactory (HS); Efficiency: 1. Highly Unsatisfactory (HU), 2. Unsatisfactory (U), 3. Moderately Unsatisfactory (MU), Moderately Satisfactory (MS), Satisfactory (S), Highly Satisfactory (HS); Impact (1. Negligible, 2. Minimal, 3. Significant). Sustainability (1. Unlikely (U), 2. Moderately Unlikely (MU), 3. Moderately Likely (ML), and 4. Likely (L)*</p> | | | |

The rating scale was adopted from:

1. IFRC (2011). IFRC Framework for Evaluation
2. OECD-DAC (2019). Better Criteria for Better Evaluation: Revised Evaluation Criteria, Definitions and Principles for Use. OECD DAC Network on Development Evaluation

3. UNDP (2012) Guidance for Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects New York: UNDP Evaluation Office.

4.2 Recommendations

As the project has already completed the implementation phase, these recommendations refer to sustaining the project effects and in design of similar future initiatives.

With the adoption of 'one house one water-tap policy' water use efficiency will increase. There is a likelihood of increased demand for and adoption of the Multiple Use System of water. Future designs should consider incorporating promotion of MUS, which will also help in economic empowerment of the vulnerable households and overall communities.

The learning on the positive effects of incorporating DRR and CCA issues in project design; cooperating with the local governments and leveraging resources; and encouraging community contribution should be strengthened and continued.

As several environmental and social processes and factors have contributed in decline of water sources, future design should emphasize on comprehensive water sources conservation and improving local hydrology.

The WUCs should be encouraged to upscale the measures to water conservation such as constructing more water recharge ponds, planting water conserving species, and measures to retain water in rainy seasons.

Although, DWSS schemes were handed over to the communities after all the operational mechanism were in place in seven of the schemes, in the case of two schemes the operational mechanism was not fully functional after a few months of handing over the schemes. Handing over should be done only after ensuring all the operational plan is functional.

WUCs should be encouraged to network with Federation of Drinking Water and Sanitation Users Nepal (FEDWASUN).

Section II: Household Survey

A. GENERAL

Sampling: The sample size for the household survey was calculated with 5 percent margin of error and 95 percent level of confidence for the total household of all three project districts which summed up to 272 households out of 664 beneficiaries HHs. Due to topographical variation and scattered settlements, the household survey was conducted in 300 households. The detail of the surveyed households is presented in the table below.

Table 1: Details of the households surveyed in the project area

| District | Scheme | Municipalities | Benefitted HHs | Sampled HHs |
|--------------|---|--|----------------|-------------|
| Sindhuli | Valayatar DWSS | Sunkoshi RM-06 | 28 | 13 |
| | Gaukharka DWSS-1 | Sunkoshi RM-06 | 61 | 30 |
| | Gaukharka DWSS-2 | Sunkoshi RM-06 | 58 | 25 |
| Ramechhap | Jaldevi Community Lifting DWSS | Hatechaur, Manthali Municipality-01 | 91 | 41 |
| | Balkanya Community Lifting DWSS | Rampur, Ramechhap Municipality-05 | 182 | 81 |
| | Likhu Majhi Gaun Community Lifting DWSS | Majhigaun, Rampur, Ramechhap Municipality-05 | 51 | 24 |
| Okhaldhunga | Dharakhola DWSS | Siddhicharan Municipality-05 | 126 | 56 |
| | Barnalu Raitol DWSS | Siddhicharan Municipality-05 | 67 | 30 |
| Total | 8 DWSS | 4 Municipalities | 664 | 300 |

The surveyed households have a total population of 1,808 and an average family size of 6.06. The ethnic distribution of the surveyed households is presented in the following table.

Table 2: Ethnic distribution of surveyed households

| Municipality | HH surveyed | Janjati % | BCTS % | Dalit % | Madhesi % | Male pop ⁿ | Female pop ⁿ |
|---------------------------|-------------|-------------|-------------|------------|------------|-----------------------|-------------------------|
| Manthali Municipality | 41 | 8.0 | 4.7 | 0.7 | 0.3 | 107 | 106 |
| Ramechhap Municipality | 105 | 34.3 | 0.0 | 0.7 | 0.0 | 364 | 407 |
| Siddhicharan Municipality | 86 | 26.3 | 1.7 | 0.7 | 0.0 | 200 | 202 |
| Sunkoshi R Municipality | 68 | 7.3 | 9.7 | 5.7 | 0.0 | 193 | 223 |
| Total | 300 | 76.0 | 16.0 | 7.7 | 0.3 | 864 | 938 |

Table 3: Gender of household head among the surveyed HHs

| Water supply schemes | Female | Male | Total |
|----------------------------------|-----------|-----------|------------|
| Balkanya khanepani yojana | 14 | 67 | 81 |
| Barnalu Raitole khanepani yojana | 9 | 21 | 30 |
| Dharakhola khanepani yojana | 19 | 37 | 56 |
| Gaunkharka khanepani yojana -1 | 5 | 25 | 30 |
| Gaunkharka khanepani yojana -2 | 5 | 20 | 25 |
| Jaldevi khanepani yojana | 9 | 32 | 41 |
| Majhigaun khanepani yojana | 7 | 17 | 24 |
| Valayatar khanepani yojana | 1 | 12 | 13 |
| Total | 69 | 231 | 300 |
| Percentage | 23 | 77 | 100 |

B. WATER SUPPLY

Water Source

During the baseline survey for the majority of households (81.98%) the source of drinking water was community taps, whereas with the intervention of the project, all the households have private water taps.

Time for water collection

There has been a marked improvement in time spent for fetching water. The endline survey revealed that 91 percent of the households spend less than 2 minutes to reach the water tap whereas during the baseline 77.16 percent of the households spent less than 15 minutes to collect the water followed by 15 to 30 minutes for 16.75 percent households.

Table 4: Time required for fetching water

| Water supply schemes | 2 to 15 minutes | Less than 2 minutes | Grand Total |
|----------------------------------|-----------------|---------------------|-------------|
| Balkanya khanepani yojana | 4 | 77 | 81 |
| Barnalu Raitole khanepani yojana | | 30 | 30 |
| Dharakhola khanepani yojana | 5 | 51 | 56 |
| Gaunkharka khanepani yojana -1 | 3 | 27 | 30 |
| Gaunkharka khanepani yojana -2 | 2 | 23 | 25 |
| Jaldevi khanepani yojana | 11 | 30 | 41 |
| Majhigaun khanepani yojana | | 24 | 24 |
| Valayatar khanepani yojana | 3 | 10 | 13 |
| Total | 28 | 272 | 300 |
| Percentage | 9 | 91 | 100 |

Water Tarriff

Excepting in Gounkharka-2 DWSS, users in all the schemes have been paying monthly tariff for water use.

Table 5: Number of households paying monthly tariff for water you use

| Water Supply schemes | Yes | No | Grand Total |
|----------------------------------|-----|----|-------------|
| Balkanya khanepani yojana | 81 | | 81 |
| Barnalu raitole khanepani yojana | 30 | | 30 |
| Dharakhola khanepani yojana | 56 | | 56 |
| Gaunkharka khanepani yojana -1 | 30 | | 30 |
| Gaunkharka khanepani yojana -2 | | 25 | 25 |
| Jaldevi khanepani yojana | 40 | 1 | 41 |
| Majhigaun khanepani yojana | 24 | | 24 |
| Valayatar khanepani yojana | 13 | | 13 |
| Total | 274 | 26 | 300 |
| Percentage | 91% | 9% | 100% |

Basis for water tariff

| Water supply schemes | Decided by the WUC | Meter reading based | Total |
|----------------------------------|--------------------|---------------------|-------|
| Balkanya khanepani yojana | | 81 | 81 |
| Barnalu Raitole khanepani yojana | | 30 | 30 |
| Dharakhola khanepani yojana | | 56 | 56 |
| Gaunkharka khanepani yojana -1 | | 30 | 30 |
| Jaldevi khanepani yojana | 39 | 1 | 40 |
| Majhigaun khanepani yojana | | 24 | 24 |
| Valayatar khanepani yojana | | 13 | 13 |
| Total | 39 | 235 | 274 |
| Percentage | 13% | 91% | 100% |

Average monthly tariff

| Water supply schemes | Average Tariff (NPR) |
|----------------------------------|----------------------|
| Balkanya khanepani yojana | 338 |
| Barnalu Raitole khanepani yojana | 30 |
| Dharakhola khanepani yojana | 156 |
| Gaunkharka khanepani yojana -1 | 52 |
| Jaldevi khanepani yojana | 311 |
| Majhigaun khanepani yojana | 171 |
| Valayatar khanepani yojana | 208 |
| Total average | 212 |

Gender role in water collection**Table: Number of households on gender roles in collection of water**

| Water supply schemes | All family members | Female only | Male | Grand Total |
|---------------------------|--------------------|-------------|------|-------------|
| Balkanya khanepani yojana | 71 | 10 | | 81 |

| | | | | |
|----------------------------------|-----------|-----------|----------|------------|
| Barnalu raitole khanepani yojana | 18 | 11 | 1 | 30 |
| Dharakhola khanepani yojana | 28 | 25 | 3 | 56 |
| Gaunkharka khanepani yojana -1 | 21 | 7 | 2 | 30 |
| Gaunkharka khanepani yojana -2 | 15 | 7 | 3 | 25 |
| Jaldevi khanepani yojana | 34 | 7 | | 41 |
| Majhigaun khanepani yojana | 21 | | 3 | 24 |
| Valayatar khanepani yojana | 7 | 5 | 1 | 13 |
| Grand Total | 215 | 72 | 13 | 300 |
| Percentage | 72 | 24 | 4 | 100 |

During the baseline, in 57.87 percent households only female were responsible for collecting water. In the endline only 24 % of households only female are responsible for water collection.

Labour Contribution in the construction/rehabilitation of DWSS

| Water supply schemes | Yes | No | Total |
|----------------------------------|------------|------------|-------------|
| Balkanya khanepani yojana | 78 | 3 | 81 |
| Barnalu raitole khanepani yojana | 30 | | 30 |
| Dharakhola khanepani yojana | 54 | 2 | 56 |
| Gaunkharka khanepani yojana -1 | 27 | 3 | 30 |
| Gaunkharka khanepani yojana -2 | 25 | | 25 |
| Jaldevi khanepani yojana | 20 | 21 | 41 |
| Majhigaun khanepani yojana | 24 | | 24 |
| Valayatar khanepani yojana | 13 | | 13 |
| Total | 271 | 29 | 300 |
| Percentage | 90% | 10% | 100% |

Average labour contribution was 31 person days with male contribution at 28 days and female contribution at 35 days.

Cash contribution

A total of 234 HHs out of 300 HHs reported of contributing cash for these DWSS. The detail is in the following table.

Table: Average amount of cash contribution by a household in different DWSS

| Water supply scheme | Average cash contribution (NPR) |
|----------------------------------|---------------------------------|
| Balkanya khanepani yojana | 3659 |
| Barnalu raitole khanepani yojana | 843 |
| Dharakhola khanepani yojana | 700 |
| Gaunkharka khanepani yojana -1 | 1036 |
| Gaunkharka khanepani yojana -2 | 909 |
| Jaldevi khanepani yojana | 8197 |
| Majhigaun khanepani yojana | 1492 |
| Valayatar khanepani yojana | 1375 |
| Total | 2653 |

Average daily water consumption

The average family size was found to be 6.06. Average daily water consumption in different DWSS is in the following table.

Table: average daily water consumption (in liters)

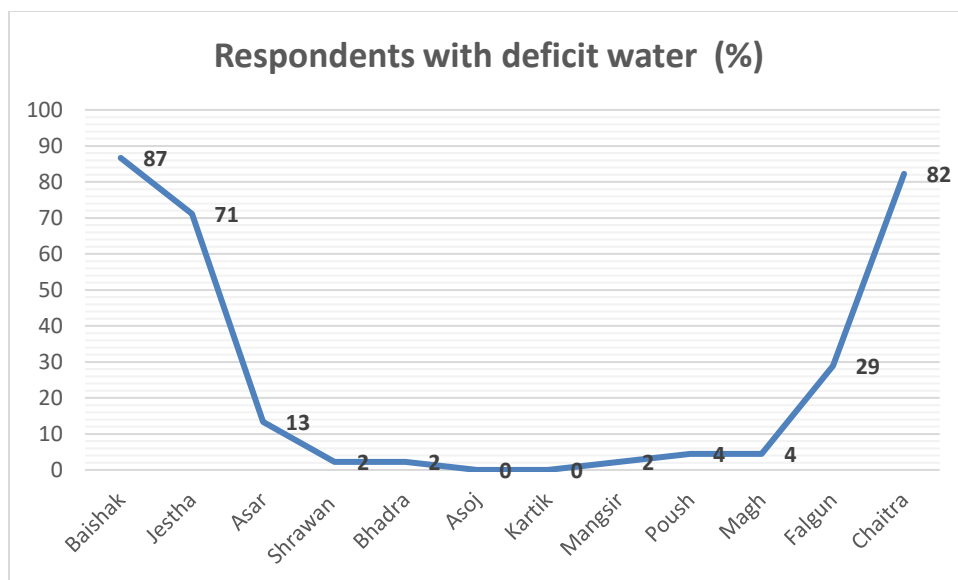
| Water Supply schemes | Less than 150 | 150-200 Liter | 200-300 Liter | Above 300 Liter | Total |
|----------------------------------|---------------|---------------|---------------|-----------------|-------|
| Balkanya khanepani yojana | 11 | 31 | 25 | 14 | 81 |
| Barnalu raitole khanepani yojana | 2 | 5 | 12 | 11 | 30 |
| Dharakhola khanepani yojana | 4 | 33 | 16 | 3 | 56 |
| Gaunkharka khanepani yojana -1 | 18 | 8 | 3 | 1 | 30 |
| Gaunkharka khanepani yojana -2 | 15 | 5 | 3 | 2 | 25 |
| Jaldevi khanepani yojana | 5 | 14 | 3 | 19 | 41 |
| Majhigaun khanepani yojana | 3 | | 9 | 12 | 24 |
| Valayatar khanepani yojana | 3 | 7 | 1 | 2 | 13 |
| Total | 61 | 103 | 72 | 64 | 300 |
| Percentage | 20% | 34% | 24% | 21% | 100% |

Sufficiency of water

Table: Number of households thinking water supply is sufficient

| Water supply schemes | Yes | No | Total |
|----------------------------------|-----|-----|-------|
| Balkanya khanepani yojana | 79 | 2 | 81 |
| Barnalu raitole khanepani yojana | 30 | | 30 |
| Dharakhola khanepani yojana | 55 | 1 | 56 |
| Gaunkharka khanepani yojana -1 | 19 | 11 | 30 |
| Gaunkharka khanepani yojana -2 | 5 | 20 | 25 |
| Jaldevi khanepani yojana | 34 | 7 | 41 |
| Majhigaun khanepani yojana | 24 | | 24 |
| Valayatar khanepani yojana | 9 | 4 | 13 |
| Total | 255 | 45 | 300 |
| Percentage | 85% | 15% | 100% |

A total of 85 % of the respondents thought water supply is sufficient whereas in the baseline only 68.75 percent of the households had enough water available throughout the year.



Alternate source of water in the case of deficiency

Table: Alternative source of Water supply for HHs

| Water supply schemes | Number of Respondents | Percentage |
|---------------------------------|-----------------------|------------|
| Surface water (River/Pond/Lake) | 19 | 42 |
| Public Tap | 19 | 42 |
| Boring | 4 | 9 |
| Safe kuwa | 2 | 4 |
| Safety well | 1 | 2 |
| Total | 45 | 100 |

Table: Uses of water on activities other than drinking water

| Activities | Respondents | Percentage |
|-------------------|-------------|------------|
| Bathing & Washing | 300 | 100 |
| To water Garden | 177 | 59 |
| Livestock | 277 | 92 |
| Irrigation | 56 | 19 |

Water use in economic activities

Table: Number of households using water in economic activities

| Water supply schemes | Yes | No | Total |
|----------------------------------|-----|----|-------|
| Balkanya khanepani yojana | 2 | 79 | 81 |
| Barnalu raitole khanepani yojana | | 30 | 30 |
| Dharakhola khanepani yojana | 17 | 39 | 56 |
| Gaunkharka khanepani yojana -1 | | 30 | 30 |
| Gaunkharka khanepani yojana -2 | | 25 | 25 |

| | | | |
|----------------------------|------------|------------|-------------|
| Jaldevi khanepani yojana | 14 | 27 | 41 |
| Majhigaun khanepani yojana | | 24 | 24 |
| Valayatar khanepani yojana | | 13 | 13 |
| Total | 33 | 267 | 300 |
| Percentage | 11% | 89% | 100% |

Water quality

Table: Number of respondents on quality of water

| Water Supply schemes | Clean | Muddy during rainy season | Year wise Muddy water | Total |
|----------------------------------|--------------|---------------------------|-----------------------|---------------|
| Balkanya khanepani yojana | 81 | | | 81 |
| Barnalu raitole khanepani yojana | 27 | 3 | | 30 |
| Dharakhola khanepani yojana | 56 | | | 56 |
| Gaunkharka khanepani yojana - 1 | 9 | 21 | | 30 |
| Gaunkharka khanepani yojana - 2 | 17 | 8 | | 25 |
| Jaldevi khanepani yojana | 40 | 1 | | 41 |
| Majhigaun khanepani yojana | 24 | | | 24 |
| Valayatar khanepani yojana | 7 | 5 | 1 | 13 |
| Total | 261 | 38 | 1 | 300 |
| Percentage | 87.0% | 12.7% | 0.3% | 100.0% |

Water Purification

Table: Number of households purifying water before drinking

| Water supply schemes | Always | Never | Sometimes | Total |
|----------------------------------|--------------|--------------|--------------|---------------|
| Balkanya khanepani yojana | 7 | 73 | 1 | 81 |
| Barnalu raitole khanepani yojana | 8 | 8 | 14 | 30 |
| Dharakhola khanepani yojana | 25 | 14 | 17 | 56 |
| Gaunkharka khanepani yojana -1 | 7 | 9 | 14 | 30 |
| Gaunkharka khanepani yojana -2 | 12 | 5 | 8 | 25 |
| Jaldevi khanepani yojana | 20 | 16 | 5 | 41 |
| Majhigaun khanepani yojana | 1 | 22 | 1 | 24 |
| Valayatar khanepani yojana | 6 | 2 | 5 | 13 |
| Total | 86 | 149 | 65 | 300 |
| Percentage | 28.7% | 49.7% | 21.7% | 100.0% |

Type of pitcher to store the water

Table: Type of pitcher to store the water

| Water Supply schemes | With lid | Without lid | Total |
|----------------------------------|----------|-------------|-------|
| Balkanya khanepani yojana | 81 | | 81 |
| Barnalu raitole khanepani yojana | 30 | | 30 |

| | | | |
|--------------------------------|------------|-----------|-------------|
| Dharakhola khanepani yojana | 56 | | 56 |
| Gaunkharka khanepani yojana -1 | 29 | 1 | 30 |
| Gaunkharka khanepani yojana -2 | 24 | 1 | 25 |
| Jaldevi khanepani yojana | 40 | 1 | 41 |
| Majhigaun khanepani yojana | 24 | | 24 |
| Valayatar khanepani yojana | 13 | | 13 |
| Total | 297 | 3 | 300 |
| Percentage | 99% | 1% | 100% |

During the baseline 84.52 percent households were found to store water in open container whereas the endline survey showed 99% use contained with lid.

Material used to clean the water pitcher

Table: Material used to clean the water pitcher

| Water supply schemes | Ash | Soap | Water only | Total |
|----------------------------------|-----------|-----------|------------|------------|
| Balkanya khanepani yojana | 1 | 31 | 49 | 81 |
| Barnalu raitole khanepani yojana | 6 | 24 | | 30 |
| Dharakhola khanepani yojana | 4 | 52 | | 56 |
| Gaunkharka khanepani yojana -1 | 25 | 5 | | 30 |
| Gaunkharka khanepani yojana -2 | 11 | 12 | 2 | 25 |
| Jaldevi khanepani yojana | | 40 | 1 | 41 |
| Majhigaun khanepani yojana | | 24 | | 24 |
| Valayatar khanepani yojana | 5 | 7 | 1 | 13 |
| Total | 52 | 195 | 53 | 300 |
| Percentage | 17 | 65 | 18 | 100 |

Use of water tank to store water

Table: Number of households using a tank at home to store water

| Water supply schemes | Yes | No | Total |
|----------------------------------|------------|------------|-------------|
| Balkanya khanepani yojana | 17 | 64 | 81 |
| Barnalu raitole khanepani yojana | 13 | 17 | 30 |
| Dharakhola khanepani yojana | 48 | 8 | 56 |
| Gaunkharka khanepani yojana -1 | 23 | 7 | 30 |
| Gaunkharka khanepani yojana -2 | 14 | 11 | 25 |
| Jaldevi khanepani yojana | 35 | 6 | 41 |
| Majhigaun khanepani yojana | 3 | 21 | 24 |
| Valayatar khanepani yojana | 11 | 2 | 13 |
| Total | 164 | 136 | 300 |
| Percentage | 55% | 45% | 100% |

C. SANITATION

Presence of a toilet

Table: Toilets at home

| Water supply schemes | Yes | No | Total |
|----------------------------------|-----|----|-------|
| Balkanya khanepani yojana | 80 | 1 | 81 |
| Barnalu raitole khanepani yojana | 30 | | 30 |
| Dharakhola khanepani yojana | 56 | | 56 |
| Gaunkharka khanepani yojana -1 | 29 | 1 | 30 |
| Gaunkharka khanepani yojana -2 | 25 | | 25 |
| Jaldevi khanepani yojana | 40 | 1 | 41 |
| Majhigaun khanepani yojana | 22 | 2 | 24 |
| Valayatar khanepani yojana | 13 | | 13 |
| Total | 295 | 5 | 300 |
| Percentage | 98% | 2% | 100% |

During the baseline 95.69 percent of hhs reported having a toilet. The endline survey revealed that 98 % of hhs have toilet.

Defecation in the case of not having a toilet

| Water supply scheme | Neighbor's toilet | Open space | Public toilet | Total |
|--------------------------------|-------------------|------------|---------------|-------|
| Balkanya khanepani yojana | | 1 | | 1 |
| Gaunkharka khanepani yojana -1 | 1 | | | 1 |
| Jaldevi khanepani yojana | | | 1 | 1 |
| Majhigaun khanepani yojana | | 2 | | 2 |
| Total | 1 | 3 | 1 | 5 |
| Percentage | 0.33 | 1.00 | 0.33 | 1.67 |

Types of toilets used

Table: types of toilet in the household

| Water supply schemes | Pit toilet with direct Pit | Indirect pit toilet | Direct water seal | Indirect water seal pit toilet | Septic tank water seal | Total |
|----------------------------------|----------------------------|---------------------|-------------------|--------------------------------|------------------------|-------|
| Balkanya khanepani yojana | 1 | 3 | 4 | 70 | 2 | 80 |
| Barnalu raitole khanepani yojana | 1 | | 29 | | | 30 |
| Dharakhola khanepani yojana | 3 | | 10 | | 43 | 56 |
| Gaunkharka khanepani yojana -1 | 24 | | | | 5 | 29 |
| Gaunkharka khanepani yojana -2 | 14 | | 1 | | 10 | 25 |

| | | | | | | |
|----------------------------|----|---|----|-----|----|-----|
| Jaldevi khanepani yojana | | 1 | | 13 | 26 | 40 |
| Majhigaun khanepani yojana | | | | 22 | | 22 |
| Valayatar khanepani yojana | 6 | | | 1 | 6 | 13 |
| Total | 49 | 4 | 44 | 106 | 92 | 295 |
| Percentage | 16 | 1 | 15 | 35 | 31 | 98 |

The endline survey showed 81 percent of hhs have water seal toilet and 17% have pit toilet compared to 64% and 23% on baseline survey.

Type of Sewage disposal tank

Table: type of sewage-disposal tank used

| Water supply schemes | Pit with lining | Simple pit with no lining | Improved pit | Septic Tank | Total |
|----------------------------------|-----------------|---------------------------|--------------|-------------|-------|
| Balkanya khanepani yojana | | 2 | 76 | 2 | 80 |
| Barnalu raitole khanepani yojana | | 2 | 28 | | 30 |
| Dharakhola khanepani yojana | | 4 | 11 | 41 | 56 |
| Gaunkharka khanepani yojana -1 | 11 | 10 | 2 | 6 | 29 |
| Gaunkharka khanepani yojana -2 | 9 | 6 | 1 | 9 | 25 |
| Jaldevi khanepani yojana | | | 14 | 26 | 40 |
| Majhigaun khanepani yojana | | | 22 | | 22 |
| Valayatar khanepani yojana | 3 | 3 | 3 | 4 | 13 |
| Total | 23 | 27 | 157 | 88 | 295 |
| Percentage | 8 | 9 | 52 | 29 | 98 |

Cleanliness (water leaking, visible faeces) of environment outside the Toilet

| Water supply schemes | Yes | No | Unable to inspect | Total |
|----------------------------------|-----|----|-------------------|-------|
| Balkanya khanepani yojana | 78 | 2 | | 80 |
| Barnalu raitole khanepani yojana | 22 | 7 | 1 | 30 |
| Dharakhola khanepani yojana | 33 | 21 | 2 | 56 |
| Gaunkharka khanepani yojana -1 | 27 | 2 | | 29 |
| Gaunkharka khanepani yojana -2 | 25 | | | 25 |
| Jaldevi khanepani yojana | 37 | 3 | | 40 |
| Majhigaun khanepani yojana | 17 | 5 | | 22 |
| Valayatar khanepani yojana | 12 | 1 | | 13 |
| Total | 251 | 41 | 3 | 295 |
| Percentage | 84 | 14 | 1 | 98 |

Satisfaction with the current toilet

Table: Number of households satisfied with the current toilet

| Water supply schemes | Yes | No | Total |
|---------------------------|-----|----|-------|
| Balkanya khanepani yojana | 79 | 1 | 80 |

| | | | |
|----------------------------------|-----------|----------|-----------|
| Barnalu raitole khanepani yojana | 29 | 1 | 30 |
| Dharakhola khanepani yojana | 52 | 4 | 56 |
| Gaunkharka khanepani yojana -1 | 23 | 6 | 29 |
| Gaunkharka khanepani yojana -2 | 23 | 2 | 25 |
| Jaldevi khanepani yojana | 39 | 1 | 40 |
| Majhigaun khanepani yojana | 22 | | 22 |
| Valayatar khanepani yojana | 11 | 2 | 13 |
| Total | 278 | 17 | 295 |
| Percentage | 93 | 6 | 98 |

Sufficiency of water supply in the toilet

| Water supply schemes | Yes | No | Total |
|----------------------------------|------------|-----------|------------|
| Balkanya khanepani yojana | 79 | 1 | 80 |
| Barnalu raitole khanepani yojana | 28 | 2 | 30 |
| Dharakhola khanepani yojana | 54 | 2 | 56 |
| Gaunkharka khanepani yojana -1 | 28 | 1 | 29 |
| Gaunkharka khanepani yojana -2 | 25 | | 25 |
| Jaldevi khanepani yojana | 38 | 2 | 40 |
| Majhigaun khanepani yojana | 22 | | 22 |
| Valayatar khanepani yojana | 13 | | 13 |
| Grand Total | 287 | 8 | 295 |
| Percentage | 96% | 3% | 98% |

Management of Children's stool

| children stool management | HHs with Children's | Percentage |
|---|---------------------|------------|
| Buried in a hole | 5 | 3 |
| Putting in Toilet | 179 | 94 |
| Throwing in fields/gardens | 1 | 1 |
| Wash with water and throw away with garbage | 6 | 3 |
| Total | 191 | 100 |

Awareness on the risks of lack of personal Hygiene

The table below shows the number and percentage of respondents on the awareness of risk of personal hygiene.

Table: Number of respondents aware of the risks of lack of personal hygiene

| Hygiene knowledge | Respondents | Percentage |
|-----------------------------------|-------------|------------|
| Proper use of Toilet | 233 | 78% |
| Menstrual hygiene management | 213 | 71% |
| Avoid stagnant water | 219 | 73% |
| Regular cleaning of water sources | 218 | 73% |
| Water management in Toilet | 211 | 70% |

| | | |
|------------------------------------|-----|-----|
| Washing hand | 297 | 99% |
| Cleaning inside outside home/broom | 246 | 82% |
| Daily bath | 269 | 90% |
| Brushing teeth | 268 | 89% |

During the baseline 99.24 percent households understood the importance of handwashing, above 90 percent had knowledge on personal hygiene, 80.20 percent on the importance of adequate water in the toilet and 38.07 percent respondents were aware on menstrual hygiene.

Hand washing

Table: Number of respondents aware of the risks of not washing hands or lack of personal hygiene

| Water Supply schemes | Yes | No | Total |
|----------------------------------|-----------|----------|------------|
| Balkanya khanepani yojana | 81 | | 81 |
| Barnalu raitole khanepani yojana | 30 | | 30 |
| Dharakhola khanepani yojana | 56 | | 56 |
| Gaunkharka khanepani yojana -1 | 28 | 2 | 30 |
| Gaunkharka khanepani yojana -2 | 23 | 2 | 25 |
| Jaldevi khanepani yojana | 39 | 2 | 41 |
| Majhigaun khanepani yojana | 23 | 1 | 24 |
| Valayatar khanepani yojana | 13 | | 13 |
| Total | 293 | 7 | 300 |
| Percentage | 98 | 2 | 100 |

The detail of households practicing hand washing in different DWSS is in the following table.

Table: Respondents washing hands with soap water

| Water supply schemes | Soap-water | Percentage |
|----------------------------------|------------|------------|
| Balkanya khanepani yojana | 80 | 99 |
| Barnalu raitole khanepani yojana | 30 | 100 |
| Dharakhola khanepani yojana | 56 | 100 |
| Gaunkharka khanepani yojana -1 | 26 | 87 |
| Gaunkharka khanepani yojana -2 | 23 | 92 |
| Jaldevi khanepani yojana | 41 | 100 |
| Majhigaun khanepani yojana | 24 | 100 |
| Valayatar khanepani yojana | 13 | 100 |
| Grand Total | 293 | 98 |

Remaining use Ash-water to wash hands.

The percent of households using soap water for handwashing has increased to 98 percent from 94.92 percent during the baseline.

Understanding on the causes and control of diarrhea

Table: Occurrence of diarrhea in the household in the last two years

| Water Supply schemes | Yes | No | Total |
|----------------------------------|-----|-----|-------|
| Balkanya khanepani yojana | 8 | 73 | 81 |
| Barnalu raitole khanepani yojana | 18 | 12 | 30 |
| Dharakhola khanepani yojana | 4 | 52 | 56 |
| Gaunkharka khanepani yojana -1 | 10 | 20 | 30 |
| Gaunkharka khanepani yojana -2 | 6 | 19 | 25 |
| Jaldevi khanepani yojana | 9 | 32 | 41 |
| Majhigaun khanepani yojana | 9 | 15 | 24 |
| Valayatar khanepani yojana | 7 | 6 | 13 |
| Total | 71 | 229 | 300 |
| Percentage | 24 | 76 | 100 |

The number of respondents on the understanding of different causes and control measures of diarrhea is in the following table

Table: Causes of Diarrhea

| Causes of Diarrhea | Respondents | Percentage |
|--|-------------|------------|
| Eating infected or contaminated food | 267 | 89 |
| Open defecation | 208 | 69 |
| From insect | 273 | 91 |
| Not washing your hands properly after using Toilet | 297 | 97 |
| Drinking contaminated water | 276 | 92 |
| Not handwashing after working in dirt | 221 | 74 |

Table: Control/preventive measures for diarrhea (multiple choice)

| Activities | Respondents | Percentage |
|--------------------------------------|-------------|------------|
| Cleaning home and yard | 229 | 76 |
| Timely washing hands | 280 | 93 |
| Avoiding contamination of food | 267 | 89 |
| Safe water from Contamination | 223 | 74 |
| Use of clean drinking water | 277 | 92 |
| Proper management of Children faeces | 285 | 90 |

During the baseline 86.55 percent households were aware that diarrheal diseases are caused due to poor handwashing practice, 87.56 percent households on unsafe water, 73.86 percent on not washing hand after using toilet, 87.56 percent on unsafe food and 85.53 percent due to flies.

Table: percentage of HHs adopting different methods in the case of Diarrhea

| Treatment done to Diarrhea | Percentages |
|----------------------------|-------------|
| Jeevan jal | 96 |
| Use of homemade liquid | 54 |
| Zink | 27 |
| Saline/Use of Syringe | 14 |

| | |
|---------------------------|---|
| Ayurved medicine | 8 |
| Others (salt sugar water) | 8 |
| Nothing | 4 |

D. WASTE MANAGEMENT

Table: Disposal of biodegradable waste

| Management of Biodegradable wastes | Respondents | Percent |
|--|-------------|------------|
| Thrown in designated place | 24 | 8 |
| Buried in a pit | 7 | 2 |
| Decomposed and used as fertilizer | 234 | 78 |
| Given to garbage collector | 1 | 0 |
| Not separated with perishable and non-perishable garbage | 31 | 10 |
| Others | 1 | 0 |
| Thrown in an organized place (ward/municipality) | 2 | 1 |
| Total | 300 | 100 |

Table: disposal of non-biodegradable waste?

| Management of Non-biodegradable wastes | Respondents | Percent |
|--|-------------|------------|
| Thrown in certain place | 197 | 66 |
| Given to garbage collectors | 6 | 2 |
| Open burning | 91 | 30 |
| Thrown in an organized place (ward/municipality) | 5 | 2 |
| Total | 300 | 100 |

Table: Management of plastic waste?

| Activities | Respondents | Percent |
|--|-------------|------------|
| Burning | 254 | 85 |
| Re use | 4 | 1 |
| Thrown in an organized place (ward/municipality) | 4 | 1 |
| Thrown in open place | 4 | 1 |
| Used to light the fire | 34 | 11 |
| Total | 300 | 100 |

E. DISASTER RISK AND CLIMATE CHANGE

Table: Experience of changes in climate

| Notice in Climate changes | Respondents | Percentage |
|---------------------------|-------------|------------|
| Decline in Rainfall | 185 | 62 |
| windstorm | 23 | 8 |
| Lower temp. in winter | 22 | 7 |
| Extreme temp. in Summer | 117 | 39 |
| Drought | 231 | 77 |
| No effect | 27 | 9 |
| Extreme Rainfall | 49 | 16 |

Table: Safety of taps and toilets from floods and landslides

| Water supply schemes | Yes | No | Total |
|----------------------------------|------------|-----------|------------|
| Balkanya khanepani yojana | 80 | 1 | 81 |
| Barnalu raitole khanepani yojana | 29 | 1 | 30 |
| Dharakhola khanepani yojana | 41 | 15 | 56 |
| Gaunkharka khanepani yojana -1 | 17 | 13 | 30 |
| Gaunkharka khanepani yojana -2 | 23 | 2 | 25 |
| Jaldevi khanepani yojana | 37 | 4 | 41 |
| Majhigaun khanepani yojana | 23 | 1 | 24 |
| Valayatar khanepani yojana | 9 | 4 | 13 |
| Total | 259 | 41 | 300 |
| Percentage | 86 | 14 | 100 |

F. AWARENESS ABOUT REDCROSS

Table: Number of respondents aware of Nepal Red Cross work

| Water supply schemes | Yes | No | Total |
|----------------------------------|-----------|----------|------------|
| Balkanya khanepani yojana | 81 | | 81 |
| Barnalu raitole khanepani yojana | 28 | 2 | 30 |
| Dharakhola khanepani yojana | 56 | | 56 |
| Gaunkharka khanepani yojana -1 | 29 | 1 | 30 |
| Gaunkharka khanepani yojana -2 | 25 | | 25 |
| Jaldevi khanepani yojana | 29 | 12 | 41 |
| Majhigaun khanepani yojana | 20 | 4 | 24 |
| Valayatar khanepani yojana | 13 | | 13 |
| Total | 281 | 19 | 300 |
| Percentage | 94 | 6 | 100 |

Table: Number of respondents participating in any program of Nepal Red Cross?

| Water supply schemes | Yes | No | Total |
|----------------------------------|------------|------------|------------|
| Balkanya khanepani yojana | 61 | 20 | 81 |
| Barnalu raitole khanepani yojana | 5 | 23 | 28 |
| Dharakhola khanepani yojana | 3 | 53 | 56 |
| Gaunkharka khanepani yojana -1 | 9 | 20 | 29 |
| Gaunkharka khanepani yojana -2 | 12 | 13 | 25 |
| Jaldevi khanepani yojana | 17 | 12 | 29 |
| Majhigaun khanepani yojana | 14 | 6 | 20 |
| Valayatar khanepani yojana | 9 | 4 | 13 |
| Grand Total | 130 | 151 | 281 |
| | | | |

Table: Number of people hearing about Namaste Hotline 1130

| Water supply schemes | Yes | No | Total |
|----------------------|-----|----|-------|
|----------------------|-----|----|-------|

| | | | |
|----------------------------------|-----------|-----------|------------|
| Balkanya khanepani yojana | 8 | 73 | 81 |
| Barnalu raitole khanepani yojana | 28 | 2 | 30 |
| Dharakhola khanepani yojana | 8 | 48 | 56 |
| Gaunkharka khanepani yojana -1 | 3 | 27 | 30 |
| Gaunkharka khanepani yojana -2 | 8 | 17 | 25 |
| Jaldevi khanepani yojana | 4 | 37 | 41 |
| Majhigaun khanepani yojana | | 24 | 24 |
| Valayatar khanepani yojana | 4 | 9 | 13 |
| Total | 63 | 237 | 300 |
| Percentage | 21 | 79 | 100 |

Table: Gender of people aware of Namaste Hotline 1130?

| Water supply scheme | Female | Male | Grand Total |
|----------------------------------|-----------|-----------|-------------|
| Balkanya khanepani yojana | 1 | 7 | 8 |
| Barnalu raitole khanepani yojana | 7 | 21 | 28 |
| Dharakhola khanepani yojana | 3 | 5 | 8 |
| Gaunkharka khanepani yojana -1 | | 3 | 3 |
| Gaunkharka khanepani yojana -2 | 2 | 6 | 8 |
| Jaldevi khanepani yojana | 1 | 3 | 4 |
| Valayatar khanepani yojana | 1 | 3 | 4 |
| Grand Total | 15 | 48 | 63 |

Table: Percentage of people in different level of satisfaction

| Satisfaction of respondents | Percentage |
|-----------------------------|------------|
| Dissatisfied | 2 |
| Highly dissatisfied | 2 |
| Highly satisfied | 47 |
| Neutral | 10 |
| Satisfied | 40 |
| Total | 100 |

Annexes

Annex 1: Targets and Achievements

| Indicators | Target | Achievement | Remarks |
|---|--------|-----------------------------|--|
| Outcome 1: Access to water, sanitation and hygiene services among targeted community members is improved | | | |
| Output 1.1: Existing water schemes in targeted communities are extended /rehabilitated/constructed. | | | |
| Output 1.1.1 Number of rehabilitation of water supply schemes | 11 | 8 completed and handed over | Three schemes in Molung, Okhaldhunga are under construction |
| 1.1.2: Number of people (Male/Female) provided with rehabilitated improved water sources /or water points | 6183 | 4419 | |
| Output 1.2: Sanitation facilities in the target communities are improved. | | | |
| Indicator 1.2.1: Number of schools with improved sanitation facilities (support for rehabilitation of latrines) | 3 | 6 | Done in 5 schools and 1 health center directly benefiting about 900 people |
| Indicator 1.2.2: Number of Households supported with improved toilets. | 100 | 115 | Benefiting 551 people (289 females) |
| Output 1.3: Hygiene promotion activities/session conducted in the communities/ schools. | | | |
| Indicator 1.3.1: number of hygiene promotion activities delivered at schools & communities | 244 | 262 | Hygiene promotion activities included hand washing demonstration and practice, orientation on household water treatment, awareness on menstrual hygiene management, uterus prolapses and total sanitation. Conducted at schools, mother groups, WUCs and community |
| Indicator 1.3.2: Number of people reached by hygiene promotion sessions | 4880 | 8722 | Community people being engaged in hygiene promotion activities. Through the 146 sessions |
| Output 1.4: DRR /CCA and COVID consideration/issues are mainstreamed into all components | | | |
| Indicator 1.4.1: DRR/CCA and COVID risks are integrated in program assessment and technical design | 19 | 12 | One CC/DRR assessment conducted. DRR/CCA risks mitigated in water supply |

| | | | |
|--|------|------|---|
| | | | schemes and construction of recharging pond |
| Indicator 1.4.2: number of people reached with DRR/CCA and COVID awareness activities | 1500 | 4577 | People reached through 109 awareness sessions on DRR/CCA and COVID. Out of them 2849 are female. |
| Outcome 2: Capacity of Communities and NRCS units in delivering WASH services is improved. | | | |
| Output 2.1: Financial management, CEA and WASH related trainings are provided to NRCS staff/volunteers and WUCs members. | | | |
| Indicator 2.1.1: Number of NRCS volunteers/staff in financial management, CEA, and WASH management trainings | 22 | 67 | Conducted through workshop on project, training on compliance |
| Indicator 2.1.2: Number of Community members trained in financial management, CEA and WASH management trainings | 282 | 261 | WUCs trained on pre-construction training, plumbing training including meter reading and post-construction management training. |
| Output 2.2: Coordination and collaboration with local government and other stakeholders in targeted communities/municipalities is maintained | | | |
| Indicator 2.2.1: Number of coordination-collaboration meetings (including inception and review meetings) with municipalities and other organizations organized | 14 | 14 | Helped to leverage the fund for construction of water supply schemes |
| Indicator 2.2.2: Number of municipalities providing co-funding for the project activities | 5 | 5 | 5 local governments provided co-funding for construction of water supply schemes as of the project plan |
| Indicator 2.2.3: Percent of households community members providing co-funding/contribution for the project activities | 75% | 100 | All the households (664) contributed in the construction of water supply schemes |

Annex 2: Comparative Overview of parameters in baseline and Endline survey

| SN | Parameters | Baseline | Endline |
|----|--|-------------------------------------|----------------------------------|
| 1. | Percentage of HHs with round the year water sufficiency | 68.75 | 85 |
| 2. | Time required for fetching water | 77% hhs spending 15 minutes or less | 91% hh spend less than 2 minutes |
| 3 | Percentage of HHs with access to clean drinking water | 38.83 | 87 |
| 4 | Percentage of HHs paying tariff for water use | 82.49 | 91 |
| 5 | Gender role in water collection | Only female in 57.87% hh | Only female in 24% hh |
| 6 | Percentage of HHs storing water in a lid-covered container | 15.48 | 99 |
| 7 | Percentage of HHs understanding that there should not be stagnant water in the surrounding | 62.44 | 73 |
| 8 | Percentage of HHs with latrine at their homes | 95.69 | 98 |
| 9 | Percentage of HHs with water seal toilets | 64 | 81 |
| 10 | Percentage of Hhs having latrines with handwashing facilities/sufficient water supply near latrine | 60.91 | 96 |
| 11 | Percentage of Hhs with awareness that diarrheal diseases are caused due to poor handwashing practice | 86.55 | 97 |
| 12 | Percentage of Hhs practicing use of safe drinking water to prevent diarrhea | 85.53 | 92 |
| 13 | Percentage of Hhs avoiding contaminated food | 82.23 | 89 |
| 14 | Percentage of Hhs with Proper management of children faeces, | 85.53 | 90 |
| 15 | Percentage of Hhs with the awareness that soap and water should be used for hand washing | 94.95 | 98 |
| 16 | Percentage of Hhs with awareness on menstrual hygiene | 38.07 | 71 |
| 17 | Households responded on the experience of changing pattern of rainfall /drought | 69.54 | 77 |

Annex 3: Itinerary of field study

| Date | Place | Activity |
|--------------|-----------------------------------|---|
| Jan 8, 2024 | Kathmandu-Manthali | Travel |
| | Manthali, Ramechhap | Meeting with NRCS district officials |
| | | Meeting with Enumerators |
| | | Meeting with Social Mobilizer |
| Jan 9, 2024 | Likhukhola Majhigaon, Ramechhap-5 | Meeting with community, observation of activities |
| | Rampur, Ramechhap -5 | Meeting at the Janata Secondary School |
| | | Meeting with Balkanya DWSS, and observation of infrastructure |
| Jan 10, 2024 | Hatechaur, Manthali 1, Ramechhap | Meeting with Water User Committee and Women's Group |
| | Manthali, Ramechhap | Meeting with Ward Chairperson, NRCS official |
| | Manthali-Okhaldhunga | Drive to Okhaldhunga |
| Jan 11, 2024 | Barnalu Rai Tol, Siddhicharan 5 | Meeting with WUC, technician |
| | | Meeting with Ward Chair, Technician |
| | | Meeting with Rajya Laxmi Seco School |
| Jan 12, 2024 | Rayale, Siddhicharan 5 | Meeting with mother group |
| | Dharakhola, Siddhicharan 5 | Meeting with WUC, caretakers, social mobilizer |
| Jan 13, 2024 | Okhaldhunga | Meeting NRCS officials, Programme Manager, Junior Engineer |
| Jan 14, 2024 | Okhaldhunga- Sindhuli | Drive to Sindhuli |
| | | Meeting with NRCS officials, Sindhuli |
| | | Meeting with NRCS, enumerators, Khalte Sindhuli |
| Jan 15, 2024 | Bhalayotar, Sunkoshi-6, Sindhuli | Meeting with WUC, Bhalayotar, Social mobilizer |
| Jan 16, 2024 | Gaunkharka, Sunkoshi -6, | Meeting with WUCs Gaunkharka 1 and 2, Social Mobilizer |

Annex 4: List of people interacted

| SN | Name | Representation |
|--|------------------------|-------------------------------|
| I. Meeting with WUCs and users in Likhukhola Majhi Gaun, Ramechhap-5, January 9, 2024 | | |
| 1 | Govinda B Majhi | User |
| 2 | Bhim B Majhi | User |
| 3 | Sunil Majhi | Chairperson |
| 4 | Kamal B Majhi | User |
| 5 | Tek B Majhi | User |
| 6 | Mangale Majhi | User |
| 7 | Dor B Majhi | Member |
| 8 | Dil Maya Majhi | User |
| 9 | Budha Maya Maji | User |
| 10 | Dil B Sunuwar | Ward Representative |
| II. Meeting at Janata Seco School, Ramechhap, January 9, 2024 | | |
| 1 | Shyam Lal Magar | Principal |
| 2 | Gopi Tamang | Teacher |
| 3 | Premika Magar | Student |
| 4 | Pragya Shrestha | Student |
| 5 | Sunita Shrestha | Teacher |
| 6 | Muna Kumari Shrestha | Teacher |
| 7 | Gita Shrestha | Teacher |
| 8 | Pushpa Lal Shrestha | Secretary Junior Red Cross |
| 9 | Ritesh Adhikari | Junior Red Cross |
| 10 | Nelson Shrestha | Junior Red Cross |
| 11 | Prem Kumari | Junior Red Cross |
| 12 | Anita Shrestha | Chairperson, Junior Red Cross |
| III. Meeting with WUC at Balkanya DWSS, Ramechhap 5, January 9, 2024 | | |
| 1 | Keshav Kumar Shrestha | Treasurer |
| 2 | Nare Magar | Member |
| 3 | Him Kumari Tamang | Secretary |
| 4 | Padam Bahadur Shrestha | Chairperson |
| 5 | Lokendra Shrestha | Vice Chairperson |
| 6 | Sabita Shrestha | Member |
| 7 | Priti Maya Shrestha | Member |
| IV. Meeting with WUC and Mothers groups at Jaldevi DWSS, Manthali 1 Hate Chaur, January 10, 2024 | | |
| 1 | Gore Majhi | Chairperson |
| 2 | Raj Kumar Majhi | User |
| 3 | Kiran Shrestha | Care taker |
| 4 | Dharke Majhi | User |
| 5 | Bir Man Majhi | User |
| 6 | Sannani Devkota | Member |
| 7 | Yamuna Majhi | User |

| | | |
|---|--------------------|----------------------------|
| 8 | Sharswati Majhi | User |
| 9 | Sita Majhi | Member |
| 10 | Krishna Maya Majhi | Vice Chairperson |
| 11 | Bharati Majhi | User |
| 12 | Somi Majhi | User |
| 13 | Januka Majhi | User |
| 14 | Mangali Majhi | User |
| V. Meeting with WUC and users at Barnalu Rai Tol DWSS, Barnalu, Siddhicharan 5, Okhaldhunga, January 11, 2024 | | |
| 1 | Samjhana Rai | Member |
| 2 | Runika Rai | User |
| 3 | Anita Rai | Member |
| 4 | Rajani Rai | Secretary |
| 5 | Jit Kumar Rai | User |
| 6 | Ram Laxman Rai | User |
| 7 | Diksha Rai | User |
| 8 | Babita Rai | User |
| VI. Meeting at RajyaLaxmi Seco school, Barnalu, Siddhicharan 5, Okhaldhunga January 11, 2024 | | |
| 1 | Jagat Bahadur Giri | Teacher, Junior Red Cross |
| 2 | Sunita Dahal | Secretary Junior Red Cross |
| 3 | Aruna Dahal | Member |
| 4 | Ashmit Rai | Member |
| 5 | Rojita Dahal | Member |
| 6 | Sushmita Khatiwada | Chairperson |
| 7 | Vijaya Dahal | Member |
| VII. Meeting with Mother Group, Rayale, Siddhicharan 5, Okhaldhunga, January 12, 2024 | | |
| 1 | Rebika Rai | Member |
| 2 | Man Maya Rai | Member |
| 3 | Mangal Maya Rai | Member |
| 4 | Sarita Rai | Member |
| 5 | Aaiti Maya Rai | Chairperson |
| 6 | Jaya Rupa Rai | Member |
| 7 | Kalpna Rai | Member |
| 8 | Soniya Rai | Member |
| 9 | Nirmala Giri | Member |
| 10 | Krishna Giri | Member |
| 11 | Yadav Maya Giri | Member |
| 12 | Sapana Giri | Member |
| 13 | Bishnu Rai | Social Mobilizer |
| 14 | Gajendra Rai | Teacher |
| 15 | Dinesh Giri | |
| 16 | Ambika Rai | Member |
| VIII. Meeting with WUC, Dharakhola DWSS, Siddhicharan 5, January 12, 2024 | | |

| | | |
|---|------------------------|----------------------------|
| 1 | Indra Kumari Rai | Vice Chairperson |
| 2 | Dil Bahadur Rai | Heralu |
| 3 | Tilak Bahadur Giri | Heralu |
| 4 | Surendra Bhujel | User |
| 5 | Harka Bahadur Rai | User |
| 6 | Bir Kaji Rai | Member |
| 7 | Pradum Rai | Chairperson |
| 8 | Samjhana Rai | Treasurer |
| 9 | Nanda Rai | Heralu |
| IX. Meeting with NRCS officials, Sindhuli January 14, 2024 | | |
| 1 | Lekh Nath Baral | |
| 2 | Deepak Dhakal | Member |
| 3 | Kedar Prasad Devkota | Vice Minister |
| 4 | Purushottam Adhikari | Treasurer |
| 5 | Pawan Pakhrin | Section Chief |
| 6 | Ashok Shrestha | Chairperson |
| 7 | Govinda Basnet | Joint Treasurer |
| 8 | Ram Prasad Sigdel | Member |
| X. Meeting with WUC and users at Bhalayotar DWSS, Sunkoshi 6 Sindhuli, January 15, 2024 | | |
| 1 | Bishnu Bahadur Darlami | Ex Chairperson |
| 2 | Ramji Prasad Saru | User |
| 3 | Rum Bahadur Darlami | User |
| 4 | Mohan Ba Darlami | User |
| 5 | Nav raj Darlami | Secretary |
| 6 | Jit Bahadur Darlami | Chairperson |
| 7 | Uddhav Saru | Member |
| 8 | Som Bahadur Darlami | Vice Chairperson |
| 9 | Durga Bahadur Darlami | Social Mobilizer |
| 10 | Radha Devi Darlami | User |
| 11 | Maya Darlami | Member |
| 12 | Santoshi Saru | Member |
| 13 | Sahija Darlami | User |
| XI. Meeting with WUC and users at Gaunkharka DWSS 2, Sunkoshi 6, January 16, 2024 | | |
| 1 | Dharma Raj Thapa | Chairperson |
| 2 | Hom Raj Karki | User |
| 3 | Madan Thapa | User |
| 4 | Dor Bahadur Thapa | Secretary |
| 5 | Sunita Nepali | Member |
| 6 | Hema Kumari Karki | Chairperson, Mothers Group |
| 7 | Shanti Bhandari | User |
| 8 | Sunita Silwal | Treasurer |
| 9 | Madhu Prasad Kaphley | User |
| 10 | Krishna Bahadur Karki | User |

| | | |
|--|----------------------|-------------------------------------|
| 11 | Ratna Bahadur Nepali | User |
| 12 | Rajan Bhandari | Member |
| 13 | Tika Ram Nepali | Member |
| 14 | Sahadev Thapa | User |
| 15 | Bhuwan Karki | User |
| 16 | Uddhav Karki | User |
| 17 | Padam B Nepali | User |
| 18 | Indra B Nepali | Social Mobilizer |
| 19 | Ram Thapa | User |
| 20 | Tika Maya Devkota | Executive Member Rural Municipality |
| XII. Meeting with WUC and users at Gaunkharka DWSS 1, Sunkoshi 6, January 16, 2024 | | |
| 1 | Sahadev Thapa | Treasurer |
| 2 | Madan Raj Thapa | User |
| 3 | Prem Bahadur Thapa | User |
| 4 | Mishra Nepali | User |
| 5 | Bishnu Maya BK | User |
| 6 | Devi | User |
| 7 | Durga Kumari Sewa | Secretary |
| 8 | Dil Kumari Karki | User |
| 9 | Ganga Kumari Thapa | User |
| 10 | Som Kumari Thapa | User |
| 11 | Man Kumari BK | User |
| 12 | Gyan B BK | Member |
| 13 | Jagat Bahadur Thapa | User |
| 14 | Bhesh B Thapa | User |
| 15 | Badri Raj Thapa | User |
| 16 | Kumar Nepali | Heralu |
| 17 | Sabitra Karki | Member |
| 18 | Hem Kumari Karki | Chairperson Mothers Group |

Individuals consulted

| SN | Name | Representation |
|----|------------------------|------------------------------------|
| 1 | Shiva Kumar Karki | President, NRCS Ramechhap |
| 2 | Durga Bahadur Shrestha | Minister, Ramechhap |
| 3 | Shambhu Budhathoki | NRCS, Ramechhap |
| 4 | Manisha Shrestha | Social Mobilizer, Manthali |
| 5 | Srijana Shrestha | User Balkanya DWSS, Ramechhap 5 |
| 6 | Saraj Raj Shrestha | Heralu, Balkanya DWSS, Ramechhap 5 |
| 7 | Hom Nath Dahal | Ward chairperson, Manthali 1 |
| 8 | Dilli Sher Rai | Ward chairperson, Siddhicharan 5 |
| 9 | Krishan Dahal | Ward Secretary, Siddhicharan 5 |
| 10 | Gyan B Rai | Technician, Ward office |

| | | |
|----|-----------------------|---|
| 11 | Hem Kumar Rai | Plumber, Barnalu |
| 12 | Bishnu Maya Rai | SM, Barnalu |
| 13 | Dil B Rai | Heralu, Dharakhola DWSS, Siddhicharan 5 |
| 14 | Tilak B Giri | Heralu, Dharakhola DWSS, Siddhicharan 5 |
| 15 | Nanda Raj Rai | Heralu, Dharakhola DWSS, Siddhicharan 5 |
| 16 | Om Prakash Chaudhary | Junior Engineer, NRCS, Okhaldhunga |
| 17 | Naindra Raj Rai | Minister NRCS, Okhaldhunga |
| 18 | Narayan Dahal | Chairperson NRCS Okhaldhunga |
| 19 | Khilaraj Guragain | Programme Manager NRCS Okhaldhunga |
| 20 | Durga Bahadur Darlami | Social Mobilizer, Bhalayotar |
| 21 | Hasta Raj Thapa | Chairperson, NRCS Khalte |
| 22 | Indra B Nepali | Social Mobilizer, Gaounkharka |
| 23 | Manorama Gautam | IFRC Kathmandu |
| 24 | Khem Raj Nepal | IFRC Kathmandu |
| 25 | Birendra Shahi | NRCS Kathmandu |
| 26 | Achyut Koirala | NRCS Kathmandu |
| 27 | Suvechhya Manandhar | NRCS Kathmandu |

Annex 5: Household Survey Team

| SN | Name | Place | Role |
|----|-----------------|-------------|--------------|
| 1 | Ujjal Acharya | Kathmandu | Data Analyst |
| 2 | Surendra Bhujel | Okhaldhunga | Enumerator |
| 3 | Rojita Rai | Okhaldhunga | Enumerator |
| 4 | Puja Thapa | Ramechhap | Enumerator |
| 5 | Manju Magar | Ramechhap | Enumerator |
| 6 | Som Bdr Darlami | Sindhuli | Enumerator |
| 7 | Bishnu Prasai | Sindhuli | Enumerator |
| 8 | Bishnu Prasai | Sindhuli | Enumerator |

Annex 6: Evaluation Matrix

| Evaluation criteria | Key questions | Information required/source of data | Data collection methods/tools |
|---------------------|---|--|--|
| Relevance | <ul style="list-style-type: none"> • How relevant was the project in addressing the identified needs of the project area in relation to WASH? • Were the overall design and approaches of the project appropriate in the overall WASH scenario of the project area? • To what extent was the project in line with national development priorities, and the priority of the respective Palikas? • Has the project been able to incorporate disaster risk and climate change consideration in project design in implementation? | <ul style="list-style-type: none"> • General WASH scenario of the of the respective Palikas • List of activities planned to achieve the objectives • Relationship of the project activities with the expressed needs • Objectives/activities aligned with the priority of the Palikas • Relationship established between the project and the local needs • Comprehensiveness of the Project activities designed to meet the objectives | <p>Review of the project proposal, Palika profiles</p> <p>Consultation with Project Team, Palika and ward officials, WUCs, and schools</p> |
| Efficiency | <ul style="list-style-type: none"> • How efficiently were the resources including human, material and financial, used to achieve the project results in a timely manner? • To what extent was the existing project management structure appropriate and efficient in generating the expected results? • To what extent has the project implementation strategy and its execution been efficient and cost-effective? • How efficient were the interventions in addressing the needs of the target population? | <ul style="list-style-type: none"> • Time series achievement • Administrative and financial management guidelines • Financial reports and assessment of program and admin expenses • Nature of synergy | <p>Review of reports (technical and financial)</p> <p>Review of Monitoring System Chronology of the project implementation</p> <p>Consultation with Project Team; Local government officials</p> |

| | | | |
|----------------|--|--|---|
| Effectiveness | <ul style="list-style-type: none"> • To what extent the project activities were delivered effectively in terms of quality, quantity, and timing? • What factors have contributed to achieving or not achieving the intended outputs? • To what extent were the project results inclusive in terms of gender, vulnerable groups, and other social differentials? • To what extent the different project components were effective? • To what extent was the implementation approach and management effective in delivering the project output? | <ul style="list-style-type: none"> • Time series achievement of the activities against the target • Quality of the work undertaken • Level of beneficiary satisfaction as expressed through survey and consultation meetings • Participation of different groups of beneficiaries in different phases of the project • Measures for ensuring transparency and accountability • Adaptive management practices | <p>Review of the progress reports; monitoring reports, meeting minutes at local level</p> <p>Consultation with project team, front line staff, officials of partner organizations, beneficiaries, local government officials, community organizations</p> <p>Observation of the activities undertaken</p> |
| Impact | <ul style="list-style-type: none"> • What major changes has the project invention brought in the project area? • To what extent the project initiatives indicate that intended impact will be achieved in the future? • What long-term effects have been produced by the project (directly, indirectly, intended and unintended)? • What have been the unintended and unexpected outcomes of the project activities? (Positive or negative) | <ul style="list-style-type: none"> • The list of changes already brought about by the project intervention (both material and non-material) • Potential wider effects of the changes brought about by the project intervention • List of changes in status quo | <p>Household survey, Review of Progress Reports, Consultation with the different groups of beneficiaries, Local government officials, Project Team,</p> |
| Sustainability | <ul style="list-style-type: none"> • To what extent are project results/ achievements likely to sustain? • Do the communities or WUCs leverage the funding from local government? • Are the WUCs and schools able to run their programs by themselves • To what extent measures (institutional, social, technical, financial) were implemented to sustain the project results? | <ul style="list-style-type: none"> • Institutional arrangements for sustaining the project effects • Availability of technical human resources at the local level to sustain the effects • Level of funding provided by local governments and other organizations (if any) | <p>Observation of field activities</p> <p>Review of reports</p> <p>Operation and maintenance plan of WUCs</p> <p>Sanitation and hygiene plan of schools</p> <p>Consultation with the Project Team, Local governments, WUCs, Schools</p> |

| | | | |
|--|---|--|--|
| | <ul style="list-style-type: none"> • To what extent the project contributed to strengthen the institutional base (of local governments, community organizations) on WASH? • To what extent have lessons learned been documented by the project on a continual basis to inform the project for needful change? | <ul style="list-style-type: none"> • The level of adverse environmental, social impacts (if any) • Intensity of the need to undertake the project • Ownership of the project by beneficiaries, or local organizations | |
|--|---|--|--|

Annex 7: List of Documents Referred

1. Project Proposal. IFRC 2021
2. Look Back Study on sustainability and Replicability WASH Projects: Nepal Earthquake recovery Operation. IFRC 2021
3. Quarterly Progress Reports IFRC
4. Final Report DRR/CCA Assessment for Water Sanitation and Hygiene. IFRC 2022
5. IFRC Framework for Evaluation IFRC 2011
6. Better Criteria for Better Evaluation: Revised Evaluation Criteria, Definitions and Principles for Use. OECD DAC Network on Development Evaluation. OECD-DAC (2019).
7. Guidance for Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects New York: UNDP Evaluation Office. UNDP (2012)
8. Sustainable Development Goals: Status and Roadmap 2016-2030. National Planning Commission 2017
9. Water Safe Communities: An Approach Towards Achieving SDG 6.1 in Nepal. UNICEF 2021 <https://www.unicef.org/nepal/media/14186/file/Field%20note:%20Water%20Safe%20Communities.pdf>

Annex 8: Checklist for interaction

A. Interaction with Water User Committees

1. General information

Rural/Municipality

Ward Number

Settlements

Number of Households

Ethnic groups

2. Background for project initiation

a. General WASH situation in the settlement prior to project implementation

i. Availability of water, challenges faced in terms of source, infrastructure, management, capital

ii. General health and hygiene situation in the community, schools

3. Project implementation

a. Formation/reformation of the committee, committee composition, rules/regulations

b. Fund contribution ratio (NRCS, Municipality, Community, others); challenges faced in fund generation mobilization

c. Pre construction Public hearing, sub committees (construction, monitoring if any)

d. Role of other partners/donors, Initiatives undertaken by the communities and involvement of other partners/donors

e. Institutionalization (source registration, committee registration, account management

f. Nature of disputes and their resolution during the implementation

g. Fund for repair and maintenance

h. Measures for mitigating disaster risks to source, infrastructure if any

i. Measures for sustaining the source

4. Operation and maintenance

a. Tariff system

b. Operator/caretaker

c. Trainings, meetings

d. Measures adopted for ensuring transparency and accountability (both financial and managerial), Auditing

e. General coordination with Municipality/ward, other organizations

f. Networking with other organizations such as FEDWASUN

5. Changes

a. Water availability, water use pattern

b. Incidences of disease/ outbreaks

c. General sanitation

d. Economic benefits (if any change in hh level income because of water availability)

6. Lessons learnt (in terms of project approach, general management, institutionalization, of duration of the project etc.)

a. What were the conducive/enabling factors for facilitating the project ?

- b. What were the detracting factors constraining the project implementation?
 - c. In retrospect, what could have been improved for more effective outcome?
 - d. How would the momentum of initiative be sustained?
 - e. Some key specific examples of achievements/outcomes (Beneficiary groups, locality etc.)
7. Major disaster risks and trends in the settlement, and potential threats on water source, infrastructure, use, demand
8. Existing challenges and future course

B. Focus Group Discussion with Beneficiaries

1. Historical context of water availability and sanitation
 - a. Challenges faced in water management
 - b. Condition of source
 - c. Sanitation
2. Involvement in project
 - b. Community meetings/hearings, committee formation
 - c. Process of construction/ role of individual households
 - d. Nature and extent of contribution
 - e. Fund management
9. Benefits drawn from the project
 - a. Water availability
 - b. Sanitation benefits
 - c. Economic benefits
 - d. Humanitarian (relief from drudgery, gender/ethnic discrimination)
10. Sustainability
 - a. Provision of repair/maintenance
 - b. Regularity of tariff management
 - c. Technicians/ Human resources in the village
 - d. Continuation of the committee
 - e. Support of the Palika
11. Conflicts and Resolution
12. Existing and potential challenges
13. Major disaster risks and trends in the settlement, and potential threats on water source, infrastructure, use, demand
14. Lessons learnt

C. Interview with municipality officials

1. General
 - a. Context of the WASH and severity of the problem in the Municipality and other settlements
 - b. Context of the WASH and severity of the problem prior to project implementation in the project settlement
 - c. Priority, proportion of resource (budget) allocation for WASH by the Municipality in the annual plan
 - d. Other organizations working in WASH sector in the Municipality
2. Partnership in project implementation
 - a. Agreement
 - b. Participation in designing, planning, execution, monitoring
 - c. Fund contribution
 - d. Contribution to priority of the Palika
3. Sustainability
 - b. Provision of repair/maintenance

- c. Technicians/ Human resources available
 - d. Registration of sources/ committees
4. Lessons learnt- and suggestion

2.2 पालिकाको नाम

- सुनकोशी गाउँपालिका
- रामेछाप नगरपालिका
- मन्थली नगरपालिका
- शिद्धिचरण नगरपालिका
- मोलुङ गाउँपालिका

2.3 वडानम्बर:

3. घरमुलीको विवरण:

3.1 घरमुलीको नाम

3.2 घरमुलीको उमेर:

3.3 घरमुलीको लिंग:

- पुरुष
- महिला
- अन्य

3.3.1 यदि महिला भए, के घरको घरमूली एकल महिला हो?

- हो
- होइन

3.4 घरमुलीको सम्पर्क नम्बर:

3.5 के तपाईं घरमुली हो?

- हो
- होइन

3.5.1 होइन भने,उत्तरदाताको घरमुलीसंगको नाता

- घरमुलीको छोरा/छोरी
- घरमुलीको बुवा/आमा
- घरमुलीको श्रीमान/श्रीमती
- घरमुलीको भाइ/बहिनी
- घरमुलीको नाति/नातिनी
- अन्य

3.5.2 उत्तरदाताको लिंग

- पुरुष
- महिला
- अन्य

3.6 तपाईं कुन जातियातामा पर्नुहुन्छ?

- ब्राह्मण/छेत्री/ठकुरी/सन्ध्यासी
- जनजाती
- मधेसी
- दलित
- अन्य

अन्य भए खुलाउने

4. पारिवारिक विवरण

4.1 यस घरमा तपाइको कतिजना परिवारका सदस्यहरु बस्नुहुन्छ? (परिवार एक छानामुनि बस्ने र एकै भान्सा प्रयोग गर्ने व्यक्तिहरुलाई जनाउछ)

| 4.2 उमेर अनुसार, यस घरमा हाल बसोबास गर्नुभएका पुरुषहरु/ महिलाहरु /अन्य सदस्यहरु छुट्याउनुहोस् (सबै उक्त घरमा बसिरहेको निश्चित गर्न प्रश्न गर्नुहोस) | पुरुषहरु | महिलाहरु | अन्य |
|---|----------|----------|------|
| एक वर्ष भन्दा मुनि | | | |
| १-५ वर्ष | | | |
| ६-१२ वर्ष | | | |
| १३-१७ वर्ष | | | |
| १८-५९ वर्ष | | | |
| ६०-६० भन्दा माथि | | | |
| <p>4.3 के परिवारको कुनै सदस्य अशक्त, दिर्घकालिन रोगि अथवा विशेष साहायता चाहिने छन् ?</p> <p><input type="radio"/> छन</p> <p><input type="radio"/> छैन</p> | | | |
| <p>4.4 के तपाईंको परिवारमा गर्भवती वा सुत्केरी महिला हुनुहुन्छ ?</p> <p><input type="radio"/> छन्</p> <p><input type="radio"/> छैन</p> | | | |

4.5 के तपाईको परिवारका सदस्य विदेशमा काम गरेर रेमिट्यान्स पठाउनुहुन्छ ?

- छ
 छैन

4.6 तपाईको घरमा खाना पकाउन प्रयोग हुने मुख्य इन्धन कुन हो?

- काठ/दाउरा
 बायोग्यास
 एल.पि.जि (LPG) ग्यास
 गुइठा (जनावरको सुकेको मल)
 अन्य

अन्य (उल्लेख गर्नु)

5. घर तथा जग्गाको विवरण

5.1 के तपाईको घर भएको जग्गा तपाईको परिवारको सदस्यको स्वामित्वमा छ ?

- छ
 छैन

6. खानेपानी

6.1 तपाईको घरमा कुन स्रोतबाट खानेपानी ल्याउनु भएको छ ?

- जलदेवी खानेपानी योजना
 बालकन्या खानेपानी योजना
 माझीगाउँ खानेपानी योजना
 भलायाटार खानेपानी योजना
 गाँउखर्क खानेपानी योजना-१
 गाँउखर्क खानेपानी योजना-२
 बर्नालु रैतोले खानेपानी योजना
 धाराखोला खानेपानी योजना
 खहरे खसरेनी खानेपानी योजना
 अन्य

अन्य (उल्लेख गर्ने)

6.2 तपाईंले खानेपानी ल्याउनु भएको योजना कस्तो प्रकारको हो?

- मुलको पानी (Gravity fed)
- लिफ्टिङ (Lifting)
- अन्य

अन्य (उल्लेख गर्ने)

6.3 यो खानेपानी योजना आउनु भन्दा पहिले, तपाईंको दैनिक खानेपानीको मुख्य श्रोत के थियो?

- घर भित्रै पाइपबाट आउने
- घर बाहिर पाइपबाट आउने
- सार्वजनिक धारा
- बोरिङ
- सुरक्षित इनार
- सुरक्षित कुवा
- वर्षाको पानी
- पानीको ट्यांकरबाट ढुवानी गरिएको पानी
- असुरक्षित इनार
- असुरक्षित कुवा
- सतही पानीको श्रोत (खोला/ पोखरी/ तलाउ)
- अन्य

अन्य (उल्लेख गर्ने)

6.3 पिउन बाहेक अन्य के प्रयोजनका लागि अहिले को श्रोतको पानी प्रयोग गर्नुहुन्छ ? (बहुउतर सम्भव)

- नुहाउन
- लुगा धुन
- बगैँचामा पानी हाल्न
- जनावरलाई खुवाउन
- सिँचाई गर्न
- केही गर्दिन
- अन्य

अन्य (उल्लेख गर्ने)

6.4 तपाईंलाई खानेपानी लिनको लागि श्रोतसम्म पुग्न कति समय लाग्छ ?

- २ मिनेट भन्दा कम
- २ देखि ५ मिनेट
- ५ मिनेट देखि १५ मिनेट
- १५ देखि ३० मिनेट
- ३० मिनेट भन्दा माथि

6.5 तपाईंको परिवारलाई एक दिनमा सालाखाला कति पटक पानी ल्याउनु पर्दछ?

- १ पटक
- २ पटक
- ३ पटक
- ३ पटक भन्दा धेरै

6.6 तपाईंको परिवारमा पानी भर्ने र ल्याउने जिम्मा प्रायजसो कसको हो?

- पुरुष
- महिला
- १६ बर्ष मुनीको किशोरी
- १६ बर्ष मुनीको किशोर
- सबै जना

6.7 तपाईंको खानेपानीको श्रोतबाट आउने पानी बर्षे भरिलाई पुग्छ?

- पुग्छ
- पुग्दैन

6.7.1 यदि पुग्दैन कुन कुन महिनालाई पुग्दैन? (multiple choice)

- बैसाख
- जेठ
- असार
- साउन
- भदौ
- असोज
- कार्तिक
- मङ्सिर
- पुष
- माघ
- फाल्गुन
- चैत्र

6.7.2 यदि पुग्दैन भने, तपाईंको वैकल्पिक खानेपानीको श्रोत के हो? (multiple choice)

- घर बाहिर पाइपबाट आउने
- सार्वजनिक धारा
- बोरिङ
- सुरक्षित इनार
- सुरक्षित कुवा
- वर्षाको पानी
- पानीको ट्यांकरबाट ढुवानी गरिएको पानी
- असुरक्षित इनार
- असुरक्षित कुवा
- सतही पानीको श्रोत (खोला/ पोखरी/ तलाउ)
- अन्य

अन्य (उल्लेख गर्ने)

6.8 तपाईंले प्रयोग गर्ने खानेपानीको गुणस्तर कस्तो छ?

- सफा
 वर्षायाममा धमिलो
 बर्षैभरि धमिलो
 सफा तर गन्ध आउने/ नमिठो स्वाद भएको

6.9 तपाईं खानेपानीलाई शुद्धीकरण गर्नुहुन्छ ?

- गर्छु, सधैं
 गर्छु, कहिलेकाहीँ
 गर्दिन

6.9.1 यदि गर्नुहुन्छ वा कहिलेकाहीँ गर्नुहुन्छ भने, प्रायजसो कस्तो शुद्धीकरण विधि प्रयोग गर्नुहुन्छ ?

- उमाल्ने
 छान्ने
 क्लोरिन हाल्ने
 सोडिस विधि
 अन्य

अन्य (खुलाउने)

6.9.2 यदि गर्नुहुन्छ भने, सुद्धीकरण विधि किन प्रयोग गर्नुहुन्छ ?

- पानि सफा भएकोले
 पानि सुद्धीकरण किन गर्नुपर्छ थाहा नभएकोले
 आवश्यक नभएकोले
 साधनको अभाव (दाउरा, क्लोरिन, आदि)
 सुद्धीकरण महेँगो भएकोले
 सुद्धीकरण स्वास्थ्यको लागि सुरक्षित नभएकोले
 पानीको स्वाद परिवर्तन हुने भएकोले
 अन्य

अन्य (खुलाउने)

6.10 तपाईं कस्तो भाँडोमा पानी भण्डारण गर्नुहुन्छ?

- ढक्कन भएको
- ढक्कन नभएको

6.11 तपाईंले पानी भण्डारणको लागि घरमा ट्यांकी राख्नु भएको छ ?

- छ
- छैन

6.12 तपाईं कति समयको अन्तरालमा खानेपानीको भाँडो सफा गर्नुहुन्छ?

- सधैं हरेक पटक पानी भर्दा
- हप्ताको एकचोटि
- महिनाको एकचोटि
- अन्य

अन्य (उल्लेख गर्नुहोस्)

6.13 तपाईं खानेपानीको भाँडो सफा गर्न के प्रयोग गर्नुहुन्छ?

- पानी मात्र
- साबुन पानी
- खरानी पानी
- बालुवा पानी
- सफा गर्दिन
- थाहा छैन
- अन्य

अन्य भए (उल्लेख गर्नुहोस्)

6.14 तपाईंको परिवारमा दैनिक औसत कति लिटर पानी उपभोग हुन्छ? (सबै प्रयोजनको लागि)

- १५० लिटर भन्दा कम
- १५०-२०० लिटर
- २००-३०० लिटर
- ३०० लिटर भन्दा बढी

| | | | |
|--|---------------------------|---------------------------|--------------------------|
| <p>6.15 तपाईंको विचारमा पानीको आपूर्ति तपाईंको आवश्यकता अनुसार पर्याप्त छ ?</p> <p><input type="radio"/> छ</p> <p><input type="radio"/> छैन</p> <p><input type="radio"/> थाहा छैन</p> | | | |
| <p>6.16 के तपाईंले प्रयोग गर्ने खानेपानीको मासिक शुल्क तिर्ने गर्नुभएको छ?</p> <p><input type="radio"/> छ</p> <p><input type="radio"/> छैन</p> <p><input type="radio"/> थाहा छैन</p> | | | |
| <p>6.16.1 छ भने, खानेपानीको मासिक शुल्क के को आधारमा तिर्ने गर्नुभएको छ?</p> <p><input type="radio"/> मिटर रिडिङको आधारमा</p> <p><input type="radio"/> उपभोक्ता समितिले निर्णय गरेको एकमुष्ट शुल्क</p> <p><input type="radio"/> अन्य</p> | | | |
| <p>अन्य (खुलाउनुहोस्)</p> <p>.....</p> | | | |
| <p>6.16.2 खानेपानी प्रयोगका लागि मासिक शुल्क कति बुझाउनु हुन्छ? (ने.रू.)</p> <p>.....</p> | | | |
| <p>6.17 यो खानेपानी योजना निर्माण गर्दा तपाईं वा तपाईंको परिवारका कुनै सदस्यले श्रमदान गर्नु भएको थियो?</p> <p><input type="radio"/> थियो</p> <p><input type="radio"/> थिएन</p> | | | |
| <p>6. 17.1 यदी थियो भने, यो खानेपानी योजना निर्माण गर्दा तपाईंको परिवारका कुन सदस्यले कति दिन श्रमदान गर्नुभयो?</p> | <p>पुरुष सदस्य</p> | <p>महिला सदस्य</p> | <p>अन्य सदस्य</p> |
| <p>दिन</p> | | | |

6.18 यो खानेपानी योजनाका लागि तपाइंको परिवारले कति नगद सहयोग गर्नु भयो? (ने.रू.)

6.19 पानीको उपलब्धता बढे पछि आर्थिक उपार्जनका कुनै गतिबिधि थाल्नु/वृद्धि गर्नु भएको छ कि छैन??

छ

छैन

6.19.1 यदि छ भने कुनै गतिबिधि थाल्नु/वृद्धि गर्नुभयो? (multiple choice)

तरकारी खेति

पशु पालन

कुखुरा पालन

खाजा पसल

अन्य

अन्य (खुलाउनुहोस्)

6.19.2 यदि आर्थिक क्रियाकलाप गर्नु भएको भए गत एक वर्ष मा कति आम्दानि भयो? (ने.रू.)

7. सरसफाई

7.1 के तपाईंको घरमा शौचालय छ?

छ

छैन

7.1.1 यदी छैन भने, तपाईं कहाँ दिसपिसाब गर्नु हुन्छ ?

छिमेकिको चर्पीमा

सार्वजनिक शौचालय

खुला ठाउमा

खोला वा पानि भएको ठाउँमा

अन्य

अन्य (खुलाउनुहोस्)

| |
|---|
| <p>7.2 तपाईं कस्तो प्रकारको शौचालय प्रयोग गर्नुहुन्छ?</p> <p><input type="radio"/> खाल्डे चर्पी</p> <p><input type="radio"/> साधारण खाल्डे चर्पी</p> <p><input type="radio"/> इनडाइरेक्ट (indirect) खाल्डे चर्पी</p> <p><input type="radio"/> डाइरेक्ट (direct) वाटर शिल</p> <p><input type="radio"/> इनडाइरेक्ट (indirect) वाटर शिल खाल्डे चर्पी</p> <p><input type="radio"/> सेप्टिक ट्यांकीसहित को वाटर शिल</p> |
| <p>7.3 तपाईंले प्रयोग गर्ने चर्पीको खाल्डो कस्तो प्रकारको हो?</p> <p><input type="radio"/> सामान्य खाल्डो (Simple pit with no lining)</p> <p><input type="radio"/> गारो लगाएको वा बाँसले बुनेको खाल्डो (Pit with lining)</p> <p><input type="radio"/> सुधारिएको खाल्डो (Improved pit)</p> <p><input type="radio"/> सेप्टिक ट्यांकी</p> |
| <p>7.4 के तपाईंले प्रयोग गर्ने चर्पी कहिले भरेको थियो?</p> <p><input type="radio"/> थियो</p> <p><input type="radio"/> थिएन</p> |
| <p>7.4.1 पछि चर्पी/ दिसाजन्य लेदोलाई के गर्नुभयो? अन्य भए उल्लेख गर्नुहोस्।</p> <p><input type="radio"/> चर्पीलाई बन्द गरियो र फेरी प्रयोग गरिएन</p> <p><input type="radio"/> चर्पीको खाल्डो लाई पुरियो र केहि समयपछि मलको रूपमा प्रयोग गरियो</p> <p><input type="radio"/> खाल्डोलाई तुरुन्तै खाली गराएर निश्चित ठाउँमा बिसर्जन गरियो</p> <p><input type="radio"/> खेत, खोला व अन्य स्थानमा बिसर्जन गरियो</p> <p><input type="radio"/> अन्य</p> |
| <p>अन्य (उल्लेख गर्नुहोस्)</p> <p>.....</p> |
| <p>7.5 के चर्पीको बाहिरको वातावरण सफा छ? निरिक्षण गर्ने (पानी चुहिएको छ/छैन, बाहिर दिसा देखिएको, खाल्डो/ ट्यांकी भरिएको, आदि)</p> <p><input type="radio"/> छ</p> <p><input type="radio"/> छैन</p> <p><input type="radio"/> निरिक्षण गर्न सकिएन</p> |

| |
|--|
| <p>7.6 के तपाईंले हाल प्रयोग गरिरहनु भएको चर्पी प्रति तपाईं सन्तुष्ट हुनुहुन्छ?</p> <p><input type="radio"/> छ</p> <p><input type="radio"/> छैन</p> |
| <p>7.6.1 किन सन्तुष्ट हुनुहुन्न ?.....</p> <p>.....</p> |
| <p>7.7 के चर्पीमा प्रयोग गर्न पर्याप्त पानीको व्यवस्था छ?</p> <p><input type="radio"/> छ</p> <p><input type="radio"/> छैन</p> |
| <p>7.8 के चर्पी पानीको धारा नजिक छ? निरिक्षण मात्रै गर्नुहोस्</p> <p><input type="radio"/> छ</p> <p><input type="radio"/> छैन</p> <p><input type="radio"/> निरिक्षण गर्न सकिएन</p> |
| <p>7.9 के शौचालय नजिक हातधुने स्थानको व्यवस्था छ? निरिक्षण गर्नुहोस्: साबुन पानी को उपलब्धता, रुमालको व्यवस्था)</p> <p><input type="radio"/> छ</p> <p><input type="radio"/> छैन</p> <p><input type="radio"/> निरिक्षण गर्न सकिएन</p> |
| <p>7.10 के तपाईंले प्रयोग गर्ने हातधुने स्थान प्रति तपाईं सन्तुष्ट हुनुहुन्छ ?</p> <p><input type="radio"/> छ</p> <p><input type="radio"/> छैन</p> |
| <p>7.11 के तपाईंको घरको चर्पी घरका सबै सदस्य ले प्रयोग गर्न सहज छ ? [उदाहरण: चुकुलसम्मको पहुँच, चर्पी सम्म जाने बाटो, क्षेत्रफल, भन्टिलेसन, प्रकाश, पानीको व्यवस्था, हातधुने स्थानको सुविधा, आदी]</p> <p><input type="radio"/> छ</p> <p><input type="radio"/> छैन</p> |
| <p>7.12 बालबालिकाको दिसा कसरी व्यवस्थापन गर्नुहुन्छ?</p> <p><input type="radio"/> चर्पीमा विसर्जन</p> <p><input type="radio"/> खाल्डोमा पुरेर</p> <p><input type="radio"/> खेत/ बारीमा फाल्ने गरेको</p> <p><input type="radio"/> पानीले पखालेर फोहोरमैलासंगै फाल्छौं</p> <p><input type="radio"/> अन्य</p> |

अन्य (उल्लेख गर्नुहोस्)

7.13 घरेलु जैविक फोहर-मैलालाई कसरी व्यवस्थापन गर्नुहुन्छ?

- कुहिने -नकुहिने फोहर-मैलासंग छुट्याइदैन
- कुहाएर मलको रूपमा प्रयोग गरिन्छ
- बाल्नको लागि सुकाईन्छ
- ब्यबस्थित ठाउँमा फालिन्छ (वडा/पालिकाले तोकेको ठाउँमा)
- निश्चित ठाउँमा फालिन्छ
- खाडल खनेर पुरिन्छ
- फोहर-मैला संकलन गर्नेलाई दिईन्छ
- अन्य

अन्य (उल्लेख गर्नुहोस्)

7.14 नकुहिने फोहर-मैलालाई कसरी व्यवस्थापन गर्नुहुन्छ?

- ब्यबस्थित ठाउँमा फालिन्छ (वडा/पालिकाले तोकेको ठाउँमा)
- निश्चित ठाउँमा फालिन्छ
- खुल्ला हावामा जलाईन्छ
- इन्सिनरेटरको प्रयोगले जलाईन्छ
- फोहोर-मैला संकलन गर्नेलाई दिईन्छ
- अन्य

अन्य (खुलाउनुहोस्)

7.15 प्लास्टिकजन्य फोहर-मैलालाई कसरी व्यवस्थापन गर्नुहुन्छ?

- पालिकाले तोकेको निश्चित ठाउँमा फाल्ने
- जलाउने
- खुल्ला ठाउँमा फाल्ने
- आगो सल्काउन प्रयोग गर्ने
- पुनः प्रयोग गर्ने
- अन्य

अन्य (खुलाउनुहोस्)

8. स्वच्छता प्रवर्द्धन

8.1 तपाईंको विचारमा स्वच्छ बानीमा के-के कुरा पर्दछन ? (multiple choice)

- हात धुने
- दाँत माझे
- नियमित नुहाउने
- घरभित्र र बाहिर सफा राख्ने / कुचो लगाउने
- चर्पीको उचित प्रयोग गर्ने
- चर्पीमा पानीको व्यवस्था गर्ने
- खानेपानीको मुहान तथा श्रोतको नियमित सरसफाई
- घर वरिपरी पानी जम्मा हुन नदिने
- महिनावारी स्वच्छता व्यवस्थापन
- अन्य

अन्य (खुलाउनुहोस्)

8.2 के तपाइलाई हात नधुनु वा व्यक्तिगत सरसफाईको कमीको जोखिम बारे जानकारी छ?

- छ
- छैन

8.2.1 यदि छ भने, के जोखिम हुन सक्छ ? (multiple choice)

- बान्ता
- झाडा-पखाला
- ज्वरो
- जुका
- आउ
- जन्डिस
- हैजा
- खान मन नलाग्नु
- अन्य

अन्य (खुलाउनुहोस्)

8.3 तपाइको विचारमा हात कहिले/कुन अवस्थामा धुनुपर्छ? (multiple choice)

- खाना पकाउनुअघि
- खाना खानु अघि
- बच्चालाई खुवाउनु अघि
- शौचालयको प्रयोगपछि
- विरामीको सुसारपछि
- बच्चालाई सफा गर्दिसकेपछि
- गाई-बस्तुलाई सेहारेपछि
- थाहा भएन
- अन्य

अन्य(खुलाउनुहोस्)

8.4 तपाई प्रायः के ले हात धुनु हुन्छ?

- साबुन पानी
- पानी मात्रै
- खरानी-पानी
- बालुवा-पानी
- अन्य

अन्य(खुलाउनुहोस्)

8.5 तपाइले स्वच्छता सम्बन्धि केही जानकारी/अभिमुखीकरण पाउनु भएको छ?

- छ
- छैन

8.6 बिगत २ वर्षमा परिवारको सदस्यलाई झाडा-पखाला लागेको थियो?

- थियो
- थिएन

8.6.1 झाडा पखलाको उपचार गर्न के के गर्नु भयो ? (multiple choice)

- केही पनि गरीन
- जिबन जल को प्रयोग
- घरेलु झोल पदार्थ को प्रयोग
- जिन्क चक्की वा जिन्क भएको झोल प्रयोग
- सलाइन/सुइ को प्रयोग
- अयुर्वेदिक औषधीको प्रयोग
- अन्य

अन्य(खुलाउनुहोस्)

8.7 तपाईंको विचारमा के कारणले गर्दा झाडापखाला लाग्छ? (multiple choice)

- संक्रमित वा अशुद्ध पानी पिउदा
- कुनै फोहोर बस्तु छोएपछि साबुन पानीले हात नधुदा
- संक्रमित वा दुषित खान खाँदा
- चर्पीको प्रयोग पछि राम्ररी हात नधुदा
- झिंगाको मध्यमबाट
- खुल्ला दिसा गर्दा
- थाहा भएन
- अन्य

अन्य(खुलाउनुहोस्)

8.8 के गरेमा झाडापखाला नियन्त्रण गर्न सकिन्छ ?(multiple choice)

- दिसाको उचित व्यवस्थापन
- शुद्ध खानेपानीको प्रयोग
- पानीलाई संक्रमण हुनबाट बचाउने
- खाना संक्रमित हुन नदिने (सफा भाँडोको प्रयोग, झिंगा लग्न नदिने)
- समय समयमा साबुन पानीले मिचीमिची हात धुने
- घर तथा आँगन सफा राख्ने
- अन्य

अन्य(खुलाउनुहोस्)

9. विपद

9.1 विगत २ बर्षमा तपाईंको परिवार कुनै विपदबाट प्रभावित भएको थियो? (multiple choice)

- बाढी वा पहिरोले जग्गा बगाउने
- परिवारका सदस्य घाइते
- परिवारका सदस्यको मृत्यु
- बालिमा क्षति
- कृषियोग्य जमिनको उत्पादनमा हास
- आयआर्जनमा कमी
- केहि पनि भएन
- अन्य

अन्य(खुलाउनुहोस्)

9.2 के तपाईंको घर, धारा तथा शौचालय बाढी-पहिरोबाट सुरक्षित छ?

- छ
- छैन

9.3 के तपाईंले आफ्नो जीवन अवधि भर जलवायु (climate) मा कुनै परिवर्तन महशुस गर्नुभएको छ?(multiple choice)

- कुनै प्रभाव छैन
- अत्यधिक वर्षा
- थोरै पटक वर्षा
- धेरै खडेरी
- गर्मिमा अत्यधिक तापक्रम
- जाडोमा तापक्रम पहिलेभन्दा कम
- अत्यधिक हावाहुरी तथा चट्याङ
- अन्य

अन्य भए उल्लेख गर्नुहोस्

सामुदायिक संलग्नता र जवाफदेहिता

10.1 के तपाईंलाई नेपाल रेडक्रसले यो ठाउँ मा काम गरेको थियो भनेर जानकारी छ ?

- छ
 छैन

10.1.1 के तपाईं वा तपाईंको परिवारका कुनै सदस्यले नेपाल रेडक्रसको कुनै कार्यक्रममा भाग लिनुभएको छ ?

- छ
 छैन

10.1.2 तपाईं यो योजना प्रति कतिको सन्तुष्ट हुनुहुन्छ ?

- धेरै असन्तुष्ट
 असन्तुष्ट
 ठिकै
 सन्तुष्ट
 धेरै सन्तुष्ट

10.2 के तपाईंले नमस्ते हटलाइन ११३० को बारेमा सुनुभएको छ?

- छ
 छैन

11. घरको जि.पि.एस

latitude (x.y °)

longitude (x.y °)

altitude (m)

accuracy (m)



यो सर्वेक्षणमा सहभागी भइ दिनु भएकोमा धेरै धन्यवाद !!!