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USAID Karnali Water Activity

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जल परियोजना



ANNUAL PROGRESS REPORT
JULY 15, 2022 – JULY 14, 2023

USAID KARNALI WATER ACTIVITY

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Cover Photo: Here's an image of [REDACTED] glowing with a smile, as she fills a pot with fresh, and safe drinking water right in the premises of her home. [REDACTED] could not contain her joy as she shared her experience with the USAID Karnali Water Activity team during a community visit. Together, [REDACTED] and her community dedicated themselves to construct and provide water taps to all 34 families, ensuring access to clean water for all.

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ACRONYMS

Activity	USAID Karnali Water Activity
BHAKARI	Building Hope Along the Karnali River Basin
CBRT	Criteria-Based Ranking Tool
CD	Capacity Development
CIP	Construction Implementation Plan
CC	Collection Chamber
CoP	Chief of Party
CSP	City Sanitation Plan
DC	Distribution Chamber
DCoP	Deputy Chief of Party
DPR	Detailed Project Report
DWS	Drinking Water Supply
DWSS	Drinking Water Supply and Sanitation
FGD	Focus Group Discussions
DWSSM	Department of Water Supply and Sewerage Management
FSM	Fecal Sludge Management
FSTP	Fecal Sludge Treatment Plant
GESI	Gender Equality and Social Inclusion
ICA	Institutional Capacity Assessment
IQC	Indefinite Quality Contract
IWMI	International Water Management Institute
KII	Key Informant Interview
KRB	Karnali River Basin
LGs	Local Governments (Municipality or Rural Municipality)
LTTA	Long-Term Technical Assistance
MERL	Monitoring, Evaluation, Research and Learning
MIS	Management Information System
MoWS	Ministry of Water Supply
MoWRED	Ministry of Water Resources and Energy Development (Karnali Province)
MUS	Multiple Use Water System
N-WASH	National Water Sanitation and Hygiene
PEA	Political Economy Analysis
PES	Payment for Environmental Services
RVT	Reservoir Tank
SBC	Social Behavior Change
STTA	Short Term Technical Assistance
SWAT	Soil and Water Assessment Tool
SWN	Scott Wilson Nepal (Sub-contractor)
ToT	Training of Trainers
USAID	United States Agency for International Development
WAG	Water Association Group
WASH	Water, Sanitation and Hygiene
WASH-FIN	WASH Financing
WRM	Water Resources Management
WSS	Water Supply and Sanitation
WUMP	Water Use Master Plan
WUSC	Water Users and Sanitation Committee

A. EXECUTIVE SUMMARY

This Year 2 (Y2) Annual Report presents achievements, progress, challenges, and learnings of the USAID Karnali Water Activity (the Activity) from July 15, 2022, to July 14, 2023. The following is a summary of the key achievements in Y2:

Objective 1: The USAID Karnali Water Activity completed the Detailed Project Report (DPR) of 64 water supply and sanitation (WSS) schemes in Y2, which were identified based on the criteria-based ranking tool in Year 1. Five sub-contractors for the WSS construction and management, and four construction materials suppliers contracted to start the construction in 64 WSS sites in collaboration with the respective municipalities. Forty-six WSS schemes were constructed and completed in Soru Rural Municipalities (RM), Chhayanath Rara Municipality (M), Khandachakra M, Turmakhand RM, Barahatal RM, and Mohanyal RM in Y2. Out of these, 40 were drinking water supply (DWS) schemes and six were multiple use water system (MUS) schemes. For the planning, management, and sustainability of WSS, the Activity has established and registered 49 WUSCs in 6 LGs and oriented them on WUSC management, WSS construction and sustainability, and GESI aspects. As a result, 64 percent of the total key positions were held by women and/or marginalized groups in the WUSCs.

A total of 7,505 people (male 48%, and female 52%) were reached with safely managed drinking¹ water services from new 46 WSS schemes. Among them, 33 percent were *Dalits* and 9 percent were *Janajati*. While 924 people received basic drinking water service through two rehabilitated WSS schemes. Six MUS schemes have provided a micro-irrigation service to 127 HH with the land coverage of 2.56 hectares for agriculture and kitchen gardening. The construction of 1,902 major WSS infrastructure components, including laying 74.952 kilometers of transmission pipeline and 116 kilometers of distribution pipeline, were completed in Y2. The remaining 18 WSS schemes were at the final stage of completion in July 2023. For Y3, the Activity had already identified 205 WSS sites and completed the feasibility study of 135 WSS schemes.

The Activity collaborated with six local governments (LGs) and influenced the LGs to leverage [REDACTED] [REDACTED] for WSS construction in Y2. Likewise, the community contributed 20 percent in-kind, with the equivalent value of [REDACTED] [REDACTED] for the construction of the 64 WSS schemes. Furthermore, 41 WUSCs also raised the operation and maintenance (O&M) fund of [REDACTED]. O&M fund establishment in the remaining eight schemes are in process.

The Activity has assessed the institutional capacity of 29 LGs using Institutional Capacity Assessment (ICA) tools. ICA is one of the innovative approaches which was successfully designed and tested by the Activity to engage LGs to assess and enhance their capacity. Based on which Capacity Development (CD) Plans for 18 LGs were developed and approved by USAID. The CD Plan was also included in the municipal Water Use Master Plan (WUMP) so that it may be implemented by the respective municipalities. Through the Activity's capacity building training package, a total of 19,938 WUSC members, LG authorities and officials, and local stakeholders benefited. Out of which 51 percent were female, 31 percent *Dalits*, and 11 percent *Janajati*. Similarly, Village Maintenance Worker (VMW) trainings were provided to 78 locals, which included 33 percent female, 33 percent *Dalits*, and 17 percent *Janajati*.

The Karnali Water Challenge was launched on March 22, 2023, on World Water Day. Three concepts were selected to pilot their innovative solutions after pitching their ideas to the panelists consisting of representatives from the Ministry of Water Supply/DWSSM, MOWRED and the

¹ Water Quality testing of 46 WSS schemes is ongoing. The Activity is receiving lab reports and in the process of validation. Any non-potable report observed will be reported as basic user.

Activity, and non-voting representatives from USAID. Similarly, the SBC Campaign Challenge grant was announced, and the selection process is ongoing.

The Activity conducted formative research and developed an SBC strategy. Based on the strategy, a rigorous consultative process was adopted to develop key messages for the SBC campaign. Following this process, 27 local journalists from the Karnali Region were trained in SBC media content production and storytelling to reach communities and decision makers with SBC messages. Furthermore, the Activity initiated a policy dialogue through a popular forum Kuda Karnalika (annual festival in Karnali province) regarding the conservation, use, and management of the Karnali River system among the policy makers, local activists, stakeholders, community groups, and institutions.

Objective 2: A Sanitation Situation Analysis (SSA) was conducted in seven municipalities. A total of 4,265 households and institutions were surveyed, 25 focus group discussions (FGD) at the ward level and six FGDs with sanitation workers were conducted to understand the sanitation context. Seven City Sanitation Plans (CSPs) were formulated for Thakurbaba, Rajapur, Lamkichuha, Dullu, Aathabis, Khandachakra and Madhuwan Municipalities. Likewise, two business plans for Fecal Sludge Treatment Plants (FSTPs) were developed for Madhuwan and Rajapur Municipalities. To support FSTP construction in Madhuwan, the Activity developed a draft FSTP design and drawing report for the rehabilitation of Madhuwan FSTP and completed a scoping study report of positive threshold decisions for Fecal Sludge Treatment.

Objective 3: Fifteen WASH Bills were drafted and proposed to LGs for endorsement, of which 14 were endorsed and adopted by LGs. Among them, 5 LGs had already implemented and published it in their local gazette. At the province level, the provincial WASH Bill was drafted and proposed in Karnali province. The Ministry of Water Resources and Energy Development (MOWRED) formed a WASH Bill drafting committee to review and finalize the Bills. On the other hand, 29 LGs have formulated Water User Master Plans (WUMPs), out of which 12 LGs have endorsed them. The remaining LGs will endorse them by the end of September 2023.

Objective 4: Four One Water Steering Committees (OWSCs) and 28 Sub-Watershed Management Committees (SWMCs) were formed in Rara, Tila, Middle Karnali, and Lower Karnali Watersheds. The Activity formulated Water Sources Protection Guidelines, assessed 11,841 spring sources, and prepared the Water Sources and Biodiversity Baseline Report. In addition, the Activity conducted a Hydrological Modeling Analysis using the Soil and Water Assessment Tool (SWAT) and water accounting plus (WA+) models. Three potential sites for the Payment for the Ecosystem Services (PES) were identified based on the PES site assessment tool.

Cross-cutting: The Activity updated the GESI Action Plan to ensure GESI integration in all activities in Y2. It integrated GESI into assessments, interventions, approaches, tools, products, procedures, and updated the GESI Action Plan for Y3 based on progress and lessons learned. The Criteria Based Ranking Tool (CBRT) was used to select WSS which included GESI sensitive indicators. Likewise, a separate community consultation with Women and *Dalit* groups was held in 13 Municipalities for the formulation of WASH Bills. Similarly, the GESI provisions were incorporated in the SSAs and the seven completed CSPs in Y2. The representation of women and marginalized communities was prioritized in all four One Water Steering Committees (OWSCs) and 28 Sub-Water Management Committees (SWMCs). 105 GESI related trainings and orientations were provided for members of WUSCs.

Internal Data Quality Assessment (DQA) was conducted by the MEL team at the Watersheds, Sub-contractors, and community level. Using the DQA assessment checklist and measurements tools, the accuracy and reliability of data collected and reported in DAICollect™ were assessed and observations were shared with Sub-contractors and Watershed teams to ensure proper documentation and data quality.

The 49 Environmental Review Reports (ERRs) for the new and rehabilitated schemes were prepared and finalized. These ERRs were based on the approved Environmental Mitigation and Monitoring Plan (EMMP) of USAID Karnali Water Activity for Y2 and the Activity's Initial Environmental Examination (IEE).

CONTRACTUAL DELIVERABLES

The USAID Karnali Water Activity's achievements of contractual deliverables are presented below.

Table 1: The main results achieved in Y1 and Y2 and the targets for the Activity's remaining base year and two option years.

Sn	Main Results	Unit	Objectives	Y1	Y2	Y 2	Y 3	Y 4	Y 5
				Actual	Plan	Actual	Target	Target	Target
1	Construction of Drinking Water Supply Schemes	Schemes	1	0	40	40	120	110	0
2	Construction of Multiple Use Drinking Water Systems	Schemes	1	0	5	6	20	25	0
3	Business plans for agricultural value chain	Plans	1	0	10	10	0	0	0
4	Develop Citywide Sanitation Plan	LGs	2 and 3	0	7	7	5	0	0
5	Construction/Rehabilitation of Fecal Sludge Treatment Plants/FSM Schemes	Plants/Scheme	2	0	1	0	4	2	0
6	Develop Business Model for FSTP	Plans	2	0	2	2	8	0	0
7	Develop Water Use Master Plans	LGs	1,3,4	0	29	29	0	0	0
8	Business Plan for Payment for Ecosystem Services (PES)	Plans	3	0	0	0	3	0	0
9	Spring Sources Protection	Sources	4	0	30	30	50	20	0
10	Watershed and biodiversity baseline/Midline/End line assessment		1,2,3,4	0	1	1	1	0	1

A. PROJECT INTRODUCTION

The USAID Karnali Water Activity is a five-year (three base years and two one-year option years) project funded by USAID and implemented by DAI Global LLC (DAI). The Activity will create an integrated vision and drive collective action in the Karnali River Basin by mapping assets, risks, and attitudes; convening stakeholders to align interests; co-designing and co-implementing plans and interventions; and rigorously monitoring, learning, and adapting for impact and sustainability. By replicating this approach across the Karnali River Basin, the activity will deliver a system that produces:

- New and rehabilitated safely managed drinking water and multiple use water systems (MUS). Municipalities, Water Users, and Sanitation Committees strengthened to effectively plan, manage, and sustain the water systems.
- Sustainable, safely managed fecal sludge management (FSM) service provision, connected to viable fecal sludge treatment plants (FSTP) with circular economy options from fecal waste stream reuse.
- Local government and community actors with the legal mandate, partnerships, and capacity to deliver sustainable WSS services and manage water resources equitably.
- Well-protected and managed water catchment areas that ensure ecological flows for sustainable water services.

At the end of five years, the Karnali River Basin will be home to healthy, resilient, and water-secure communities that have the skills and capacities to manage their water resources and scalable, shock-responsive systems relevant to stressed Watersheds.

COUNTRY SITUATION

Nepal continued its focus on addressing water and sanitation challenges through significant policy interventions and reporting in this reporting period and prepared to accelerate progress to meet national targets under SDG 6 as the country is half-way through the SDG period. The government promulgated the National Water Supply and Sanitation Act, aiming to ensure equitable access to safe drinking water and sanitation services nationwide. Additionally, a Joint Sector Review (JSR) was initiated by Ministry of Water Supply in collaboration and coordination with the development partners, WASH stakeholders, provincial and local governments to conduct a comprehensive assessment of sector performance. The key objective of the JSR is to bring all stakeholders into one single platform to engage in a government-led process to periodically review sector status, progress, and performance and to make decisions on priority actions in emphasizing the need for integrated approaches, community engagement, and promotion of good hygiene practices. This process is ongoing and will be completed during Year 3 of the Activity.

At the Watershed level, the Activity, and other agencies such as HELVETAS, UNICEF, and MERCY Corps are supporting LGs in WASH policy development and program implementation. The newly elected representatives showed interest in the work of the Activity on WASH Bills, WUMPs, CSPs, ICAs etc. As a result, WASH Bill drafting, and the endorsement process was relatively smooth, and the LGs registered 49 WUSCs. Likewise, the LGs engaged and supported the establishment of four OWSCs and 28 SWMCs in four Watersheds. The finalization and endorsement of WUMPs in 29 LGs provided a priority list for WSS schemes in Y3. Furthermore, the CSP process was initiated and completed in seven LGs. However, the Allocation of Budget in WASH was less as LGs focused on infrastructural development such as road construction and building other infrastructures. Also, the frequent transfers of the Chief Administrative Officers (CAO) and other local officials brought challenges to regular coordination and collaboration. At the community level, the Activity engaged LGs and WUSC to resolve observed disputes over water source ownership, land ownership, and committee formation.

B. OBJECTIVE I: INCREASED SUSTAINABLE ACCESS TO SAFE DRINKING WATER AND WATER FOR PRODUCTIVE USES



Photo 1: WUSC and community engaged in pipe laying work in Pokharikanda WSS

KEY ACHIEVEMENTS

- Forty-six WSS schemes were completed, comprised of six MUS schemes and 40 DWS schemes, including one solar lifting system. The final construction of 18 WSS schemes (1 MUS and 17 DWS) is ongoing.
- The Activity completed the construction of 1,902 major infrastructure components, including intakes, reservoir tanks (RVTs), collection chambers (CCs), distribution chambers (DCs), and tap stands. Additionally, 74.952 kilometers of transmission pipeline were excavated and refilled, and 116 kilometers of distribution pipelines were laid.
- 7,505 people, of which 2,455 were *Dalit* and 706 were *Janajati*, received safe drinking water services in their house's yard due to the completion of new 44 WSS schemes. While 924 people received basic drinking water service through two rehabilitated WSS schemes. This included six MUS schemes, providing access to micro-irrigation systems to 127 HHs, 2.56 hectares of agricultural land, and kitchen gardens.
- Established and registered 49 WUSCs in six LGs and oriented them on WUSC management, WSS construction and sustainability, GESI considerations, and the Activity's working approach and procedures.
- Influenced and collaborated with six LGs to leverage [REDACTED] ([REDACTED]) for 64 WSS construction in Y2. Similarly, the community contributed 20 percent in-kind, with equivalent value of [REDACTED] ([REDACTED]) for the construction of the 46 WSS schemes. Furthermore, 41 WUSCs raised the O&M fund of NPR 2,817,613.
- For Year 3, the Activity has identified and selected 205 new WSS schemes including MUS. Out of which the feasibility studies of 135 WSS schemes have already been completed.
- Institutional Capacity Assessments (ICAs) were rolled out and completed in 29 LGs, ICA roll out in three LGs were carried out in Year 1. The Activity received approval from USAID for the CD Plan for 18 LGs, and the consolidated CD Plan for all 29 LGs has been submitted to USAID for review.

- 19,938 people, mainly WUSCs, LGs, and local stakeholders, were trained and oriented through 694 capacity building trainings and events including international days of recognition, demonstrations, and orientations. Out of which, 51 percent were female, 31 percent were *Dalits*, and 11 percent were *Janajati*.
- 78 community people were trained to be a Village Maintenance Worker (VMW) for WSS schemes. Out of which 33 percent were female, 33 percent were *Dalits*, and 17 percent were *Janajati*.
- The Karnali Water Challenge was launched to mark World Water Day on March 22, 2023. Three finalists pitched their innovative solutions to the panelists consisting of representatives from USAID, Ministry of Water Supply/DWSSM, MoWRED and the Activity. The Activity is in the process of awarding the grant. Similarly, the SBC Campaign Challenge grant was announced, and the selection process is ongoing.
- The Activity conducted formative research and developed the SBC Strategy. Through a rigorous human-centered design approach, the key messages and training modules were developed for the SBC campaign. Twenty-seven journalists based in the Karnali Region were trained on the development of SBC media content and telling news and stories to reach a wider population.
- The Activity designed and implemented two innovative tools ICA and Community Based Ranking Tool (CBRT). ICA was well appreciated by LGs, which helped them to assess and enhance their institutional capacity. While CBRT tool was found very effective in identification, prioritization and selection of WSS schemes to provide safe drinking water services to unreached and marginalized communities through consultation at LG level.
- The Activity initiated a dialogue regarding the conservation, water use, and management of the Karnali River among policy makers, local activists, stakeholders, and community groups through a popular festival in the Karnali province - Kuda Karnalika.

INTERMEDIATE RESULT 1.1 UNIVERSAL ACCESS TO SAFE DRINKING WATER SUPPLY AT MUNICIPAL LEVEL ACHIEVED

ACTIVITY 1.1.1 PRIORITIZE WATER INFRASTRUCTURE FOR KARNALI WATER ACTIVITY-SUPPORTED REHABILITATION AND CONSTRUCTION

The Activity identified a total of 205 WSS schemes in 25 LGs recommended in the WUMPs to conduct feasibility studies in Y2. Out of these, the feasibility studies of 135 WSS schemes (125 DWS and 10 MUS) were completed. To prioritize WSS schemes, the Activity developed a WUMP preparation guideline including the Criteria Based Ranking Tool (CBRT) to identify the potential DWS and MUS schemes through ward-level and LG level WUMP planning workshops in the respective LGs. They were selected based on the opportunities of cost-sharing with LGs, community engagement for the cash-for-work and agriculture-based income generation opportunities, particularly for women and GESI target groups. Seven WSS Sub-engineers were onboarded to conduct feasibility studies and to provide technical support for the construction of WSS schemes in Y2. For the WSS construction in Y2, a total of 56 new WSS schemes, and eight rehabilitation WSS schemes, which were damaged by the monsoon flood in October 2022, were selected in Soru RM, Chhayanaath Rara M, Khandachakra M, Turmakhand RM, Barahatal RM, and Mohanyal RM.

For Year 3, the selection and awarding process of Architectural and Engineering (A&E) firms for the detailed engineering survey, design, Detailed Project Report (DPR), and finalization of Bill of Quantities (BOQs) is ongoing.

ACTIVITY 1.1.2 SUPPORT CONSTRUCTION, REHABILITATION AND UPGRADING OF WATER SUPPLY INFRASTRUCTURE

Based on the alternative construction approach adopted by the Activity, two separate Sub-contractors were contracted for the WSS construction, management and institutional support, and supply and delivery of the construction materials. Five Sub-contractors were onboarded to construct

and manage WSS in Mugu, Kalikot, Achham, Kailali, and Surkhet districts and four hardware suppliers were onboarded in six LGs. In addition, Suryodaya Urja was separately contracted for the supply and installation of the solar lift schemes in the respective WSS sites.

For WSS construction, management, and institutional support, five Subcontractors (Subcontractor II) were onboarded in five districts. They were as follows:

1. Mugu: Himali Rural Youth Social Development Center (HIRYSDEC)
2. Kalikot: Human Rights and Environment Development Centre (HuRENDEC)
3. Achham: Social Empowerment and Building Accessibility Center Nepal (SEBAC Nepal)
4. Kailali: Social Awareness and Development Association (SADA)
5. Surkhet: Sarada Nepal

For the construction material supply and delivery, four Subcontractors (Subcontractor I) were onboarded in six LGs. They were as follows:

- | | |
|-----------------------------------|----------------------------------|
| 1. Soru Rural Municipality: | Siddhababa Hardware, Nepalgunj |
| 2. Chhayanath Rara Municipality: | Gaurishankar Hardware, Nepalgunj |
| 3. Khandachakra Municipality: | Subhashree Supplier, Nepalgunj |
| 4. Turmakhand Rural Municipality: | Subhashree Supplier, Nepalgunj |
| 5. Barahatal Rural Municipality: | Vijay Trade Link, Tulsipur |
| 6. Mohanyal Rural Municipality: | Gaurishankar Hardware, Nepalgunj |



Photo 2: The chairperson of the municipality and USAID representatives are cutting the ribbon to inaugurate the water supply

The Activity developed 49 DPR reports for 64 WSS schemes in Y2². For the Environmental Mitigation and Monitoring Plan (EMMP) for each WSS, the Activity incorporated an environmental screening checklist in the feasibility studies and detailed engineering surveys to assess any potential environmental risks to flora, fauna, and natural resources. The Activity developed 49 Environmental Review Reports (ERRs) to fulfill the requirement of environmental compliance in 64 WSS schemes.

These DPRs were shared with the respective LGs for commitment of resources and to establish a cost-share agreement and the Activity obtained permission to start construction in the proposed sites. [REDACTED] of new funding mobilized from LGs and communities to the water and sanitation sectors as a result of USG assistance. The DPRs were also shared with the respective WUSCs for the community’s in-kind contribution towards the WSS construction. The community committed to contribute 20 percent of the total construction costs via an in-kind contribution. The table below shows the total cost-share amount of all six LGs:

Table 2: Total amount of cost leverage by the LGs in Y2 (NPR)

SN	District	LG	WSS schemes	LG Contribution	Kind contribution by communities	O&M Fund Collected by Users
1	Kailali	Mohanyal	11			
2	Surkhet	Barahatal	14			
3	Achham	Turmakhand ³	12			
4	Kalikot	Khandachakra	10			
5	Mugu	Chhayanath Rara	10			
6	Mugu	Soru	7			
	Total		64			

The community people contributed 20 percent of the total construction cost of the WSS, which is equivalent to the value of [REDACTED], by providing their free labor for distribution pipeline excavation, collection of stone, aggregate, wood, and other non-local materials in 46 constructions

² Note: 49 WSS were further divided into 64 WSS schemes after DPR, ERR, and WUSC formation

³ Note: Turmakhand RM has planned to provide an additional amount of [REDACTED]. Hence LGs total contribution for WSS schemes will be [REDACTED], which is 15 percent of the total construction cost of WSS.

⁴ Incorporated only kind contributions from 46 construction completed WSS projects.

completed WSS schemes. Forty-one WUSCs also raised [REDACTED] for the operation and maintenance (O&M) fund and deposited the funds in the bank account. Raising O&M funds for the eight rehabilitation schemes is ongoing.

Drinking water and multiple use system: In Y2, the Activity started the construction of 64 DWS, out of which seven were MUS schemes. For DWS, a total of 54 gravity water schemes, and 10 water lifting schemes (9 solar and 1 electric lift scheme) were initiated for the construction. In addition, seven MUS schemes are estimated to provide irrigation coverage of 3.41 hectares, reaching 34 schools and 3 healthcare facilities.

To start the construction, 50 community level construction kickoff workshops were conducted to cover all 64 WSS schemes in Soru RM, Chhayanath Rara M, Khandachakra M, Turmakhand RM, and Mohanyal M. Participants were Subcontractor staff, LG’s chairperson and vice chairperson, the Chief Administration Officer (CAO), Ward Chairs, LG officials, and WUSC representatives. The workshop shared and discussed the DPR, construction plans, and roles and responsibilities for WSS scheme construction. The kickoff workshop resulted in the creation of a community action plan (CAP) that details and schedules activities for WSS scheme development, management, and institutional support for timely construction and completion of all planned activities within the timeline. A tripartite agreement between the LG, WUSC, and the Subcontractor for the construction and community leverage in all schemes was developed and signed.

Table 3: WSS scheme types and coverage

LGs	DWS			MUS			Source Protections	No of School	No of HCF	Irrigation coverage (in Ropani)
	Gravity	Solar Lift	Electric. Lift	Gravity	Solar Lift	Electric. Lift				
Soru RM	7	0	0	0	0	0	0	4	0	0
Chhayanath Rara M	11	0	0	1	0	0	6	4	2	24
Khandachakra M	10	0	0	0	0	0	7	5	1	0
Turmakhand RM	11	1	0	2	0	0	6	6	1	5.5
Barahatal RM	6	7	1	1	2	0	6	0	0	21.5
Mohanyal RM	9	1	0	0	1	0	5	3	0	9.5
Total	54	9	1	4	3	0	30	22	4	60.5

Following the CAP kickoff workshop, planning workshops were conducted for material procurement, transportation, and scheme construction in all schemes. Then, the WUSC members and water users of all schemes were oriented on the Activity Compliance and Scheme Construction Standards including quality assurance, environmental management, GESI and safeguarding, as well as health and safety on construction activities, and Nepal’s government standards and procedures for WSS construction.

Out of the 64 planned WSS schemes, the construction work was completed in 46 WSS, out of which six were MUS, and is ongoing in 18 WSS scheme sites in Y2 (for the complete list, refer to Annex 3). To provide technical support and supervision of WSS construction, social and technical experts (WSS technician) were assigned to support Sub-contractors and WUSCs, which included

construction site and design verification, schedule for construction, identification of quarry site, collection of local construction materials, and recruitment of both skilled and unskilled labor in collaboration with WUSC. The Activity has completed the construction of 1,902 major infrastructure components, including intakes, RVTs, CCs, DCs and tap stands in Y2. Additionally, 74,952 kilometers of transmission pipeline were excavated and refilled, and 116 kilometers of distribution pipelines were successfully completed.

From the completed new 44 WSS, a total of 1,368 HHs and 7,505 people who were fetching water from unprotected sources such as springs, ponds, and rivers received safe drinking water services at their doorsteps. Among them, 52 percent were female, 33 percent were *Dalit*, and nine percent were *Janajati*. While 924 people received basic drinking water service through two rehabilitated WSS schemes. The completed six MUS schemes provide access to micro-irrigation services for 708 people from 127 HHs and their 2.56 hectares (51.090.32 *Ropani*) of agricultural land and kitchen garden.

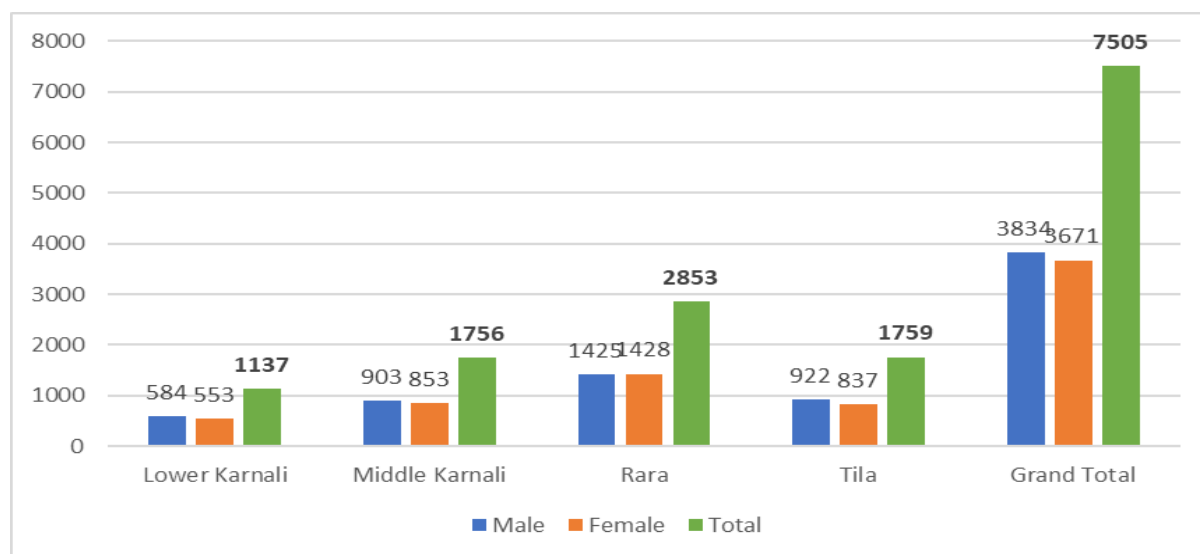


Figure 1: Gender disaggregation of Water user by Watersheds

ACTIVITY 1.1.3 IMPROVE PLANNING, BUDGETING AND MONITORING OF WATER SERVICES BY MUNICIPALITIES

The Activity developed the Water Supply Scheme Implementation Guideline, which was approved by USAID. It provides guidance and steps of WSS scheme planning, construction, and post-construction to the Activity, Subcontractors, and stakeholders along with the roles and responsibilities.

The Activity formed, registered, and trained 49 WUSCs for 64 WSS schemes in Y2. The WUSC members were oriented on the Activity’s working procedures, GESI considerations, WUSC statute preparation, registration, WUSC management, and O&M requirements. While forming the WUSCs, the Activity ensured at least 50 percent representation of women and/or people from the Dalits and Janajati groups in the key positions of the committees (chair, vice-chair, secretary, and treasurer). As a result, 68 percent out of total key positions were held by women and marginalized groups. The table below presents the composition of the WUSCs.

Table 4: The composition of WUSCs in six LGs

LGs	# WUSC Formed	Total WUSC Members	Total Key Positions*	# Women/ Marginalized People in Key positions

Mohanyal Rural Municipality	7	49	28	21
Barahatal Rural Municipality	9	67	36	29
Turmakhand Rural Municipality	9	91	36	26
Khandachakra Municipality	10	83	41	28
Chhayanath Rara Municipality	8	64	31	18
Soru Rural Municipality	6	50	24	12
Total	49	404	196	134 (68%)

The Activity successfully designed, tested and rolled-out the Institutional Capacity Assessment (ICA) tool to assess capacity gaps and strength in all 29 LGs and completed ICA assessment in 29 LGs in Y2. The ICA played a crucial role in formulating Capacity Development (CD) Plans for the LGs. Using DAI Collect, the data were collected, analyzed, and visualized on three variables: thematic areas, WASH Building Blocks, and GESI perspectives. Seventy-two parameters in the scoring range of 0-3 were developed to assess the capacity of LGs, of which 27 parameters were related to GESI. Figure 2 presents a comparative analysis of GESI scores of 29 LGs against the maximum score of 81.

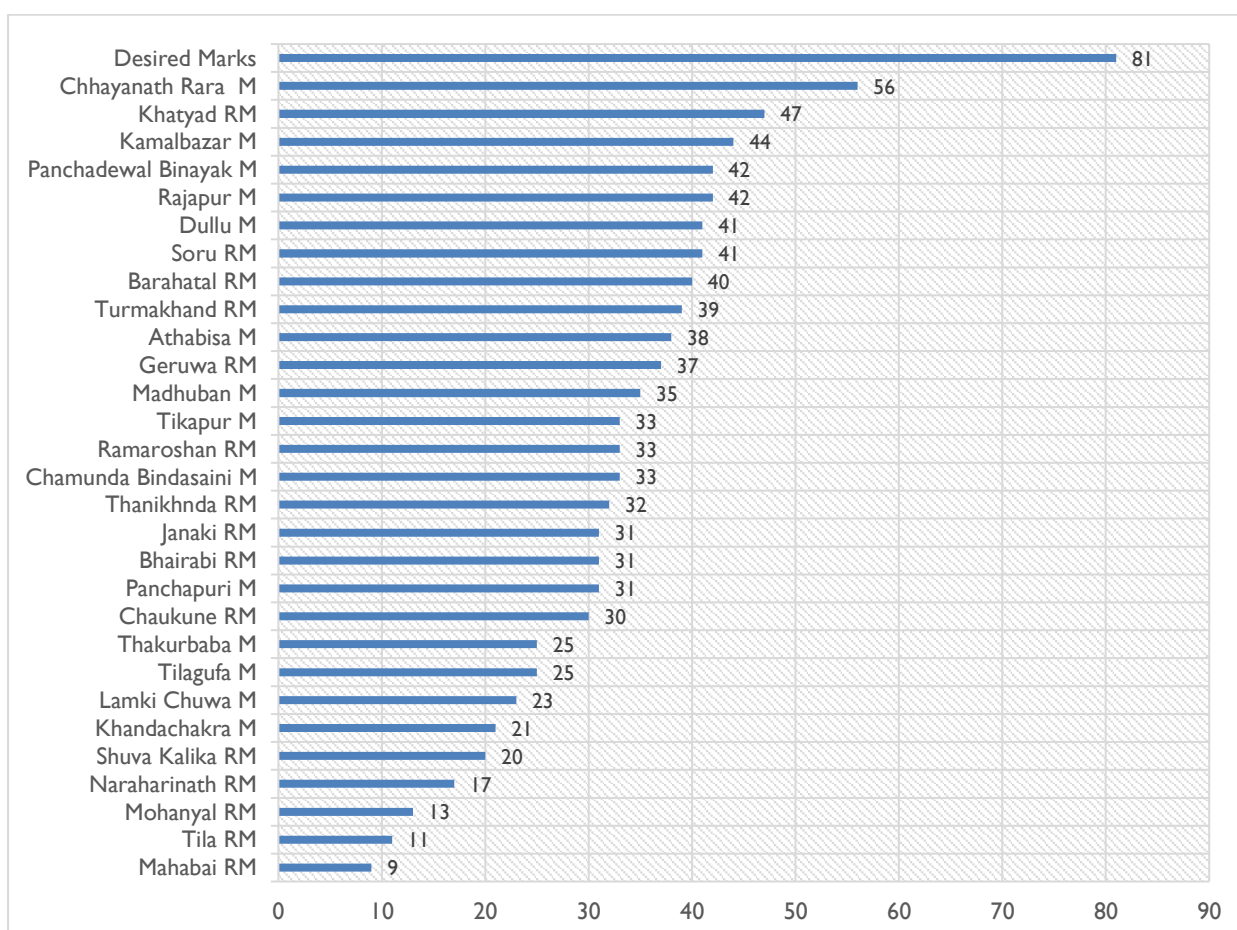


Figure 2: Comparative GESI score of 29 LGs.

The assessment found significant capacity gaps, especially absence or limited policies, legislation, and strategic plans, and budgeting for WASH and biodiversity conservation in LGs. Furthermore, there

were gaps in the institutional mechanism such as lack of a WASH unit, MWASHCC, and GESI unit in most of the LGs, and limited staff capacity to fulfill their designated roles and responsibilities. Also, most LGs lack a proper planning and monitoring mechanism. Regarding GESI integration, the assessment found that GESI in LGs is not well integrated into sectoral planning, decision-making, and resource allocation processes. Most LGs lack GESI-sensitive policies, guidelines, or inclusive sectoral plans (WUMP, WASH Plan) for equitable access to safe drinking water and for the productive use. Moreover, more than 50 percent of LGs were observed not following participatory and inclusive planning processes to include unserved, marginalized, and vulnerable groups.

Because of the ICA process, the Activity was able to better coordinate and collaborate with LGs. It provided an entry point to work with LGs. The Activity provided Training of Trainers (ToT) to three LG's officials representing the WASH, Planning Section, and GESI units who subsequently became key contact points for the Activity to coordinate and collaborate with the LGs. The process also raised awareness and realization among the LGs to improve their results in Y4, integrate GESI inclusive planning, documentation, and information management systems. More importantly, it



Photo 3: Public Audit Event, Tallo Matela WUSC, Khandachakra Municipality

provided a new capacity assessment tool for LGs in the WASH and biodiversity sector. Based on ICA findings, the Activity received approval from USAID for the CD Plan for 18 LGs, and the consolidated CD Plan for all 29 LGs has been submitted to USAID for review. Aligned with the Plan, the CD Action Plan was developed to enhance capacity and system strengthening of the LGs in Y3 and Y4. This will involve providing technical support to formulate policies and guidelines, WASH Plan, WUMP implementation support, and the institutionalization of MWASHCC, OWSC, WASH Unit, and GESI Unit. The CD packages were finalized in 29 LGs as an integral part of the WUMP reports. The Activity will provide technical support to implement the CD Packages, including designing of the training modules, connecting with the resource persons, and coordinating the events. The Service Provider Capacity Assessment (SPCA) Tool was developed for use in the pre-existing WUSCs. It was designed to assess the capacity of the WUSCs and enhance their capacities in financial management, O&M, water safety plans, and equitable and quality customer service. It was

administered in 15 pre-existing WUSCs through hiring Short-Term Technical Assistance (STTA) experts. Based on its findings, the Activity had developed the Water Service Provider Capacity Gap Report, also known as the CD plan for the WUSCs. These reports identified capacity and knowledge gaps in the WUSCs. They were implemented in the construction of 46 WSS schemes in Y2. The CD Packages were developed and implemented in all WUSCs of each WSS scheme.

A total of 19,938 people were trained and oriented through 694 capacity building events including international days of recognition, demonstrations, and orientations in Y2. Participants were mostly from the WUSC, and a few from LGs, and local stakeholders. Out of these, 10,264 (51.4%) were female, 6,243 (31.3%) *Dalits*, and 2,243 (11.2%) *Janajati*. The Activity developed and implemented the orientation and training packages on the public audit process, WUSCs Governance, training on O&M (Gravity & Solar Scheme), construction management training/account keeping, water tariff and O&M fund management, stakeholder coordination and governance, GESI, entrepreneurship development, productive use of water/homestead garden management, sustainability of WSS schemes, and customer service management.



Photo 4: VMW Training Participants at Mohanyal M and Barahatal M

Likewise, seventy-eight VMW were produced from the 14-day VMW training program. Out of which, 33 percent were female, 33 percent *Dalits*, and 17 percent *Janajati*. They were trained in the technical aspects of O&M of the WSS schemes. The training package covered technical aspects of water supply system maintenance, basic plumbing, water quality monitoring, system troubleshooting, record-keeping and reporting, health and safety, communication and teamwork, customer service and public relations, sustainability, and environmental considerations. They were recruited by the WUSCs to provide basic technical support for the sustainability of the WSS schemes.

INTERMEDIATE RESULT 1.2: PRODUCTIVE USES OF WATER ENHANCED FOR IMPROVED AGRICULTURE-LED GROWTH AND COMMUNITY RESILIENCE

ACTIVITY 1.2.1 DESIGN AND CONSTRUCT MUS FOR VULNERABLE GROUPS

The Activity completed the construction of six MUS schemes in Barahatal (3), Turmakhand (2) and Chhayanath Rara (1) in Y2. These MUS schemes provided water services for both domestic and productive use. A total of 708 people from 127 HHs, totaling 708 people, benefited from drinking water service and irrigation facilities across the 2.56 hectares of agricultural land. The design process of MUS infrastructure was carried out alongside the DWS infrastructures (Activity 1.1.1 and 1.1.2 above). Below is the list of MUS schemes:

Table 5: MUS schemes completed and ongoing in Y2

S N	Name of MUS Scheme	District	Municipality	Ward No	Settlement	Status
1	Jukepani Palanga lode WSS	Achham	Turmakhand RM	3	Palanga	Completed
2	Mathillo Khorke Khola MUS (I)	Achham	Turmakhand RM	2	Lamagada	Completed
3	Khamagote WSS (MUS)	Mugu	Chhayanath Rara M	4	Khamagote Balai Tole	Completed
4	Odal Todke WSS (MUS-II)	Surkhet	Barahatal RM	6	Tallo Odal Todke	Completed
5	Kariyapani WSS (Gravity)	Surkhet	Barahatal RM	5	Tallo Kariyapani	Completed
6	Sisneri WSS (Lifting)	Surkhet	Barahatal RM	2	Sisneri Tole	Completed
7	Naulakot WSS	Kailali	Mohanyal RM	7	Naulakot	Ongoing

ACTIVITY 1.2.2 COORDINATE WITH BHAKARI AND FTF PROJECTS AND ACTIVITIES

The Activity continued its coordination and learning sharing with BHAKARI and the KISAN II Feed the Future (FTF) project at Watershed and regional levels. The Activity convened a coordination meeting with BHAKARI to discuss water source registration, N-WASH, WUMP, best practices for areas of collaboration for WSS, and other topics in the Surkhet office. Similarly, the Activity and BHAKARI continued their regular monthly progress and learning sharing meetings at the Watershed level. In the Kathmandu office, the Activity and BHAKARI team came together to discuss and share on SBC formative research, communication initiatives, promotion of the Karnali Water Challenge, and cross learning exchange between the two organizations. The GESI team from BHAKARI and USAID Karnali Water Activity have been meeting on a quarterly basis to share GESI learnings.

ACTIVITY 1.2.3 ENGAGE PRIVATE SECTOR TO IMPROVE MARKET VALUE CHAIN INPUTS, PROMOTE WATER-EFFICIENT TECHNOLOGIES, AND PROMOTE CROPS WITH GOOD MARKET POTENTIAL THAT REQUIRE LESS-INTENSIVE IRRIGATION

The Activity developed 10 value chain analysis and agricultural MUS business plans for WUSCs in Y2. To formulate the business plan, the Activity followed five steps of a) initial preparation, b) end market analysis, c) value chain structuring and mapping, d) formulation and testing conclusions, and e) synthesis and writeup. In Barahatal RM, the plans were developed for five WUSC namely Kariyapani MUS, Sisneri MUS, Odaltodke MUS, Pokharikanda WSS and Dharapani Udhokhola WSS. Similarly, in Turmakhand RM, three plans were developed for Jukepani Palanga Lode WSS, Mathillo Khorkekhol (MUS) and Bijulekh Chanu Jalawayu Solar lift WSS. Likewise, Chhayanath Rara and Mohanyal RM have developed two plans in Khamagote WSS (MUS) and Naulakot WSS respectively.

Launch Karnali Water Challenge: The Activity launched the Karnali Water Challenge on World Water Day, March 22, 2023. The grant aims to source innovative, scalable water savings solutions and water-efficient technologies at the household and farm levels. A total of 18 proposals were received. Out of these, seven were shortlisted based on the criteria of relevance, feasibility, scalability, innovation, and inclusivity. They pitched their proposals to the panelist members of Joint Secretary and Deputy Director General from the Ministry of Water Supply/Department of Water Supply and Sewerage Management (DWSSM), Senior Divisional Engineer from the Ministry of Water Resource and Energy Development (MOWRED)/Karnali Province, and COP from the Activity on June 1, 2023. USAID COR and Senior Technical advisor from USAID participated as non-voting members of the panel. Based on the panelist’s scoring and observation, three finalists were selected and are under the process of review from the Home Office.



Photo 5: Karnali Water Challenging pitching event on June 1, 2023

INTERMEDIATE RESULT 1.3: SOCIAL NORMS AND BEHAVIORAL CHANGE FOR WATER SAFETY AND WATER CONSERVATION AT HOUSEHOLD LEVEL IN AGRICULTURAL PRACTICES ENHANCED

ACTIVITY 1.3.1 DEVELOP SOCIAL BEHAVIOR CHANGE (SBC) STRATEGY, CAMPAIGN AND CAPACITY STRENGTHENING MEASURES FOR WATER SAFETY AND CONSERVATION

Formative Research Report: The Activity conducted and finalized the formative research report to formulate SBC strategy in Y2. The research generated evidence to design effective SBC strategies and interventions. The field-level data were collected from eight sample LGs representing all four Watersheds. The field team conducted 32 focus group discussions (FGDs), 40 Key Informant Interviews (KIIs), 56 in-depth interviews (IDIs), 32 household observations, and 16 consultations with WUSC members, members of mother groups, child clubs, forest user groups, farmers’ groups, Female Community Health Volunteers -FCHVs community leaders, etc.

SBC Strategy and message development: Based on the findings of formative research and consultation with agencies, the Activity finalized the Social and Behavior Change (SBC) strategy. The strategy is based on the Theory of Reasoned Action and Social Learning, which provides a

framework for understanding how individuals and communities perceive their practices, context, potential barriers, and opportunities for change. The Activity consulted with partners such as DWSSM, Suaahara II, Plan Nepal, Food and Nutrition Security Enhancement Project, and National Health Education, Information and Communication Center (NHEICC) to finalize the strategy. Furthermore, the Activity conducted field visits in Rajapur and Thakurbaba Municipalities and Turmakhand RM to interact with community leaders, mothers' groups, Female Community Health Volunteers (FCHVs), WUSC members, community youth, schoolteachers, and students.

SBC Message Development: Through 13 participatory workshops, SBC messages were developed in the identified behavioral areas for the SBC campaign at Watershed levels. A Human-Centered Design (HCD) approach was adopted to engage communities and stakeholders in drafting the critical messages. The workshops were conducted among 260 people, of which 62 percent were women and girls. The participants included WUSC committee members, LG Mayors/Chairs, LG Executive Members, LG GESI and WASH Unit/Section Leads, OWSC members, Community Leaders, Development Partners, FCHVs, Forest User Groups, Farmer Groups, Child Club Members, Mother Groups, Social Leaders, Teachers, and other stakeholders. The messages were compiled in a single design document. This will be a guiding document for the production and dissemination of the critical messages in the communities as suggested by the SBC Strategy.

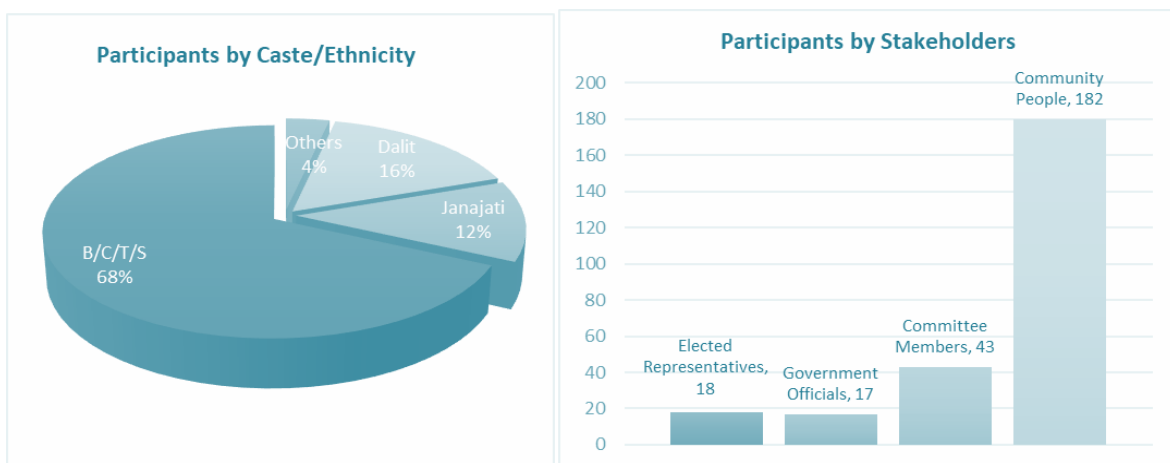


Figure 3: Participants in SBC message development workshops

SBC Capacity Mapping of Local Stakeholders: The Activity conducted four SBC consultation meetings in the four Watersheds to assess the interest and capacity of local stakeholders in designing and implementing SBC campaigns. The participants included local media representatives, journalist association representatives, NGOs, community-based organizations (CBOs), community leaders, and representatives of USAID-funded projects. The issues identified and discussed during the meeting will be considered in the designing of the SBC campaign and capacity development packages for the different stakeholders.

"We have received orientation on water savings, water-efficient technologies, and equitable access to water. We found it extremely beneficial for our community. I have started reusing wastewater for water saving. I am now motivating other community members to adopt water saving practices."

— [Redacted], Chair, Pokharikanda WUSC, Surkhet

SBC Module and Special Events: The Activity developed the SBC module for community-level orientation and demonstration of water-saving, productive use, and equitable access to water based on the SBC strategy and formative research. The module was designed to guide and support the field team with detailed orientation and demonstration approaches, as well as messages on priority behaviors. Using participatory and engaging approaches, Watersheds and Sub-contractors are using it to engage community people to make them realize the importance of behavioral changes and achievable actions. The community and school-level orientation were conducted on water savings, productive use, equitable access to water, meaningful participation, and countering the social norms and discriminatory practices on access to water and menstruation hygiene management.



Photo 6: SBC Orientation for WUSC members and school students, accompanied by a guideline for water-efficient technology.

Furthermore, Radio Public Service Announcement (PSA) scripts were drafted and reviewed for the SBC Campaign.

A total of 78 SBC related activities and celebration days were conducted at the Watershed level. In coordination with LGs, World Water Day, World Environment Day, World Biodiversity Day, 16 Days of Activism against Gender-Based Violence, International Women's Day, and Menstrual Hygiene Management (MHM) Day was celebrated by developing key messages and slogans in communities and schools. Through these events, 2,800 people were directly reached out of which 60 percent were female, 37 percent *Dalits*, and 16 percent *Janajati*.

Launched SBC Campaign Challenge Grant: The Activity announced the SBC campaign challenge grant for innovative and creative ideas to support the SBC campaign in June 2023. The grant prioritized three key themes: best practices of household water conservation, productive use, and menstrual hygiene management. A total of five applications were received, of which three were shortlisted. Three finalists pitched their ideas to the panelists consisting of PSC members representing the Ministry of Water Supply and Ministry of Energy and Water Resources Development. The finalization and announcement of the winner will take place in August 2023.

Engagement with media: The Activity conducted a two-day training for local journalists on SBC and development of media content for behavioral change on July 10 and 11, 2023. It aimed to capacitate and empower local journalists to collect and report on key SBC messages and stories for behavioral change at the community and policy level. A total of 27 journalists participated in the

training from the different districts of Karnali region representing four Watersheds. Among them, seven were women journalists and eight belonged to disadvantaged and marginalized communities. The participants represented print, radio, television, and news agencies from the local and central level. The event was organized in collaboration and coordination with the Federation of Nepalese Journalists (FNJ)- Karnali Province and FNJ District chapters.

Policy Dialogue in ‘Karnali River System’ for water use and conservation: The Activity initiated a policy dialogue on the Karnali River system for water use, conservation, and management through an annual festival Kuda Karnalika of Karnali Utshav on February 18, 2023. The event was moderated by the Activity and attended by Joint Secretary from the Water and Energy Commission Secretariat, social development expert, former deputy mayor of Aathibis Municipality, and water conservation activist. Around four hundred participants, including OWSC members from four Watersheds, local activists, champions, and people from the Karnali region participated in the policy dialogue session. The event was broadcasted live from Community Information Network (CIN)



Photo 7: Policy dialogue session in Kuda Karnalika, Surkhet

Radio Network, Setopati Facebook page, and National Network Television. Nepal’s popular news portals, onlinekhabar.com and ratopati.com covered key points of the dialogue session as their news content.

The First of 320 Safe Drinking Water Schemes Inaugurated!



Photo: A culturally decorated water tap stands at the doorstep of a community member in Odal Todke, ready for its inauguration.

The first of the 320 water schemes to be constructed under the USAID Karnali Water Activity has been successfully inaugurated (pictured here)! Thanks to collaborative efforts of Barahatal Rural Municipality, USAID, and the community, 13 families in Surkhet, Nepal now have access to safe drinking water. Surplus water will be used for agriculture, benefiting the community even further.

Let us join in celebrating this remarkable achievement and the positive impact it will have on the lives of these families! As we celebrate this success, we remain committed

to our journey of completing other schemes and benefiting more communities in the project area.

USAID Karnali Water Activity has fulfilled our long-standing dream of clean water. We now have a multi-use system, including an irrigation tank for livelihood activities. We would like to request the local government to allocate a budget for road construction in our community. Additionally, we seek support in obtaining vegetable seeds and training to enhance vegetable production.

[REDACTED], Chairperson of Odal Todke DWSUC

C. OBJECTIVE 2: INCREASED SUSTAINABLE ACCESS TO AND USE OF SAFELY MANAGED SANITATION THROUGH FECAL SLUDGE MANAGEMENT



Photo 8: Proposed FSTP site in Rajapur

KEY ACHIEVEMENTS

- A total of 4,265 Household and Institution surveys, 25 focus group discussions (FGDs) at the ward level and six FGDs with the sanitation workers were conducted to understand the sanitation context in seven municipalities.
- Seven City Sanitation Plans (CSPs) for Thakurbaba, Rajapur, Lamkichuha, Dullu, Aathabis, Khandachakra, and Madhuwan Municipalities were completed.
- Two Fecal Sludge Treatment Plant (FSTP) business plans for Madhuwan and Rajapur Municipalities were developed.
- Drafted the FSTP design and drawing report for rehabilitation of Madhuwan FSTP.
- Completed the scoping study report of positive threshold decisions for FSTP in Madhuwan.
- A video on the stories and issues of sanitation workers was produced and released to mark World Toilet Day 2022.

INTERMEDIATE RESULT 2.1: SAFE MANAGEMENT OF SANITATION THROUGH FECAL SLUDGE ACHIEVED

ACTIVITY 2.1.1 - CONDUCT CITYWIDE SANITATION PLANNING EXERCISES THAT INCLUDE FSM, CITY DRAINAGE, AND SOLID WASTE SYSTEMS CONDUCTED

The Activity focused on city-wide sanitation planning in seven municipalities: Thakurbaba, Rajapur, Lamkichuha, Dullu, Aathabis, Khandachakra, and Madhuwan. Following the Nepal Government's five stage process guideline⁵, the Activity facilitated to formulate comprehensive CSPs in these seven

⁵ Ministry of Water Supply (2021) Citywide Inclusive Sanitation (CWIS) Plan Guideline (unpublished draft)

municipalities. The LGs were supported by organizing inception workshops and providing technical assistance in Sanitation Situational Analysis (SSA), sanitation system improvement, conceptual service delivery models, and CSP preparation. Overall, the city sanitation planning aimed to characterize the current and projected volume and type of fecal sludge generated, enhance understanding of sanitation issues, develop tailored solutions, and guide municipalities in improving their sanitation systems, especially focusing on FSM, and including greywater management, stormwater management, and solid waste management.

A total of 3,473 households and 464 institutions, schools, and public toilets were surveyed and 25 focus group discussions (FGDs) at the ward level and six FGDs with the sanitation workers were conducted to gather information and understand the sanitation context in Thakurbaba, Rajapur, Lamkichuha, Dullu, Aathabis, Khandachakra, and Madhuwan Municipalities. As part of the survey, 25 fecal sludge samples from each of these municipalities were collected to assess the quality and quantity of the samples. They were tested and analyzed for the total solids (TS) and chemical oxygen demand (COD) in the lab at Kathmandu. This extensive data collection improved understanding of sanitation challenges and needs, especially in fecal sludge management (FSM). Based on the findings, context-relevant on-site sanitation systems were proposed for each municipality in the CSPs.

Table 6: HHs and institutions sanitation surveys

Municipality	HH Survey	Institutions	School	Public Toilet	Sub Total
Thakurbaba	575	59	39	1	674
Rajapur	575	73	48	4	700
Lamkichuha	525	65	63	3	656
Dullu	423	48	47	1	519
Aathabis	400	36	54	2	492
Khandachakra	400	55	23	2	480
Madhuwan	575	128	38	3	744
Total	3,473	464	312	16	4,265

ACTIVITY 2.1.2 – DESIGN, CONSTRUCT AND STRENGTHEN MANAGEMENT OF FSTPS TO MEET LOCAL STANDARDS, BUILDING CODES AND REGULATIONS

The Activity was dedicated to designing, constructing, and managing FSTPs in Madhuwan and Rajapur municipalities in Y2. Through regular meetings and coordination, both the municipalities' leadership and officials committed to support FSTP construction and operations. Madhuwan Municipality obtained consensus during their Executive Council meeting and allocated a budget for FSTP maintenance and purchase of suction trucks. Rajapur Municipality provided written commitment to provide land for the FSTP.

In Lamkichuha Municipality, the authorities showed interest in allocating part of land in the local *Mahila Jagaran* community forest for the FSTP, which is currently also used as a dumping site. As it falls under the community forestry land, the municipality is following legal procedures to gain approval for FSTP construction. The Madhuwan FSTP underwent a detailed engineering survey, considering climate vulnerability, and upgrades including reconstructing anaerobic digester units,

improving access roads, replacing sludge drying bed filter media, and adding facilities to meet national effluent standards. A scoping study emphasized the need for an FSTP in Madhuwan, with land acquisition being a challenge as the site is located within the community forest. It concluded that the major components of the FSTP have already been constructed and the construction of auxiliary components, such as fencing, parking spaces, a guard house, and water supply structures, remain to be built. In Rajapur, the FSTP site selection process is ongoing as per the recommendation of the municipality. The Activity is coordinating with Dullu and Thakurbaba Municipalities to explore the need and viability of FSTPs. Within the jurisdiction of Dullu Municipality, there is a plan underway to establish a shared waste management facility that encompasses an FSTP. This initiative involves a cooperative effort between Dullu Municipality and three neighboring municipalities: Narayan, Chhamunda Bindrasaini, and Bhairabi (rural municipality). The Activity's ongoing communication with Dullu Municipality underscores its commitment to seize this opportunity in this context and provide valuable support to Dullu municipality.

ACTIVITY 2.1.3 – ASSESS AND PROMOTE REUSE OF TREATED SLUDGE IN AGRICULTURE, ENERGY, OR BUILDING MATERIALS, FOCUSING ON REVENUE GENERATION TO SUPPORT FSM OPERATIONAL COSTS

The rehabilitation of FSTP in Madhuwan planned for Y2 was delayed due to the legal issues related to land use permission. Hence, through a contract modification, the rehabilitation of Madhuwan FSTP and the assessment and promotion of reuse of the treated sludge were postponed to Y3.

INTERMEDIATE RESULT 2.2: FINANCIAL SUSTAINABILITY FOR FSTPS DEVELOPED

ACTIVITY 2.2.1 – SUPPORT LOCAL GOVERNMENT IN DEVELOPMENT OF BUSINESS PLANS FOR FSTPS

Madhuwan and Rajapur Municipalities developed business plans for FSTPs in support of the Activity. These plans provide an overview of the FSM market size, highlighting the value proposition and benefits of establishing a safe FSM system. It also provides analysis of potential customer segments, customer relationships, and communication channels. The plans outline the costs and expenses associated with operating the FSM system, including emptying, conveyance, and treatment. Furthermore, the Activity conducted a financial scenario analysis considering operational costs, potential revenue streams, and the roles of different stakeholders in establishing a service delivery model to inform municipalities.

D. OBJECTIVE 3: STRENGTHENED GOVERNANCE FOR SUSTAINABLE RESILIENT MANAGEMENT OF WATER RESOURCES



Figure 4: WASH Bills formulation process and stages

- Thirteen LGs adopted and implemented WASH Bills in Y2. Out of which, seven LGs have already implemented the Bills and among them five had published in their local gazette.⁶
- The provincial WASH Bill was drafted and proposed to the Bill drafting committee which was formed under the Ministry of Water Resources and Energy Development (MOWRED) for their review and inputs.
- Twenty-nine LGs formulated Water User Master Plan (WUMP), and 12 LGs endorsed WUMP.

INTERMEDIATE RESULT 3.1: POLICY AND REGULATIONS FOR WRM DEVELOPED/IMPROVED AT THE WATERSHED LEVEL

ACTIVITY 3.1.1 DEVELOP POLICIES AND REGULATIONS FOR IMPROVED WATERSHED-LEVEL WATER RESOURCE MANAGEMENT

This Activity supported 14 WASH Bill, of which one provincial WASH Bill proposed and 13 LGs WASH Bill proposed and implemented through the drafting committees formed in each LGs. The Bill drafting process followed an existing procedure of the governments. The process also ensured representation from women, and marginalized groups.

Fourteen WASH Bills were proposed, adopted and implemented to LGs for endorsement of which seven were implemented and six were adopted by LGs. Seven LGs implemented WASH Bills are Dullu, Rajapur, Thakurbaba, Chhayanath Rara, Soru, Khatyad and Tila. Six LGs adopted WASH Bills

⁶ The USAID MEL plan define a) proposed=decision of the executive body for the submission of bill in the municipal assembly, b) adopted=passes of bill by municipal assembly, published in the gazette and c) implemented=formation of structure as stated in the act, WUSC registration, water source registration

are Chamunda, Khandachakra, Barahatal, Chaukune, Kamalbazar, Tilagufa, The WASH Bills of Aathabis, Rajapur, Thakurbaba and Turmakhand were proposed in Y1 and implemented WASH Bill by Rajapur and Thakurbaba in Y2. The remaining WASH Bills will be published in the local official gazette in Y3. The WASH Bill formulation process is rigorous, and the iterative process follows nine steps. These include a) policy gap analysis, b) formation of a Bill drafting committee, c) drafting and sharing the Bill outline with LGs, d) conducting consultations with stakeholders at LGs, e) consultation with community levels, f) multistakeholder workshops to review the Bills g) support LGs to pass the Bills, h) develop the community product and i) capacity building of water related agencies to support WASH Bills. The whole process of Bill drafting was appreciated by LGs.

Provincial Level WASH Bill: The Karnali province drafted a preliminary outline of a WASH Bill with the technical support Karnali Water Activity. The outline of the WASH Bill was proposed to the Acting Secretary and Law Officer of the Ministry of Water Resources and Energy Development (MoWRED). Based on the agreed version, the WASH Bill was drafted and proposed to the Bill drafting committee for its further review and finalization.

INTERMEDIATE RESULT 3.2: INSTITUTIONAL CAPACITY AND GOVERNANCE OF EXISTING SERVICE DELIVERY ORGANIZATIONS ENHANCED

ACTIVITY 3.2.1- DEVELOP/STRENGTHEN INSTITUTIONAL MECHANISMS FOR WATERSHED MANAGEMENT AND COORDINATION AT ALL LEVELS

Twenty-nine LGs have developed Water User Master Plans (WUMPs) in technical support of the Activity in Y2. Out of these, 12 LGs had officially endorsed the WUMP by the respective municipal executive/council. These LGs included Aathabis, Khandachakra, Turmakhand, Chaukune, Soru, Bhairabi, Chhayanath Rara, Madhuwan, Mohanyal, Kyhatyad, Kamalbazar, Ramaroshan. The remaining 17 WUMPs will be endorsed by LGs in the first quarter of Y3. The WUMP preparation process follows a bottom-up assessment and planning process starting from the needs assessment at the Ward level, social and technical assessment, ward level planning, and LG level planning. During the planning process the data are validated at the ward and LG level before prioritization of the schemes. The vendors and the Activity staff were trained on WUMP-and National-Water, Sanitation and Hygiene (N-WASH) integration, capacity development and planning process. Similarly, vendors were trained for SSA data collection and facilitation of the WUMP drafting process. The Activity technically reviewed the first draft of WUMP and supported in the finalization and endorsement of the plan of all LGs. The LGs showed commitment to implement the plan and appreciated the role and technical support of the Activity. The WUMP data were collected using DAICollect™ and integrated in N-WASH accordingly. Furthermore, the Activity drafted the national WUMP guidelines formulation process and reviewed in the Project Steering Committee (PSC) meeting held on January 26, 2023. The process has been approved by USAID and the national WUMP guidelines formulation process will be completed in Year 3.

ACTIVITY 3.2.2 - STRENGTHEN COORDINATION AND CAPACITY FOR WATER SUPPLY SERVICE DELIVERY

The Activity provided technical assistance to formalize and institutionalize 49 WUSCs as a key provision stated by the WASH Bills. The Activity continued its technical support to finalize the statutes of WUSC, and the registration process of 49 WUSCs in their respective LGs. Furthermore, the Activity continued its technical support to draft the WASH Bill of Karnali province and formed a Bill Drafting Committee which included the members of provincial WASH stakeholders. It also contributed to institutionalization and strengthening of WASH coordination among provincial government, LGs, and sector agencies in the Karnali province.

ACTIVITY 3.2.3 STRENGTHEN COORDINATION AND CAPACITY FOR SANITATION SERVICE DELIVERY

The Activity collaborated with DWSSM and MoWS to improve sanitation service delivery. FSM training framework developed by the WASHFIN project, a USAID supported project, was reviewed, and contextualized to formulate the module for the Karnali region. Beside it, the Activity engaged in drafting of national WASH regulation by providing technical review and comments to incorporate the issues of sanitation. The Activity emphasized inclusive WUSC formation, defining responsibilities for all tiers of governments, and provision of mandates for reconstruction, rehabilitation, and repair to improve the sanitation services. The Activity also continued policy engagement to formulate WASH Bills and CSPs for the effective planning and implementation of WASH projects at the local level.

E. OBJECTIVE 4: STRENGTHENED CONSERVATION OF WATERSHEDS AND BIODIVERSITY



Photo 9: Water discharge assessment training for enumerators in Bulbule Lake, Surkhet

KEY ACHIEVEMENTS

- 11,841 Spring Source Assessments (SSA) were conducted. Based on these, the Water Sources and Biodiversity Baseline Report was updated by analyzing the Water Quality Index (WQI), spring flow seasonality, and yield of spring sources.
- Conducted Hydrological Modeling Analysis by applying the Soil and Water Assessment Tool (SWAT) in the four Watersheds and the Water Accounting Plus (WA+) framework in three Watersheds.
- Four One Water Steering Committees (OWSCs) and 28 Sub-Watershed Management Committees (SWMCs) were formed in Rara, Tila, Middle Karnali, and Lower Karnali Watersheds.
- Formulated Water Sources Protection Guideline.
- Three potential Payment for Ecosystem Service (PES) sites were identified based on the PES site assessment tool.

INTERMEDIATE RESULT 4.1 WATER CATCHMENT AREAS WELL PROTECTED AND MANAGED FOR BIODIVERSITY AND SUSTAINABLE WATER SERVICES

ACTIVITY 4.1.1 SUPPORT THE IDENTIFICATION OF ECOLOGICALLY SIGNIFICANT AREAS TO CONSERVE BIODIVERSITY AND WATER

Based on the hydrological modeling analysis, SSA, and literature review, the Activity produced a Water Source and Biodiversity Baseline Report. For the analysis and report writing, the biodiversity and water resource indicators were determined to assess the total coverage of land use, vegetation distribution, species distribution, and forest fragmentation. Similarly, physicochemical parameters were assessed for 6,099 water sources. The hydrological situation, forest (flora and fauna) biodiversity, aquatic biodiversity, forest fragmentation, and conservation issues were analyzed for each watershed. The water sources indicators were assessed based on spring flow seasonality, discharge data, and WQI. The data was visualized in geospatial maps.

A total of 11,841 Spring Sources Assessments (SSAs) were conducted in two phases in Y2. In the first phase, 6,646 springs sources were identified and assessed. Similarly, 3,595 springs sources were identified and assessed in the second phase, additionally 1,600 spring sources were identified and assessed through WUMP-II process, out of which, the detailed physicochemical parameters were calculated for 6,099 spring sources. The water discharge was calculated for each source after the enumerators were trained through conduction of the municipality and ward level inception workshops. The below table shows the number of SSAs in each watershed:

Table 7: Watershed wise spring sources identified through SSA process

Watershed	Number of Municipalities and Rural Municipalities	Total Water Source
Lower Karnali Watershed	5	1,951
Middle Karnali Watershed	10	6,686
Tila Watershed	5	1,694
Rara Watershed	3	1,510
Total	23	11,841

The final report of the Spring Sources Assessment showed that only 17 percent of sources were in good condition, while 80 were in moderate condition, and three percent were highly microbially contaminated⁷. Based on their microbial status, 84.39 percent were considered safe, 10.29 percent intermediate risk, 5.08 percent high risk, and 0.24 percent very high risk to the health of water users.

Table 8: Water Quality status of four watersheds

Watershed	Physiological parameter testing				E. coli testing
	Excellent	Good	Poor	Very poor	Unfit for drinking without treatment (%)
Lower Karnali (N=1289)	25	1261	1	2	16

⁷ Based on WQI classification, excellent=85.75%, good=13.40%, poor=0.58%, very poor=0.12%, and unsuitable=0.14% were (source: ISET, 2023)

Middle Karnali (N=3778)	2897	868	7	6	16
Tila (N=778)	574	201	2	1	16
Rara (N=254)	146	107	1		14
Total (N=6099)	3642 (60%)	2437 (40%)	11	9	16%

SWAT Models and Water Accounting+ (WA+): Hydrological modeling analysis was completed in four Watersheds. The model presented annual spatial distribution and volume of water balance. The report included an analysis of water balance and its availability in the areas of municipalities in the watershed boundary. The data analysis on precipitation, evaporation, transpiration, water yields, surface runoff, lateral flow, and groundwater flow was presented to LGs by using the local data on precipitation, temperature, relative humidity, wind speed, and sunshine hours.

The SWAT hydrological model was applied in four Watersheds (Rara Khatyad, Tila Karnali, Middle Karnali, and Lower Karnali) for Hydrological Modeling Analysis. The climate change and land use land cover scenarios of these Watersheds were also developed. These scenarios were implemented in the calibrated and validated SWAT hydrological model to understand the changes in water balance and availability at the watershed, Sub-watershed, and municipality levels. The comparative summary of hydrological modeling analysis activity is shown in the table below.

Table 9: SWAT hydrological findings and results

S N	Description	Rara Khatyad	Tila Karnali	Middle Karnali	Lower Karnali
1	Mean seasonal distribution of precipitation	44 mm in post-monsoon to 494 mm in monsoon	66 mm in post monsoon to 816 mm in monsoon	62 mm in post monsoon to 1068 mm in monsoon	55 mm in post monsoon to 1566 mm in monsoon
2	Average distribution of Actual Evapotranspiration (AET)	29 mm in winter to 265 mm in monsoon	25 mm in winter to 365 mm in monsoon	49 mm in post monsoon to 360 mm in monsoon	50 mm in post monsoon to 355 mm in monsoon
3	Net Water Yield (NWY)	49 mm in winter to 195 mm in monsoon	57 mm in winter to 444 mm in monsoon	72 mm in pre monsoon to 557 mm in monsoon	23 mm in pre monsoon to 1084 mm in monsoon
4	Maximum temperature is projected to increase (For SSP245 and SSP585 models)	2.4°C (4.2°C)	2.4°C (4.2°C)	2.1°C (3.8°C)	1.9°C (3.3°C)
5	Minimum temperature is projected to increase (For SSP245 and SSP585 models)	2.7°C (4.7°C)	2.7°C (4.7°C)	2.9°C (5.1°C)	2.2°C (4.4°C)
6	Maximum precipitation is projected to increase	11% (33%)	14% (40%)	20% (53%)	18% (42%)

	(For SSP245 and SSP585 models)				
7	Projected River discharge increase by the end of the century (For SSP245 and SSP585 models)	20% (57%)	6.4% (24%)	49% (92%)	28% (64%)

The validated SWAT model outputs were used to bias-correct various remote sensing datasets which served as inputs into the WA+ framework. The Integrated SWAT-WA+ model was used to simulate water availability and various sectoral uses over the last 10 years in three Watersheds (Lower Karnali, Middle Karnali and Tila). The findings are presented in the table below.

Table 10: Water Accounting findings and results

SN	Description	Tila Karnali	Middle Karnali	Lower Karnali
1	Gross inflow	3.5 km ³ /year	19.57 km ³ /year	44.8 km ³ /year
2	Upstream runoff and discharge from point sources	2.4 km ³ /year	16.8 km ³ /year	42.8 km ³ /year
3	Rainfall contribution	31%	14%	4.5%
4	Average annual precipitation consumed by AET	54%	44%	53%
5	Outflow	3.14 km ³ /year	10.96 km ³ /year	31.2 km ³ /year
6	Average annual environmental water requirements	0.72 km ³ /year	2.41 km ³ /year	6.85 km ³ /year

A total of 91 Sub-Watersheds were identified (LK:24, MK:27, Tila:32, Rara Khatyad: 8) in four Watersheds.

ACTIVITY 4.2.1 SUPPORT THE ESTABLISHMENT AND MAINTENANCE OF ECOLOGICALLY SIGNIFICANT AREAS TO CONSERVE BIODIVERSITY AND WATER

The Activity formulated the OneWater Approach and structure of the OWSC in WASH Bills. The OneWater Approach promotes the formation of OWSC for the holistic, equitable, and sustainable water supply services at the Watershed levels. It was shared during the WASH Bills formulation process with LGs and different stakeholders. To form the OWSC, a series of 14 local level consultation workshops were conducted among the leaderships of municipalities chair/vice chair and Wards chairs, community forestry user groups (CFUG), and water user groups to promote the OneWater approach. These workshops engaged participants on the identification of Sub-Watersheds, and mapping of stakeholders for the conservation and management of water resources. In total, 364 LG's authorities and community user groups were engaged in the consultation process, out of which 30 percent were women, nine percent *Dalits*, and 13 percent *Janajati*.

One Water Steering Committees at Watershed and Sub-watershed level: The Activity facilitated and prepared a list of potential members of the OWSC through the multi-stakeholder consultative process. The inclusive Scope of Work was developed to include women and *Dalits* as the committee members. The committee consisted of representatives from the Watershed level leadership including leaders of LGs, Division Forest Office, Soil and Watershed Management Office,

Water Supply, Irrigation and Energy Development Office, and representatives of the Sub-watershed Management Committee. The committees are chaired by one of the mayor/chairpersons of LGs and development agencies participated as members.

Four OWSCs were formed in Rara Khatyad, Tila, Middle Karnali, and Lower Karnali Watersheds to strengthen the coordination and collaboration between the upstream and downstream authorities and communities. After a series of multi-stakeholder’s consultation meetings with 161 people at the LBG and Sub-watershed level, out of which 24 percent were women and 11 percent were *Dalits* and *Janajati*, at the LG and Sub-watershed level, these committees were formed. The first OWSC was formed in Rara Khatyad Watershed with 14 members on December 24, 2022. Similarly, other Watersheds like Lower Karnali formed OWSC with 21 members, Tila watershed with 18 members, and Middle Karnali with 19 members. The OWSC of Middle Karnali is led by a female leader- [REDACTED], Mayor of Panchadewal Binayak Municipality, Achham.

To form four OWSC, a total of 28 Sub-watershed management committees (SWMC) were identified and formed based on SWAT models and the lack of institutional mechanisms for the coordination of watershed management and soil conservation at the Sub-watershed levels. The Activity conducted consultation meetings in each Sub-watershed levels, where chair of Wards, CFUGs, WUSCs, irrigation water user groups, and micro-hydro and water mill users were engaged to formulate the committee and discuss the issues of water conservation. The activity has brought together the multiple users of water resources and the representatives of upstream and downstream communities.



Photo 10: Training on source protection, Garsekhola WSS, Khandachakra municipality

Spring source protection: Thirty spring source protection schemes were identified and implemented in Y2. These sources were protected by constructing green/grey infrastructures along with the construction of WSS schemes. Further, 527 WUSC members, out of which 52 percent were women and 30 percent *Dalit*, were oriented on source protection and watershed conservation. The WUSCs members were trained on the techniques of source protection, water quality, availability, and roles of the WUSCs. Also, the Activity drafted the Water Source Protection

Guideline, which is at the stage of finalization. The below table shows the number of source protection schemes in each Watersheds.

Table 11: No. of source protection schemes in four Watersheds

Watershed	District	LGs	No. of Source Protection Schemes
Rara Khatyad	Mugu	Chhayanath Rara Municipality	6
Tila	Kalikot	Khandachakra Municipality	7
Middle Karnali	Achham	Turmakhand Rural Municipality	6
Lower Karnali	Surkhet	Barahatal Rural Municipality	6
	Kailali	Mohanyal Rural Municipality	5
Total			30

Integrated Business Models/Payment for Ecosystem (PES) Modalities: The Activity has begun to develop the business models/PES modalities by developing a scorecard for the PES site selection and assessment criteria. The Activity considered the ecosystem service based on the demand for the service, potential to establish PES, supportive institutional mechanism as laws and policies, and willingness to pay for ecosystem services. Water insecurity in the downstream communities was considered a key-criteria for the PES site selection. The Activity had selected three potential sites for the PES business planning and activity implementation through consultative process with local stakeholders in 10 potential sites. The below table shows the potential PES sites:

Table 12: List of potential PES sites

Watershed	LG/Ward Number	Settlements	PES potential sites
Rara Khatyad	Khatyad / 8	Sukadhik	Not selected
	Khatyad / 11	Bajedi	Not selected
Tila	Khandachakra / 5	Garsekhola	Prioritized
	Khandachakra / 8	Chaukhola	Not selected
	Tilagufa / 5	Khallagad	Not selected
Middle Karnali	Ramaroshan / 5	Ramaroshan	Ramaroshan
	Dullu / 4	Badi Mul	Badi Mul (Alternative site)
Lower Karnali	Barahatal / 5	Baddichaur	Baddichaur (Alternative site)
	Mohanyal / 7	Jyamire, Kuine	Prioritized
	Mohanyal / 7	Chiplemul	Not selected

F. CROSSCUTTING CONSIDERATIONS



Photo 11: Joint Sector Review meeting held in Dhangadi

GENDER EQUALITY AND SOCIAL INCLUSION (GESI)

The Activity updated and implemented the GESI Action Plan to integrate GESI into assessments, interventions, approaches, tools, products, and procedures in Y2. The GESI Monitoring Checklist was developed and employed to assess the meaningful participation and engagement of women and marginalized communities for equitable access to water and sanitation services. The regular meeting of Anti-Harassment Action Group (AHAG) continued, and the Sub-contractors and vendors were oriented on the zero-tolerance policy against any forms of discriminations and other safeguarding policies. The safeguarding policies were translated into Nepali for easy and effective communications.

Joint Sector Review (JSR): The Activity provided technical and financial support to the Ministry of Water Supply (MoWS) to organize the Joint Sector Review (JSR) in Lumbini and Sudurpaschim Provinces held in June 2023. The JSR was led by the Technical GESI Working Group in Sudurpaschim and the Planning and Monitoring & Reporting Working Group in Lumbini province. The review included field visits in both provinces to explore issues related to planning, monitoring, reporting, and GESI in the WASH sector. In Sudurpaschim Province the JSR team visited the Activity working and observed that women are more responsible for WASH but not engaged in water sector governance, technical workforce, etc. During the field visit Deputy Mayor of Turmakhand-Achcham acknowledged the integration of GESI in the WASH sector and the Activity's continuous technical support.

Solidarity with international campaigns: The Activity organized GESI-related campaigns and celebration events at Watersheds and regional levels. Sixteen Days of Activism against Gender-Based Violence (GBV) was marked by a series of interaction events to raise awareness about GBV in collaboration with schools, municipalities, and other USAID implementing partners in four Watersheds. The Activity celebrated International Women's Day through a men and women futsal

game, photo and poem competitions, play cards displayed on the theme #Embrace Equity and the slogan; DIGITALL: Innovation and Technology for Gender Equality. Further, the Activity celebrated Dignified Menstruation Hygiene Day through campaigns to raise awareness, share achievements, and empower locals to change the social behavior which hinders accessing water and sanitation facilities through various activities such as orientations, interaction among adults and school children, competitions among members of WUSCs, school children, and LGs.

Coordination and collaboration: The Activity hosted and participated regularly in USAID’s GESI Working Group to foster learnings and collaboration among implementing partners of USAID. Further, the Activity coordinated with Karnali Province and joined the Karnali Alliance for Dignified Menstruation Management (KADAMM) for peer learning and sharing on the issues of menstrual hygiene management. The GESI unit participated in three joint meetings with KADAMM members.

The GESI unit coordinated with the BHAKARI’S GESI team on a quarterly basis and conducted a joint field visit to learn from their signature program “Household Dialogue” in Kalikot. Adopting this learning, the Activity has planned Community Dialogue in WUSCs in Y3. In addition, a joint field-led visit of GESI activities of BHAKARI was conducted to learn GESI integration and collaborate in the future. The Activity is adapting a few sessions of the GESI household dialogue program of BHAKARI in year three training sessions for WUSC members, especially sessions on reducing gender disparities such as engaging men and boys for fetching water, reducing prohibition of accessing water during menstruation, household workload sharing, and reducing gender-based violence in WASH etc.

GESI Monitoring: The GESI checklist was developed, and monitoring was conducted in six WUSCs. Some of the key issues identified were finding the right location for the event to encourage female participation, equal wages for men and women workers, economic contribution by low-income families for WSS construction, and the consideration of the needs of people with disability in WSS construction.

Building Capacity on GESI: The Activity staff were oriented on GESI and its mainstreaming in the working approach and activities, along with the role and responsibilities of all staff. The Subcontractors and vendors for WSS construction, formulation of WUMPs, and VMW trainings, were oriented on GESI with a focus on the inclusion of marginalized groups and facilitating on the GESI guiding checklist.

Internship Policy: The activity developed an internship policy to promote and encourage recently graduated women and youth from disadvantaged and marginalized groups to enhance their knowledge and skills in water security, sanitation, governance, and biodiversity. This policy is planned to be implemented in Y3.

GESI INTEGRATION IN THE OBJECTIVES FOR EQUITABLE ACCESS TO WATER AND SANITATION SERVICES

OBJECTIVE 1: INCREASED SUSTAINABLE ACCESS TO SAFE DRINKING WATER AND WATER FOR PRODUCTIVE USES

DWS and MUS were selected through application of Criteria Based Ranking Tool (CBRT) and detailed surveys, with GESI indicators and parameters, to provide safe drinking water service to the most marginalized and vulnerable population in the working area. The DPRs provided disaggregated

data on gender, economic status, disability, ethnic minorities, and caste. From the household survey data, 41 percent of *Janajati* and three percent of *Dalits* were determined as the users. The Activity also ensured a minimum of 50 percent participation of women and marginalized people to make the WUSC’s membership more inclusive, with an additional provision that at least two key positions were held by women or member of a vulnerable group. In Y2, 68 percent of key positions were held by women or member of a vulnerable group in 49 WUSCs.

The ICA rollout process identified the major GESI gaps in the policies, resources, participation, and knowledge at LGs. Major gaps identified were the lack of GESI responsive planning process and limited GESI knowledge and awareness among LG’s authorities and officials. Based on the identified gaps, the GESI components were incorporated in CD plans for the LGs and WUSCs. The below table shows major GESI related capacity building activities and their participants in Y2:

Table 13: Participants of GESI capacity building activities

Name of the training/ orientations	Men	Women	Brahman/Chhetri/ Sanyasi/ Thakuri	Ethnic minority	Dalit	People w/ Disabilities
GESI Training	82	56	95	18	25	3
Advocacy and Interaction	74	45	85	14	20	0
Training to WUSC on engaging men and boys	652	157	432	111	266	1
GESI orientation with MHM and safeguarding	206	304	242	85	183	1
Entrepreneurship Development training	7	44	38	7	6	0
Total	1021	606	892	235	500	55

The SBC strategy and message development process integrated GESI sensitive approaches and messaging in Y2. Out of the five behavioral objectives illustrated in the formative research, two focused on GESI integration as below:

- a) Increase the proportion of women and members of marginalized communities meaningfully participating alongside men in community water management structures.
- b) Communities enable equitable access to and use of water sources regardless of caste, gender, or other types of marginalization.

The SBC messages were developed through a Human-Centered Design (HCD) consultative workshop to gather the perspective and experience of *Dalits* and marginalized communities, mothers’ groups, religious leaders, school adolescents, FCHVs, farmer and forest group members, cooperatives, and LG GESI section representatives. These workshops were focused on producing

the GESI sensitive key SBC messages on workload sharing, access to water, equal participation and decision making, and MHM.

OBJECTIVE 2: INCREASED SUSTAINABLE ACCESS TO AND USE OF SAFELY MANAGED SANITATION THROUGH FECAL SLUDGE MANAGEMENT

In the formulation process of CSP, the Activity conducted FGD among women and marginalized people to understand and capture their issues in the sanitation sector in Khadachakra, Aathabis, Dullu, Madhuan and Lamki municipalities. Furthermore, FGDs were conducted among the sanitation workers to assess their social, economic, and working environmental status. The findings of the FGDs have also been incorporated into the sanitation situation assessment reports and the learnings have been incorporated into the CSPs. The important findings from the FGDs are i) risks of occupation health and safety related hazards ii) job insecurity for the informal sanitation workers iii) lack of technology and knowledge iv) discrimination to the informal sanitation workers by society and v) inadequate pay.

Likewise, SSA and CSPs integrated GESI parameters in data collection, analysis, and reporting in Y2. Some of the key issues identified were issues of affordable sludge management systems for marginalized groups, women friendly technologies, low-cost small desludging pumps, and rickshaws. Furthermore, it recommended GESI-responsive planning and budgeting by LGs, increased GESI awareness, and the capacity building of workers. It also emphasized creating job opportunities for the GESI target groups in FSTPs along with the practice of fair wages, insurance, and other benefits as per the labor law.

OBJECTIVE 3: STRENGTHENED GOVERNANCE FOR SUSTAINABLE RESILIENT MANAGEMENT OF WATER RESOURCES

The WASH Bills and WUMP formulation process include the policy analysis of GESI in the existing policy instruments. For the formulation of WASH Bills, separate community consultations were conducted among women and *Dalit* groups in 13 municipalities. The Bills provisioned the subsidy in the water tariff and O&M for the low-income families. The Activity ensured 33 percent representation of women and proportional representation of the *Dalit* and marginalized communities in the WASH Bill drafting committees. In addition, the Activity conducted consultative meetings with DWSSM and reviewed the data collection tools to incorporate GESI into N-WASH system.

During the capacity development stage of the WUMP formulation process, *Dalits*, women, and marginalized communities had a dedicated orientation on their rights and how to address their issues in WUMP. The data analysis in the WUMP report presents disaggregated data. The WUMP recommends the yard

The major GESI provisions in the WASH Acts (2022) are:

- i) The Executive Committee of the WUSC consists of at least 40% women, and if available, 50%. Additionally, at least one key position is to be held by a person from a marginalized caste, and among the key positions, 2 should be held by women.
- ii) The Act does not prevent the formation of WUSC with only women membership
- iii) For equitable access and benefit sharing, women, *Dalits*, ethnic minorities, people with disabilities, and poor individuals should have equal access to the decision making in the operation and management of WASH services.
- iv) WUSC membership fees and water tariffs should be determined in a way that is affordable for women and marginalized communities.
- v) The WASH Act has provisions about the rights of sanitation workers who operate as informal workers such as those who work in fecal sludge desludging.

Figure 5: GESI provisions in WASH Acts

connection of water taps that reduces the workload, gender-based violence and promotes the easy access to the water and sanitation services for women, girls, and people with disabilities.

The application of CBRT for the selection of WSS schemes has increased the community and LG ownership because of their engagement in the identification and prioritization of WSS schemes. Also, the GESI session in the confidence building training provided to the women and marginalized community empowered them to raise their voice in the process.

OBJECTIVE 4: STRENGTHENED CONSERVATION OF WATERSHEDS AND BIODIVERSITY

The representation of women and marginalized communities was ensured in the committees in four OWSC and 28 SWSC. The committee formation workshops engaged a significant number of women and marginalized groups in four Watersheds. One of the OWSCs is led by a woman - the mayor of Binayak Panchadeval Municipality, [REDACTED]. Furthermore, the selection of one of PES sites was guided by the presence of Majhi community whose livelihoods depend on the fishing and forest.

MONITORING, EVALUATION, RESEARCH AND LEARNING



Photo 12: Collecting field stories and video documentaries by the communication team in Pokharikhanda

The MEL plan was revised as per the Year 2 Annual Work Plan, which was approved by USAID on December 22, 2022. The MEL unit focused on inhouse capacity building of staff and Sub-contractors to collect, clean, and ensure the quality of data reporting in DAICollect™. The unit has initiated data analysis and sharing through quarterly dashboards. Currently the unit is working closely with the home office to analyze and visualize the DAICollect™ database through the PowerBI Dashboard.

The following are key achievements in monitoring, evaluation, research, learning and communications:

- Developed, trained and rolled-out data collection form for the Activity and Sub-contractors. Five WSS Sub-contractors for Mugu, Kalikot, Achham, Surkhet and Kailali districts were oriented on the data standards and reporting requirements as per USAID policy. Similarly, the monitoring tools for GESI mainstreaming, environmental compliance, and quality control and assurance were drafted and planned to roll-out across the Activity in Y3.
- For regular monitoring, technical supervision, and field support, WSS monitoring tool was designed in DAICollect™. Currently, the Activity is tracking the progress and performance of 64 WSS. The monitoring data and its findings will be regularly used to improve the quality and performance of WSS construction work.
- The Activity completed data collection and cleaning of all sources through Spring Source Assessment (SSA) in four Watersheds
- A total of 71 data collection forms were deployed, collected, and managed in DAICollect™. The following were the major tasks completed by the MEL team:
 - Data cleaning and review of the sanitation situational assessment report of five municipalities: Lamkichuha, Aathabis, Dullu, Madhuwan and Khandachakra
 - Data collection, cleaning and review for formative research and SBC strategy
 - Reviewed and validated 29 WUMP reports.

Joint monitoring visit: The USAID/Nepal Deputy Mission Director, the BHAKARI project, and the Activity conducted a joint monitoring visit in Tila Watershed on May 11, 2023. They observed WSS sites and consulted with WUSCs, construction workers, and LGs. Also, the USAID team conducted six visits in the working areas of the Activity. Municipal chairs and vice-chair, Ward chair, engineers of LGs, and other stakeholders conducted six joint monitoring visits of the WSS Construction sites to observe the progress and provide feedback.

Technical supervision and support: After the start of WSS construction work, the Watershed field engineer and sub-engineers regularly conducted technical supervision of all WSS sites and provided technical support to WUSCs and Sub-contractors. From the regional office Surkhet, Supervisory Engineer, QA/QC Engineer, Design and Supervision Engineer, WSS & Private Sector Development Specialist, Environment Compliance Specialist, and others conducted field assessment, monitoring and technical support to Watershed team and Sub-contractors. Similarly, M&E Communication Coordinators provided regular onsite coaching and mentoring to the Sub-contractors and vendors to ensure data quality along with the frequent field monitoring and support to the Watershed teams.

Internal Data Quality Assessment (DQA): The MEL and Communications team conducted an internal DQA in four Watershed after the orientation of the technical teams and development of DQA checklist and tools. The tools were tested in Sisneri and Odal Todke WSS schemes. The team identified the sampling of WSS, WUSC, LGs, and training participants based on the selected 10 indicators for the DQA assessment. The team conducted DQA with all four Watershed offices, Sub-contractors, WSS sites, WUSCs and LGs. The team is currently drafting the DQA report.

Promoting cross learning: Five learning agendas of the Activity were discussed and reviewed among the technical and Watershed teams to develop a common understanding and preparation through a series of meetings. A key concept and question of these agendas was determined, and its operational questions were agreed upon for the systematic documentation and data collection. To produce these learning briefs, both project team members and an external STTA will be mobilized.

The Activity also organized a three-day Semiannual pause, review, and reflection workshop to review the progress and performance against the Annual Work Plan, challenges, and learnings in January 24-26, 2023. Also, a Project Steering Committee (PSC) meeting was organized on January 26, 2023. The Project Steering Committee Chair, and the Secretary of the Ministry of Water Supply (MoWS), provided valuable suggestions in the workshop to reach the unreached populations through drinking water services.

Additionally, a Joint Sector Review (JSR) meeting took place in Turamakhand on June 3, 2023. Furthermore, at the community level, LG consultation meetings, Focus Group Discussions (FGDs), and Key Informant Interviews (KIIs) were conducted in Y2.

Communicate the work of the Activity: To visualize and promote the presence and work of the Activity, the Activity oriented staff and Sub-contractors on Branding and Marking (B&M) of USAID, installed office signage for Watershed offices, designed and installed public display board in all WSS construction sites, designed B&M banners for the field events, and prepared metal plaque guidelines for WSS sites.

To capture community stories, videos, and photos of water scarcity, community hardship, and youth engagement in WSS construction, the unit embarked on a visit to Odal Todke, Pokharikada, and Dopka WSS. Community narration, video footage, and photos were collected to create compelling video stories to increase visibility and work of the Activity to foster learning internally and externally.

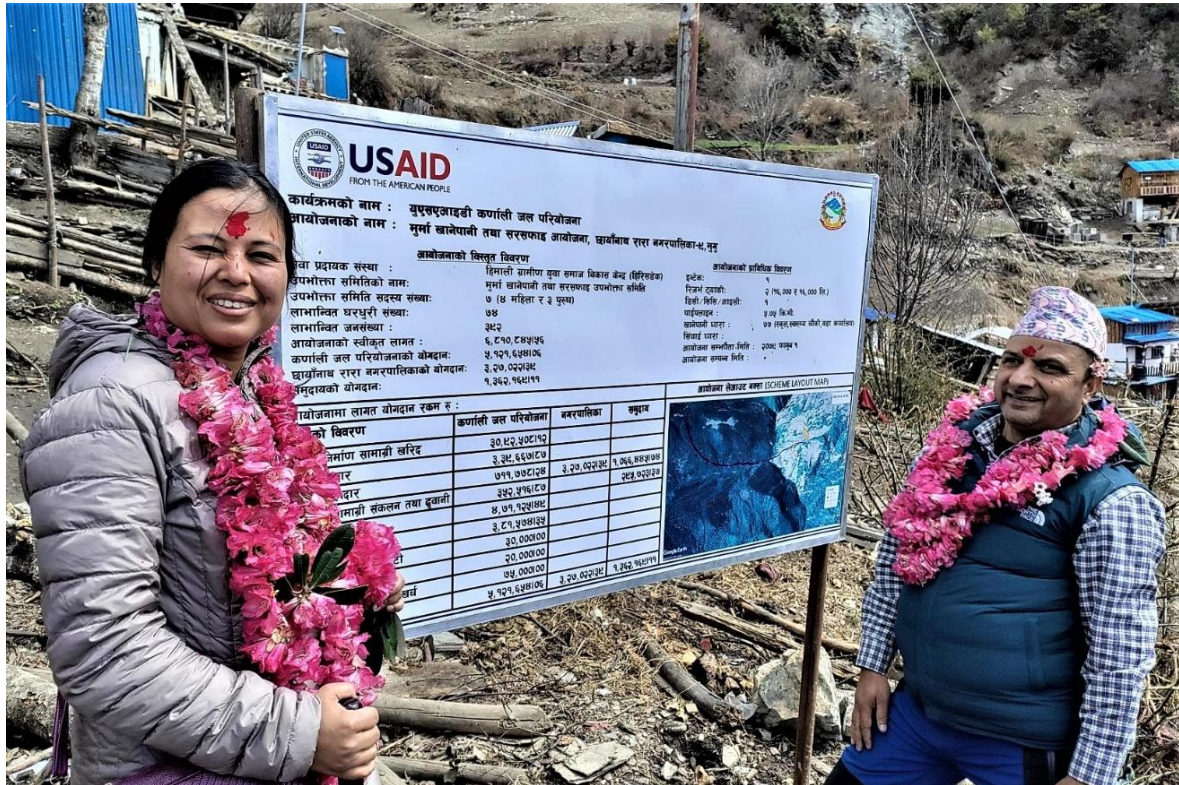


Photo 13: Murma WSS hoarding board displayed at the construction site, Murma, Chhyanath Rara

ENVIRONMENTAL AND QUALITY COMPLIANCE

Forty-nine ERRs for the new and rehabilitated WSS schemes, and the scoping study for the FSTP were prepared in accordance with the requirements of Country Federal Regulation (CFR) 216. These ERRs were based on the approved EMMP of the Activity for Y2 and the project's Initial Environmental Examination (IEE). Among these, the ERR for the gravity feed scheme of Barma WSS, Khandachakra Municipality and water lifting scheme of Pokharikanda WSS, and Barahatal Rural Municipality were approved. The remaining ERRs were prepared and finalized based on the approved ERRs from USAID.

During the initial stages of the construction process, orientation training was provided to the staff of the Subcontractors regarding environmental compliance and the EMMP of the WSS. Subsequently, the Subcontractors provided training on the construction standards and compliance, including environmental compliance, to the construction workers. The implementation of the EMMP for each WSS involved monitoring by LGs, Watersheds teams, technical teams, and USAID. A spot check form was developed and provided to watershed officials to ensure compliance at the WSS level. The issues identified and addressed included the proper use of safety gear, backfilling/refilling of excavated soils, drainage management, and soil erosion, etc. A sample spot check monitoring was conducted in 16 WSS schemes for the environmental compliance.

Quality Assurance and Control: Based on the finalized USAID Karnali Water Activity’s Quality Assurance and Quality Control plan and procedure, the construction Subcontractors and engineering team had verified the specifications of external materials before dispatching them at the site to ensure quality compliance. This verification process involved examining the manufacturer’s laboratory test reports and comparing them with actual field observations to ensure further quality assurance. When the joint verification of materials’ specifications was completed, the materials were delivered, and a Good Delivery Report (GDR) was maintained. If any deviations were found in the specifications, the team would instantly inform the Materials Supply Subcontractors through the material deficiency log for replacement. For example, in Mohanyal, 20 pieces (6m each) of HDPE 63mm, PE-100, PNI0 that did not meet the quality standards were replaced by Subcontractors.



Photo

14: Inspection of WSS Quality and Environmental Compliances in Jukepani WSS, Turmakhad.

To ensure the quality of local materials, the construction Subcontractors were responsible for identifying potential quarry sites. They followed QA/QC protocols during the site identification process. Once the potential quarry sites were identified, the construction Subcontractors submitted the information to the Activity’s engineering team for further verification. Likewise, the team cross-verified the identified quarry sites. In case the site did not meet the standard specifications and requirements, the site was rejected, and the team recommended another suitable quarry site. For example, the Activity visited one proposed sand collection site in Sotakhola, Barahatal, Surkhet. It was found that the sand contained a high amount of coarse material, approximately 40 percent, and more than 10 percent mica content, which did not meet standards. Therefore, the recommendation was to reject the sand from the Sotkhola quarry site. Subcontractors replaced the quarry site accordingly and obtained sand from a site that met the standards.

The construction Subcontractors carried out materials and cube testing in GoN certified labs based on Indian Standards and National Standards and were found to comply with standards. In the

laboratory, tests were performed on cement, aggregate, and sand to verify technical specifications, and cubes were used to assess the compressive strength of mortar and concrete. To ensure regular inspections for quality compliance of WSS, MUS, and Spring Protection schemes, Watershed Advisor, Field Engineers, and Sub-Engineers regularly inspected the construction sites under the guidance of the QA/QC Engineer. Moreover, the 22 schemes were spot monitored by the Quality Assurance and Quality Control Engineer during the construction phase on a sample basis. During the monitoring visits, any identified issues were promptly addressed, and corrective measures were provided to Subcontractors for improvement to ensure the quality.

Table 14: Environmental and Quality compliance status of WSS/MUS:

Total No. of WSS	WSS comply with EMMP report	WSS certified for the quality compliance
46	46	46

PARTNERSHIP AND COLLABORATION

Collaboration with the Ministry of Water Supply: The activity collaborated with the Ministry of Water Supply (MoWS) for the WASH Joint Sector Review (JSR). MoWS reviewed seven themes related to the WASH sector, including a) WASH Governance, Institutional Arrangement, Capacity Building; b) Safely Managed Water Supply Services; c) Safely Managed Sanitation Services; d) Sector Financing; e) Gender Equality, Social Inclusion (GESI), f) Climate Change, and Disaster Risk Reduction (WASH Sector), as well as g) Sector Planning and Monitoring and Evaluation. Technical working groups were formed for each theme, and the Activity supported MoWS in conducting a joint sector review for Theme-7: Sector Planning, M&E, co-led by USAID and headed by MoWS. The Secretary of MoWS announced the Karnali Water Challenge at the national workshop organized jointly by MoWS and Society of Public Health Organization on World Water Day. The Activity provided technical and financial assistance to the Joint Sector Review (JSR) of Lumbini Province and Sudurpaschim Province, which was held in June and was coordinated by the Ministry of Water Supply (MoWS). The Activity's DCOP and GESI Director took part in the JSR in Lumbini and Sudurpaschim Provinces, respectively. In the JSR led by the Technical GESI Working Group in Sudurpaschim Province, the Activity assisted in the finalization of questionnaires for community and provincial assessments and reviews, along with supporting MoWS for a provincial workshop and field visit in Turmakhand- Acchham, Kailali, and Kanchanpur to collect issues related to GESI in the WASH sector.

Collaboration with the provincial government: The Activity collaborated with the Ministry of Infrastructure, Water Resources, and Energy in Karnali Province, announcing the Karnali Water Challenge through a popular radio program to engage potential groups and organizations in the region.

Cost leverage from LGs: The Activity collaborated with six LGs for WSS construction and successfully influenced a resource leverage amount of ██████████ (██████████) in Y2. Additionally, the community contributed an in-kind donation amounting to 20 percent of the construction of 64 WSS schemes.

Partnership with Rotary International: The Activity worked on a possible partnership with Rotary International through USAID to enhance access to safely managed water and sanitation services for 2,500 households in 25 communities across three districts. The proposed partnership includes interventions for new construction, rehabilitation, and upgrading of existing water supply schemes in communities, health posts, and schools to reduce health risks and provide significant health and economic benefits to 12,500 users. The partnership also aimed to install 10 institutional

latrines in schools and healthcare facilities. The model of partnership and signing MoU between USAID and Rotary International will be discussed in Y3.

Collaboration with RHITI Foundation: The Activity collaborated with RHITI Foundation to organize a policy dialogue session on water use and conservation during the popular event "Kuda Karnalika" of Karnali Utshav Fair in Surkhet on February 18, 2023.

Collaboration with LGs to celebrate International Women's Day: The Activity marked International Women's Day through various events on March 25, 2023. The watershed team collaborated with respective LGs to organize events that raised awareness on Gender Equality and Inclusion.

Marking the 16 Days of Activism Against Gender-Based Violence: The Activity organized various activities involving school adolescents and community members. They held an interschool speech competition on 'The role of the family in eliminating gender-based violence,' where students from nine schools participated. Additionally, in collaboration with BHAKARI and UNICEF, the Activity organized an interaction program with school adolescents against Gender-Based Violence, followed by a quiz contest among students.

Collaboration with BHAKARI and KISSAN II: The Activity initiated consultations with the organizers of Karnali Utsav (Karnali Festival), held from February 17-19, 2023, in Birendranagar, Surkhet, regarding the possibility of relevant sessions on Biodiversity Conservation and Water Safety, among other topics. The SBC team conducted monthly sharing meetings on SBC updates, experiences, and future priorities with BHAKARI. The team decided to share the learnings and communication products to promote each other's initiatives. These projects collaborate at the Watershed level for special celebrations such as 16 Days of Activism Against Gender-Based Violence, Menstruation Hygiene Day, and World Water Day. Moreover, the GESI team has conducted quarterly meetings with the BHAKARI GESI team and conducted a joint field visit with BHAKARI including GESI Director and GESI Officer in their working municipality in Kalikot for learning about their signature program called Household Dialogue.

The Activity also discussed with KISSAN II for the optimum utilization of resources developed by KISSAN II at the municipal and field level, including mobilizing cooperatives for value chain and business plans, agro-vets for technical support to farmers, and aligning Activity business plan support with existing available private sector units. Joint meetings and collaboration on different celebrations and participating in each other's activities continued at the watershed and LG level.

G. OPERATIONS

The Activity successfully set up satellite offices in the four watershed offices (Rara, Tila, Middle and Lower Karnali) including the installation of power backup systems and internet services and the provision of equipment/office furniture in Y2. The Activity also procured, registered, and insured four project vehicles. Servers were also installed at the Kathmandu and Surkhet offices.

STAFFING/RECRUITMENT

The project was able to recruit most of its key personnel before the end of Year 2. Among those key personnel were the COP, DCOP, GESI Director, and WASH Governance Manager. Also onboarded were the following technical and support staff:

Table 15: Location, position, name and start date of staff

Location	Position Title	Name of Staff	Start Date
Middle Karnali	Municipal Coordinator		1-Jul-22
Tila Watershed	Field Engineer		8-Aug-22
Lower Karnali	Field Engineer		8-Aug-22
Middle Karnali	Field Engineer		8-Aug-22
Rara Watershed	Field Engineer		8-Aug-22
Surkhet	WUMP Manager		15-Sep-22
Kathmandu	Driver - Kathmandu		15-Sep-22
Surkhet	Driver - Surkhet		15-Sep-22
Surkhet	Driver-Surkhet		10-Oct-22
Surkhet	Driver-Surkhet		10-Oct-22
Surkhet	Driver-Surkhet		10-Oct-22
Surkhet	Environment and Compliance Manager		17-Nov-22
Surkhet	GESI Advisor		9-Jan-23
Tila Watershed	M&E and Communication Coordinator		13-Feb-23
Kathmandu	Strategic Communication and Learning Director		16-Jan-23

Surkhet	Water Supply Services and Private Sector Development Specialist		1-Mar-23
Surkhet	Research and Data Quality Associate		1-Mar-23
Kathmandu	Human Resources Assistant		1-Mar-23
Surkhet	Admin Assistant		13-Mar-23
Surkhet	QA and QC Engineer		13-Mar-23
Surkhet	Design and Supervision Engineer		3-Apr-23
Rara Watershed	M&E and Communication Coordinator		3-Apr-23
Surkhet	Watershed Biodiversity and Conservation Specialist		3-Apr-23
Kathmandu	Driver		8-May-23
Surkhet	Grants and Procurement Officer		10-May-23
Middle Karnali	Municipal Coordinator		22-May-23
Kathmandu	Communications Manager		5-Jun-23
Surkhet	Governance and Law Advisor		12-Jun-23
Kathmandu	Grants and Procurement Manager		21-Jun-23

As of the end of Y2, the Activity onboarded a total of 37 staff. Seventeen staff left to pursue other opportunities, leaving 50 active staff members in place. The Activity currently has 13 staff in Kathmandu, 21 in Surkhet, and the remaining 16 in the four watershed offices. The current staff mix includes 11 females and 39 males. Recruitment is still underway for Senior Procurement Coordinator and a Finance Assistant. The following table presents the staff recruited and resigned in Y2.

Table 16: Staff recruited and resigned in Y2

	TOTAL	STAFF TYPE	LOCATION
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Staff Status		Technical	Support	Kathmandu	Surkhet	WO - Rara	WO - Tila	WO - Middle Karnali	WO - Lower Karnali
Employed as of 6/30/2023	50	34	16	13	21	4	4	4	4
Ended Assignment / Resigned as of June 2023	17	10	7	9	5	1	NA	1	1
Hired as of June 30, 2023	37	27	10	9	16	3	3	3	3

Below is the list of short-term consultants engaged in Y2.

Table 17: List of short-term consultants in Y2

SN	Name	Position	Start date
1		Capacity Development Expert	13-Oct-22
2		GESI Advisor	1st Nov 2022
3		Sub Engineer - WSS	20-Mar-23
4		Sub Engineer - WSS	13-Mar-23
5		Sub Engineer - WSS	13-Mar-23
6		Sub Engineer - WSS	27-Mar-23
7		Sub Engineer - WSS	13-Mar-23
8		Sub Engineer - WSS	13-Mar-23
9		Sub Engineer - WSS	13-Mar-23
10		Sub Engineer Feasibility Study	20-Mar-23
11		Sub Engineer Feasibility Study	20-Mar-23
12		Sub Engineer Feasibility Study	20-Mar-23
13		Sub Engineer Feasibility Study	20-Mar-23
14		Business Plan Development Expert	21-Mar-23
15		Local Insurance Products for WSS Infrastructure Scoping Study	13-Mar-23

16		Watershed Biodiversity Expert	3-Apr-23
17		Water Source Protection Specialist	10-Apr-23
18		WUMP Expert	3-Jul-23

PROCUREMENT

The Activity procurement team successfully competed and awarded 21 purchase orders valued at [REDACTED] in Y2. The below table presents all purchase order awards valued at more than [REDACTED] that were issued from July 2022 to June 30, 2023.

Table 18: Major procurement in Y2

Description	Total Contract Value (\$US)	Date of Purchase Order
Spring Source Assessment under Package #7	[REDACTED]	03-May-23
Spring Source Assessment under Package #6	[REDACTED]	03-May-23
Develop Water Use Master Plan (WUMP) of Selected Municipalities and Rural Municipalities under Package #5	[REDACTED]	30-Mar-23
Develop Water Use Master Plan (WUMP) of Selected Municipalities and Rural Municipalities under Package #3	[REDACTED]	30-Mar-23
Develop Water Use Master Plan (WUMP) of Selected Municipalities and Rural Municipalities under Package #2	[REDACTED]	29-Mar-23
Develop Water Use Master Plan (WUMP) of Selected Municipalities and Rural Municipalities under Package #1 and #4	[REDACTED]	14-Mar-23
Scoping Study for Fecal Sludge Treatment Plant (FSTP) in Madhuwan and Rajapur Municipality	[REDACTED]	09-Feb-23
Supply and Delivery of Construction Materials for WSS Scheme Rehabilitation	[REDACTED]	15-Jun-23
Supply and Delivery of Construction Materials for WSS Scheme Rehabilitation	[REDACTED]	15-Jun-23
Consultancy Service To Conduct Training Events For The Local Governments (LGs) And Village Maintenance Workers (VMWs)	[REDACTED]	24-May-23
Consultancy Service To Conduct Training Events For The Local Governments (LGs) And Village Maintenance Workers (VMWs)	[REDACTED]	15-Jun-23
Monthly mobile top up services for communication expenses of staffs	[REDACTED]	03-Apr-23
Supply and Delivery of Construction Materials for WSS Scheme Construction in Mohanyal Rural Municipality	[REDACTED]	27-Feb-23
Supply and Delivery of Construction Materials for WSS Scheme Construction in Barahatal Rural Municipality	[REDACTED]	27-Feb-23
Supply and Delivery of Construction Materials for WSS Scheme Construction in Turmakhand Rural Municipality	[REDACTED]	22-Mar-23
Supply and Delivery of Construction Materials for WSS Scheme Construction in Khandachakra Municipality	[REDACTED]	27-Feb-23
Supply and Delivery of Construction Materials for WSS Scheme Construction in Chhayanath Rara Municipality	[REDACTED]	27-Feb-23
Group Medical Insurance for Karnali Water Activity's Staffs and Their Immediate Dependents	[REDACTED]	23-Feb-23
Supply and Delivery of Construction Materials for WSS Scheme Construction in Soru Rural Municipality	[REDACTED]	27-Feb-23
Security Guard Services in Kathmandu and Surkhet office	[REDACTED]	28-Dec-22
Office Support Services for Kathmandu, Surkhet and Four Watershed Offices	[REDACTED]	26-Sep-22

BUDGET INFORMATION

As of July 2023, the Activity has expended [REDACTED] which is nearly 50 percent of its total budget for Base Period of 3 years. Details are below.

Table 19: Budget and expenditure in Y2

USAID KARNALI WATER ACTIVITY BUDGET	
LOP Budget (3 Yr. Base Period)	[REDACTED]
Total Expenditures as of July 2023	[REDACTED]
Current Obligation	[REDACTED]
Remaining Obligation	[REDACTED]

The Activity has planned the remaining budget obligation for the activities of Year 3.

Summary of VAT Refund Status for Y2 (July 01, 2022, to June 30, 2023): The Activity has received VAT refund of [REDACTED] or [REDACTED] (see below) in Y2.

Table 20: VAT claim and refund in Y2

No	Detail	Vat Claim Amount in NPR	VAT Refund received in NPR
1	VAT Submission in August 2023 for the period covering April - June 2022	[REDACTED]	[REDACTED]
2	VAT Submission in December 2023 for the period covering July to Oct 2022	[REDACTED]	[REDACTED]
3	VAT Submission on March 2023 for the period covering Nov - Dec 2022	[REDACTED]	[REDACTED]
4	VAT Submission in June 2023 for the period covering Jan - March 2023	[REDACTED]	[REDACTED]
	Total VAT Submission and Refund	[REDACTED]	[REDACTED]

H. SUBCONTRACTS AND GRANTS UNDER CONTRACT

SUBCONTRACTS AND TASK ORDERS – ONGOING AND IN THE PIPELINE

The Activity converted its CPFF contractual agreement with 500B into an IQC contract to develop 7 CSPs in Y2. In addition, the Activity also awarded Task Order 1 as per an IQC contract to SWN effective April 21, 2022, to conduct feasibility assessments for up to 52 WSS and eight MUS. The table below presents the Task Orders of 500B (Task Order 1 was issued in July 7, 2022) and SWN, issued from April 21, 2022 to June 30, 2023.

Table 21: Closed and ongoing task order in Y2

NO.	SUBCONTRACTOR/GRANTEE	CONTRACT TYPE	OBLIGATION AMOUNT (USD)	DISBURSEMENT (USD)	STATUS / REMARKS – EFFECTIVE DATE
1	SWN	IQC – Task Order 1			Completed and closed
2	500B Solutions Pvt Ltd	IQC - Task Order 1-5			July 11, 2022 – July 14, 2023

The Activity has awarded Subcontracts to the following vendors for WSS construction, management, and institutional support. All Subcontracts are ending in August 2023. The below table presents Subcontracts issued from February 7, 2023, to June 30, 2023.

Table 22: Ongoing Sub-contracts in Y2

NO.	SUBCONTRACTOR / GRANTEE	CONTRACT TYPE	OBLIGATION AMOUNT (USD)	DISBURSEMENT (USD)	STATUS / REMARKS – EFFECTIVE DATE
1	Himali Rural Youth Social Development Center (HIRYSDEC)	Subcontract			Feb 7, 2023- July 31, 2023
2	Human Rights and Environment Development Center (HuRENDEC)	Subcontract			Feb 14, 2023 – Aug 14, 2023
3	Social Empowerment and Building Accessibility Centre (SEBAC Nepal)	Subcontract			Feb 15, 2023- Aug 14, 2023
4	Social Awareness and Development Association (SADA)	Subcontract			Feb 27, 2023 – Aug 19, 2023
5	Sharada	Subcontract			Mar 23, 2023 – Aug 22, 2023
6	Suryodaya Urja Pvt Ltd	Subcontract			May 1, 2023- Jul 31, 2023
7	Centre for Appropriate Technology (CATN)	Subcontract			Completed and closed

NO.	SUBCONTRACTOR / GRANTEE	CONTRACT TYPE	OBLIGATION AMOUNT (USD)	DISBURSEMENT (USD)	STATUS / REMARKS – EFFECTIVE DATE
8	Himali Rural Youth Social Development Center (HIRYSDEC)	Subcontract			June 14, 2023 – December 31, 2023
9	Human Rights and Environment Development Center (HuRENDEC)	Subcontract			July 7, 2023 – December 31, 2023

GRANTS – COMPLETED AND IN THE PIPELINE

The Activity received 18 grantee proposals in response to Request for Application RFA-KarnaliWaterActivity-23-001 Karnali Water Challenge issued on March 22, 2023. Out of 18 proposals, seven were shortlisted for pitching to the PSC of the Activity. After the pitch was held on June 1, 2023, the PSC selected the final three proposals for award. As of July 14, 2023, the Activity is still working with the three finalists of the Karnali Water Challenge Grant to build organizational capacity so they will be able to successfully execute their grant proposals and submit final grant proposals to USAID for approvals.

Since the approval of the Grants Under Contract (GUC) Manual, on April 28, 2022, the Activity has completed and closed its first grant with IWMI on SWAT Modeling and Water Accounting. The Activity also issued on June 5, 2023, RFA Number RFA-KWA-002 Social Behavior Change Campaign Challenge Grant: Promoting Water Secure and Dignified Menstrual Hygiene Friendly Behavior. This grant aims to award promising and innovative concepts, ideas and approaches to promote water saving, conservation, and Dignified Menstrual Hygiene Management (DMHM) practices in selected communities. The Activity received five proposals and has completed the evaluation.

Table 23: Closed and active institutional Subcontracts and grants in Y2

Grant No.	Grantee	Grant Title	Amount (USD)	Disbursement (USD)	Status / Remarks – 30 June 2023
Grants Closed / Completed in Year 2					
G-KAT-001 FAA	International Water Management Institute	USAID Karnali Water Activity Hydrological Modeling Analysis Activity			closed
Upcoming Grant Approval					
	Diyalo Technologies Pvt. Ltd.	Development and Creation of a Municipal Level Water Supply Service Center			Under Grant Package Development
	Executive Consulting	Karnali Water Challenge			Under Grant

	Engineering and Planner Pvt. Ltd.				Package Development
	WindPower Nepal Pvt. Ltd.	Water-efficient Fodder production technology to enhance livelihood of climate vulnerable communities			Under Grant Package Development
		Social Behavior Change Campaign Challenge Grant			Under Concept Review

I. CHALLENGES AND PROPOSED REMEDIES

PROBLEMS ENCOUNTERED AND PROPOSED REMEDIAL ACTIONS	
CHALLENGE	PROPOSED REMEDIES
The initial cost estimates for WSS scheme construction, which were based on comprehensive feasibility studies of 135 WSS schemes in Y2. Based on the feasibility study, the unit cost was estimated [REDACTED] per WSS. However, the Activity allocated the lower unit cost of [REDACTED] for each scheme. Due to inflation and difficult geography of Karnali, there could be challenge in meeting all the construction standards and completion of construction in Y3.	To address this, the WSS schemes size and HH coverage might need to be reduced to align with available budget. The Activity has established a collaboration with the LGs and secured funding through their annual planning via the municipal assembly. The LGs has made a commitment to allocate the necessary budget to address this deficit.
Because of their limited capacity, the Subcontractors/vendors have delayed and submitted poor quality work and associated reports. As a result, for the quality of the work and report, the activity technical team had to devote more time and energy to mobilizing the Subcontractors' staffs, on-site coaching, and document finalization.	The large Subcontracts were divided into a number of Subcontracts and onboarded separate Subcontractors for each of them to onboard a specific skilled Subcontractor. Furthermore, the activity will maintain its technical guidance, regular follow-ups, and close collaboration with vendors to capacitate them.
DBA and performance bank guarantees for Subcontractors for the construction activity is mandatory. It has been a challenge because of the bank's reluctance to issues loan/performance guarantees to Subcontractor-NGOs due to the lack of clarity on the legal provisions of NGO's eligibility to take loan/perform business and high-risk factor.	This has been shared to HO team and the Activity is planning to seek a waiver for financial guarantees for construction. Regarding DBA, the DAI HO team will facilitate the payment for the DBA insurance directly to the vendor as DAI has done in the past as the banks in Nepal are reluctant to transfer outside the country due to changes in the policy of Nepal Rastra Bank.
The consideration of environmental aspects in development projects, especially for small-scale	The Activity has prepared an Environmental review report for each water supply scheme. The objective is

PROBLEMS ENCOUNTERED AND PROPOSED REMEDIAL ACTIONS	
CHALLENGE	PROPOSED REMEDIES
<p>constructions, shows less concern from local governments.</p>	<p>to mitigate any minor or moderate environmental impacts arising from the construction of small-scale water supply projects involving local governments (LGs) in each of the Activity's activities. This approach will serve as a learning opportunity for LGs and the possibility to replicate the environmental assessment in their own small scale construction activities.</p>
<p>While CSPs usually prioritize sanitation planning in urban settings, the municipalities involved in the Activity are primarily located in rural areas, with only a few town centers displaying urban characteristics.</p>	<p>The CSPs prioritize demand creation and completing the FSM value chain by promoting safely managed sanitation. This approach addresses the current context and focuses on developing safe and appropriate sanitation practices from the outset. Major infrastructure interventions, such as an FSTP, are exclusively proposed for the urbanized section of the municipality. Meanwhile, on-site systems that enable local FSM at the household level have been recommended for rural and part of the peri-urban areas.</p>
<p>For construction of FSTP, most municipalities have allocated land in the local community forest. This requires acquiring legal approval from the government to construct the facility, which is typically a time-consuming process, and delays the designing and construction, provided the approval is granted.</p>	<p>The Activity will focus on allocating land outside the community forest, ensuring improved likelihood of land availability within a shorter timeframe.</p>
<p>Local government who is responsible for implementing and enforcing WASH act lacks the necessary capacity and resources.</p>	<p>The regular orientation and follow up mechanism need to be established to enhance their ability to effectively implement and enforce WASH acts. Strengthening institutional capacity and promoting inter-agency/departmental coordination can also improve in its implementation.</p>
<p>WASH acts /Bills are less likely to receive adequate political support and may be deprioritized in favor of other pressing issues. Even after an act is endorsed, its successful implementation may be hindered due to insufficient funding.</p>	<p>Building strong advocacy campaigns and raising awareness to generate political will and support.</p> <p>Local government can be supported to allocate their annual budget for WASH intervention and technical support can be provided to leverage financial support and introduce innovative approaches such as co-financing, blended finance, and public private partnerships.</p>

PROBLEMS ENCOUNTERED AND PROPOSED REMEDIAL ACTIONS	
CHALLENGE	PROPOSED REMEDIES
Lack of legal provision for the operation of OWSCs and SWMCs.	The Activity is liaising with local and provincial governments to keep appropriate provisions to legalize OWSC and SWMC.
LGs and stakeholders are not well connected in terms of water resources planning, management, and utilization because of the larger geography of the watershed coverage.	Sub-Watersheds committees were formed to enhance the participation and ownership of local stakeholders in watershed management and conservation activities. Close coordination with GoN watershed offices during formulation of IWRM plans would be beneficial for its implementation and sustainability.
Improvement in the biodiversity status within a short period of time may not increase or change as the data provided in Biodiversity and Water Source Baseline Report.	The land use land cover change and forest fragmentation will be analyzed again in Biodiversity and Water Resource Mid-term and End-line reports. In addition, the Spring Source Assessment data received in the second lot of assessment and from WUMP will be incorporated along with updating biodiversity data if it exists.
Preparation and implementation of the PES business model is very new in the Karnali River Basin area. It may cover less than the targeted area and beneficiaries.	The Activity will assess all possible ecological goods and services and identify as many as buyers and sellers as possible to prepare and implement the PES business model.
The prolonged process of hiring Short-Term Technical Assistance (STTA) or Fixed Price Purchasing Order (FPPO) creates time constraints and places pressure on the timely implementation of the assignment. As a result, the quality of deliverables and overall output of the assignment may be adversely affected.	Develop a feasible procurement plan to ensure the timely hiring of STTA/FPPO and enhance the accountability of the technical lead and procurement team to adhere to the designated timeline for implementation.

J. ANNEXES

ANNEX I: MEL INDICATORS – TARGETS VS. ACTUALS

IND. #	INDICATORS	FY 2023			LIFE OF ACTIVITY		ACTIVITIES THAT CONTRIBUTED TO INDICATORS
		TARGET	ACTUAL	%	TARGET	ACTUAL	
K-1	[HL.8.1-3] Number of people receiving improved service quality from an existing basic or safely managed drinking water service as a result of USG assistance (K-1)	-	-		-	-	As per standard PIRS dated July 2023, no progress this year under this indicator. As per the standard PIRS, a new target figure has to be set.
K-2	[HL.8.2-3] Number of people gaining access to safely managed sanitation services as a result of USG assistance (K-2)	3600	0	0%	16,200	0	Madhuwan M is in the process of land acquisition for the FSTP construction
K-3	[HL.8.5-1] Number of people benefiting from the adoption and implementation of measures to improve water resources management as a result of USG assistance (K-3)	15,000	5,393	36%	50,000	5,393	The Activity constructed 30 source protection and the numbers of people benefitting as stated in PIRS is from the 30 source protection water schemes. Less progress due to high target.
K-4	[EG.10.2-2] Number of hectares of biologically significant areas showing improved NRM as a result of USG assistance (K-4)	150	26.45	18%	500	26.45	Note: The Activity has constructed 30 source protection schemes. Low achievement against target, it may be because the total value calculated 5 hectares per source protection is ambitious
K-5	[Custom] Percent of leadership positions in USG supported community management entities that are filled by a woman or member of a vulnerable group (K-5)	50%	68%	136%	50%	68%	WUSC's leadership position is filled by 68% of women and people from marginalized communities in 49 WUSCs.

IND. #	INDICATORS	FY 2023			LIFE OF ACTIVITY		ACTIVITIES THAT CONTRIBUTED TO INDICATORS
		TARGET	ACTUAL	%	TARGET	ACTUAL	
K-6	[Custom] Percent of households experiencing water insecurity (K-6)	0	NA	NA	17%	NA	NA
K-7	HL.8.1-2 Number of people gaining access to safely managed drinking water services as a result of USG assistance	9,565	7,505	78%	70,115	7,505	(Added new indicator, after USAID DQA 2023). The target shifted from K-1 indicator to this (K-7) indicator. The number achieved from completed 46 WSS (40 DWS+6 MUS) and verified from completion report and water quality test report of all.
K-1.1	[HL.8.1-1] Number of people gaining access to basic drinking water services as a result of USG assistance (K-1.1)	375	924	246%	11,000	924	User number calculated from 2 completed rehabilitated schemes
K-1.2	[HL.8.1-4] Number of institutional settings gaining access to basic drinking water (K-1.2)	20	26	130%	60	26	WSS provided basic drinking water services to 22 schools and 4 HCF
K-1.3	[Custom] Number of Water Users and Sanitation Committees (WUSC) with Water Safety Plans approved (K-1.3)	45	35	78%	320	35	49 WUSC formed of which 35 approved their WSP, and 14 in progress.
K-1.4	[Custom] Number of Drinking Water Systems constructed or rehabilitated (K-1.4)	45	46	102%	320	46	6 WSS construction completed. Out of which 6 were MUS and 2 were rehabilitated.
K-1.5	[Custom] Percentage of targeted municipalities reporting into the national WASH M&E MIS within deadlines (K-1.5)	29	29	100%	29	29	29 Municipalities have incorporated WUMP data in N-WASH as an integral part of WUMP formulation process
K-1.6	[Custom] Number of water supply systems with improvement in operational cost recovery for water services (K-1.6)	0	NA	NA	200	NA	NA
K-1.7	[EG.3.2-25] Number of hectares under improved management practices or technologies with USG assistance (K-1.7)	7	2.56	37%	75	2.56	6 MUS provide micro-irrigation to 2.56 hectares

IND. #	INDICATORS	FY 2023			LIFE OF ACTIVITY		ACTIVITIES THAT CONTRIBUTED TO INDICATORS
		TARGET	ACTUAL	%	TARGET	ACTUAL	
K-1.8	[EG.3.2-24] Number of individuals in the agriculture system who have applied improved management practices or technologies with USG assistance(K-1.8)	625	0	0%	6,250	0	Note: MEL team will develop a tool to measure individuals who received training on home gardening, and will be reported in Y3
K-1.9	[Custom] Percent of households stating they perform water saving practices (K-1.9)	0	NA	NA	97%	NA	NA
K-1.10	[Custom] Number of Water Users and Sanitation Committees (WUSC) receiving support to manage sustainable O&M of WSS (K-1.10)	45	49	109%	320	49	49 WUSCs have received training on O&M. Out of which 41 have established O&M fund.
K-2.1	[Custom] Number of city-wide sanitation plans developed (K-2.1)	5	7	140%	12	7	CSP for Thakurbaba, Rajapur, Lamkichuha, Dullu, Aathabis, Khandachakra and Madhuwan Municipalities were completed.
K-2.2	[Custom] Number of FSTPs constructed (K-2.2)	1	0	0%	6	0	The construction of FSTP in Madhuwan was initiated for the land acquisition
K-2.3	[Custom] Number of FSTPs with SOPs and O&M plan in place (K-2.3)	2	0	0%	6	0	With the start of FSTP construction work, SOPs and O&M plan will be developed
K-2.4	[Custom] Number of business plans developed for FSTPs (K-2.4)	2	2	100%	10	2	FSTP business plans for Madhuwan and Rajapur Municipalities were developed
K-3.1	[EG.10.2-5] Number of laws, policies, or regulations that address biodiversity conservation and/or other environmental themes officially proposed, adopted, or implemented as a result of USG assistance (K-3.1)	9	14	156%	30	14	1 provincial WASH Bill was proposed, and 13 LG Bills were adopted and implemented in Y2. In Y1, the Bills of Aathabis and Turmakhand were proposed, and progress was adopted in Y2.

IND. #	INDICATORS	FY 2023			LIFE OF ACTIVITY		ACTIVITIES THAT CONTRIBUTED TO INDICATORS	
		TARGET	ACTUAL	%	TARGET	ACTUAL		
K-3.2	[HL.8.3-3] Number of water and sanitation sector institutions strengthened to manage water resources or improve water supply and sanitation services as a result of USG assistance (K-3.2)	0	NA	NA	23	NA	NA	
K-3.3	[Custom] Number of Water Use Master Plans (WUMPs) developed (K-3.3)	29	29	100%	29	29	29 WUMPs report developed in Y2. Out of 29, 12 were endorsed by the LGs.	
K-4.1	[EG.11-2] Number of institutions with improved capacity to assess or address climate change risks supported by USG assistance (K-4.1)	0	NA	NA	23	NA	NA	
K-4.2	[EG.10.2-4] Number of people trained in sustainable natural resources management and/or biodiversity conservation as a result of USG assistance (K-4.2)	180	527	293%	1,280	527	527 people were trained on 'Source Protection and Biodiversity Conservation' conducted in Y2.	
K-4.3	[Custom] Number of green infrastructure projects constructed to protect water sources (K-4.3)	30	30	100%	100	30	30 spring source schemes have constructed in Y2	
K-4.4	[Custom] Number of PES business plans developed (K-4.4)	0	NA	NA	3	NA	NA	
K-CC.1	[HL.8.4-1] Value of new funding mobilized to the water and sanitation sectors as a result of USG assistance (K-CC.1)							New funding mobilized from 6 LGs and community contribution both n kind.

IND. #	INDICATORS	FY 2023			LIFE OF ACTIVITY		ACTIVITIES THAT CONTRIBUTED TO INDICATORS
		TARGET	ACTUAL	%	TARGET	ACTUAL	
K-CC.2	[Custom] Number of WASH infrastructure assets with insurance for potential infrastructure damage (K-CC.2)	30	0	0%	90	0	Sub-contractors had initiated process for WSS scheme insurance
K-CC.3	[Custom] Number of business plans that gain private sector investment (K-CC.3)	0	NA	NA	6	NA	NA
K-CC.4	[CLBD-9] Percent of USG-assisted organizations with improved performance (K-CC.4)	0	NA	NA	80%	NA	NA
K-CC.5	[STIR-10] Number of innovations supported through USG assistance (K-CC.5)	TBD	0	0%	TBD	0	The contracting process is ongoing with 2 innovation ideas under Karnali Water Challenge. Out of which, one is at the final stage of contracting. While 1 innovation under SBC challenge grant is in the selection process.

ANNEX 2: Q4 MAJOR ACTIVITIES PLANNED VS ACHIEVED

The USAID Karnali Water Activity planned the following activities, by objective and operational area in Q4/Y2:

PLANNED	ACHIEVED
OBJECTIVE I - INCREASED SUSTAINABLE ACCESS TO SAFE DRINKING WATER AND WATER FOR PRODUCTIVE USES	
Completion of the schemes	Forty-six WSS schemes were completed, comprised of 6 MUS schemes and 40 DWS schemes including one solar lifting system. Currently the final construction of 18 WSS schemes (1 MUS and 17 DWS) are ongoing
Major infrastructure and transmission pipeline	The Activity has completed the construction of 1,902 major infrastructure components, including intakes, reservoir tanks (RVTs), collection chambers (CCs), distribution chambers (DCs), and tap stands. Additionally, 74.952 kilometers of transmission pipeline were excavated and refilled, and 116 kilometers of distribution pipelines were laid
Access to clean drinking water	7,505 people, of which 33 percent were <i>Dalit</i> and nine percent <i>Janajati</i> , received safely managed water services at their house yard from completion of new 44 WSS schemes. Furthermore, six MUS schemes provided access to micro-irrigation systems to 125 HHs and their 2.56 hectares of agricultural land and the kitchen gardening
Establishment and registration of WUSC	Established and registered 49 WUSCs in 6 LGs and oriented them on WUSC management, WSS construction and sustainability, GESI considerations, and the Activity working approach and procedures.
Collaboration with the local government	Influenced and collaborated with six LGs and received the resource leverage of ██████████ (██████████) for 64 schemes in Y2. Similarly, the community contributed a 20 percent in-kind donation, with equivalent value of ██████████ for the construction of the 46 WSS schemes. Furthermore, 41 WUSCs raised the O&M fund of ██████████.
Capacity assessment and development of LG	Institutional Capacity Assessment (ICA) was rolled out in 29 LGs and finalized the assessments in 29 LGs. Also, Capacity Development (CD) Plan of 18 LGs are completed.

PLANNED	ACHIEVED
Capacity development of the community	19,938 people, mainly WUSC, LGs and local stakeholders, were trained and oriented through 694 capacity building trainings and events. Out of which, 51 percent female, 31 percent <i>Dalits</i> , and 11 percent <i>Janajati</i> were trained. Likewise, 78 community members were trained on Village Maintenance Worker (VMW) for WSS schemes. Out of which 33 percent were female, 33 percent <i>Dalits</i> and 17 percent <i>Janajati</i> .
The Karnali Water Challenge	The Karnali Water Challenge was launched to mark World Water Day on March 22, 2023. Three finalists pitched their innovative solutions to the panelist consisting of representatives from USAID, Ministry of Water Supply/ DWSSM, MOWRED and the Activity. The Activity is in the process of awarding the grant. Similarly, SBC Campaign Challenge Grant was announced, and the selection process of the finalist is ongoing.
Finalize SBC Strategy	SBC Strategy was formulated based on key findings of the formative research and capacity mapping of local stakeholders. The team, including home office STTA, reviewed reports, consulted with government officials, stakeholders, and USAID-funded project teams, and conducted field visits.
Develop SBC messages, produce SBC content and expedite SBC campaign	Conducted SBC message development workshops to address behavioral barriers in four Watersheds. The Activity used the Human-Centered Design approach, involving communities and stakeholders to draft critical and GESI-sensitive messages. A total of 13 workshops and meetings were attended by 260 individuals with 62% female participants. The PSA scripts have been developed and sent to USAID for their review. Once the script is finalized, the PSAs will be recorded and broadcast.
Develop SBC capacity building training package and organize event for local resource partners, media partners and journalists, champions, and community influencers	As part of the SBC strategy and the objective to enhance local capacities, the Activity conducted a two-day SBC Capacity Development Orientation designed for local journalists. The training was attended by 27 local and national level journalists in Surkhet. The aim of this activity was to empower local journalists and enable them to effectively communicate key messages and success stories to motivate behavioral change within the targeted Watersheds.

PLANNED	ACHIEVED
Conducted SBC Orientation and Demonstration	Engaged construction Sub-contractors to organize orientation and demonstration activities in the WUSC communities. They also interacted with peripheral communities and schools to address issues and promote behavioral messages through group exercise and games. Organized events marking important days such as World Water Day, World Environment Day, World Biodiversity Day, 16 Days of Activism Against Gender-Based Violence, International Women's Day, and MHM Day. 23 activities focused on orientation and demonstrations, while 55 activities were dedicated to special day celebrations.
RFP and launch SBC challenge through grant fund	Announced an RFP for innovative ideas to support the SBC campaign. The RFP targets local organizations and focuses on three themes: water conservation practices for homes, water-saving practices for farmer cooperatives, and dignified menstrual hygiene management. The grants aim to create a pathway for Water Champion communities, particularly in the Rara, Tila, and Middle Karnali Watersheds.
OBJECTIVE 2 – INCREASED SUSTAINABLE ACCESS TO AND USE OF SANITATION THROUGH FSM	
Prepare CSP reports in 7 municipalities	7 CSPs prepared in Thakurbaba and Rajapur, which were carried over from Year 1, and in Madhuwan, Lamkichuha, Dullu, Aathabis and Khandachakra, which were the Year 2 targets.
Prepare business plans for FSTPs in 2 municipalities	Business plans prepared for Rajapur and Madhuwan municipality.
Design and construct 1 FSTP	This activity could not be achieved in Year 2. The process of rehabilitation of Madhuwan FSTP was delayed due to the necessary legal process required by the municipality to legally use the forest land for FSTP construction with a formal approval from the federal government. Hence, this activity has been postponed to Year 3.
OBJECTIVE 3 - STRENGTHENED GOVERNANCE FOR SUSTAINABLE RESILIENT MANAGEMENT OF WATER RESOURCES	

PLANNED	ACHIEVED
Support Provincial Ministry to draft and develop WASH Bill	The outline of the WASH Bill was drafted and shared with the Provincial Bill drafting committee. Based on the agreed outline, a Provincial Wash Bill for Karnali Province was drafted and shared. The internal review within Provincial Ministry is ongoing. The progress regarding WASH Bill was shared with Honorable Minister Urmila Bishwakarma, Ministry of water resources and energy development.
Support LGs to constitute municipal committees to support the development of WASH Bill	Supported Kamal Bazar Municipality and Chaukune Rural Municipality to form WASH bill drafting municipal committees to support in drafting and developing WASH Bill.
Review WSS, FSM, WRM and NRM related policies and plans based on the policy gap analysis	Reviewed two LGs' (Chaukune) Water Resource Management (WRM) and Natural Resource Management (NRM) resource related policies and laws.
Develop outline for DWS Bill and share with municipal committees	Developed outline of two LGs (Kamal Bazar, Chaukune) WASH Bill and shared with them and feedback was incorporated, and Bill was drafted on agreed content.
WASH Bills proposed, and endorsed	Altogether five WASH Bills were drafted, reviewed, and proposed, after the feedback and suggestions from wider stakeholders were incorporated. Out of five proposed WASH Bills, three Bills are endorsed and two are on the verge of getting endorsed.
Water Use Master Plans	Out of 14 (Batch I) WUMPs, 8 WUMP reports endorsed by respective LGs, namely Chhayanath Rara, Soru, Kamal Bazar, Ramaroshan, Bhairabi, Khyatyad and Madhuwan. Tila and Tilagufa reports were being finalized.
OBJECTIVE 4 - STRENGTHENED CONSERVATION OF WATER-RELATED WATERSHED BIODIVERSITY	
Develop integrated business models including PES modalities	The Karnali Water Activity onboarded two international STTAs for developing business models including PES modalities. The Activity has developed a PES site selection scorecard and assessment criteria in Y2. The consultation with stakeholders and assessment were completed in 11 sites. The most suitable three sites have been selected for the PES model.

PLANNED	ACHIEVED
Spring Sources Assessment (SSA)	Spring Source Assessments were conducted in two packages. The second package of Spring Source Assessment was conducted during May-July 2023. Two vendors, one is HIRYSDEC and the other MRDF/YAE, assessed 3,719 springs to date.
Conduct and finalize SWAT models and water accounting+ (WA+) for 4 Watersheds	The Hydrological Modeling Analysis Activity was completed in all Watersheds by International Water Management Institute (IWMI). The model presented annual spatial distribution and volume of water balance. The report included an analysis of water balance and its availability in the areas of municipalities in the watershed boundary.
Develop Water Source and Biodiversity Baseline	Based on the Hydrological Modeling Analysis Activity conducted by IWMI, Spring Source Assessment conducted by ISET Nepal in the first package during May-July 2022, and HIRYSDEC and MRDF in the second package during May-July 2023, and other secondary information from governmental reports and research papers; Karnali Water Activity have developed Biodiversity and Water Resources Baseline Report.
Training on Source Protection and Watershed Conservation to the members of WUSCs and SWMCs	Training on Source Protection and Watershed Conservation was completed for all WUSCs. The participants were members of WUSCs and SWMCs. The training was conducted at the respective location of WUSC where drinking water supply schemes have been constructed. Source protection techniques to manage water quality and continuous availability of water quantity were discussed with the participants. The role of SWMC and WUSC was also discussed.
Prepare Source Protection Guidelines	The final draft of the Water Source Protection Guideline was submitted to the home office for further review and action. A STTA was hired to develop the guideline in March 2023.
Design and construct 30 spring sources protection schemes	30 spring sources protection schemes were implemented by aligning with activity 1.1.2 (Task 1.1.2.6 Initiate, supervise, and complete construction). Details of the activity and location are presented under activity 1.1.2.

PLANNED	ACHIEVED
MONITORING, EVALUATION, RESEARCH AND LEARNING	
Conduct Annual Pause and Reflection and Year 3 planning workshop	The SOW and agendas of Annual Pause and Reflection and Year 3 planning workshop were finalized and planned for the month of May. However due to the priority of completion of WSS construction before monsoon, the event is planned to be held in August 2023.
Conduct Internal Data Quality Assessment (DQA)	The SOW for internal DQA was finalized. Ten performance indicators were selected for the field level DQA. The Activity staff were oriented on DQA process, methods and tools, and the field assessment plan. MEL teams were oriented and engaged in the finalization of tools and field plan. The developed tools were pre-tested in Odal Todke and Khariyapaani WSS and revised accordingly. DQA is ongoing at the Watershed level.
Finalize the Environment Compliance and Infrastructure Monitoring Checklist and deploy	The Environment Compliance Monitoring Checklist was drafted and reviewed. A detailed survey checklist was prepared and finalized. Additionally, a short checklist was prepared and circulated among the Watershed office to update and track the environmental compliance of WSS.
Maintain and update the Activity's Dashboard	Discussed the frame and content of PowerBI Dashboard with Home Office. Based on the preliminary dashboards established, the Activity will discuss among the team to come up with basic framework for the dashboard to inform program decision at Watershed, regional and central levels.
Update quarterly Political Economic Analysis (PEA)	For Annual Report Y2, PEA tracker was reviewed and updated by the Watershed teams.
GESI	
Develop a monitoring checklist to ensure the GESI action plan is well executed and monitor the field-level activities	GESI Monitoring Checklist was finalized and used for monitoring. By using this checklist, the team monitored seven WUSCs and Schemes. The GESI Monitoring Checklist is important for keeping track of continuing activities from the GESI lens, confirming that the guiding GESI principles were used throughout implementation, and making sure the GESI action

PLANNED	ACHIEVED
	plan is properly executed. The GESI team visited communities and monitored the WUMP planning process, scheme construction, GESI-related activities, VMW training, and WASH Bill formulation of Karnali Province, and provided inputs.
Develop training and orientation modules for GESI-related training/orientations and ensure quality implementation through mentoring to Subcontractors and the Watershed team	Developed the training modules for five trainings namely i) Advocacy and interaction with GESI and WASH unit of LG ii) Training to WUSC on engaging men and boys, iii) GESI orientation with MHM management and safeguarding iv) GESI Training, and v) Entrepreneurship Development Training. Ensured implementation of 105 GESI-related training and orientations for WUSC members: 6 GESI trainings, 3 entrepreneurship development trainings, 45 menstrual hygiene trainings, 6 advocacy trainings, and 45 engaging men and boys' trainings.
Provide input on the WSS surveys for Y3 Schemes.	GESI input was provided on the WSS Detail Engineering Survey form for Y3 Schemes
Update GESI Action Plan for year three	Updated and Submitted GESI Action Plan for Year 3
GESI integration in the N-WASH system (collaboration with DWSS)	Collaborated with DWSS and Submitted GESI-related parameters that need to be included in the N-WASH system
Collaboration among USAID GESI working group members	Collaborated regularly with USAID GESI Working Group meetings to strengthen Working Group Collaboration, Learning, and Adaptation (CLA), and to advance GESI through USAID-supported programs.
GESI orientation to the consultants for preparing new WUMPs	Provided GESI and safeguarding orientation to the Sub-contractors and vendors to conduct WUMPs, and VMW training
GESI package development for the WUMP planning process.	Supported service providers to develop the GESI package for the confidence-building workshop for the WUMP planning process.

PLANNED	ACHIEVED
<p>Compile the individual learning report of FGD with Sanitation Workers and share the findings with all.</p>	<p>Learning report of the FGD with sanitation workers at five municipalities developed and the findings incorporated in the Sanitation Situation Assessment (CSP) and the recommendations incorporated in the CSPs.</p> <p>Developed a checklist to track the income generated by GESI target groups from ongoing scheme construction of the Activity. The Activity will track how the women and underprivileged communities benefited in Year 3 from the construction work.</p>
<p>Review of the CSP, and WUMP, and other documents</p>	<p>Reviewed CSP of Thakurbaba, Rajapur, Madhuwan, Aathabis, Khandachakra, Lamkichuha, and Dullu and provided inputs from the GESI perspective. In addition, the GESI perspective has been included in the summary WUMP reports and MUS Business Plan. Reviewed the program description of the Grantee of the Water Challenge Fund, SBC Challenge Fund, WASH Bills at provincial and municipal level.</p>
<p>Sensitization to the journalists</p>	<p>Sensitize journalists on the role of media in story collection and reporting with GESI-sensitivity. The discussion focused on challenging gender inequalities and exclusion to contribute to gender equality in society and social inclusion.</p>
OPERATIONS	
<p>Complete recruitment of new positions and fill in the resigned/vacant positions as soon as possible</p>	<p>During Q4 of Year 2, 10 new staff were onboarded while three have resigned. As of end of July, four positions were still being filled: Director of Operations, Grants and Procurement Coordinator, Monitoring and Evaluation Coordinator, and Finance Assistant.</p>
<p>Follow up on the VAT refund amounting [REDACTED] from the Inland Revenue Office for the period July to December end 2022.</p>	<p>VAT refund amounting to [REDACTED] received from Inland Revenue Office.</p>
<p>Process VAT refund for the period January to March 2023 by mid-April 2023.</p>	<p>VAT refund amounting to [REDACTED] for the period January to March 2023 received from Inland Revenue Office</p>

PLANNED	ACHIEVED
Finalize and award the vendors for the Solar and Electrical Pumping Systems in Western Nepal by early April 2023.	Suryodaya Urja Pvt Ltd was awarded the “Supply, Delivery, Installation, Testing and Commissioning of Solar and Electrical Pumping Systems” contract on April 30, 2023.
Finalize the vendors and award two contracts for Water and Spring Sources Validation/Assessment in 13 Rural/Municipalities by early April.	Two vendors, Himali Rural Youth Social Development Center (HIRYSDEC) and Mountain Research and Development Foundation Pvt Ltd (MRDF) were awarded the contract for Water and Spring Source Validation/Assessment in 13 Rural Municipalities. MRDF has been assigned to work on seven local governments (LGs) at Lower and Middle Karnali Watershed while HIRYSDEC was awarded the contract for six LGs at Rara and Tila Watersheds.
Finalize the vendor and award contract for Developing Detail Design and Detail Project Report (DPR) Services for drinking water systems, multiple-use water systems, and source protection systems by end of April 2023.	The Activity issued a Request for Proposal (RFP) for Architectural and Engineering Design Services in March 2023. However, due to a lack of clarity in the RFP requirements that resulted in inconsistent responses to the solicitation, the RFP was cancelled. A more complete and finetuned RFP on the same services was issued in June and awards were made by end of July 2023.
Conduct the evaluation of applications for Karnali Water Challenge by end of April 2023.	<p>Karnali Water Activity’s Project Steering Committee has identified three innovative concepts for potential funding under the Karnali Water Challenge grant. These are:</p> <ol style="list-style-type: none"> 1) Water-efficient fodder production technology to enhance livelihood of climate vulnerable communities – Windpower Nepal 2) Application of floating wetlands for wastewater treatment - Executive Engineering Consulting and Planner Pvt. Ltd. 3) Establishment of Municipal Water Supply and Sanitation Service Center - Diyalo Technologies Pvt. Ltd. <p>Windpower Nepal’s proposal has been finalized while the other two concepts are under co-development with Karnali Water Activity.</p>

PLANNED	ACHIEVED
Finalize the procurement process and award the contract for Consultancy Service for conducting TOT and Training Events for The Local Governments (LGs) And Village Maintenance Workers (VMWs) by mid-May 2023.	In May 2023, Signature Engineering Pvt Ltd was awarded the consultancy contract to conduct training events for the local governments (LGs)/ civil servants and OWSC members. The award for the training of VMWs of the WUSCs, however, was not released to a third-party service provider as the Activity decided to have the KWA staff do the trainings themselves.
Conduct Annual Pause & Reflect and Year-3 AWP Workshop at Kathmandu tentatively on 2nd week of May 2023	The Pause and Reflect workshop has been moved to August 23-25, 2023 and will be held in Thakurbaba Municipality, Bardiya.

ANNEX 3: LIST OF COMPLETED AND ONGOING WSS SCHEMES IN Y2

List of completed 46 WSS schemes, HH and user coverage

SN	Name of Scheme	District	Municipality	Ward No	HH	Users	Status
1	Barma WSS	Kalikot	Khandracharka M	5	19	131	Completed
2	Gorse khola WSS	Kalikot	Khandracharka M	6	37	263	Completed
3	Matela Upper WSS	Kalikot	Khandracharka M	5	62	447	Completed
4	Matela Lower WSS	Kalikot	Khandracharka M	5	102	609	Completed
5	Utiseni WSS	Kalikot	Khandracharka M	3	13	90	Completed
6	Siradi Pallogalli khola WSS	Kalikot	Khandracharka M	4	31	219	Completed
7	Chuli Aarumul WSS (Rehabilitation)	Kalikot	Khandracharka M	8	21	138	Completed
8	Maina sujeda WSS (I)	Achham	Turmakhand RM	1	40	220	Completed
9	Maina sujeda WSS (II)	Achham	Turmakhand RM	1	24	148	Completed
10	Jukepani palanga lode WSS	Achham	Turmakhand RM	3	50	262	Completed
11	Jungleghat WSS	Achham	Turmakhand RM	4	12	63	Completed
12	Dagade WSS (I)	Achham	Turmakhand RM	4	14	103	Completed
13	Dagade WSS (II)	Achham	Turmakhand RM	4	19	116	Completed
14	Mathillo Khorke Khola MUS (I)	Achham	Turmakhand RM	2	7	24	Completed

15	Mathillo Khorke Khola (II)	Achham	Turmakhand RM	2	41	336	Completed
16	Katmeli pagarpani WSS	Achham	Turmakhand RM	8	64	484	Completed
17	Dhamkot WSS (I)	Kailali	Mohanyal RM	5	4	17	Completed
18	Dhamkot WSS (II)	Kailali	Mohanyal RM	5	25	203	Completed
19	Kausadi WSS	Kailali	Mohanyal RM	1	7	46	Completed
20	Saghure Barjena WSS	Kailali	Mohanyal RM	3	16	111	Completed
21	Kainpani WSS (I)	Kailali	Mohanyal RM	5	21	108	Completed
22	Kainpani WSS (II)	Kailali	Mohanyal RM	5	9	50	Completed
23	Simalrukh WSS (I)	Kailali	Mohanyal RM	2	24	124	Completed
24	Simalrukh WSS (II)	Kailali	Mohanyal RM	2	3	17	Completed
25	Simalrukh WSS (III)	Kailali	Mohanyal RM	2	3	17	Completed
26	Khamagote WSS (MUS)	Mugu	Chhayanath Rara M	4	20	124	Completed
27	Maathi Kalapalta WSS (I)	Mugu	Chhayanath Rara M	4	18	125	Completed
28	Maathi Kalapalta WSS (II)	Mugu	Chhayanath Rara M	4	11	74	Completed
29	Jyula WSS	Mugu	Chhayanath Rara M	10	29	168	Completed
30	Talilekh WSS (I)	Mugu	Chhayanath Rara M	10	50	288	Completed
31	Talilekh WSS (II)	Mugu	Chhayanath Rara M	10	18	114	Completed

32	Murma WSS	Mugu	Chhayanath Rara M	9	70	395	Completed
33	Gadapani WSS	Mugu	Chhayanath Rara M	10	48	250	Completed
34	Shreenagar Bushpark WSS (Rehab)	Mugu	Chayanath Rara M	1	132	786	Completed
35	Khyalcha WSS	Mugu	Soru RM	7	46	243	Completed
36	Sugurkhal Dekhi Tanja Suina WSS	Mugu	Soru RM	5	43	249	Completed
37	Nuwakot Gila WSS (I)	Mugu	Soru RM	8	27	169	Completed
38	Nuwakot Gila WSS (II)	Mugu	Soru RM	8	29	175	Completed
39	Radhekhola to Rawalwada School WSS	Mugu	Soru RM	4	84	479	Completed
40	Kariyapani WSS- MUS (Lift)	Surkhet	Barahatal RM	5	22	126	Completed
41	Kariyapani WSS (Gravity)	Surkhet	Barahatal RM	5	13	56	Completed
42	Odal Todke WSS (I)	Surkhet	Barahatal RM	6	5	44	Completed
43	Odal Todke WSS (MUS-II)	Surkhet	Barahatal RM	6	8	62	Completed
44	Karange WSS (I)	Surkhet	Barahatal RM	5	3	17	Completed
45	Sisneri WSS (Lifting)	Surkhet	Barahatal RM	2	19	104	Completed
46	Bhotedhara WSS	Surkhet	Barahatal RM	1	5	35	Completed

List of ongoing 18 WSS schemes

SN	Name of Scheme	District	Municipality	Ward No	Status
1	Majarpakha WSS (Rehab)	Kalikot	Khandachakra M	7	Ongoing
2	Rauta Dhanedi WSS (Rehab)	Kalikot	Khandachakra M	2	Ongoing
3	Chuli Aarumula WSS (Rehab)	Kalikot	Khandachakra M	8	Ongoing
4	Chaura Kalikot WSS (Rehab)	Kalikot	Khandachakra M	1	Ongoing
5	Kalikhola WSS	Achham	Turmakhand RM	7	Ongoing
6	Thapla Nigalpani obiko WSS	Achham	Turmakhand RM	8	Ongoing
7	Bijulekh chanu jalwayu solar lift WSS	Achham	Turmakhand RM	3	Ongoing
8	Shantipur WSS	Kailali	Mohanyal RM	4	Ongoing
9	Naulakot WSS (MUS)	Kailali	Mohanyal RM	7	Ongoing
10	Aanshidhara WSS (Rehab)	Mugu	Soru RM	8	Ongoing
11	Bumcha WSS (Rehab)	Mugu	Soru RM	8	Ongoing
12	Karange WSS (Lifting)	Surkhet	Barahatal RM	5	Ongoing
13	Karange WSS (II)	Surkhet	Barahatal RM	5	Ongoing
14	Dharapani Udhokhola WSS (Bojho)	Surkhet	Barahatal RM	9	Ongoing
15	Pokharikanda Dhankuti WSS (Lifting)	Surkhet	Barahatal RM	7	Ongoing
16	Kapase Chulidanda WSS (lifting) Maintenance	Surkhet	Barahatal RM	8	Ongoing
17	Bhotedhara WSS (Lifting)	Surkhet	Barahatal RM	1	Ongoing
18	Dopka WSS (Lifting)	Surkhet	Barahatal RM	2	Ongoing

ANNEX 4: TESTIMONIES FROM THE FIELD

A. ██████: BRINGING HOPE AND WATER TO THE COMMUNITY



Photo: ██████ stands in front of the water reserve tank.

██████, a compassionate member of the Dageda community, has become a true beacon of hope for his village. Despite his own economic hardships and his occupation as a traditional *Shaman*, ██████'s act of generosity has touched the lives of many. Amid the community's challenges, he has displayed unwavering dedication to their welfare, providing his land free of cost for the construction of a Reserve Water Tank. Speaking about his decision, ██████ said, "I couldn't stand by and watch my fellow community members suffer without access to clean drinking water. It was my duty as a member of this community to contribute in any way I could."

Dageda, located in Achham district of *Sudurpaschim* province, is primarily inhabited by the *Dalit* community, who have long endured social and economic marginalization due to the rigid caste hierarchy. With a reliance on agriculture, livestock rearing, and limited foreign employment opportunities, the community faces significant economic hardships. ██████ recognized the dire need for access to water and took it upon himself to make a difference.

██████'s wife, ██████, joined him in his mission. ██████ stated, "Water is a necessity of life, and

every individual deserves access to it. We couldn't bear to see our community suffer, so we decided to take action together." Their united commitment to the welfare of the community fostered a shared vision for a better future. By contributing his land, ██████ made the construction of a water storage tank possible, ensuring a reliable and accessible water supply for the households of Dageda.

Reflecting on the project's success, ██████ expressed his gratitude, saying, "It brings me a joy to witness the positive impact our efforts have had on our community. I am proud to have played a part in making this right a reality for our people." Thanks to the support received from USAID Karnali Water Activity, 34 families in Dageda now have private water taps.

With gratitude in his voice, ██████ expressed the community's excitement, saying, "The water scheme constructed by USAID Karnali Water Activity has brought joy and relief to our village. Each family having its own private water tap is truly a blessing. However, we must also focus on empowering our community with other opportunities. We long for programs that can provide us with the skills to cultivate agricultural products and raise livestock. If there are training opportunities in plumbing or masonry, we can ensure the maintenance and repair of our taps, becoming self-sustainable in the process."

██████'s selflessness, compassion, and unwavering dedication have not only provided clean drinking water to the Dageda community but have also ignited a spark of hope for a brighter future. His story serves as solid evidence to the power of kindness and the impact one individual can make in transforming a community.

B. RISING ABOVE: [REDACTED] JOURNEY OF DETERMINATION



Photo: [REDACTED] taking a water bucket in her hand and walking alongside the roads from one destination to another during spring water source measurement.

When we first met [REDACTED], a 27-year-old woman with a determined spirit, she was out in the hilly areas of Ramaroshan Rural Municipality, Achham, measuring spring water sources. Despite facing the challenges of navigating the rugged terrain, [REDACTED] remained steadfast in her commitment to pursue education and engage in social work. What made [REDACTED] even more remarkable was her unwavering determination despite facing a physical disability that she acquired by birth.

"I believe that education is the key to empowerment," [REDACTED] shared with us, her eyes filled with conviction. "No matter the obstacles, I was determined to complete my bachelor's degree and make a difference in my community."

[REDACTED] journey had not been an easy one. She hailed from an economically poor family with six children, making it a financial struggle for her parents to afford her education. However, [REDACTED] determination knew no bounds. After completing her intermediate level studies, she seized the opportunity to work as a Health Insurance Agent, all while continuing her education. This job not only allowed her to sustain her studies but also opened doors for her future.

Her dedication and hard work caught the attention of none other than the Chairperson of Ramaroshan Rural Municipality. Impressed by [REDACTED] resilience and capabilities, the Chairperson appointed her as a social scientist with the responsibility of measuring water sources in the region.

As part of the USAID Karnali Water Activity team, [REDACTED], along with three other colleagues, embarked on the task of collecting data on 300 water sources in Ramaroshan. Already, she had completed the survey of 108 water sources, each one adding to her sense of fulfillment. "With every challenge I faced, I saw an opportunity for growth and learning," [REDACTED] shared with a smile. Her positivity and determination shone through her words as she described her journey.

[REDACTED] story is one of resilience, determination, and the unwavering belief that education can pave the way for empowerment. Despite the odds stacked against her, she had proven that with hard work and the right opportunities, one can overcome any obstacle. Through her work in the water activity project, [REDACTED] is not only measuring water sources but also measuring the strength of her own spirit and inspiring those around her.

C. A DETERMINED JOURNEY: [REDACTED] STORY



Photo: In the center of the image, [REDACTED] measures the slab using a tape measure during a practical session of village maintenance workers' training in Mugu

In the remote village of Tallekh in Mugu district, nestled in the Karnali province of Nepal, lives [REDACTED] a 44-year-old woman with a strong thirst for knowledge. She belongs to a joint family of 14 members, and her husband works as a farmer, often spending long hours tending to their fields. Despite her duties as a housewife, [REDACTED] found time to contribute to the development of her community, actively participating in local-level decision-making processes.

When the USAID Karnali Water Activity initiated a water supply scheme construction project in her village, [REDACTED] saw an opportunity to make a difference and earn some additional income to support her family's livelihood. Although she had no prior experience or knowledge in water supply systems, [REDACTED] was eager to be part of the project. In the beginning, [REDACTED] husband, who had some understanding of water supply system maintenance, was preoccupied with caring for their cattle and agricultural land. Nonetheless, he recognized [REDACTED] determination and, along with other community members, encouraged her to participate in the 14-day village maintenance workers training.

During the training, [REDACTED] was like a sponge, absorbing all the knowledge and skills shared by the trainers. Despite not having much formal education, her curiosity and dedication to learning were boundless. [REDACTED] actively engaged in practical sessions, group

work, and presentations, striving to understand the technical aspects of water resource management. "I was determined to learn and remember everything I could from the training. Water is essential for our community, and I wanted to be part of ensuring its sustainability," [REDACTED] shared her experience.

Upon completing the training, [REDACTED] emerged as an inspiration to other women in her community. She proved that age, gender, or marginality were not barriers to acquiring new skills and bringing about positive change. "I want to share what I've learned with others in the community. Clean water is essential for all of us, and I am committed to making sure our water supply scheme functions well and remains sustainable," [REDACTED] expressed.

Before the water supply scheme, villagers had to walk for hours to fetch water. [REDACTED] recalled, "Before, it used to take three-four hours, and now it's just a matter of 5-10 minutes to fetch water. We are so happy that we can now save our time and utilize it for other livelihood activities. [REDACTED] dedication and commitment to the water supply scheme brought a positive transformation to her village. With her active involvement, the community's water infrastructure improved significantly, benefiting all its residents.

D. COLLABORATIVE EFFORTS FOR IMPROVED WATER SYSTEM



Photo: An interaction meeting ongoing with the Water Users Sanitation Committee and the community at Uttiseni

Promoting community engagement and effective water management, an interactive meeting was recently conducted at the Uttiseni Water Supply Scheme in Khadachakra Municipality, Kalikot. This meeting marked a significant milestone in sustainable water resource management, as it brought together the Water Users Sanitation Committee (WUSC) and the local community. [REDACTED], the esteemed chairperson of the WUSC, presided over the meeting, demonstrating her dedication to addressing the community's water-related challenges. Her presence underscored her commitment to ensuring clean and accessible water for the residents of Khadachakra Municipality.

"Timely training for VMW is our priority now. Two people from the community have been selected through the project, as mentioned in the WUSC statute. VMWs will play a major role in the sustainability of the scheme with support from WUSC by establishing tariffication. The water tariff supports proper record keeping and transparency. We will establish a water tariff system in the community. The project should also support the promotion of wastewater for kitchen gardening, adding value to the livelihood of the community people as the market is nearby for trade," said [REDACTED].

"Before, it used to take 3-4 hours, and now it's just a matter of 5-10 minutes to fetch water. We are so happy that we can now save our time and utilize it for other livelihood activities," shared a participant during the meeting.

Also present at the meeting was [REDACTED], the Ward Chairperson, whose participation further emphasized the importance of collaboration between local authorities and community representatives in addressing water supply concerns. The interactive session provided a platform for productive discussions, enabling participants to exchange ideas and voice their thoughts on water supply, sanitation, and related issues. The meeting witnessed a constructive exchange of opinions and suggestions, showcasing the shared commitment of all attendees to enhance the region's water infrastructure and management system.

This collaborative effort was made possible with the support of the USAID Karnali Water Activity, which has been actively involved in enhancing water accessibility and promoting sustainable water resource management.