



Government of Nepal
Ministry of Water Supply
Department of Water Supply and Sewerage Management
Water Sector Governance and Infrastructure Support Project
Project Implementation Unit
Bardagoriya Rural Municipality, Kailali

Detailed Project Report of Ranikunda Water Supply Project
Bardagoriya Rural Municipality, Kailali
NP-DWSSM-424255-CW-RFB

Final Report

Volume I: Main Report and Appendix

Volume II: Drawings

Volume III: Quantity and Cost Estimation

Volume IV: Bidding Document with Specification

Volume V: Environmental & Social Screening Report

[Volume VI: Environmental & Social Management Plan](#)



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ABBREVIATIONS & ACRONYMS

BoQ	: Bill of Quantity
CBS	: Central Bureau of Statistics
CoC	: Code of Conduct
DHM	: Department of Hydrology and Meteorology
DPR	: Detailed Project Report
DWSSM	: Department of Water Supply and Sewerage Management
EHS	: Environmental Health and Safety
EPR	: Environmental Protection Rule
ESIA	: Environmental and Social Impact Assessment
ESMP	: Environmental & Social Management Plan
ESMF	: Environmental and Social Management Framework
FPIC	: Free Prior Informed Consent
GBV	: Gender Based Violence
GoN	: Government of Nepal
IDA	: International Development Association
ILO	: International Labour Organization
MoWS	: Ministry of Water Supply
MWASH	: Municipal Water and Sanitation Hygiene
MSL	: Mean Sea Level
MST	: Municipal Support Project
OD	: Outer Diameter
OHS	: Occupational Health and Safety
OHT	: Over Head Tank
PIU	: Project Implementation Unit
PMU	: Project Management Unit
PPE	: Personal Protective Equipment
RAP	: Resettlement Action Plan
RM	: Rural Municipality
RoW	: Right of Way
SEA/SH	: Sexual Exploitation and Abused/ Sexual Harassment
STD	: Sexual Transmitted Disease
WASH	: Water and Sanitation Hygiene
WaSGISP	: Water Sector Governance and Infrastructure Support Project
WSUC	: Water Supply and Users' Committee

1. INTRODUCTION

1.1 Background

The Government of Nepal (GoN) (Ministry of Water Supply (MoWS) as an executing agency and the Department of Water Supply and Sewerage Management (DWSSM)/ Participating Municipalities as implementing agencies) and the International Development Association (IDA) have signed an 80 million USD financing agreement for Water Sector Governance and Infrastructure Support Project (WaSGISP).

1.2 Sub-Project Description

The Ranikunda WSS Sub-Project is located in Bardagoriya Rural Municipality (RM), Ward No. 3, in the Kailali district of Sudurpaschim Province. Geographically, the project area is located at latitude 28°41'41.84" N and longitude 81°2'56.95" E, at an altitude of 200 meters above mean sea level (MSL). The project area experiences a hot and humid climate. It is bordered by Seti Lok Marg to the west, the Ranikunda Community Health Unit to the east, the Ring Road to the south, and the Laligurans Community Forest to the north. The settlement pattern of the project area is diverse and heterogeneous.

Baradagoriya Rural Municipality plans to enhance the existing Ranikunda Water Supply Sub-Project located in Ward No. 03, with the support from WaSGISP. The current water supply system, which relies on groundwater as its source, is not operational. The existing infrastructure includes an overhead tank with a capacity of 225 cubic meters, two deep tube wells (constructed using drilling, casing, gravel packing, pumping, well development, geophysical logging, and monitoring technologies), an office building, a laboratory and a toilet. However, these facilities are only partially functional and require minor repairs and maintenance. A Water Quality test report is attached in *Annex-VI*. Additionally, approximately 11.681 km pipeline installation work has already been completed.

Under WaSGISP intervention following is planned:

- a) 175 cum reservoir tank,
- b) RCC frame structure building to house the billing counter room, pump control room, dosing room, and toilet facilities (ladies and gents) for visitors
- c) 36.55 km pipe laying work,
- d) 1,552 house connection work
- e) Two pressure vessel treatment plants equipped with multi-grade filtration system. (Layered water filtration system, typically made of gravel, sand, and anthracite coal. Each layer filters particles of different sizes, with coarser materials at the bottom and finer ones at the top). The plants also include a well-designed drainage system.

Auxiliary facilities include 11kV high voltage transmission and 50 kVA transformer which have been already installed in the OHT premises. However, due to insufficient apparent power the installed transformer has to be replaced by a 100 kVA three-phase, 50 Hertz, oil-immersed, natural-cooled transformer.

The most important part of this sub-project is laying 36.55 km of pipe along the -existing road width like: Ring road, Seti Lok Margha, New road, Pari Gada road, Jarey Khada road, Dakshin Khaireni road, Kera Bari road, Shiva Mandir road, Shiva Mandir Khalla road, Campa road, Butkauwa Shanti Tole road and Dakshin Ranikunda road. These roads are in public use and require no felling of trees, and do not transverse any protected areas and private land. Since the the existing road is clear and is already in public use there are no issues of land acquisition nor any outstanding grievances with the current public use of the road. Similarly, the pipe trench will have a depth of 90 cm and a width of 60 cm. During the excavation period, caution boards will be installed, and the area will be barricaded with caution tape to ensure pedestrian safety and prevent any impact on pedestrian movement. The trench will be immediately backfilled upon completion of the pipe-laying work. The land proposed for other structures of the sub-project is located on OHT premises of the existing Ranikunda WSS sub-project site and the ownership belongs to Ranikunda Water Supply system of Bardagoriya Rural Municipality. The existing land area of OHT premises for the Ranikunda WSS sub-project is five Kattha (632.2 sq. meter) and the land ownership certification letter from ward office is attached in Annex-III. All the structures proposed under WaSGISP will be accommodated within this proposed site, except distribution pipeline which will follow the existing road, which is in public use. Hence, additional land acquisition is not required. The salient features of the Ranikunda WS sub-project are given in table below.

Table 1:Salient Features of the Sub-project

S.N	Items	Description
1	Name of Project	Ranikunda Water Supply Project
2	Type	
		Groundwater-based pumping (Pumping)
		Extension and enhancement of existing uncompleted project.
3	Location Area	
	Province	Sudurpaschim Province
	District	Kailali
	Municipality	Bardagoriya Rural Municipality
	Ward	Ward No. 3
4	Status of the Project	
	Status and implementation.	Under construction by the province DWSSM office
	Year of implementation	Started in 2074/75 Fiscal year

Environmental & Social Management Plan (ESMP) Report for Ranikunda WSS Sub-Project

S.N	Items	Description
	Completed WS Components	Only 225 Cum capacity OHT, boundary wall, installation of 2 TWs and about 11.681 km of water distribution lines
	Operational Status	Not in operation and need to introduce minor intervention for operation
5	Available Service level and coverage	Not a single HH is covered
6	Type of Intervention	Make functional of all existing WS components for operation. Enhancement of the required components.
7	Study Level	DPR for immediate enhancement work
8	Available Facilities	
	Road	On the East-West Highway
	Supply Water System	WSUC and Hand pumps (additional upgrades needed)
	Electricity	Available (transformer need replacement)
9	Social Status of service area	
	Present HHs Numbers (2024)	1,552
	Present Population (2024)	7,157
	Base Year Population (2026)	7,498
	Design Year Population (2046)	12,271
	Weighted Growth Rate % (WGR)	2.942
	Projected HHs in Design Year based on WGR (Nos)	~2662
10	Water Demand (MLD) in Design Year	1.55
11	Source Characteristics	
	Source Name	Deep Tube well
	Source Type	Ground Water
	Source Location	Within Service Area
	Safe Yield (lps)	13 lps / TW
12	Type of Structures and Major Intervention (all the structures, except distribution pipeline, will be accommodated within the existing WUSC's premises of 5 kattha)	
	Proposed number of Bore Hole Drilling	Rehabilitation of existing 2 tubewells
	Pumps in Deep Tube Well	2 Nos New 15 HP + 1 Nos Standby
	Pumps in Proposed Ground Reservoir	2 Nos New 15 HP + 1 Nos Standby
	Electricity line,	Available
	Transformer	Replacement of 50 kVA transformer by 100 kVA

S.N	Items	Description
	Ground Collection Reservoir at TW fields	1N-175 cum (Balancing Reservoir)
	Overhead Storage Reservoir (Nos.- Capacity m ³)	1 No existing 225 cum
	Valve Chamber (Bricks/RCC/Surface Valve Box)	30/22/10
	Office, Billing counter and Guard House	The existing two buildings are incorporated in the proposed system with minor repairs for the office and guard house
	New Building	A billing counter with toilet facilities
	Household Connection	1,552 (new)
	Fire Hydrant	9 no.
	Total Length of Pumping Mains Pipe and others (m):	464 m
	Total Length of Distribution pipe (km):	48.23 km (existing 11.681 + planned 36.55) <i>Carried out along the existing road which is in public use</i>
	Pipe Used (Laying length)	
	DI (m)	240
	PE (m)	36,533
	GI (m)	266
	HDPE existing (m)	11,681
13	Total Cost of WS Component (Including all VAT and Contingency) NRs.	13,62,02,811.86

Table 2: Pipe Used for Distribution Network (meter)

S. No.	Description	Total Length (L)	Laying Length (L+ 10 %Extra)
A	PE PIPES of 6 Kg/Sqcm (mm)	m	m
	75 outer diameter (OD)	2,628	2891
	90 OD	1,413	1555
	110 OD	2,093	2303
	125 OD	2,373	2611
	140 OD	1,484	1633
	160 OD	1,290	1419
	180 OD	182	201
	200 OD	100	110
	225 OD		

	250 OD		
	280 OD		
	315 OD		
	Sub Total	11,563	12,723
B	PE PIPES of 10 Kg/Sq cm		
	50 OD	19,661	21628
	63 OD	1,983	2182
	Sub Total	21,644	23,810
C	Existing HDPE Pipe 6kg/Sq cm		
	50 OD	5551	5551
	63 OD	936	936
	75 OD	2218	2218
	90 OD	2105	2105
	110 OD	871	871
	Sub-Total	11,681.00	11,681.00
D	DI Flanged Pipe		
	Pipe of 10" (200 mm)	20	22
	Sub Total =	20	22
	Total Distribution Laying Length (m)	48,236	

1.3 Rationale of the ESMP

Rule 3 (1) of Environment Protection Act (EPA), 2019 describes completing Environmental Studies as per Schedule 1 or 2 or 3 under Environment Protection Regulation 2020 (First Amendment in 2021/05/24 on Nepal Gazette). For the Subproject, none of the legal provisions are compliable to Schedule 1 or 2 or 3 and hence detailed Environment Study (Brief Environmental Study (BES), Initial Environmental Examination (IEE) and Environmental Impact Study (EIA) is not mandatory. The screening report revealed that the proposed WSP does not lies in any National Parks /Protected areas or any critical aquatic and terrestrial habitat area. So, there is minimal environmental/or social impacts and no physical displacement is caused by the sub-project. Consequently, in accordance with the Environmental and Social Risk Management Procedures outlined in Chapter 6 of ESMF, this sub-project is categorized as having a 'moderate risk of impact' (Category III), necessitating the preparation of Environmental and Social Management Plan (ESMP) to comply with World Bank Environmental and Social Standards (ESS) requirements. The ESMP will form part of the bid document and to be reviewed and updated during implementation as per requirements. The ESMP will be included in the contractual clauses and will be made binding on the contracting firm.

1.4 Scope and Objective of Environment and Social Management Plan (ESMP)

The ESMF which was developed for the overall project provides the guiding framework for the site specific environmental and social monitoring plan study in conformance with World Bank policy and accordingly the project level standards. This ESMP is prepared in line with the requirements of the National Environmental Law and Regulations of Nepal and World Bank considering the anticipated impacts associated with the proposed sub-project, such as: air

pollution, noise pollution among other effects. The ESMP study for Water Supply sub-projects will guide the sub-project implementation and ensure that adequate measures are taken to protect and minimize any potential adverse environmental and social impacts associated with the proposed construction works. This ESMP provides the actions required to be taken for managing and keeping the negative impacts and risk of the proposed water supply scheme to a minimum, while enhancing the significant positive and beneficial impacts.

The major objective of this Environment and Social Management Plan (ESMP) is to mitigate any social and environment impacts in development interventions. The specific objectives are:

- To identify the existing site-specific environmental and social condition of the project area;
- To identify the environmental and social risks and impacts of the proposed development intervention;
- To explore alternatives, and suggest practical mitigation measures with sufficient budget to mitigate the adverse environmental impacts;
- To prepare environmental monitoring plan;
- To specify institutional arrangement, and roles and responsibilities for environmental and social risk management, and monitoring of the sub-project.

1.5 Legal and Policy Framework

Under the legal and policy framework, a brief of legal acts, policies, regulations and guidelines of the GoN and the World Bank Environmental and Social Standards have been discussed that are relevant and applicable to the Ranikunda WSS sub-project.

The ESMF reviewed country's legal and institutional framework, identified gaps from comparison of national and World Bank ESF requirements and suggested corresponding measures to meet the requirements. Nine of the ten World Bank Environmental and Social Standards (ESSs) are relevant to this project, namely ESS1 on Environmental Assessments, ESS2 on Labour and Working Conditions, ESS3 on Resource Efficiency and Pollution Prevention and Management, ESS4 on community Health and Safety, ESS5 on Involuntary Resettlement, ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources, ESS7 on Indigenous Peoples, ESS8 Cultural Heritage and ESS10 on Stakeholder Engagement and Information Disclosure.

2. DESCRIPTION OF STUDY AREA

2.1 Location and Accessibility

The Ranikunda WSS Sub-Project is situated in Bardagoriya Rural Municipality, Ward No. 3, Kailali District, Sudurpaschim Province. The project area is located 5.5 km north of Bauniya Bazar, with Khaireni Bazar serving as the largest market in this ward. The terrain is predominantly flat, and the Kanda and Kuira rivers traverse the ward. The settlement pattern in the project area is heterogeneous.

Geographically, the area lies at a latitude of 28°41'41.84" N, longitude 81°2'56.95" E, and an altitude of 200 meters above mean sea level (MSL). The climate is characterized as hot and humid. The project site is bounded by Seti Lok Marg to the west, the Ranikunda Community Health Unit to the east, the Ring Road to the south, and the Laligurans Community Forest to the north.

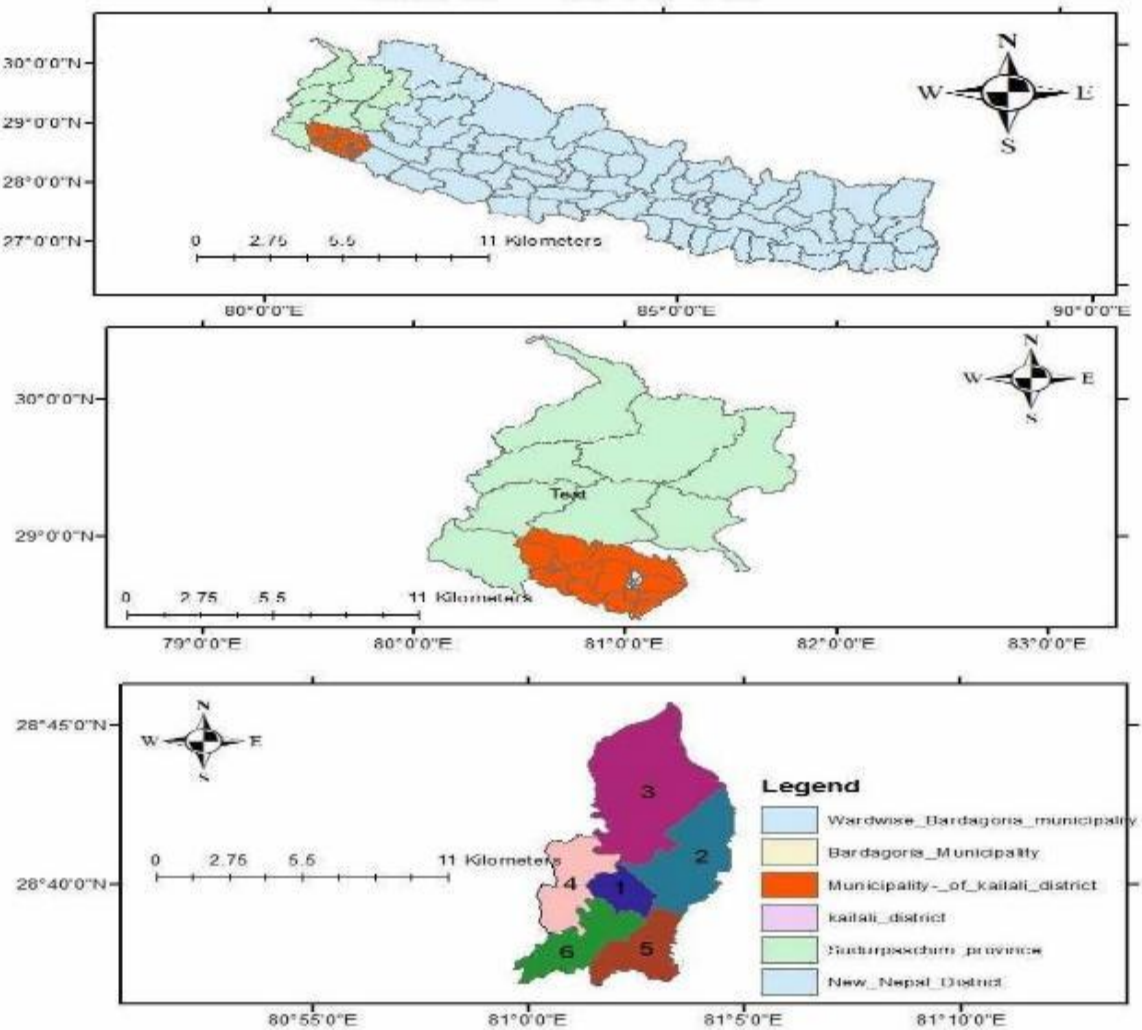


Figure 1: Location of Bardagoriya Rural Municipality Ward 03



Figure 2: Location of proposed land for Ranikunda WSS Sub-Project and google Map

The existing Ranikunda Water Supply and Sanitation (WSS) Project in Bardagoriya RM was being implemented by the Federal Water Supply and Sewerage Management Project, Kailali. Although handed over to the RM, it is not yet operational and remaining works will be completed by the current intervention from WaSGISP. The primary water source for this sub-project is groundwater.

The sub-project's tubewells have a pumping discharge capacity of 13 liters per second (lps), with a safe yield of 13.56 lps. This indicates that the safe yield capacity exceeds the pumping rate, affirming that the current groundwater abstraction rate is within safe limits. This conclusion is supported by geophysical logs of existing tubewells at the Overhead Tank (OHT) premises, which show sufficient yield to meet the projected demand without overexploitation of the groundwater resource.

The geophysical logs and well logging reports of the boreholes at the OHT premises demonstrate satisfactory conditions for sustainable groundwater abstraction. These tubewells were drilled and developed several years ago but require proper rehabilitation and sealing to maintain performance. The design of the tubewell structure, including screens and the adopted tubewell assembly, was found to be satisfactory.

Table 3: Assessment of Existing Tubewell Design

Description	Unit	Values
-------------	------	--------

Pumping Discharge	lps	13
Discharge of Well (m ³ /s)	m ³ /sec	0.013
Optimum screen entrance velocity (m/s)	m/sec	0.03
Screen Clogged	%	60%
Screen Diameter	m	0.20
Percent of Open Area	%	10%
Length of screen	m	15
Discharge Capacity of Tube Well	lps	16.96
Safe Yield (80% of Yield)	lps	13.57

(Source: Federal Water Supply and Sewerage Management Project, Kailali)

2.2 Physical Features

2.2.1 Topography and Land Use

The project area lies on plain land of Terai on the northern boundary of the Indogangetic plain at the lap of the Chure foothills. The topography of the project area consists of flat lands molded by perennial and ephemeral streams originating in the foothills (Chure) forming meandering gullies.

The total 28.2 sq.km (36%) of area is covered by ward no.3 among the total land area 77.3 sq.km of the Bradagoriya RM. There is no scientific land use planning at the moment. However, land use for Bardagoriya RM 03, can be divided as: agricultural 1.91 sq. km. (6.7%) residential 1.77 sq. km. (6.3%), commercial 0.82 sq. km. (2.9%), forest is 20.59 sq. km. (73%), River is 3 sq.km.(10.7%) and public land is 0.123 sq. km.(0.4%).

2.2.2 Geology

Geologically, the project area lies in the Terai Zone of the Nepal Himalaya. The flatland of Terai constitutes the north fringe of the extensive Ganga foreland basin. The Pleistocene and Holocene alluvial accumulations of this strip were laid down by rivers, originating within the Himalaya or beyond it in the Tibetan Plateau. The average thickness of these sediments exceeds 1,500 m. The project area is composed of thick deposit of recent alluvium consisting of gravels, sand and clay. The subsurface geology is dominated by the sediments from large and coalescing fans, the deposits of the Ganga Basin extending to the north, and the sediments constituting the Siwalik trough.

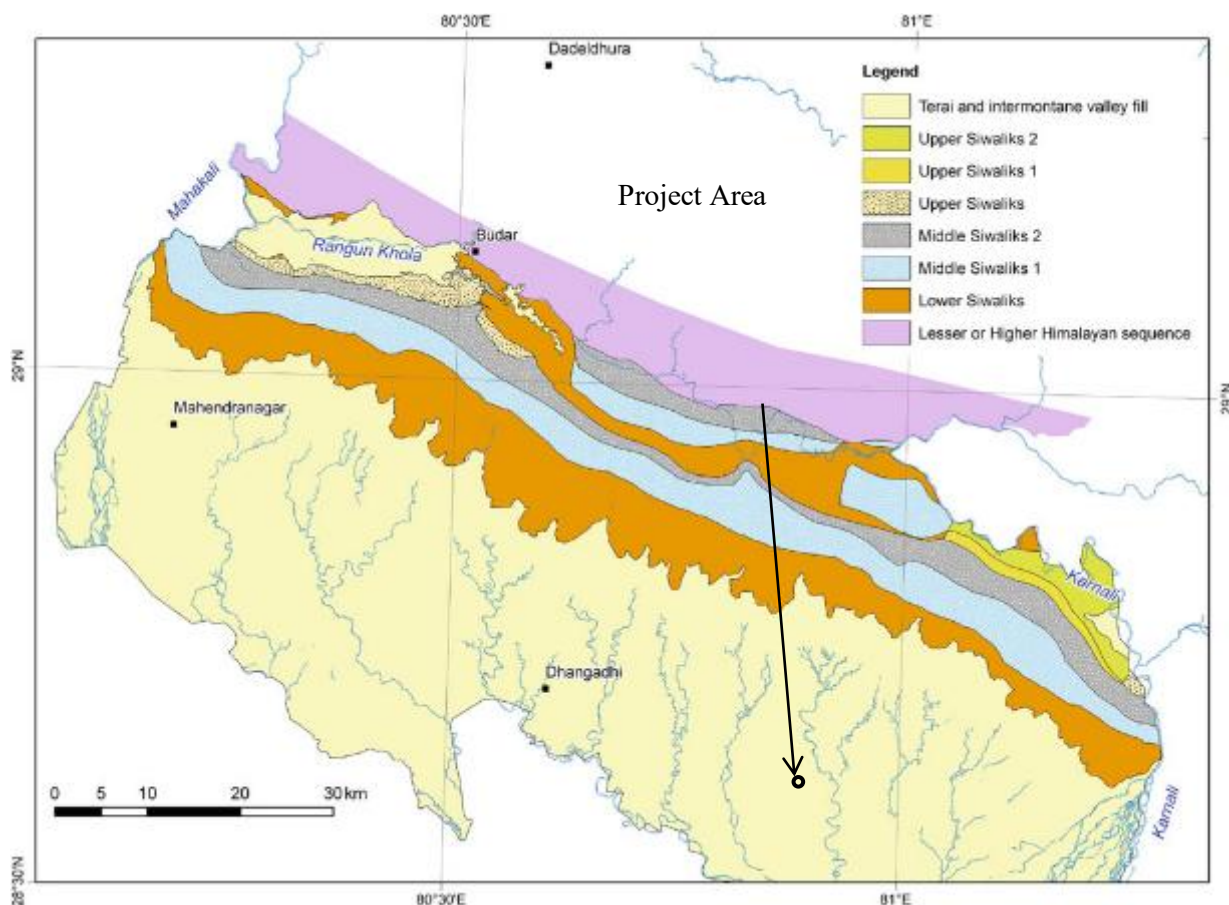


Figure 3:: Modified Geological Map of Western Siwaliks and Terai. Source: Dhital, 2015

2.2.3 Climate

Temperature: The project area lies in Terai region with tropical climatic condition. The temperature rises as high as 46°C during summer and falls as low as 5°C during winter. Both the maximum and minimum temperature is increasing at the rate of 0.023°C /year and 0.016°C /year respectively (DHM, 2017).

Rainfall: Considering the 30 years rainfall data (from 1984 to 2013) recorded at Dhangadhi, Kailali, the district receives an annual rainfall of 1860.47 mm and the average annual rainfall shows an increasing trend. The observed climate trend analysis of Nepal from year 1971 to 2014 (DHM, 2017) shows that the annual precipitation trend of Kailali District is increasing at the rate of 3.44 mm/year but the post-monsoon precipitation shows decreasing trend at the rate of 0.22 mm/year. The temporal distribution of rainfall is highly controlled by the monsoon with more than 80% of rainfall occurring during June to September.

2.2.4 Climate Change and Disaster Vulnerability

According to Climate Change Vulnerability Mapping for Nepal (MoE, 2010) based on indices, Kailali district has low combined sensitivity, low overall vulnerability and moderate adaptation capability to the impacts of climate change. Likewise, District Disaster Management Plan of Kailali, (DDC Kailali, 2070) has assigned three vulnerability categories (high, medium and

low) to different disasters. The project area has medium level earthquake vulnerability, low level flood vulnerability and low level fire vulnerability.

2.2.5 Drainage Network

The project area is drained by some locally originating ephemeral creeks: Jogi Nala drains into the Kanda River and Ranikunda Nala drains into the Kanda River towards the south of the project area. The likelihood of flooding or waterlogging in the sub-project area is minimal, as the proposed site is situated on flat terrain.

2.2.6 Air and Water Quality and Noise Level

Point sources of air and water pollution were not visible in and around the project area. The water quality test of the existing tube wells located at the subproject site was done and found to comply with the NDWQS. Generally, the ground in Terai shows occasional increases in iron and turbidity. Therefore, a water treatment system comprising aeration, filtration, and disinfection is recommended to meet the requirements of the NDWQS for drinking water (*Water Quality Test report of Deep Tube wells is attached in Annex VI*). Vehicles travelling along the gravel Ring-Road and Seti Lok Margh on the west and south side of the project site generate dust, which sometimes increases the suspended particulate matters in the air. The project area is near settlements, health post, and schools. Noise in the area primarily comes from vehicle traffic, wind, and frequent visitors. The air quality monitoring test and noise level monitoring has been conducted to establish the baseline and the monitoring report data is given in table below.

Table 4: Air Quality Monitoring Report

Date	Location	Description		
15th October 2024	Bardagoriya RM-03; Khaireni Chowk	PM 2.5 Microgram/Cubic meter	PM 10 Microgram/Cubic meter	Air Temperature Degree Celsius
		35	80	10 ⁰ C
National Standards of Air Quality, 2069		40 Microgram/Cubic meter	120 Microgram/Cubic meter	

Table 5: Sound Level Monitoring Report

Date	Location	Noise Level (decibel) dB	National Standards of Sound Level, 2069 Day Time Limits Leq (Decibel) dB
15th October 2024	Bardagoriya RM-03; Khaireni Chowk -East	55	50
15th October 2024	West	56	50
15th October 2024	North	52	50
15th October 2024	South	54	50

2.2.7 Soil Type and Quality

Top soil in the project area is fine textured humus mixed loamy soil productive to vegetation. Regarding the quality of soil, for the remoteness of the project area, the soil is free from pollution of urban origin (like garbage, sewage and industrial discharge).

2.3 Biological Features

2.3.1 Vegetation

The Ranikunda WSS Sub-Project is located in Bardagoriya RM, Ward No. 3 of Kailali district. Kailali district possesses abundant forest resources and a diverse range of biodiversity when compared to other districts of Nepal. The major tree species of the district are: Sal (*Shorea robusta*), Saadan (*Neurada procumbens*), Jamun (*Syzygium cumini*), Kusum (*Schleichera oleosa*), Peepal (*Ficus religiosa*), Mango (*Mangifera indica*), Haldu (*Haldina cordifolia*), Sagwan (*Tectona grandis*), Liptis (*Eucalyptus globulus*), Bamboo (*Bambusa vulgaris*), Khair (*Acacia catechu*), Bel (*Aegle marmelos Correa*), Sisam (*Dalbergia sissoo*), Bot Dhairo (*Lagerstroemia parviflora*), Maloo (*Phanera vahlii*), Epil-Epil (*Leucaena leucocephala*), Bhalayo (*Semecarpus anacardium*), Amala (*Emblica officinalis Gaertn.*), Bakaino (*Melia azedarach*), Simal (*Bombax ceiba*), Tammal (*Cinnamomum tamala*), Tuni (*Toona ciliata*), Harro (*Terminalia chebula*), Barro (*Terminalia bellirica*), Neem (*Azadirachta indica*), etc. The Laligurans Community Forest (CF), managed by the neighboring settlements of Ward No. 3 of RM, borders the sub-project area. However, the sub-project will not have any impact on the community forest.

2.3.2 Fauna/Birds

The study gathered information on the presence of fauna in the vicinity of the sub-project area. This data was obtained through interviews with local residents. Forests of Kailali district host the mammalian species such as Spotted Deer (*Axis axis*), Wild Boar (*Sus scrofa*), Jackal (*Canis aureus*), Tiger (*Panthera tigris*), Wild Cat (*Felis silvestris*), Monkey (*Macaca mulatta*), Nilgai (*Boselaphus tragocamelus*) etc. However, the sub-project is situated within the settlement area of Ward no. 3 of RM and does not serve as a designated habitat for any terrestrial fauna.

Similarly, the Kailali district and its surroundings host the variety common avian species: Peacock (*Pavo cristatus*), Parrot (*Psittaciformes spp.*), Bulbul (*Pycnonotus barbatus*), Dhukur (*Streptopelia orientalis.*), Dangre Rupi (*Acridotheres tristis.*), Crow (*Corvus spp.*), Tailorbird (*Orthotomus sutorius*), Kokale/ Grey treepie (*Dendrocitta formosae*), Kalij pheasant (*Lophura leucomelanos*), Vulture (*Cathartidae, Accipitridae.*), Hornbill/Dhanesh (*Bucerotidae spp.*), Herons/Bagula (*Ardeidae spp.*), Pigeon (*Columbidae spp.*), Sparrow (*Passeridae spp.*) etc. However, the sub-project area is not a designated bird habitat.

2.4 Socioeconomic and Cultural Features

2.4.1 Demographic Characteristics

According to National Population Census 2021 and Bardagoriya Rural Municipality Village Profile, total population of ward no-03 is 5,042 (Population census 2021) including 2,338 males

and 2,704 females. This shows that female population outnumbers male population in project area. The sex ratio is 89.28%. The total number of households is 1095 and the average size of a household is 4.60. The population density is 178.8 individuals per sq. km where the total area of Bardagoriya RM ward no.3 is 28.2 sq.km. But according to the baseline survey 2024, total households is 1552 with population 7157. The baseline survey in this ward revealed the notable presence of Janajati/ethnic group (Tharu Chaudhary, Magar, Gurung etc.) comprising about 34.9%, and the Dalit group comprising about 24.3% of total households in the project area, whereas 40.8% are Brahmin/Chhetri. Tharu Chaudhary are the original inhabitants of this project area. People of more than 25 different castes and ethnic groups were reported in this area. Language spoken mainly depends on the caste/ethnicity. For the majority of people Achhami & Doteli is the most common language followed by Nepali, Tharu, Jumli, Bajureli, Dailekhi, etc.

2.4.2 Socio-economic Characteristics

Agriculture and livestock rearing are the main occupations in the project area. Major crops grown in the project area are cereal crops like paddy, maize and wheat, pulse seeds like gram, red gram, black gram, red lentil and pea, oilseeds like mustards, flaxseed and sesame, vegetables like potato, onion, cauliflower, lady's finger, garlic and cash crops like sugarcane and banana. Livestock reared in the area include cow/oxen, buffalo, goat and pig. Poultry is also common in the area. Meat and dairy are the major livestock products. For the availability of pasture, the livestock/cattle are grazed freely.

Besides agriculture, people are involved in other occupations like Business, Service, Labor and Foreign Employment. As understood from discussion with local people, they have adopted more than one occupation. The business ventures besides commercial agriculture include wholesale and retail shops of daily utilities, electronics and electrical, packaged food, garments, construction materials, etc. Khaireni Bazar, Radhakrishna chok and Koholpur Bazar are the growing market centers in this ward of Bardagoriya Rural Municipality.

According to the National Population and Housing Census 2021, the literacy rate of population 6yrs of age and above is 76%. Literacy is higher in male (83.3%) population than female (69.6%) which reflects the gender discrimination existent in education opportunities.

People have organized into different groups according to their subjective interest and involvement for the welfare to those interest groups. People are involved in community forest user groups, mothers group, youth clubs, civil awareness centers, committees and associations.

2.4.3 Available Public Service Facilities

There is one existing Water Supply & Sanitation Project in Bardagoriya Rural Municipality ward no.3 Ranikunda WSSP. There are 2 secondary schools, 3 primary schools in this ward. For health care service, there is one Primary health care center, 1 Health Post and 1 community health unit in Ward no.3. There is village clinic and immunization center at this ward, 5 numbers of female health care volunteers are mobilized at this health center and immunization clinic. Electricity supply through national transmission has reached to the entire ward of, but

yet to benefit some 15% of the households. The source of drinking water for majority of families is ground water drawn through shallow tube well. All the settlements of the project area have been connected with road network. Four number of financial institutions are available in this ward for providing saving and credit service.

2.4.4 Places of Religious and Cultural Importance

Each specific caste/social groups in the project area have their own cultures based on their religion and traditions. There are many festivals which are specifically celebrated by specific types of social/caste groups. For instance, Maaghi or Mange Srakanti is the major festival celebrated by Tharu community in the area. It is also celebrated by other groups. Additionally, Dashain, Tihar, Janaipurnima, Naag Panchami, Buddha Jayanti, Thulo Ekadashi, Holi, Shivaratri etc. are other major festivals being celebrated by general people in the project area. Similarly, all of these groups have their own set of intangible heritages example, scared spaces, belief systems, knowledge and practices. But, during consultation with the community, it was reported that project footprints is unlikely to have a bearing on these intangible heritages.

In terms of tangible heritages, there are four places of religious and cultural importance in this ward. They are Ramjanaki Mandir, Shiva Mandir, Radhakrishna Mandir and Bootkauwa Gumba.

2.4.5 Gender Based Violence (GBV) and Sexual Exploitation Abuse (SEA)/ Sexual Harassment (SH)

Nepal has high incidence rates of GBV cases with mostly girls and women as reported victims. Latest DHS (2022) data shows that 23% of women in Nepal age 15–49 have experienced physical violence since age 15, and 8% have ever experienced sexual violence.. Only 28% of women who have ever experienced any type of physical or sexual violence have sought help to stop the violence. Out of the 15 most GBV prevalent countries in the world, Nepal ranks 4th in domestic violence and violence by a partner and child marriage tops 2nd highest in South Asia (DHS, 2022). GBV in Nepal is prevalent due to unequal gender relations and discrimination towards women in both public and private spheres. It has direct implications on the reproductive health status of women and physical, emotional, and mental health of their children.

In case of project district, there is hospital based One Stop Crisis Management Centre (OCMC) at Seti Zonal Hospital of Kailali district, In this OCMC a total of 433 cases have been registered in 2080/081 fiscal year. Out of them there are nine cases of child labour, one case of cyber-crime, 109 cases of denial resources, 1 case of human trafficking, 53 cases of mental abuse, 95 cases of physical assault/ violence, 123 cases of rape, 39 cases of sexual abuse and three cases of social discrimination.

In Kailali district OCMC of Seti Zonal Hospital has registered altogether 433 cases of SEA/SH and GBV in 2080/081 fiscal year. In case of sub-project there is Department of Women and Children (DWC) under social development unit of Bardagoriya Rural Municipality to resolve

the GBV/SEA/SH issues The Bardagoria RM has nominated GBV and SEA/SH focal person (Ms. Panmati Rana). As per the consultation carried out with the local women and with Bauniya Area Police Office ,there are 20 cases (3 cases of SH, 2 cases of child labour & 15 domestic violence) in 2080/081 fiscal year related to GBV according to Bauniya Area Police Office and if any such cases happen, then those cases are settled under facilitation of the local elite and social figures. In case, if such cases are not resolved even under facilitation of the local elite and social figures then they are reported to Rural Municipality office and Area Police Office. There are prevalent forms of GBV in communities and it can be further triggered by the sub-project infrastructure work wherein it is expected that around 40 to 45 labours (15 local & 20-25 migrant) will be mobilized per day during the peak construction at the sub project sites. Therefore, potential risks of SEA/SH have been assessed to be 3 cases according to Bauniya Area Police Office for which a code of conduct will be adopted to mitigate the SEA/SH impacts of the sub-project and the sample of personal code of conduct for WSS sub-project is attached in Annex VII.

3. STUDY METHODS

The methods adopted to achieve the objective primarily involved map analysis to establish a frame of reference, along with field investigations of the Ranikunda WSS Sub-Project. This included the collection of field based information and mapping. The methods included:

3.1 Literature Review and Secondary Data Collection

The assignment commenced with a review literature and the collection of secondary data. Relevant information was sourced from project documents, including feasibility studies and detailed engineering design reports, district and municipal profile of the project area, topographical maps, geological maps, Google Earth imagery, published and unpublished project- related reports, and climatological records from the Department of Hydrology and Meteorology (DHM).

3.2 Field Survey, Mapping and Verification of Secondary Data

The study was conducted through an on-site walkthrough of the Ranikunda WSS Sub-Project area, primarily focusing on the proposed location. It also included focused group discussions (FGDs), formal consultation meetings, and key informant interview (KII) with the local stakeholders, such as the local government, chamber of commerce, and local residents. Separate consultations with women, Dalits, and Tharu and other disadvantaged groups living in the service area was organized to discuss potential E&S issues related to proposed water supply sub-project and minute of meeting is attached in Annex I. The issues raised during public consultation along with its corresponding mitigation measures is given below in sub-heading 5.1 of public consultation section.

The environmental and social screening checklist was developed following a through desk study, and review of sub-project related documents, including feasibility studies, detailed engineering design report, environmental impact assessments of similar projects, and stakeholder consultation records. The checklist incorporates different parameters and issues outlined in the ESMF of the WaSGISP project and was further informed through consultations with stakeholders and municipal personnel.

Environmental and social assessment process involved gathering of relevant information on the existing physical, biological and socio-economic, and cultural environmental conditions. This was achieved through field walkthroughs, surveys, measurements, discussions, consultations, and stakeholder interactions. Additionally, potential issues to be addressed in the Environmental and Social Management Plan (ESMP) were identified.

3.3 Desk Work

Major part of the study was executed through desk-based work, which included engineering design, drawing and mapping, analysis, quantification, and planning of ESMP. Additionally, cost estimation for ESMP was carried out using information obtained from field studies and literature reviews.

4. ENVIRONMENT AND SOCIAL MANAGEMENT PLAN

4.1 Impacts and Mitigation

The proposed Ranikunda WSSP sub-project is expected to have physical, biological, and socio-economic impacts. These impacts may arise during various phases of the project, including pre-construction, construction, and operation and maintenance. While some impacts may be negative, others can be positive. The objective of environmental management is to enhance positive impacts and minimize negative ones through appropriate mitigation measures. Key impacts are described below:

- 1. Disruption of natural drainage and pavements:** The pipe-laying activities along the public road through Ranikunda, Uttar Purba Ranikunda, Dailekhi Tole, Katan Tole, and Butkuwa Chautara may disrupt the existing roadside drainage system. Construction tasks such as earthworks, backfilling, and material stockpiling could obstruct natural drainage flows. This interference might lead to issues such as localized flooding, channel erosion, and other related impacts along these routes.
- 2. Disruption to traffic flow and accessibility:** The excavation and installation of pipelines (trenches 90 cm deep and 60 cm wide) along the public road from Ranikunda, Uttar Purba Ranikunda, Dailekhi Tole, Katan Tole, and Butkuwa Chautara will cause temporary road disruptions. These disruptions may affect traffic flow, leading to delays and congestion. To minimize the impact, the pipeline installation will be carried out in short sections of 500 meters at a time, with testing and backfilling completed promptly, within a week.
- 3. Impact to Communities:** Communities will face a range of interrelated challenges due to construction activities, including impacts on air and water quality, increased ambient noise levels, traffic congestion, road safety concerns, and disruptions to the mobility of people, goods, and services. The pipe laying and conducting pre-cover testing will temporarily limit access to homes and may negatively affect businesses in Ranikunda, Uttar Purba Ranikunda, Dailekhi Tole, Katan Tole, and Butkuwa Chautara. However, these impacts can be effectively mitigated with proper management. The pipe trenches will be relatively small, measuring 90 cm in depth and 60 cm in width, and construction will be sequenced to ensure that trenches are backfilled promptly, typically within a week, following the completion and testing of pipe-laying work.
- 4. Occupational health and Safety:** Given the nature of construction activities, exposure to extreme weather conditions and the non-observance of health and safety measures could trigger occupational health and safety issues for workers. Additionally, an inadequate supply of safe, potable water; insufficient sanitation facilities; poor sanitation practices on-site; and substandard housing conditions may pose significant threats to their well-being. Workers employed informally, such as migrant workers or individuals newly entering the labor market, are most vulnerable. This is particularly critical given that a strong occupational health and safety culture is not prevalent in Nepal. Therefore, the onus will be on the Project to ensure that workers are advised of their rights, and to actively promote and protect those rights on behalf of the workers.

Environmental & Social Management Plan (ESMP) Report for Ranikunda WSS Sub-Project

The impacts have been identified and predicted by considering all activities related to the construction, operation, and decommissioning of support facilities. The possible impacts and their corresponding mitigation measures are listed in Table 6 below.

Table 6: Environmental and Social Management Plan Matrix

Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Cost NRs.	Frequency of Monitoring
1. Prior to Construction Activities						
Consents, permits, clearance, no objection certificate (NOC), etc.	Failure to obtain necessary consents, permits, NOCs, etc. for use of land and other property can result to design revisions and /or stoppage of works.	<ul style="list-style-type: none"> - Obtain all of the necessary consents, permits, clearance, NOCs, etc. prior to start of civil works. - Acknowledge in writing and provide report of compliance on all consents, permits, clearance, NOCs, etc. 	PIU/MST	Incorporated in final design and communicated to the Contractors.		Prior to award of contract
Existing utilities	Disruption of services-existing water supply and electricity supply temporarily.	<ul style="list-style-type: none"> - Identify and include locations and operators of utilities, including roads in the detailed design documents to prevent unnecessary disruption of services and traffic during construction, especially since the pipes will be lined along the roads, which could significantly impact traffic flow. - Coordinating with local water authorities and communicating with public. - Avoid relocating transformers and electrical pole as much as possible. 	PST/MST/PIU	List of affected utilities and operators		During detailed design phase
Drinking Water Supply	Extraction of unsatisfactory raw water quality	<ul style="list-style-type: none"> - During the detailed engineering design stage, test water samples from existing tube wells located near proposed tube wells. The water Quality Test of Deep Tube well has been done and Report is attached in ANNEX VI. 	PST, PMU	Incorporated in final design and communicated to contractors	60,000.00	Prior to award of contract

		<ul style="list-style-type: none"> - The cumulative total daily water demand for the Ranikunda Water Supply Sub-Project has been estimated to be 1.55 MLD by the end of the design period in 2046 and discharge of 13lps per DTW has been recommended for a safe yield. - Design to include basic treatment using lime dosing, pressure filter and disinfection using Ca(ClO)₂ and provisions for lab unit and kits. 				
Stockpile areas, Storage areas, Disposal areas, and workers camp (if needed)	Disruption to traffic flow and sensitive receptors	<ul style="list-style-type: none"> - Stockpile area, storage areas and workers camp area is proposed within OHT premises. Contractor's camp will be located in existing OHT premises at Khareni, Bardagoriya RM-03. - The details will be included in C-ESMP (Contractor's Environment and Social Management Plan) of Sub-Project by the Contractor within 60 days after site mobilization. 	PIU	List of selected sites for stockpile areas, storage areas, disposal areas and workers camp (Workers camp is separated from contractor's camp within the Existing OHT premises) (Estimated No. of workers is 20 man/day) Written consent of landowner/s (not lessee/s) for reuse of excess spoils to agricultural land	140,000.00	During detailed design phase
Waste Generation	Generation of solid waste, wastewater and other construction waste may cause pollution from work sites and workers camp (if	<ul style="list-style-type: none"> - Mechanism of safe disposal will be developed in the subproject site before the actual commencement of work, including provision of waste bins. 	Bardagoriya RM/Ward Office	Contractor records. visual inspection		During detailed design phase

	any is established)	<ul style="list-style-type: none"> - Prohibition of unwanted littering and discharge of waste. - Proper management of solid waste will be done using lined pits for waste disposal. 				
2. During Construction Activities						
A. Physical Characteristics						
Community facilities	<p>Disruption of natural drainage</p> <p>Damage to existing facilities like water supply and pavements (roads along Ranikunda, Uttar Purba Ranikunda, Dailekhi Tole, Katan Tole, and Butkuwa Chautara).</p>	<ul style="list-style-type: none"> - Avoid natural drainage pathways for pipe-laying works. - Stockpile the excavated material at safe but nearby place to construction site under the satisfaction of Construction Supervision Engineer. - Restore natural drainage system if the drainage system during the construction is blocked. - Conduct a detailed assessment if any drainage system exist. - Design and implement temporary drainage solutions to manage water flow during construction. - Prior permission has been obtained from respective local authority for use of water for construction. Use of water for construction works shall not disturb local water users. - If construction work is expected to disrupt, users of community shall be informed 7 days in advance and again 1 day prior to start of construction. - Coordinate with local water supply authorities to schedule any 	PIU/RM/Contractor	List of any public or private infrastructure disturbed by the subproject works Minutes of meetings with the locals or affected persons.		As per need, or field-inspection if any such case is foreseen

		<p>necessary rerouting or upgrades during low-demand periods, minimizing disruption.</p> <ul style="list-style-type: none"> - Set up temporary water distribution points or alternative supply lines to ensure continuous access to water for affected areas. 				
Ambient air	<p>Conducting works at dry season and moving large quantity of materials may create dusts and increase in concentration of vehicle-related pollutants (such as carbon, monoxide, Sulphur oxides, particulate matter, nitrous oxides, and hydrocarbons) which will affect people who live and work near the sites (Ranikunda, Uttar Purba Ranikunda, Dailekhi Tole, Katan Tole, and Butkuwa Chautara).</p>	<ul style="list-style-type: none"> - Confining earthworks according to an Excavation Segmentation Plan as part of the C-ESMP, which the contractor is required to prepare before construction begins. The C-ESMP should also include all necessary permits and documents that need to be obtained by the contractor before works commence. - Water sprinkling at dry exposed surfaces and stockpiles of aggregates at least twice daily, or as necessary. - If re-surfacing of excavated portion of roads cannot be done immediately, spread of crushed gravel over backfilled surfaces - Require trucks delivering aggregates and cement to have tarpaulin cover and maintain a minimum of 2" free board - Limit speed of construction vehicles in access roads to maximum of 20 kph. - Ensure use of equipment and fuel complying with applicable 	Contractor/MS T/PIU	<p>Location of stockpiles.</p> <p>Number of complaints from sensitive receptors.</p> <p>Heavy equipment and machinery with air pollution control devices.</p> <p>Certification that vehicles are compliant with air quality standards.</p>	90,000.00	<p>Daily monitoring by MST in coordination with PIU</p> <p>Monthly visual inspection by PIU.</p> <p>Air quality measurement , once a year.</p>

		<p>emission standards.</p> <ul style="list-style-type: none"> - Do not allow construction equipment/vehicles that generate significant air pollution (above the applicable limit) and those that are poorly maintained on-site. Require all vehicles to be attested and certified for emissions compliance before use. - Conducting once a year Air Quality Test for dust nuisance (PM 10 and PM 2.5) at key locations such as settlement, Khaireni chok and Kolour Chok of Bardagoriya RM-03 during the dry working season (January-June). The tests will be carried out by the MST in coordination with the PIU or by a third party and the determined pollutants will be compared with the National Ambient Air Quality Standards (NAAQS) of 2012. 				
Acoustic environment	<p>Construction activities will be along the Row of existing roads (Ranikunda, Uttar Purba Ranikunda, Dailekhi Tole, Katan Tole, and Butkuwa Chautara).</p> <p>Temporary increase in noise level and vibrations may be caused by excavation equipment, and the transportation of</p>	<ul style="list-style-type: none"> - Plan activities in consultation with local administration so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance. - Restrict noisy activities to daytime. - Minimize drop heights when loading and unloading coarse aggregates. - Horns should not be used unless it 	Contractor/MS T/PIU	-Results of monitoring noise levels (Maintain maximum sound levels not exceeding 70 decibels when measured at a distance of 10m or more from the construction	90,000.00	<p>Daily monitoring by MST in coordination with PIU</p> <p>Monthly inspection by PIU.</p> <p>Noise level measurement</p>

	<p>equipment materials, and people.</p>	<p>is necessary or unavoidable</p> <ul style="list-style-type: none"> - Utilize modern vehicles and machinery with the requisite adaptations to limit noise and exhaust emissions, and ensure that these are maintained to manufactures' specifications at all times. - All vehicles and equipment used in construction shall be fitted with exhaust silencers. Use silent type generators (if required) - If it is not practicable to reduce noise levels to or below noise exposure limits, the contractor must post warning signs in the noise hazard areas. Identify any building at risk from vibration damage and avoiding any use of pneumatic drills or heavy vehicles in the vicinity. Complete work in these areas quickly. - Providing ear mufflers to workers operating high dB construction equipment. - Implementing regular inspection & maintenance of construction/transportation vehicles to ensure compliance with National Noise Standard Guidelines (NVMES, 2069 B.S., 2012). - Conduct noise level test once a year during the peak construction 		<p>sites)</p> <p>-Number of complaints from sensitive receptors</p>		<p>, once a year.</p>
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		stage at specified locations near schools, hospital and Khareni chok, Kolpur chok and Laligurans Community Forest areas. The test will be carried out by the MST in coordination with the PIU or by a third party.				
Waste disposal	<p>Pollution of water and land resources, and cases of vector borne diseases due to haphazard waste disposal.</p> <p>Generation of solid waste and waste water from construction sites and labor camp</p>	<ul style="list-style-type: none"> - Waste minimization and waste segregation will be prioritized - Practices of composting will be promoted - Hazardous waste will be segregated from nonhazardous waste and stored in closed, labeled containers, away from direct sunlight, wind, and rain. Incompatible wastes will be kept separate by physical barriers or sufficient spacing, with secondary containment systems in place to prevent leaks. Only licensed contractors, following local and international regulations, will handle, treat, and dispose of the waste. - Waste minimization and waste segregation will be prioritized; 3R approach will be promoted. - Organic waste generated from the camps will be composted or properly managed in compost pit within the camp area by following the waste management guidelines. - Awareness raising event will be carried out. - Decommissioning waste will be re-used, sold to local scrap dealers. 	Contractor	On-site situation in campsites (if any), work sites and their vicinities	10,000.00	Monthly monitoring by PIU/MST.

		<ul style="list-style-type: none"> - Construction debris will be disposed at designated spoils site only (as recommended in the C-ESMP) and the efforts will be made to minimize such waste through reuse, reduction, and recycling concepts. While hauling and storing spoil temporarily, spoil will be covered with plastic/tarpaulin cover. - Backfilling will be done with an immediate effect. 				
B. Biological Characteristics						
Vegetation	<ul style="list-style-type: none"> - Loss of vegetation cover during construction works. However, at present, no tree clearance is envisaged during construction - Pressure on the Laligurans CF for its products like firewood, timber and non-timber forest products 	<ul style="list-style-type: none"> - Greenery promotion around the construction sites and road alignments where possible - Tree felling will be avoided, and if any such cases occur, prior approval from the local bodies will be received and compensatory plantation @ 1:10 will be carried out - Species of local economic significance and values will be planted - Providing alternative fuel to worker for cooking - Establish, implement, and enforce a Worker Code of Conduct that expressly prohibits illegal logging, clearing, and collection of plant species in general, including fines and dismissal for repeat offences. 	Contractor	<p>Area of greenery that has been cleared</p> <p>Number of trees cut (only if unavoidable)</p> <p>Complaints or grievances by the locals</p>	500,000.00	Monthly monitoring by PIU/MST.

<p>Impacts on fauna</p>	<ul style="list-style-type: none"> - Disturbance to possible occasional movement of wildlife and birds of Laligurans CF and its surroundings from construction activities - Possible hunting and poaching by workers 	<ul style="list-style-type: none"> - Restrict noise-generating construction activities to established working hours 8 hrs. (8 AM to 4 PM) as per the Labour Act 2017. For any work outside these hours, obtain a special permit in advance. - Establish and enforce a speed limit of 20 km/hr for construction vehicles - Horn prohibited sign will be placed near the Laligurans CF. There is no evidence of human-animal conflict in the Laligurans Community Forest, which is adjacent to the WSS sub-project, so additional measures for this concern are not necessary. - Establish, implement, and enforce a Worker Code of Conduct that expressly prohibits illegal logging, clearing, hunting, poaching, and collection of animal and plant species in general, including fines and dismissal for repeat offences. - Implement a worker environmental awareness program as part of worker induction to inform personnel about the prohibition of hunting and poaching and the penalties associated therewith 	<p>Contractor</p>	<ul style="list-style-type: none"> - Vehicles running nearby Laligurans CF will be monitored. - Number of complaints from sensitive receptor on disturbance of hunting, poaching etc. 		<p>Monthly monitoring by PIU/MST</p>
<p>C. Socioeconomic Characteristics</p>						

<p>Community activities</p>	<p>The construction related activities that impede access will disturb the local residents</p>	<ul style="list-style-type: none"> - To minimize disturbances, construction work will be conducted at earliest possible. - Disturbances to local activities due to obstacle in movement during pipe laying may occur in service areas of Ranikunda, Uttar Purba Ranikunda, Dailekhi Tole, Katan Tole, and Butkuwa Chautara. - The pipe trench will have a depth of 90 cm and a width of 60 cm. During the excavation period, caution boards will be installed, and the area will be barricaded with caution tape to ensure pedestrian safety and prevent any impact on pedestrian movement. To minimize the impact, the pipeline installation will be carried out in short sections of 500 meters at a time, with testing and backfilling completed promptly, within a week. - The local residents will be consulted and informed about the work schedule preferably a week before the construction starts and one day before the construction starts. - Temporary diversions and signboards will be provided for the pedestrian. - Ramps, where necessary, will 	<p>Contractor</p>	<p>Time schedule of construction work; Information related to construction activity to local residents Number of temporary diversions sign, signboards etc.</p>		<p>Daily (or whenever there are construction activities) by the Contractor/M ST Monthly visual inspection by PIU</p>
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		be provided to ensure access to houses, and other service areas. Ramps provided will be of sturdy material and of sufficient width.				
Labor Camp Management	Poor sanitation practices by workforce of 40 to 45 labours (15 local & 20-25 migrant) may cause pollution of surrounding environment. Social problems may arise due to bad behavior of the workforce such as gambling, alcoholism and disrespect to local people and culture	<ul style="list-style-type: none"> - Provide adequate health care facilities within construction sites and provide first aid facility round the clock - Camp shall not be in the vicinity of landslide and flood plains. - Provide and maintain proper drinking water, sewerage and waste disposal facilities at the camps. - Proper ventilation will be provided in the camp - Separate room for men and women workers will be managed. - Separate toilet will be established for male and female. - Raised bed is the minimum standard of bedding in labor camp. - Ensure no wood is burnt by any worker on or off site. Camps shall be provided free of cost, with electricity and regulator & adequate fuel supplies of LPG or Kerosene - 	Contractor	Daily entry-sheet of the workforce in the campsites Number of local people versus outside workers in the subproject area will be regularly monitored	146,000.00	Monthly inspection at campsites (if any) by PIU.

Occupational Health & Safety	During the construction work, the laborers involved in the construction activities may be exposed to different level of health risks and are prone to accidents	<ul style="list-style-type: none"> - Mandatory use of safety measures (PPEs) such as mask, helmet, hand gloves and rubber boots, etc. - The laborers will be insured for their health and safety. - Provide safe drinking water for labours - Prohibit child labour and forced labour in all construction activities. - Provide OHS orientation training to all new employees to ensure they are apprised of the basic site rules of work at / on the site and of personal protection and preventing injury to fellow employees - Provide comprehensive training to all workers on occupational health and safety practices. Training should consist of basic hazard awareness, sites specific hazards, safe work practices, and emergency procedures for fire, evacuation, and natural disaster, as appropriate. Any site-specific hazard or color coding in use should be thoroughly reviewed as part of orientation training. - Contractor will arrange the First Aid Kit Box and standby medicine for workforce during working period and emergency situations. Adequate and easily accessible first-aid outfit should be available 	Contractor	Availability of personal protective equipment, First-aid facilities, Medical insurance coverage for workers, Housekeeping and condition of sleeping and sanitation facilities at campsite (if any), Roster of workers	50,000.00	<p>Daily (or when there is a construction activity) by the Contractor/MS T.</p> <p>Monthly visual and document inspection by PIU</p>
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		<p>on the site. Some of the work force should be trained to use the outfit. The contractor should also make provisions for an ambulance to take injured for ill person to the nearest hospital, if needed</p> <ul style="list-style-type: none"> - Adopt systematic labor registration procedures keeping up-to-date information of all workers including contact details of the person to be contacted in case of emergency. 				
Social Harmony	<p>-Changes in social structure, cultural and traditional practices of the rural people due to exposition to the outside workforce</p> <ul style="list-style-type: none"> - Conflict between Local and Outside Workers and erosion of law and order situation of the project area 	<p>-Workforce will be informed about the culture and living style of the project area. They will be instructed to respect the locally accepted culture and living style.</p> <ul style="list-style-type: none"> - Special instruction will be given to all workers to act in responsible manner during and after the working hours, respecting the rights, properties and practices of local people. - The use of local workers will be maximized in order to mitigate the impact. The use of locals will not only help in minimizing the adverse impact associated with the change in lifestyle but also a milestone to enhance the local economy through employment and cash flow. - Preference will be given to the local people in project related jobs and subsidiary opportunities - Construction workers from outside the project area will be well-informed 				

		<p>about the general norms and values of society before deployment. The construction workforce will be instructed to respect local people, especially the female members and the local culture and tradition.</p> <p>-A code of conduct (CoC) will be prepared for the construction workforce and the project staff on how to behave with the local people of the project area, which besides others will include a) Respect to the local people their culture, traditions and women; b) Not indulge in any conflict with the local people; c) Not to gamble with the local community people; d) Not to drink alcohol outside the construction camps and roam local markets after consuming alcohol.</p> <p>-</p>				
GRM, Social Disturbance / Risk of SEA/SH, Human trafficking, GBV, HIV AIDS and Communicable diseases	During the construction work, the laborers including the community, may be exposed to risk of SEA/SH, Human Trafficking, GBV, HIV AIDS and Communicable diseases.	<p>(i) Regarding SEA/SH, GBV</p> <ul style="list-style-type: none"> - Locals will be given due priority for any employment opportunity - GRM will be established for the workers, focal person handling GRM including SEA/SH will be assigned, and every laborer will be informed of the GRM. - Follow Code of Conduct which applies to staff, laborers and others employees at works ite, personnel of subcontractors, any other personal assisting in 	PIU	Regular monitoring and supervision of construction site/ camp <ul style="list-style-type: none"> - Information related to SEA/SH, Human trafficking, GBV, HIV AIDS and Communicable diseases 	50,000.00	Daily (or when there is a construction activity) by the Contractor. MST/ PIU Rural Municipality

		<p>the execution of the subproject works.</p> <ul style="list-style-type: none"> - - CoC will be COC signed, oriented on the CoC to ensure it is understood by those signing, and strictly adhered to and monitored for all workers. Signed copies of code of conduct will be maintained. - Separate toilets will be provided for male and female workers - SEA/SH, GBV awareness raising activities, trainings and stakeholder engagements such as - community based- awareness program, school based awareness program. The GRM focal person related to GBV (Panmati Rana) of Department of Women and children under social development unit of Bardagoriya RM will be part of trainings, awareness programs regarding SEA/SH. - Awareness program for women and against the gender-based violence will be conducted for the workers as well as the local community including school children regarding these concerns - 4 orientations/trainings with at 				
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		<p>least 25 participants in each training; to be conducted during Pre-construction and during Construction period.</p> <p>(ii)HIV AIDS & Communicable diseases</p> <ul style="list-style-type: none"> ▪ Awareness creation and sensitization to workers and other persons post- project to reduce or eliminate chances of infections of HIV-AIDS and other sexually transmitted diseases ▪ Distribute HIV & AIDS awareness materials in collaboration local health related agencies ▪ Ensure protective measures for communicable diseases is followed, prepare and follow SOPs by all workers and staff (hand washing, using sanitizer, masks etc.) including the community health and safety awareness and management ▪ Health screening of the workers will be carried out before joining them into workforce ▪ Emergency Response Plan will be implemented during any critical circumstances (e.g. CoVID spread) 				
Child labour, forced labour and wage discrimination	During the construction work, the laborers involved in the construction activities may be a Children	- Grievance Redress Mechanism will be established for labor issues, focal person handling worker related GRM will be assigned and every laborer will be informed of	Rural Municipality/ Contractor	- Copies of citizenship card or other valid personal ID		Daily by the Contractor. MST Monthly visual

		<p>the GRM.</p> <ul style="list-style-type: none"> - Grievances box will be installed in contractor and labor camp. - Child labour & forced labour will be strictly prohibited - Copies of citizenship card or other valid personal ID card will be kept in record of the workers - Awareness among the workers and the local community (at least two) will be conducted <p>Equal wage for male and female workers will be ensured</p>		card will be seen if any doubt		inspection by PIU
Community Health & Safety	Overall, communities will be exposed to cross-cutting threats from construction's impacts on air and water quality, ambient noise level; Chances of accidents, Communicable and transmittable diseases may potentially be brought into the community by construction workers	<ul style="list-style-type: none"> - Contractor's will maintain adequate space and adequate lighting, temporary fence, barriers and signage at worksites; - Children and community members will be prohibited from active construction sites - Proper fencing of stockpile areas - Awareness programs on communicable diseases and hygiene practices will be carried out - Disseminate the GRM to communities and affected stakeholders during consultations, community meeting, disseminate through local media and newspaper. - Sensitive localities in terms of risk of this environmental, social and health related impact is Bardagoriya Rural Municipality ward- 	Rural Municipality/Contractor	<ul style="list-style-type: none"> -Number of permanent signs, barricades and flagmen on worksites -Number of complaints from sensitive receptors; Number of walkways, signs, and metal sheets placed at subproject location 	100,000.00	<p>Daily by the Contractor/MST.</p> <p>Monthly visual inspection by PIU</p>

		<p>03.</p> <ul style="list-style-type: none"> - Inform and regularly update and organize awareness campaigns targeting the affected communities, including vulnerable groups, about potential project hazards and changes to project activities that may have environmental, health, or safety impacts, as well as the proposed prevention, mitigation, and emergency response measures. - Active sites will be well demarcated and bounded. Excavated sites will be well bounded with hard barricades. - Unauthorized entry to active construction sites and stockpile sites will be strictly regulated. - Movement of vehicles for construction activities will be strictly regulated under safety guidelines. - Code of conducts will be implied for the workforce so that they have no conflict with the local communities. - Provision of ramps will be made where trenching works are being carried out to provide access to houses and businesses. 				
3. During Operation and Maintenance Phase						
Exposure to chemicals	Excessive exposure to chlorine, hypochlorous	- All disinfection chemicals require proper storage and handling	Contractor during DLP;	Visual inspection		Daily (or as needed) by the

	<p>acid, and hypochlorite ion generally results in irritation of the esophagus, a burning sensation in the mouth and throat.</p>	<p>practices</p> <ul style="list-style-type: none"> - Provide safe storage for chemicals - Ensure that the person is hired, with knowledge of chlorine use for disinfection process during operation - Ensure use of PPE while using chemicals - Use of chlorine guideline as per WHO - Training on the handling and on dosage of the chemicals will be given to the staff. Ensure there is storage area for chemicals in compliance with the Material Safety Data Sheet (MSDS) for each substance. This includes: <ul style="list-style-type: none"> • Storing chemicals in appropriate containers that are compatible with the substances. • Ensuring proper labeling and segregation of incompatible chemicals (e.g., acids and bases, oxidizers and flammables). • Maintaining temperature, ventilation, and humidity controls as specified in the SDS. • Implementing secondary containment measures to prevent spills or leaks. - Ensuring easy access to spill kits, eye-wash stations, and fire extinguishers in case of 	<p>WSUC or Operator after DLP</p>			<p>operator.</p>
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		<p>emergencies."</p> <ul style="list-style-type: none"> - Additional measures, as required, will be defined in the O&M manual of the water treatment facility and operation of the pipeline. 				
Water bodies	<p>Water pollution due to effluent produced from the periodic Back washing of the filter plant, if discharged directly to the river course may cause harm to the water bodies and aquatic life especially during the dry season when flow will be less.</p>	<ul style="list-style-type: none"> - A settling tank is proposed for decanting of the slurry from the effluent during backwash 	Contractor during DLP; WSUC or Operator after DLP	<p>Visual inspection</p> <p>Effluent sampling</p>		<p>For first year, DSMC After that WSUC daily inspection or as needed.</p> <p>Effluent sampling by the operator, only when necessary or practical.</p>
Drinking water supply system	<p>Delivery of unsafe water due to source contamination, leakage in pipes</p>	<ul style="list-style-type: none"> - The operations and maintenance plan and training for staff will cover; - (i) Competent/cautions handling and storage of calcium Hypochlorite and qualified persons to implement/oversee disinfection and treatment;(ii) Providing safe storage for chemicals; in compliance with the Material Safety Data Sheet (MSDS) for each substance. - (iii) ensure capacity of WSUC to implement quick response to hazardous substance/waste spills; - (iv) Implement Safeguard Policy 	Contractor during DLP; WSUC or Operator after DLP	<p>Visual inspection</p> <p>Water Quality reports</p> <p>WTP records in the logbook</p>		<p>Daily or as needed visual inspection by the operator.</p> <p>Quarterly or as needed water quality testing by the operator.</p>

		Statement (SPS)-complaint EMP and a WSP. This policy ensures that the water supply sub-project is environmentally and socially sustainable; and - (v) Monitor water quality.				
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<p>-Impact on Water Pollution</p> <p>-Pollution and nuisance due to sludge removal and its disposal</p>	<p>If the effluents from the WTP and waste water from the labor camp is not well treated, then there will be risk of pollution of local water bodies due to the discharge of effluent and liquid waste. However, likeliness of occurrence of this case is very low.</p>	<ul style="list-style-type: none"> - The treatment plant will be cleaned on regular basis. - Quality of the effluent will be regularly monitored to ensure that the effluent meets the GoN tolerance limits of discharge of waste water from combined wastewater treatment plant - The operation and maintenance of the WTP will be carried out on timely and regular basis as per it O&M plan. - Standard Operation Procedure (SoP) will be adopted for the operation of WTP. - Sludge will be handled only by designated trained team authorize by the municipality and taken to the Tikapur fecal Sludge management (FSM) treatment plant. - Sludge will be disposed to the sludge drying bed or other designated place under coordination and permission of the municipality 	<p>Contractor during DLP; WSUC or Operator after DLP</p>	<p>Visual inspection Water Quality reports WTP records in the logbook</p>		<p>Daily or as needed visual inspection by the operator. Quarterly or as needed water quality testing by the operator.</p>
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4.2 Capacity Development and Training

To enhance the capacity of officials for effective implementation of proposed mitigation measures and monitoring the resultant effect, as well as create awareness among workers and supervision staff, trainings and awareness programmes have been planned and is given in Table. The PMU, PST, PIU, MST can be consulted for such trainings. Experts/Consultants can also be the resource persons to impart trainings. These experts shall be appointed based on specific need for the training.

Table 7: Details of proposed training program

S. N	Title	Objective	Time of training	Duration/ Days	Participants
1	Orientation on E&S by PMU/PST MST/PIU.	-ESMF requirements -Roles & responsibilities of contractor & MWASH unit -Identification of social issues -Addressing social impacts -Preparing mitigation plans	Pre-construction stage(when contractors are substantially mobilized)	1 Day	PIU/MST/Contractor/MWASH unit
2	Environmental and Social Management Plan (ESMP) Implementation Training by PMU/PST to MST/MWASH Unit	-To implement ESMP efficiently and accurately, leading to unfavorable impacts to environment workers and community.	Before mobilization of contractor	1 Day	PMU/PST/PIU/MST/MWASH unit
3	Focused training on specific issues by PIU/MST to Labours/Contractor	-Issues relating to wage parity, child labour etc.	During construction or when needed	½ Day	PIU/MST/Contractor/MWASH unit
4	Training on STDs/ HIV Aids issues by MST/PIU to labour/Contractor	-To increase the level of awareness about prevention and control of STDs/HIV Aids among communities.	During construction	1 Day	PIU/MST/Contractor/MWASH unit
5	Training on occupational Health by PIU/MST to labours/Contractor	-To ensure the safety health and welfare of labours and others who may be affected	During construction	1 Day	PIU/MST/Contractor/MWASH unit
6	Road safety by PIU/MWASH unit/MST to labours/contractor	-To raise road safety consciousness among the road users	During construction/During trench excavation along the road.	1 Day	PIU/MST/Contractor/MWASH unit
7	Operation and Maintenance of the Facilities (O&M Manual)	-To train the O&M staff on the implementation of operation phase E&S measures	During the DLP	1 Day	PIU/MWASH unit

4.3 Summary of cost of ESMP activities

The summary of costs for Environmental and Social Management Plan (ESMP) activities during the construction and operation phases itemizes expenses under various subjects, as shown in Table 4. These costs exclude mitigation actions that are typically the contractor's responsibility. Most physical environmental impact mitigation costs are included in the project cost or associated with contract bids, with some measures being non-cost bearing.

Mitigation costs for operation phase activities, such as infrastructure rehabilitation and periodic maintenance of the Ranikunda WSS Sub-Project are not included. The proponent will cover all environmental management costs beyond the contractor's legal liabilities and the legal roles & responsibilities of governmental institutions.

Table 8: Summary of costs of ESMP Activities

S.N.	Items & Headings	Unit	Qty.	Rate	Total, NPR	Reference
	Provisional Sum amount					
1	Water quality test	Samples	30	2000	60,000.00	Dhangadhi Lab
2	Air quality and Noise level monitoring	Samples	2	90,000	1,80,000.00	Consulting with the air, water and noise level monitoring lab. (Once in a year)
4	Greenery promotion	Job	LS	5,00,000	5,00,000.00	Consulting with Nursery.
5	Water Sprinkling	Job	LS	50,000	50,000.00	As per the site accessibility.
6	No horn sign installation	Job	LS	20,000	20,000.00	As per local market price
7	Waste collection bins	Job	LS	10,000	10,000.00	As per local market price
8	First Aid and medication	Job	LS	50,000	50,000.00	As per local market price
9	Environment and Social Awareness, Worker's & Community's Health and Safety and WASH Promotion (<i>Events will be conducted for workers as well as community</i>)					
(i)	Environmental and Social Awareness (during Pre-construction phase and construction phase; at least 30 participants/event)	Events	2	25,000	50,000.00	
(ii)	Occupational Health and Safety (including GBV, SEA/SH, HIV AIDS & Communicable diseases at least 35 participants in each	Events	2	25,000	50,000.00	

	orientation/training, during pre-construction and construction phase)					
(iii)	Community level awareness on WASH and Sanitation and on SEA/SH	Events	2	20,000	40,000.00	
(iv)	Labour Camp management	Job	LS	1,46,000	1,46,000.00	
10	Stockpile/Construction Waste Disposal Management	Job	LS	1,40,000	1,40,000.00	
11	Environment & Social safeguards (grievance meetings, site monitoring, etc.)	Meetings /Events	18	8,000	1,44,000.00	
12	Information dissemination materials and medium					
	(a) Leaflets	Job	LS	10,000	10,000.00	Consulting with local press & media.
	(b) PSA (local media)	Job	2	25,000	50,000.00	Consulting with local press and media.
	Total				15,00,000.00	

(In Words: Fifteen Lakhs Rupees Only)

Note: Environmental Mitigation will be covered from Provisional Sum A2 in Item no.2 of Contactor's BoQ & Community level awareness program will be conducted by PIU & MST

4.4 Environmental and Social Monitoring

Environmental monitoring is an essential aspect of environmental management. It consists of collection of data to measure environmental changes associated with implementation of the proposal. The purpose of monitoring is to investigate and understand the quality of the environment prior to implementation of the proposal and keep records of the impact of implementation of the proposal on the environmental quality so as to provide reliable information and scientific basis for environmental management. Therefore, environmental monitoring is a mechanism which evaluates whether the mitigation actions were actually carried out or not and evaluates the effectiveness of the implemented measures to curb the perceived impacts or identify unforeseen impacts for further corrective actions to avoid or minimize the impacts before it is too late.

Existing Environment Protection Act, 2076 and Environment Protection Rule, 2077 obliges the proponent to comply with the matters mentioned in the environmental management plan and provides the responsibility to the concerned department or ministry; these are basically related with the projects requiring environmental studies pertaining to these laws. Rule 45 of Environment Protection Rule, 2077 indicates towards self-monitoring of environmental impacts of implementation of the proposal and submit the report to the concerned agency.

Basically, two types of environmental monitoring will be carried out for this project: Impact Monitoring and Compliance Monitoring.

Impact monitoring will be carried out to assess the actual level of impact due to project construction. The impact monitoring includes:

- Monitoring of the impacts of the project on physical, biological and socioeconomic and cultural environment of the area;
- Monitoring of the accuracy of the predicted impacts;
- Identification of the emerging impacts due to project activities or natural process and development of remedial action; and
- Monitoring of the effectiveness of mitigation measures.

Compliance monitoring will be conducted to monitor the compliance of the proposed mitigation measures and regular monitoring activities by the PIU/MST. The compliance monitoring will mainly focus on:

- Compliance of the mitigation measures and specification in accordance with the environmental and social management plan;
- Allocation of adequate budget for implementation of mitigation measures and monitoring;
- Compliance of existing act, regulation and guidelines and mandate relevant with the proposal; and
- Overall environmental and social performance of the project.

E&S Reporting:

The MST is responsible for the day to day monitoring and reporting of the Contractor's E&S compliance. The MST will prepare monthly E&S progress reports and submit them to the PIU. The PIU will compile these monthly reports and, in coordination with MST, prepare a quarterly monitoring report. This quarterly report will then be submitted to the PMU, which will share it with the World Bank. In addition to these regular reports, the PMU, in coordination with the PIU, PST, and MST, will prepare an annual E&S monitoring report. This annual report will also be shared with the WB.

The monitoring plans have been presented in the form of matrix/table below. The plan includes the parameters to be monitored, the measurable indicators, the method, location and schedule. The schedule of monitoring will be daily, weekly, monthly, quarterly, half yearly or annually depending on the parameter and type of monitoring.

Table 9: Compliance Monitoring Plan

Issues	Indicators	Method	Schedule	Location	Responsible	Agencies to be consulted
Construction Phase						
Approval of operation plan of Bardagoriya Rural Municipality with proposed intervention	Approval letter	Review of approval letter	Prior initiation of work or Prior procurement	Bardagoriya Rural Municipality	PIU/MST	
Implementation of recommendations (mitigation and enhancement measures and monitoring requirements)	Inclusion of each of the environmental considerations from the tender documents in the contractor's or executor's work plan e.g. C-ESMP, Traffic management Plan, Earthwork Segmentation Plan, as applicable)	Review of proposed work plans, submitted by contractor or executing authority	During contract negotiations	Bardagoriya Rural Municipality	PIU/RM	
Mitigation management (Compliance with ESMP)	Budget allocation for mitigation measures and monitoring	Review of project budget document	Annual	Bardagoriya Rural Municipality	RM/PIU/MST	

Implementation of construction phase monitoring	Monitoring report and budget allocation for corrective actions	Review of monitoring report and budget allocation for corrective actions	Annual	Bardagoriya Rural Municipality	RM/PIU/MST	
Operation Phase						
Operation phase mitigation management	Budget allocation for mitigation measures for operation phase	Review of project budget document	Annual	Bardagoriya Rural Municipality	RM/PIU/	
Implementation of operation phase monitoring	Monitoring report and budget allocation for corrective actions	Review of monitoring report and budget allocation for corrective actions	Annual	Bardagoriya Rural Municipality	RM/MW ASH	

Table 10: Impact Monitoring Plan

Parameter	Indicators	Method	Location	Frequency & Schedule	Agencies to be consulted
Construction Phase					
Physical Environment					
Air quality	Dust and smoke	Field observation	Construction area and access road	Once in a Year	
Noise pollution	Noise level	Field observation and discussion	Construction site and access road	Once in a Year	
Land pollution	Open defecation and garbage disposal places	Direct observation	Disposal site	Daily	
Biological Environment					

Vegetation	No. of trees felled and area of site cleared	Site observation and record checking	Embankment site	Daily	
Socio-economic and Cultural Environment					
Existing infrastructures	Damages of road and culvert, access to houses	Observation and discussion with local people	Access road	Weekly during construction	
Law and Order	Incidents of different types of crimes in the project area; complaints in the local police	Discussions with the local people and the local police	Project area and surrounding	Monthly during construction	Local Police Office
Labor Issues	Number and type of grievances related to workers, number of grievances resolved, labor records	Site visits, visual inspections, reports and photographs, review of workers' grievances register		Regular	
Information disclosure, stakeholder engagements, GRM	Number, type and topic of engagement activities Number, type and status of grievances Number and type of engagement activities with vulnerable groups	Observation, discussion with the locals, GRM register and other reports/documents		Regular	
Occupational health and safety	Cases of accidents and injury	Observation and record checking	Active construction sites	Weekly	Health institutions
Traffic and road safety	Status of road for use; road accidents	Observation and record checking	Observation and record checking	Daily	

Gender, children and vulnerable group	Number of such people employed	Review of attendance and discussion	Construction site	Weekly	
Operation Phase					
Physical Environment					
Land pollution	Open defecation and garbage disposal places	Direct observation	Water Supply & Sanitation Project site and surrounding	Monthly	
Biological Environment					
Vegetation	Survival of plantations	Site observation and counting	Plantation sites	Monthly for 5 years	
Socio-economic and Cultural					
Existing infrastructures	Damages of road and culverts	Discussion with local people	Access road	Monthly	
Law and Order	Incidents of different types of crimes in the project area; complaints in the local police	Discussions with the local people and the local police	Surrounding settlements	Monthly	Local Police Office
Gender and social inclusion	Involvement of women and vulnerable groups in tourism business	Interview with local people	Water Supply & Sanitation Project site and surrounding	Biannually	Municipality/ Wards
Livelihood of local users	Involvement of users in commercial agriculture/tourism business/other related ventures	Interview with local people	Water Supply & Sanitation Project site and surrounding	Annually	Municipality/ Wards

4.5 Implementation Schedule

The project is schedule for implementation after completion of tender process, which will be after the approval of all project documents (Design and drawing, cost estimate and ESMP) and completed within 18 month form the date of contract signing.

4.6 Project Environmental Management Framework and the Key Stakeholders

Overall project environmental management framework is the responsibility of the project proponent, Bardagoriya Rural Municipality. The Bardagoriya RM under its leadership will form a project implementation committee (PIC) including all other local level stakeholders. The PIC will procure construction contractor and oversee the overall construction activities. It will also monitor the performance of environmental and social safeguard measures.

The key stakeholders including the Bardagoriya Rural Municipality, to be involved in the project management are:

- a) **World Bank:** Implementation of World Bank's Environmental and Social Framework (ESF), work plans, directives and guidelines as required, review monitoring report.
- b) **Project Implementation Unit (PIU):** The PIU will supervise the Municipality Support Team (MST) to aid in infrastructure development, construction oversight, and reporting. It will spearhead federal and provincial efforts to enhance sector governance, institutional capacity, and resilience of water supply and sanitation infrastructure through integrated watershed management, in collaboration with the municipalities.
- c) **Municipal WASH (M-WASH) Unit:** It include developing WASH governance, policy, and institutional arrangements, programming and regulation of municipality-wide water and sanitation services, as well as planning, managing, and monitoring the implementation of local water supply and sanitation services as provided for by the Constitutional provision and Local Governance Operations Act, 2017.
- d) **Project Support Team (PST):** The PST supports the Municipal Support Team by offering guidance on local project execution, capacity building, and community engagement, while also aiding the Project Management Unit (PMU) by providing essential data, reports, and on-the-ground insights to inform decision-making and ensure alignment with project objectives.
- e) **Municipal Support Team (MST):** MST offer specialized technical aid to the PIU, focusing on governance, institutional support, planning, design and construction supervision of infrastructure project. It aims to strengthen the M-WASH Unit's capacity in planning and managing water and sanitation services effectively. MST is also responsible for contractor's daily compliance monitoring.
- f) **Contractor:** The Contractor is responsible to plan, execute, supervise, inspect and direct a construction project from start to finish regardless of the scope of the project. The contractor ensures that the project complies with the ESMP and all the specifications as outlined in the contract documents.
- g) **Sub-Contractor:** Subcontractor/Supplier is an institution, awarded a portion of an existing contract by a principal or general contractor. Subcontractor/Supplier performs work under a contract with a general contractor. Essentially, a Subcontractor/Supplier will perform and abide by all the obligations of the principal or general contractor's

contract, including compliance to ESMP and all specifications in the contract documents.

- h) E&S Specialist/E&S Consultant:** The E&S Specialist are there in PMU, PST and MST who carry out the required E&S assessments and prepare reports. They provide guidance to PMU and PIU for effective implementation of ESMP recommendations. The MST E&S Specialists support the PIU to carryout day to day compliance monitoring of the Contractor's responsibilities. The Contractor will hire its own E&S Specialists to implement its E&S responsibilities as per the contract. In the guidance of PST/PMU E&S specialist, E&S specialist of MST prepare the site-specific environmental and social management plan (ESMP) report. E&S specialist support and provide guidance to PIU to ensure that the relevant E&S instruments/ESMP/ESSR/ESCoP etc. and also effective implementation of these reports for the sub-projects.
- i) Affected Wards, Municipality and District Coordination Committee (DCC):** Provide recommendations to the proponent with comments and suggestions and assist proponent in the project implementation.

4.7 Social Accountability and Grievance Redress Mechanism (Project level GRM and Central GRM)

The stakeholders may raise any grievances related to the impacts on them or any other grievances. Such types of grievances need to be addressed through Grievance Redress Mechanism (GRM) for timely response on stakeholder's query and concerns. At first instance, the project-affected grievant should raise their grievance with the Grievance Committee of the project, and the Grievance committee will determine whether it can be resolved within the project, at the ward level, or whether another mechanism should be used. The records will be kept properly.

A Grievance Redress Mechanism has been set up to allow stakeholders including PAPs to raise any concerns or complaints, or to appeal any disagreeable decisions, practices and activities arising from the project including compensation for land and assets (if applicable). Information about GRM will be published on the municipality's website, will be pasted at public space in the sub-project area, in the notice boards of municipality and ward offices. Locals will be encouraged to make use of the GRM established for the sub-project to raise any complaints/grievances induced due to this sub-project. Stakeholders will be made fully aware of their rights and the procedures.

GRM has been initiated, and ward Level GRC has been formed at project's ward level. At the Ward level, the staffing of the Grievance Redress Committee (GRC) includes ward representatives, WSUC Chairman, PIU representative under coordination of Chairperson of WN 03. Mr. Manrishi Acharya. Likewise, RM Level GRC has already been established under coordination of the Chairperson of the Bardagoria RM (Mr. Karna Bahadur Kunwar). At the RM level, the staffing of the Grievance Redress Committee (GRC) includes RM Vice Chairperson, Administrative officer, PIU Manager, MWASH Unit. (The details are provided

in Annex 2). The notice regarding formation of ward Level GRC and RM Level GRC has been published and shared to the stakeholders.

The 2nd level GRC will be at the PMU level, comprising members from the PMU. This committee formed under the chairmanship of the Project Director (PD), the staffing of the Grievance Redress Committee (GRC) includes Social Development Expert of PMU and one other employee appointed by the PD. These three -member committee can also take the help of external experts or organizations if necessary to investigate and address complaints. Special project grievance mechanisms such as on site provision of complain hearings allows project affected persons to get fair treatment on time. The subproject will also handle issues regarding the compensation damages done during construction.

The details of the proposed GRC structure and GRM process were discussed during public consultations with stakeholders in all levels.

Grievances about GBV

There is an existing GRM put in place for the project which will also be used for addressing GBV and SEA/SH-related issues at the PMU. In case of sub-project, there is Department of Women and Children (DWC) under social development unit of Bardagoriya Rural Municipality to resolve the GBV/SEA/SH issues. The Bardagoria RM has nominated GBV and SEA/SH focal person (Ms. Panmati Rana). However, the PIU/MST will also map out any GBV service providers in the project area so that the focal person can also access any support and timely advice in cases related to GBV and SEA/SH. The project will place its uppermost priority on handling and managing the GBV-related grievance by maintaining full confidentiality of the survivor. The first responders of the grievances in relation to GBV will be the GBV focal person and the focal person will be trained on managing and handling such grievances. GBV referral pathway will be established and communicated to both PMU at the DoWSSM and local level. Further, the GRM will also put in place a system to immediately notify both the PMU and the World Bank of any GBV complaints, with the consent of the survivor. As per the requirement of the World Bank, the PMU, in support of the World Bank, will prepare and implement the SEA/SH Action Plan before the implementation of the project.

Organogram of E & S activities

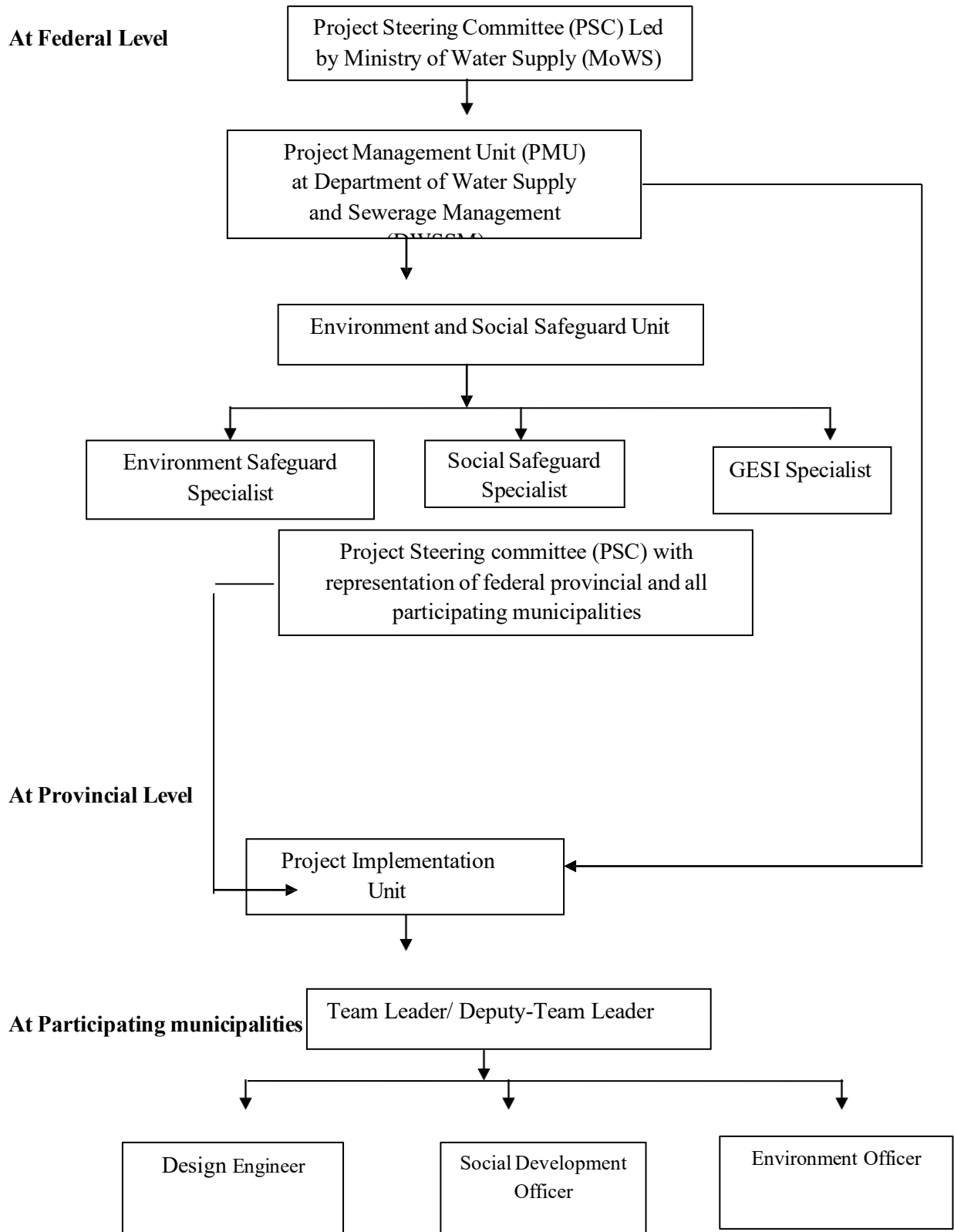


Figure 4: Organogram of E & S activities related to the project

5. STAKEHOLDER ENGAGEMENT AND INFORMATION DISCLOSURE

5.1 Public Consultation

Public consultation meetings, and Key informant interview (KII) were used to engage as many locals as possible during the public consultation process. The details of design aspects of the sub project, social & environmental risk, and GBV aspects were discussed during the public consultations. Separate consultations with women, Dalits, and Tharu and other disadvantaged groups living in the service area were organized to discuss potential E&S issues related to proposed water supply sub-project. (please see annex II for details) The major concerns discussed during the public consultations were as followings;

- Information regarding enhancement and construction of sub-project as well as about pipe laying work is given to the local people.
- Priority for sub-project construction was requested, and the locals also demanded for employment opportunities in the project's construction works as per their skill.
- The locals requested to provide subsidy tap and toilet construction for poor and marginalized households.
- A detailed discussion was held regarding the need for proper management and prior information in case of interruption of water supply and electricity during pipeline expansion.
- Awareness of workers and locals regarding social harmony was also discussed
- Potential concerns of dust problem, and disturbances due to noise during construction phase was raised as a concern as there are settlements and schools

For instance, the group of directly beneficial people is those living nearby WSS project area. The aim was to identify possible environmental and social impacts that might arise from the proposed project activities. Moreover, the applicable suggestions and recommendations have been incorporated in the proposed project design/ESMP preparation. According to the site survey during the ESMP, within the directly impacted area of Bardagoriya Rural Municipality ward no.3, people expressed their concerns about various kinds of environmental impacts caused by the project. People around the selected site of Bardagoriya expressed some comments on construction at that site, citing noise and other impacts to the surrounding communities. Public concerns and corresponding mitigation measures are summarized in table;

Table 11: Public concern and Mitigation Measures

Public concerns	Mitigate measures
Dust during construction	Regular water sprinkling and speed limits
Noise during construction	Prepare reasonable construction program; Avoid night construction as much as possible;
Wastewater and solid waste from construction camps	Use existing living facilities as much as possible; Build septic tanks on Public Toilet construction sites; Transport solid waste to location or landfills designated

	by local environmental and sanitary authorities;
Noise generated during trench excavation work and other construction activities	Select low-noise equipment; Deploy acoustic barriers
Accident may occur during trench excavation	Immediately backfilling and placed the caution board at both side of excavated trench. Pre-inform to the

5.2 Stakeholder Consultations Plan for Implementation Phase

Consultations during implementation phase will include direct interactions with the Project Impacted Persons. PIU, MST and contractor will conduct regular consultations with PAPs as well as local user’s committees, local unit of electricity office, and other stakeholders. All consultation on social and environmental issues carried out during implementation of subprojects will be held in an inclusive manner, including vulnerable social groups and women. Public consultation will be taken as a continuous process during the construction phase as well. The stakeholder engagement plan will be as per the Table 12 below.

Table 12: Stakeholder Engagement Plan

During Construction				
Topic	Stakeholders	Engagement Method	Frequency	Responsibility
<ul style="list-style-type: none"> ▪ Disclosure of ESMP (and updated ESMP), including C-ESMP ▪ ESMF, SEP, and LMP ▪ Delineate Labour Influx Management Procedures ▪ Activities planned for SEA/SH and GBV ▪ Awareness of HIV and other communicable diseases ▪ GRM for SEA/SH ▪ Project GRM ▪ Planned construction activities 	<ul style="list-style-type: none"> ▪ Badgoria Rural Municipality and concerned officials of the Municipality and MWASH Units ▪ Project affected Ward chairs ▪ Tole Committees ▪ Local Community of the project area ▪ Community Leaders ▪ Local CBOs and NGOs working on WASH and GBV 	<ul style="list-style-type: none"> ▪ FGDs and targeted outreach activities with women, IP organizations, and other vulnerable groups, such as Dalits (Application of audio/visual communication techniques and other accessible formats) ▪ Community radio and local media ▪ Notice Boards ▪ Periodic information disclosure activities 	<p>Periodically throughout project implementation</p> <p>For planned construction activities, the community will be informed a week before the construction work and a day before construction work in the construction-planned areas.</p>	<p>PIU/MST Contractors</p>

▪ Beneficiary satisfaction survey	▪ Target beneficiaries of the project	▪ Beneficiary satisfaction survey	The first survey after two years of implementation, and last survey during the final year of operation	PMU/PST/MST
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5.3 Information Dissemination

For the success of the project, all information about the proposed activities and their expected results will be publicly shared with the Project area people and interested stakeholders. In collaboration with the relevant local authorities and other community groups, the project will disclose all the relevant information in the various stages of project cycle. Agencies working for environmental and social aspects will also be informed about the on-going and planned activities, to identify jointly appropriate protective or corrective measures. All the relevant E&S documents will also be published in the PMU website. The following approaches will be adopted to make information accessible to all the concerned stakeholders throughout the project cycle;

- Mass Media: Use local media like newspapers, radio and TV.
- Meeting/Workshops, Targeted FGDs, Notice Boards, social media, consultations
- Distribution of project documents, information leaflets and brochures : Certain project documents will be disclosed in Nepali (if necessary in other relevant local language). Project-related information materials will be distributed prior to each construction work to local officials, local people, stakeholders, and other concerned offices like municipality, ward, community leaders, Toile Committee, relevant CBOs and NGOs.

Point of information will be defined at the municipality office level during implementation to disseminate all the documents related to the project activities. Based on the public information disclosure policy, the municipality will unveil the information through its website. The information disclosure activities are as per the table below.

Table 13: Proposed Strategy for Information Disclosure

Target stakeholders	List of information to be disclosed	Methods and timing proposed activities
Project implementation phase		
<ul style="list-style-type: none"> • Government officials (Federal, provincial, and Municipality officials including the wards) • District line agencies 	<ul style="list-style-type: none"> • Planned and ongoing activities • Regular updates on project status, including the implementation of ESMP, C-ESMP, ESMF, LMP, SEP • GRM 	<ul style="list-style-type: none"> • Sharing project update and reports through meetings • Consultation and face-to-face meetings • Information boards, leaflets, and brochures • PMU/PIU websites

	<ul style="list-style-type: none"> • SEA/SH and GBV activities 	
<ul style="list-style-type: none"> • CBOs and NGOs working on WASH • Local NGOs and CBOs working on GBV • Community leaders • National & local Media • Local Community 	<ul style="list-style-type: none"> • Project concept and planned activities • ESMF, IEE, SEP, Labour Influx management procedures • SEA/SH Activities and GRM procedures for SEA/SH • GRM procedure • Planned construction activities 	<ul style="list-style-type: none"> • Information boards, leaflets, and brochures • PMU/PIU websites • Meetings and workshops
<ul style="list-style-type: none"> • Individuals and communities with a focus on vulnerable groups, including IPs, women, and Dalits • Local NGOs and CSOs working on WASH and GBV 	<ul style="list-style-type: none"> • Project concept and activities • E&S procedures and management plans (ESMP, C-ESMP) • GRM procedures, ESMF and Labour Influx management procedures, SEP and • Planned construction activities • SEA/SH activities and GRM procedure for SEA/SH • Revised project information if any 	<ul style="list-style-type: none"> • Regular release of public notices through mass media, community radio, television, and social media • Regular updates of information on the PMU/PIU website • Distribute information leaflets and brochures to public • Air project information/messages through community radio • Periodic small group meetings with vulnerable and IP groups • Regular contacts with the representatives of IP and vulnerable groups through phone calls, emails, text messages (Application of audio/visual communication techniques, and other accessible formats)

6. CONCLUSION AND RECOMMENDATION

Ranikunda Water Supply in Bardagoriya Rural Municipality aims to enhance water supply infrastructure while minimizing environmental and social impacts. The major construction work of this WSS sub-project has already completed. So, the enhancement work of additional 175 cum Reservoir Tank, and proposed of 36.55 Km pipe laying work and HH connection work and other minor repair and maintenance work for this sub-project. The most important part of this sub-project is laying 36.55 km of pipe which lies along the right of way (RoW) of the road and does not transverse any protected areas and private land so there will be likely impact in this area.

The Environmental and Social Management Plan (ESMP) outlines measures for obtaining necessary consents, and mitigating potential E&S risks during construction and operation. Overall, the project exemplifies responsible development practices, ensuring community well-being and environmental protection. The plan includes impact and compliance monitoring across various environmental and social aspects, reflecting a holistic approach. Additionally, the ESMP outlines the roles of stakeholders and emphasizes social accountability via a Grievance Redress Mechanism (GRM) at project and central levels. The ESMP underscores the project's commitment to sustainable development and minimizing adverse environmental and social impacts.

A total of NRs 1,500,000.00 is allocated for mitigating impacts during the construction and operation phases. These costs have been carefully considered to ensure financial feasibility and comprehensive coverage of environmental and social management responsibilities and legal liabilities.

Annex-I: Environmental and Social Screening Checklist

I- Sub-project Background

1	Name of the Sub Project	Ranikunda Water Supply and Sanitation Project
2	Location	Municipality/ Rural Municipality: <u>Bardagoriya</u> Ward No: <u>03</u> District: <u>Kailali</u> Province: <u>Sudupaschim</u> Altitude: <u>659 Ft.</u>
3	Co-ordinate (GPS)	Latitude: N28° 41' 41.84'' Longitude: E81°2'56.95''
	Project's boundaries in four directions and the area of influence	East: Ranikunda Community Health Unit, West: Seti Lok Margh North: Laligurans Community Forest South: Ring Road
4	Type of Sub-project	Water Supply
5	Proponent	Rural Municipality

II- Environmental and Social Screening

S.N.	Screening Checklist	Response (Yes/No)	Remarks/Comments (Provide information/ justification either for "Yes" or "No" if applicable)
A	Environmental Screening		
1	Is the sub-project site located within any National parks/protected areas or any critical aquatic and terrestrial habitat area?	No	Infrastructure has already constructed. It is located near the Laligurans community Forest. Due to the existing infrastructure there is no any impact on nearby area and far from Bardiya National Park.
2	Is the sub-project site located in the surrounding national parks or protected areas including buffer zone?	No	Sub-project is located at Bardagoriya RM-03 which is far from Bardiya National Park.
3	Will the sub-project be located in areas surrounding forest or wildlife areas other than national parks and protected areas?	No	Propose site is located at Bardagoriya RM-03 and it does not transverse in any protected area.
4	Will the sub-project be implemented in the areas surrounding water bodies, lakes and ponds and intend to use or depend on them for the Implementation?	No	Far from water bodies which is 3 km far from sub-project area.

5	Will the sub-project be implemented in Areas located in high risk zone such as landslide prone area, steep slopes, highly degraded land in hills, riverine area susceptible to annually flooding, or in areas causing large-scale soil erosion?	No	Proposed site is flat land of Terai region. So, there is no risk of landslide, soil erosion prone area.
6	Will the sub-project involve land Clearance on very steep slopes?	No	The sub-project area is flat and barren land. So, no need of land clearance.
7	Will the proposed sub-project involve logging?	No	There is no history of water logging, hence the proposed sub-project does not involve logging.
8	Will the proposed sub-project endanger indigenous Plant species of ecological significance?	No	There is no any impact on plant species because major structure has already constructed. The sub-project area don't bear flora/fauna species with ecological importance.
9	Is there any public infrastructure (School, hospital, health post) in the surrounding area of the project site? If yes, provide brief descriptions.	Yes	Community health unit lies in East direction of the OHT premises.
10	Will the construction activities cause any damage to the existing local roads and other infrastructures/Utilities?	Yes	The construction activities will cause any minimal damage to the existing local roads during trench excavation for pipe laying works.
B	Social Screening		
	Land acquisition		
1	Does the sub-project require land acquisition?	No	There is enough land to construct additional infrastructure belonging to Rural Municipality (RM). Similarly, land acquisition is not required for pipe laying. Access will be temporarily restricted during the process but the trench will be covered once the pipes are laid.

2	If Yes, please provide information about the types of land that will be acquired. Private land Government/Public land Forest land (specify ownership i.e private, Government)		The land acquired by WSS sub-project belonging to Rural Municipality and the land for pipe laying work –of existing road is public land. So, the private land acquisition is not required.
3	Has sub-project managed enough land for Construction? If Yes, how? explain briefly	Yes	There is enough land to construct additional infrastructure at OHT premises and the land belonging to RM. Land for pipe laying work road is public land. So, the private land acquisition is not required.
4	If the sub-project is planning to acquire private land, please provide information about the process of acquisition Voluntary donation Involuntary acquisition Negotiation	No	Private land acquisition is not required for the sub-project because the proposed land is public land.
5	If private land acquisition is required, will there be a loss of productive land?	No	Private land acquisition is not required.
6	If private land acquisition is required, will there be any physical/economic displacement and impact on livelihoods?	No	Proposed land is public land, private land acquisition is not required. So that there is no any physical and economical displacement.
7	Will there be a temporary land acquisition for the sub-project?	No	Temporary land acquisition is not needed as there is enough land of RM for sub-project.
8	If “Yes”, please provide information about the types of land that will be temporarily acquired.	No	Ownership of the land is with Rural Municipality
9	Will there be any adverse impact on non-titleholders including loss of shelter and livelihood due to land acquisition?	No	The land is free of encroachers or non-titleholders/ illegal users, hence such impacts were not observed during field visit.
10	Will land acquisition result in loss of income loss of access to common property resources?	No	Since the proposed land is public land, no such impacts are anticipated.
	Cultural Heritage	60	

11	Will the proposed sub-project be implemented in or surrounding heritage site, religious temple and other religious site?	No	The proposed site is located at barren land. There is no any heritage site around it.
12	Will the sub-project cause encroachment on historical/cultural/religious areas?	No	No any impact on historical/cultural/religious areas.
13	Will there be any adverse impacts on cultural heritage due to sub-project activities? If "Yes", please explain briefly	No	There will be not any adverse impacts on cultural heritage due to sub-project activities.
	Indigenous and vulnerable People		
14	Will the sub-project involve activities that are likely to make irreversible adverse impact on indigenous communities, women and vulnerable Groups?	No	Does not impact on vulnerable people.
15	Will the proposed sub-project include any activity that promotes or involves incidence of child labour?	No	Child labour is strictly prohibited.
16	Will the proposed sub-project benefit ethnic groups living in the service area?	Yes	The proposed sub-project will benefit all the local people irrespective of their caste and ethnicity and will be given priority to backward/ ethnic groups in construction activities.

Checklist for ESS7 and particularly to FPIC


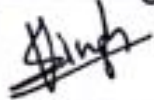


ESS7: Indigenous Peoples	Yes	No	No Impact	Positive Impact	Negative Impact	Remarks
Does the project footprints lie in areas where indigenous people is present including (area of influence)	Yes		No impact			Ranikunda Sub-Project is located at Bardagoriya Rural Municipality ward no-03. The surrounding community is mixed with Janajati/Indigenous Peoples group like Tharu, Chaudhary, Magar, Gurung etc. and other ethnic groups such as Dalit, Brahmin/Chhetri and other caste/ethnic groups. Tharu Chaudhary are the original inhabitants of the area.
Will the project lead to full or partial physical displacement of IPs (regardless of whether the IPs are recognized as IPs by the country's law)?		No	No Impact			The ownership of OHT premises land is with the Ranikunda WSUC of Bardagoriya Rural Municipality and for distribution pipeline network will be carried out along the existing public road. So, there will be no physical displacement.
Will the project lead to full or partial economic (loss of assets/access to resources due to land acquisition and also access restriction—whether or not these affected are physically displaced or not) Displacement of IPs?		No	No Impact			The ownership of OHT premises land is with the Ranikunda WSUC of Bardagoriya Rural Municipality and for distribution pipeline network will be carried out along the existing public road. Private land or community land is not required for sub-project. Proposed interventions will not result in loss of assets or access restriction to communal resources nor any full or partial economic loss.
Will the project impact land/restriction access to land subject to traditional use or under customary use or occupation		No	No Impact			All constructions works will be carried out within the existing water supply project premise and existing road

Environmental & Social Management Plan (ESMP) Report for Ranikunda WSS Sub-Project

<p>(regardless of whether IPs possess legal titles to such areas, whether the project is located within or outside of the land and territories inhabited by IPs, or whether the IPs are recognized as IPs by the country's law)?</p>						<p>width that is in public use. Thus, the sub-project will not impact on IP's community land nor lead to restriction access to land subject to traditional use or under customary use or occupation.</p>
<p>Will the project impact natural resources (timber and non-timber forest products, other forest product, medicinal plants /grazing or pasture lands/forest/cropping areas)/loss of access to such assets and resources subject to traditional use or under customary use or occupation (regardless of whether IPs possess legal titles to such areas, whether the project is located within or outside of the land and territories inhabited by IPs, or whether the IPs are recognized as IPs by the country's law)?</p>		<p>No</p>	<p>No Impact</p>			<p>The major infrastructure of Ranikunda water supply Sub-Project has already been constructed. Major investment under the project will be pipe laying work but it will be limited within the existing road width that is in public use. So, impact on natural resources or loss of access to such resources is not expected.</p>
<p>Will the project lead to the utilization or commercial development of natural resources on lands and territories claimed by IPs?</p>		<p>No</p>	<p>No Impact</p>			<p>This is a community water supply project directly benefiting the community. Thus the sub-project will not lead to the utilization or commercial development of natural resources on lands.</p>
<p>Will the project have significant impact on tangible cultural heritage that is material to the identity and/or cultural, ceremonial, or spiritual aspects of the affected community? <i>(Tangible heritage may include movable or immovable objects, sites, structures, group of structures, and natural features and landscape that have cultural</i></p>		<p>No</p>	<p>No Impact</p>			<p>There will be no impact on tangible cultural heritage.</p>

Environmental & Social Management Plan (ESMP) Report for Ranikunda WSS Sub-Project

<p>significance like burial grounds/ritual spaces/stupas/shrines/places of worship)</p>					
<p>Will the project have significant impact on intangible cultural heritage that is material to the identity and/or cultural, ceremonial, or spiritual aspects of the affected community? (Intangible cultural heritage may include practices, representations, expressions, knowledge, and skills, as well as associated instruments, objects, artifacts, cultural spaces that IP communities recognize as part of their heritage like traditional handicrafts such as Bamboo weaving, oral traditions, performing arts and so on)</p>		<p>No</p>	<p>No impact</p>		<p>IP community groups have their own set of intangible heritages example, scared spaces, belief systems, knowledge and practices. But, during consultation with the IP community, it was reported that project footprints is unlikely to have a bearing on any intangible heritages.</p>

Screening Team		Screening Date: 25 th Feb. 2024		
	Name	Contact Number	Signature	
Team leader	Megha Raj Regmi	9860917588		
Environmental expert	Umesh Pratap Singh	9843581535		
Social expert	Hikmat Rokaya	9851140869		
Other team members	Sainyachalise (Design Engineer)	9851171297		

Annex II: Minute of meeting / Consultation Meeting

I- Public Consultation meeting

classmate
Date _____
Page _____

आज मिति २०८० साल फागुन १६ गते बुधवारका दिन यस वडैजोरिया गाउँपालिका अन्तर्गत खानेपानी क्षेत्रगत सुरक्षा तथा पुर्वाधार सहयोग आयोजना अन्तर्गत यस वडैजोरिया गा.पा वडा नं १ का अध्यक्ष श्री मनशुषी आचार्यको अध्यक्षतामा बैठक वसी तपरीलका प्रस्तावहरु उपर छलफल गरी निर्णय गरियो।

तपरील/उपरथेली

१) श्री मनशुषी आचार्य	वडैजोरिया गा.पा ०१ अध्यक्ष	सहभागी
२) श्री वसन्ती देवी साहं	» न्यायिक समिति सदस्य	वडा-ती
३) श्री राम बहादुर चौधरी	सदस्य	२५
४) श्री भावना देवी वि.क	सदस्य	
५) श्री कुपील गुरुङ	सदस्य	गुला
६) श्री तुल्सी राम चौधरी		सोपान
७) श्री लक्ष्मण विष्ट	श्री गणेशजी दा.वडा अध्यक्ष	कुटुमी राम
८) श्री पदम तिम्ल		बाबुविण
९) नमस्ते नडुवा		नयक
१०) टंकु रणु धोला	(रागेश्वरडा खानेपानी उपखण्ड नयाँ बजार) लगेरि - १	
११) गोविन्द बहादुर बुढाथोडी	(श्री जगदम्बिके गणेशी दा. वि. प्र. लेख (प्रधान) गौरीधर	
१२) उदै रात्रु विष्ट	(रागेश्वरडा) खानेपानी उपखण्ड तथा सदरमुकाम	सुनक
१३) रान्जु चौधरी अलमसा	बडुक्ला टोल	
१४) नन्दा राम विष्ट	नेपाली कलेस वडा रामपती	
१५) रन्जना जैशी	रानीकुडा खा.पा.उ.स सदस्य	२५/२/१५
१६) महेका थापा	रानीकुडा खा.पा.उ.स सदस्य	
१७) मान बहादुर चौधरी		पुनपो
१८) सिता डंगौरा थारु	वडा नं ०३	सिता
१९) कृत वि.क	रानीकुडा खा.पा.उ.स सदस्य	वाराण
२०) श्री शिव कुमार कर्पेल	खोला तडाह रानिकुडा	
२१) श्री शिव शक्ती शा पु संस्थान	आत्मा प्रसाधनी	
२२) श्रीम बहादुर विष्ट	कोकरी	शान
२३) जयन्त कुवर	Sub-Engineer M-WASH Unit	

प्रस्तावहरु

- १) सार्वजनिक परामर्श (Public consultation)
- २) रानीकुडा खानेपानी सुरक्षा योजना अनुगमन टोली सम्बन्धमा
- ३) गुनासो निवारण समिति (GRC) गठन सम्बन्धमा



प्रस्ताव नं १ माघे इलफल गर्दी यस्य रानीकुण्ड स्वामिपती तथा सस्सफर्डि
आयोजना सम्बन्धी सार्वजनिक परामर्श तथा इलफल गरियो ।

प्रस्ताव नं २ माघे इलफल गर्दी रानीकुण्ड स्वामिपती सुरक्षा योजना
अनुगमन शैली तपशिल वमोजिम गठन गरी सर्वसम्मत पारित गरियो
तपशिल

१) वसन्ती देवी साडेद संयोजक		९८५८२०८०८५
२) गोविन्द वि.सी	सदस्य	९८६७५९०१८०
३) अंकीला मणारी	सदस्य	९८६५९००६००
४) टंक राज वली	सदस्य	९८६१८५०५२७
५) जयन्द्र कुंवर	सदस्य	९८५७५५५२५१

प्रस्ताव नं ३ माघे इलफल गर्दी रानीकुण्ड स्वामिपती तथा सस्सफर्डि
आयोजना सम्बन्धी गुनासो निवारण समिति (Grievances Redress Committee)
तपशिल वमोजिम गठन गरी सर्वसम्मत पारित गरियो ।

१) राम बहादुर चौधरी	संयोजक	९८६५६२३२७३
२) टंक राज वली	सदस्य	९८६१८५०५२७
३) भावनाक्षी विरवकमा	सदस्य	९८१२६६८८०७
४) जयन्द्र कुंवर	(PIU) सदस्य	९८५७५५५२५१

Handwritten signatures and initials of the committee members, including names like 'Raj', 'Ankita', 'Jyandhr', and 'Ramesh'.

Rural Municipality Level Grievances Redress Committee (GRC) Formation

Page No.

Date

आज मिति २०८१/०१/१३ गतेका दिन खनिपानी क्षेत्रगत सुरासन तथा पूर्वाधार सहयोग आयोजना (NWASH) अन्तर्गत गुनस्यो सम्बन्धी व्यवस्थापन गर्ने यस वडेगोरिया गा.पा अध्यक्ष श्री कृष्ण बहादुर कुँवर ज्यूको अध्यक्षतामा आयोजना कार्यन्वयन इन्डर्स (PIU) मा स्थापना हुने गुनस्यो व्यवस्थापन समिति गठन गर्न फलफूल सहित निर्णय गरियो।

उपस्थिति

- | | | |
|-----------------------------|-----------------------------------|--|
| १) श्री कृष्ण बहादुर कुँवर | वडेगोरिया गा.पा अध्यक्ष | |
| २) श्री गणेश राज पौरी | वडेगोरिया गा.पा उपाध्यक्ष | |
| ३) श्री प्रकारा कुङ्गना | वडेगोरिया गा.पा प्र.प्र.अ | |
| ४) श्री टंक प्रसाद ओझा | वडेगोरिया गा.पा इन्जिनियर | |
| ५) श्री लक्ष्मी राज जोशी | PIU Mandar | |
| ६) श्री हृषी राज ओझा | अधिकृत | |
| ७) श्री मोहन सिंह मंडेल | NWASH Focal Person | |
| ८) श्री अरमित खार | PIU Sub-Engineer | |
| ९) श्री हिममत बहादुर रोकाया | Social Management Specialist | |
| १०) श्री रेखरी प्रसाद महु | Governance & Institutional spc | |
| ११) श्री उमेश प्रताप सिंह | Environmental Mgmt. Specialist | |
| १२) श्री सस्वती वि.क | वडेगोरिया गा.पा कार्यपालिका सदस्य | |

प्रस्ताव

१. गुनस्यो व्यवस्थापन समिति गठन सम्बन्धमा

२. नयाँ स्थलिय गुनस्यो व्यवस्थापन सम्बन्धमा

निर्णय

१. प्रस्ताव नं १ माथि फलफूल गर्दा खनिपानी क्षेत्रगत सुरासन तथा पूर्वाधार सहयोग आयोजनामा आयोजना कार्यन्वयन गर्दा आईपर्ने सम्प्रादरुलाई समाधान गर्न पालिका स्तरीय आयोजना कार्यन्वयन इन्डर्स (PIU) मा रहने गरी आयोजना गुनस्यो व्यवस्थापन समिति तल उल्लेखित पद्याधिकारी रहेन गरी गठन गरियो।

- | | | |
|---------------------|--------|-----------------------|
| १) लक्ष्मी राज जोशी | संयोजक | PIU |
| २) टंक प्रसाद ओझा | सदस्य | NWASH इन्डर्स प्रमुख |
| ३) हृषी राज ओझा | सदस्य | सामाजिक विकास अधिकृत। |

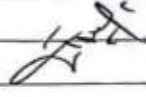
सल्लाहकार

श्री गणेश राज गिरी वर्देगोरिया गा.पा.उपाध्यक्ष

निर्णय नं. २

प्रस्ताव नं. २ माथि झलफल गर्दा यस वर्देगोरिया गा.पा. मा संचालित खानेपानी तथा ब्यस्फर्डई सम्वन्धीत आस्का युनासहसके व्यवस्थापन गरी युनासो व्यवस्थापन समितिने समाधान गर्ने निर्णय गरियो।

ESMP



3. Focus group discussion with local peoples about WSS sub-project at Bardagoriya RM-03

आज मिति २०८० साल फाल्गुन ०९ गते यस बर्दगोरिया गाउँपालिका वडा नं ३ वडास्तरीय स्वामेवानी सरसफाई योजना (WASHPlan) तथा वडास्तरीय तथा दुः सार्वजनिकिकरण योजना सम्बन्धी कार्यशाला गोष्ठीको अध्यक्षतामा यस बर्दगोरिया गाउँपालिका वडा नं ३ का अध्यक्ष शि मन्सुखी आचार्यको अध्यक्षतामा, वसी दलफल गरि निर्वाय गरियो। साथै प्रमित, जनजाती लगायत लक्षित वर्गसंग आयोजना सम्बन्धी तपशिलका बुझाएर दलफलगरी निर्वाय गरियो।

उपस्थिति :-

क्र.स	नाम, थर	पद	हस्ताक्षर
१)	शि मन्सुखी आचार्य	वडा नं ३ अध्यक्ष	
२)	शि अचना देवी वि.ड.	वडा सदस्य	
३)	शि विष्णु गौतम	संगीतज्ञ वा. म. उ. स. (उपअध्यक्ष)	
४)	शि नरहराम विष्ट	नेका. वडा कार्य समिति (सभापति)	
५)	शि नर बहादुर वडुवाल	समाजसेवी	
६)	शि नविन साउंढ	ग.प्र.वा. (प्रतिनिधी)	
७)	शि रत्नता अँरि	संगीतज्ञ वा. म. उ. स. (सदस्य)	
८)	शि उदयराज विष्ट	" " " (सोबाध्यक्ष)	
९)	शि तेजराज लोपन्नी	सोसायल ग्रिनल्याण्ड युन (प्रतिनिधी)	
१०)	शि अक्षराज अँरि	साइन्टिफिक रिसर्चलाभन (अध्यक्ष)	
११)	शि दिनपुङ्गु गौतम	M-WASH-Unit (com. operator)	
१२)	शि जयलक्ष्म कुँवर	" " (Sub-engineer)	
१३)	शि उमेश प्रताप विष्ट	MST - Environmental Mgmt. Sp.	
१४)	शि मोहन सिंह मण्डे	M-WASH-Unit (Focus person)	
१५)	शि राज बहादुर (वम)	समाजसेवी	
१६)	शि सुरन सिंह	संगीतज्ञ वा. म. उ. स. (सदस्य)	
१७)	शि जयलक्ष्म आचार्य	समाजसेवी	
१८)	शि टेकराज जोशी	साइन्टिफिक साइन्स (अध्यक्ष)	
१९)	शि सुरेश जोशी	समाजसेवी	
२०)	शि शिखर विक्रम	प्र.सं. NTOS (नया पदस्था)	
२१)	शि फिलिप गौतम	प्र.सं. मी.संगीतज्ञ वा. म. उ. स. (सदस्य)	
२२)	शि तेजराज लोपन्नी	प्र.सं. वेदोद्यान (नया पदस्था)	
२३)	शि उपेन्द्र सुनार	प्र.सं. मी.संगीतज्ञ वा. म. उ. स. (सदस्य)	
२४)	शि चक्र बहादुर विष्ट		
२५)	शि वसन्ती देवी साउंढ	बर्दगोरिया गा.पा. कार्य समिति सदस्य	

28)	श्री हिममत सोनाय	M ST Bardaganj	पु
29)	श्री गौतम वैद्य (बुढाईकी)	बडगाँवा-3	गौतम
30)	श्री इन्द्र राज शर्मा	समाजसेवी	इन्द्र
31)	श्री शिव कुमार कर्मा	स्वल्प सं संभव	शिव
32)	श्री सत्य नौधरी	भद्रवती	सत्य
33)	श्री विक्रम राम शर्मा	चौकीदार	डी कारा म
34)	श्री कपिल शर्मा	बडा सभसेवी	कपिल

तपशिल

- 1) यशवंतगौरिय) गा.पा. 3 मा प्रस्तावित शानीकुण्डा खा.स. उप-आयोजना को निर्माण कार्य र स्वरङ्गनी सम्बन्धमा निर्माण कार्य/पाइपलाइन विस्तार कार्यका लागि अपनार्थमा विधि र प्रकृया बाहेक जानकारी गराई विस्तृत दस्तावेज गरियो।
- 2) शानीकुण्डा खातेपारी सरलकारि उप-आयोजना निर्माण गर्दा शान्तिगत रूपमा पढिने प्राथमिकता समेत अनुसार स्थानिय बासिन्दाको हकमा र विन्डुपरे सम्बन्धमा विस्तृत दस्तावेज गरियो।
- 3) पाइपलाइन विस्तार सँगै नदीकाँडा बाध, घाट, खातेपारी र विन्डुनी अवरुद्ध हुने कारण त्यसमा उपरि व्यवस्थापन र पूर्व-जानकी जानकारी हुनु पर्ने सम्बन्धमा विस्तृत दस्तावेज गरियो।
- 4) निर्माण क्षेत्रमा धेरै नु दिशा तथा सँडि, कु विवेक र SEA/SHY - G BV आदी विषयमा बाहेक विस्तृत दस्तावेज गरियो।
- 5) निर्माणमा क्रममा हुनसक्ने खनि, वायु प्रदूषण र वातावरणीय एवं सामाजिक सम्बन्ध र निगरा सम्पादनमा उपाय रणमाथी विस्तृत दस्तावेज गरियो।

(Handwritten signatures and marks)

4. Focus Group Discussion with women and marginalized peoples at Bardagoriya RM-03

आज मिति २०८१/०२/०२ गतेका दिन यस रातिकुण्डा स्वानेपानी सरसकाई उपसमितिबाट अथपहाडी री टंक राज कुँडी ज्यू को संयोजनमा यस रातिकुण्डा स्वानेपानी उप-आयोजनामा ताप्रांभित हलित, जनशक्ती तथा लक्षित समुहद्वय संग रातिकुण्डा स्वानेपानी उप-आयोजनाको एक हलफल तथा अलतरक्रिया कार्यक्रम सम्पन्न गरियो साथै तपमिलका बुझाएवमा हलफल गरियो।

उपस्थिति:

क्र.सं	नाम, थर	पद	हस्ताक्षर
१)	श्री टंक राज कुँडी	रातिकुण्डा स्वा.स.उ समिति अध्यक्ष	[Signature]
२)	श्री राम बहादुर चौधरी	वर्तमानिय गा.पा. वडा नं ३ सदस्य	[Signature]
३)	श्री दिलिप कुँडा	MWASH Unit, Computer operator	[Signature]
४)	श्री हिममत चौधरी	SDS, MST Bardagajis	[Signature]
५)	श्री उमेश पत्रावु सिंह	EMS, MST "	[Signature]
६)	सुन्दर चौधरी		[Signature]
७)	सिता चौधरी		[Signature]
८)	रेजिना चौधरी		[Signature]
९)	सुनता चौधरी		[Signature]
१०)	सुनता चौधरी		[Signature]
११)	हेममती चौधरी		[Signature]
१२)	सुलता चौधरी		[Signature]
१३)	सुलता चौधरी		[Signature]
१४)	सुलता चौधरी		[Signature]
१५)	सुलता चौधरी		[Signature]
१६)	सुलता चौधरी		[Signature]
१७)	सुलता चौधरी		[Signature]
१८)	सुलता चौधरी		[Signature]
१९)	सुलता चौधरी		[Signature]
२०)	सुलता चौधरी		[Signature]
२१)	सुलता चौधरी		[Signature]
२२)	सुलता चौधरी		[Signature]
२३)	सुलता चौधरी		[Signature]
२४)	सुलता चौधरी		[Signature]

		Page No. _____
		Date _____
२२)	शैलजा चौधरी	शैलजा
२३)	कलौती चौधरी	कलौती
२४)	निशा चौधरी	निशा
२५)	कनका चौधरी	कनका
२६)	उरुषी चौधरी	उरुषी
२७)	अरुनी चौधरी	अरुनी
२८)	महेश चौधरी	महेश
२९)	कलौती चौधरी	कलौती
३०)	निशा चौधरी	निशा
३१)	गंगान सिद्ध	गंगान चौधरी
३२)	बुधराज चौधरी	बुधराज
३३)	कुलराम चौधरी	कुलराम
३४)	विष्णु चौधरी	विष्णु
३५)	इशिका चौधरी	इशिका
३६)	फूलकुमारी चौधरी	फूलकुमारी
३७)	अरुनी चौधरी	अरुनी
३८)	इशा चौधरी	इशा
३९)	गिता चौधरी	गिता
४०)	गंगा चौधरी	गंगा
४१)	पाटवति चौधरी	पावती
४२)	रविना चौधरी	रविना
४३)	जानकी चौधरी	जानकी
४४)	जगत राम चौधरी	जगत
४५)	आशीश चौधरी	आशीश
४६)	बिना चौधरी	बिना
४७)	हेमका चौधरी	हेमका
४८)	कृष्णी चौधरी	कृष्णी
४९)	जानकी चौधरी	जानकी
५०)	अश्विनी जना	अश्विनी
५१)	सुनिता चौधरी	सुनिता
५२)	धनिराम चौधरी	धनिराम
५३)	हरिराम चौधरी	हरिराम
५४)	मुकेश लोना	मुकेश

५८) ओम बहादुर विश्वकर्मा		शुभे
५९) शम्भु जोषा		
६०) मोहन सिंह विश्वकर्मा	शुभे	
६१) पादम विश्वकर्मा		
६२) बलिराम विश्वकर्मा		दली राम
६३) स्वर्णलाल बुढा		शुभे
६४) तिशा ओम		निरम
६५) सरस्वती विश्वकर्मा		
६६) मनलाल सि.श.		
६७) मोतीराम बुढा		मोतीराम
६८) मोहन विश्वकर्मा		शुभे
६९) महेश जोशी		शुभे
७०) अमृत शर्मा		शुभे
७१) सुरेश सि.क.		निरम
७२) लक्ष्मण विश्वकर्मा		लोकेश
७३) नरबहादुर विश्वकर्मा		शुभे
७४) कालीराम सुनाड		शुभे
७५) सुरे नेपाली		
७६) विष्णु विश्वकर्मा		शुभे

समाप्तः

१) थप बर्दागोल्या गा.पा. वडा नं ३ मा प्रस्तावित रानीकुण्डा खा.स. उप-आयोजनाको निर्माण कार्य र स्तर उन्नती सम्बन्धमा निर्माण कार्य। पाइला १) विनास कार्यलाई अपनाइने विधि र प्रकृया बारेमा जानकारी बराई विस्तृत हस्तकल गरियो।

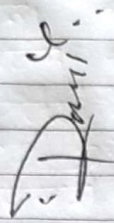
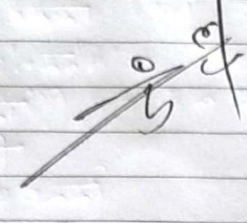
२) रानीकुण्डा खानेपानी सरसकार्ड उप-आयोजना निर्माण गर्दा खानेपानीको पहिलो प्राथमिकता क्षमता अनुसार स्थानिय वासिन्दालाई हाना नहोस् भन्ने सम्बन्धमा विस्तृत हस्तकल गरियो।

३) थप बर्दागोल्या गा.पा. वडा नं ३ मा रानीकुण्डा खानेपानी प्रथम सरसकार्ड उप-आयोजना कार्यसम्पन्न गर्दा अतिथिबल धरपुती नहोस् भन्ने धारणा गराउन रक्षा शून्यसम्बन्ध निर्माण गर्ने लक्ष्यनिर्धारित आशय-गर्ने निर्णय गरियो।

Page No. _____

Date _____

४) यद्य राणिकुण्डा क्षेत्रा-या. आयेजताका तद्विहित समुदायहल तद्वि
आय आर्जन सम्बन्धी तानि मृतथा महिला कार्यक्रीकरणो
ताउते अभियुक्तीकरण उपकरणे निर्णय कालिणे।

Annex III: Consent letter from Bardagoriya RM-03

1. Land ownership certificate from Bardagoriya Rural Municipality Ward No-03 Office



बर्दगोरिया गाउँपालिका
३ नं. वडा कार्यालय
बैरेनी कैलासी
सुदूरपश्चिम प्रदेश, नेपाल



प.स :- २०७१०८०


मिति :- २०७१/०६/२५

चलानी न. १८६

विषय :- सिफारिस गरी पठाईएको बारे ।

श्री जो जससंग सम्बन्ध राख्दछ ।

उपरोक्त सम्बन्धमा बर्दगोरिया गाउँपालिका वडा नं.३ मा अवस्थित श्री रानीकुण्डा खानेपानी उपभोक्ता तथा सरसफाई समिति को प्राप्त निवेदन अनुसार श्री रानीकुण्डा खानेपानी उपभोक्ता तथा सरसफाई समिति मिति २०७४।११।२० गते दर्ता भई दर्ता नं.१५८ हाल संस्था को सोही ठेगानामा संस्थाको नाममा ऐलानी प्रति गग्गा पुर्वमा रानिकुण्डा सामुदायिक स्वास्थ्य ईकाइ को जग्गा,पश्चिममा श्री शिव शक्ति ग्रामीण विधुत सहकारी संस्था को भवन,दक्षिणमा सडक ग्रभेल बाटो,उत्तर मा लालीगुरास सा.वन.उ.समुह यति चार किल्ला भित्र पर्ने ०-५-० (कठ्ठा) क्षेत्रफल रहेको ज वी मा पक्की घेरा पर्खाल समेत निर्माण गरी खानेपानी को भौतिक संरचनाहरु निर्माण भइसकेको र प्रत्येक टोल,टोल मा खानेपानी को पाईप,पनी विस्तार गरीसकेकोले अब को समय भित्र खानेपानी धारा सञ्चालन हुने भएकोले उक्त भौतिक संरचना बनेको जग्गा खानेपानी संस्थाको भएको व्यहोरा सिफारिस साथ अनुरोध गरीन्छ ।


मनकृषी आचार्य
वडा अध्यक्ष

Annex IV: Four Forts Proved by Bardagoriya Rural Municipality-03 Ward Office



बर्दगोरिया गाउँपालिका कार्यालय

३..... नं. वडा कार्यालय
 कैलाली, कैलाली
 ७ नं. प्रदेश, नेपाल
 सुदूरपश्चिम प्रदेश, नेपाल

पत्र संख्या :- ०८०/०८१
 चलानी नं. :- ११९९

मिति :- २०८०/११/१९

विषय :- चार किल्ला प्रमाणित ।

श्री जो जससँग सम्बन्ध राख्छ ।

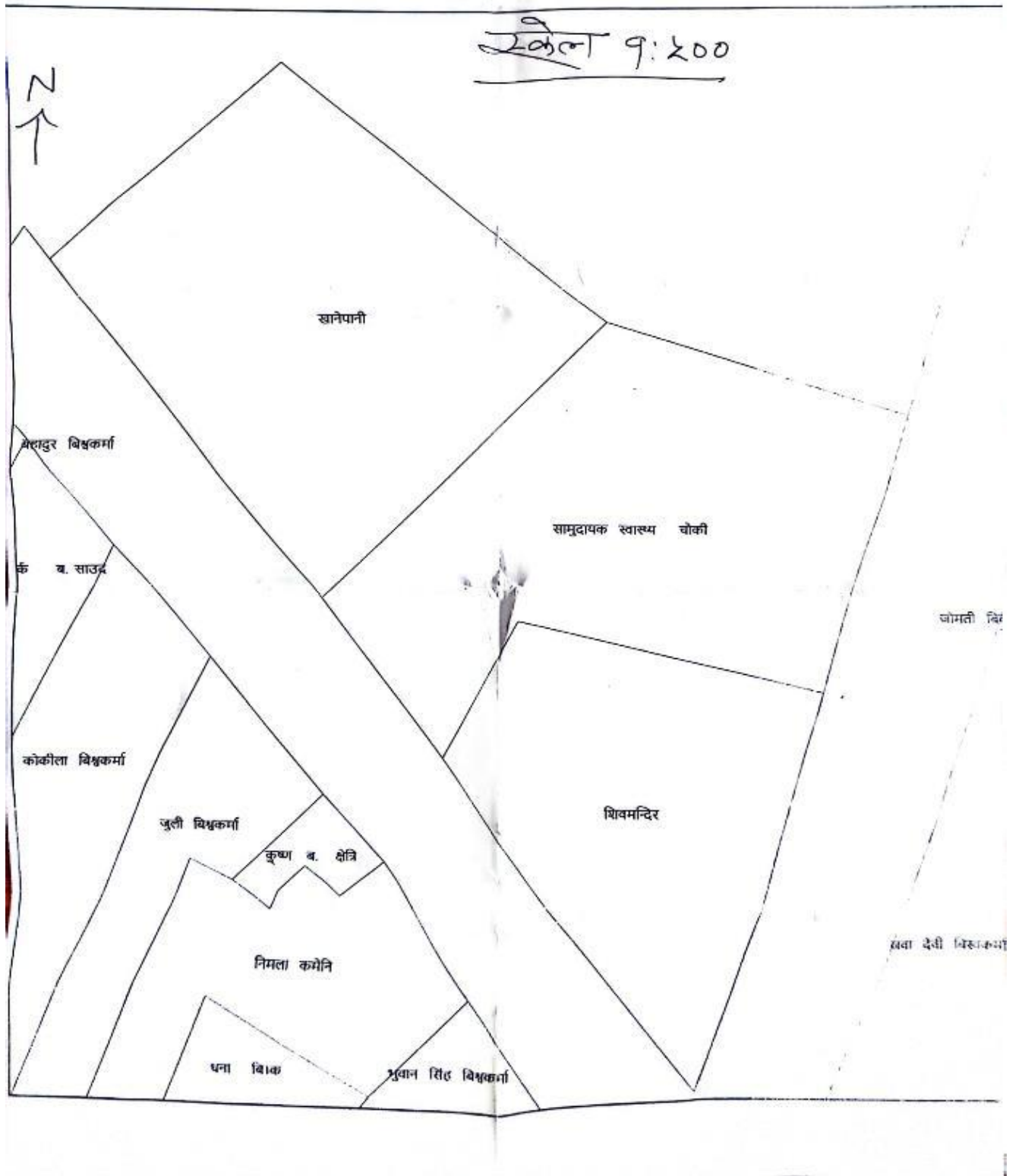
उपरोक्त विषय सम्बन्धमा कैलाली जिल्ला बर्दगोरिया नगरपालिका गाउँपालिका/उप/महा नगरपालिका वडा नं. ३ वस्ने श्री जससँग सम्बन्ध राख्छ को प्राप्त निवेदनमा निजका नाममा दर्ता श्रेस्ता कायम भएको तपसिलको जग्गाको चार किल्ला प्रमाणित गरि पाऊ भनि यस वडा कार्यालयमा दिनु भएको निवेदनका वारेमा जाँचबुझ गर्दा उक्त जग्गाको निम्नानुसार चार किल्ला रहेको व्यहोरा प्रमाणित गरिन्छ ।

तपसिल :

साविक गा.वि.स.	साविक वडा नं.	हाल वडा नं.	कित्ता नं.	क्षेत्रफल	सिट नं. (नक्सा नं.)	पुर्व तर्फ	पश्चिम तर्फ	उत्तर तर्फ	दक्षिण तर्फ
बर्दगोरिया	१	बर्दगोरिया गा.वि.स. १३३२ ३	कैलाली	०.५०		साविक १ वडा नं. १	साविक १ वडा नं. १	साविक १ वडा नं. १	बर्दगोरिया

मनकृषी आचार्य
 वडा अध्यक्ष प्रमाणित गर्ने वडा अध्यक्ष

Annex V: Sketch of Land



Annex VI: Water Quality Test Report for Ranikunda WSS Sub-project



Department of Water Supply and Sewerage Management
Federal Water Supply and Sewerage Management Project
Water Quality Testing Laboratory
 Dhangadhi, Kailali

Water Quality Test Report

Sample Id:	097/079/080	Sampled By	Sender
Sender/Client:	Ranikunda Khanepani Upabhokta tatha Sarsufai Samiti	Sampling Date	2079/09/21
Source:	Underground	Reported Date	2079/09/24
Sampling Point:	Boring -1(Tap A)	Sample Condition:	OK
Address:	Bardgoriya Ga. Pa-3 Ranikunda, Kailali		

S.N.	Parameters	Unit	Observed Values	NDWQS, 2079 BS	Analyzed Methods
1.	Taste & Odor	-	Non-Objectiionable	Non-Objectiionable	Sense Observation
2.	pH	-	7.1@25°C	6.5 - 8.5	4500-H*, APHA 22 nd Edition
3.	Turbidity	NTU	<1.01	5	2130 B, APHA 22 nd Edition
4.	Total Dissolved Solid	mg/l	345	1000	TDS Meter
5.	Electrical Conductivity	µS/cm	520@16°C	1500	2510 B, APHA 22 nd Edition
6.	Calcium	mg/l	82	200	3500 Ca- B, APHA 22 nd Edition
7.	Total Hardness as CaCO ₃	mg/l	250	500	2340 C, APHA 22 nd Edition
8.	Total Iron	mg/l	<0.1	0.30 (3)	Iron Test Kit
9.	Arsenic	mg/l	0.00	0.05	Dig. Arsenator
10.	Ammonia	mg/l	0.1	1.50	Ammonia Test Kit
11.	Nitrate	mg/l	1	50	4500-NO ₃ -B, APHA 22 nd Edition
12.	E. Coli	CFLU/100ml	0	0	9222 D, APHA 22 nd Edition

.....
 Analyzed by

.....
 Verified by

Notes

1. This report is applicable to the sample received in the laboratory for analysis.
2. This test report shall not be reproduced without the written approval of the laboratory.

केमिष्ट

Annex VII: Code of Conduct for WSS Sub-project

Water Sector Governance & Infrastructure Support Project (WaSGISP)

Bardagoriya Rural Municipality

कार्य स्थलमा हुने यौनजन्य तथा महिला हिंसा सम्बन्धी आचार संहिता

व्यक्तिगत आचार संहिता

म यो आचार संहिता पालना गर्नु मेरो दायित्व हो भनी स्वीकार गर्दछु । म कुनै पनि यौनजन्य तथा महिला हिंसा जस्ता कार्यमा संलग्न हुने छैन । परियोजनाको कामको शिलशिलामा यो आचार संहिता पालना गर्न सहमत छु ।

१. म जातजाति, धर्म, भाषा, लिङ्ग, उमेर, राजनितिक वा सामाजिक हैसियत, भौगोलिकता पहुच, बैवाहिक स्थिति वा अन्य कुनैपनि आधारमा भेदभाव नगरी सबैलाई सम्मान जनक र समान रूपमा व्यवहार गर्नेछु ।

२. सामाजिक सन्जालको प्रयोग गरी अश्लील शब्द दृश्य सामग्री वा कार्यालय समय अधिपल्ली बार्तालाप मार्फत सहकर्मी कामदार लाई यौन दुर्व्यवहार गर्ने छैन ।

३. कार्यस्थलमा सिट्टि बजाउने चुम्बन गर्ने व्यक्तिगत उपहार दिने आदि जस्ता कार्य गरी कर्मचारी सहकर्मी कामदारलाई यौन दुर्व्यवहार गर्ने छैन ।

४. कुनै पनि प्रलोभन, धम्की देखाई जस्तै पदोन्नति लाभ देखाएर, जागिर नदिने धम्की दिएर, शोषण गरेर आदि यौन दुर्व्यवहार पक्षमा संलग्न हुने छैन ।

५. कार्य समयावधि भित्र कुनैपनि मदिराजन्य तथा लागुपदार्थको सेवन गर्ने छैन ।

६. परियोजकका सरोकारवाला वा वरपरका समुदायका सदस्यहरूलाई कुनै पनि लैङ्गिक हिंसा तथा यौनजन्य दुर्व्यवहार गर्ने छैन ।

७. कुनैपनि कर्मचारि श्रमिक विरुद्ध हिंसा गरिएको दावी ठहरिएमा प्रचलित संघिय प्रादेशिक स्थानिय सरकार वर्ल्ड बैङ्क को कानुन निति नियमअनुसार सजाय दण्डित जरिवाना तिर्न तयार हुनेछु ।

८. कार्य गर्ने शिलशिलामा सम्मानजनक निर्देशनहरूको पालना गर्दछु ।(वातावरणीय र सामाजिक)

९. मेरो जिम्मेवारी कुशलता र लगनशिलता पूर्वक पुरा गर्नेछु ।

१०. सम्बन्धित कार्यालय कम्पनिले संचालन गरेको विभिन्न प्रशिक्षण कार्यक्रममा सक्रिय रूपमा भाग लिनेछु ।

११. परियोजनाका प्रत्यक्ष लाभदायक सदस्य समुदायमा यौन दुर्व्यवहार शोषण गर्ने छैन ।

१२. विश्वसनीयता नैतिक उल्लघनको रिपोर्ट गरेमा कुनै कामदार विरुद्ध बदला लिने छैन ।

१३. कार्य स्थलमा लैङ्गिक संवेदनशील भाषाको प्रयोग गर्दछु ।

१४. कार्यस्थलमा महिला हिंसा तथा यौनजन्य क्रियाकलापलाई प्रोत्साहन गर्ने खालका गतिविधी गर्न दिने छैन ।

१५. कार्यस्थलमा महिला हिंसा तथा यौन हिंसा गतिविधीहरूलाई प्रोत्साहन गर्ने छैन ।

१६. १८ वर्षभन्दा मुनिका बालिकाहरूमा कुनै डिजिटल मिडिया मार्फत वा कुनै माध्यमबाट स्वीकृती लिई वा नलिई यौनजन्य क्रियाकलापमा सहभागी हुने छैन यदि नाबालिका स्वीकृती लिई यौनजन्य क्रियाकलाप गरेमा क्षमा हुदैन ।

१७. परियोजना कार्यान्वयनको बेलामा यौनजन्य दुर्व्यवहार यौन शोषण भएमा वा आचार संहिता उल्लघन गरेमा वडा नगरपालिका स्तरमा रहेको गुनासो सुनवाइ संयन्त्रमा तुरुन्त निवेदन जानकारी दिनेछु ।

१८. कार्यस्थलमा कसैले यौनजन्य दुर्व्यवहार सम्बन्धि संकास्पद कार्य गरेमा तुरुन्त टोली प्रमुख प्रबन्धकलाई जानकारी निवेदन दिनेछु ।

माथि उल्लेखित आचार संहिता राम्ररी पढे र बुझेको छु र कार्यस्थलमा कडाईका साथ पालना गर्दछु भनी हस्ताक्षर गर्दछु ।

.....
व्यवस्थापक टोली प्रमुख

.....
कर्मचारी कामदार

Annex VIII: Photographs



1. During Public Consultation meeting at Bardagoriya RM -03 office.



2. During focus Group Discussion (FGD) at Bardagoriya RM-03



3. Existing structure at the Ranikunda WSS sub-project, OHT premises



4. During focus Group Discussion (FGD) with women group & marginalized group at Bardagoriya RM-03

Annex IX: Monitoring format

**रानीकुन्डा खानेपानी आयोजनाको
वातावरणीय प्रभाव अनुगमन फारम (निर्माण चरण)**

अनुगमन गरेको मिति		समय	
अनुगमनको स्थान			
अनुगमन गर्ने व्यक्तिको नाम			
अनुगमन गर्ने व्यक्तिको पद			

तलको तालिकामा उल्लेख गरिएका सूचकहरूलाई दिइएको विधि प्रयोग गरी अनुगमन गर्ने परिणाममा छ छैन वा निश्चित संख्या (परिमाण) आउने भए सो उल्लेख गर्ने

सूचक	विधि	परिणाम वा परिमाण		प्रतिकार्य वा सुधारात्मक कार्य (सल्लाह सुझव निर्देशन केहि दिएको भए सो उल्लेख गर्ने)
धुवाँ धुलो उत्सर्जन	बाटो र कार्यस्थल अवलोकन गर्ने	छ	छैन	
ध्वनी प्रदुषण	बाटो र कार्यस्थल अवलोकन गर्ने	छ	छैन	
व्यक्तिगत सुरक्षा उपकरणहरू लगाईएको	कार्यस्थल अवलोकन गर्ने	छ	छैन	
खुला रुपमा दिशा पिसाब गरेको	कार्यस्थल अवलोकन गर्ने	छ	छैन	
फोहरमैला जथाभावी फालेको	कार्यस्थल अवलोकन गर्ने	छ	छैन	
काटिएको रुखको संख्या	ठुटाको संख्या गन्ने र अभिलेख हेर्ने			
सडकमा नयाँ खाल्टो परेको र हिलो भएको	बाटो अवलोकन गर्ने	छ	छैन	
कामदारका अभद्र व्यवहारका घटना	स्थानीयलाई सोध्ने	छ	छैन	
कार्य क्षेत्रमा दुर्घटना र क्षतिको विवरण (संख्या र किसिम)	ठेकेदारलाई सोध्ने र अभिलेख हेर्ने			
निर्माणमा स्थानीय व्यक्तिको सभागिता (संख्या)	अवलोकन गर्ने, सोध्ने र हाजिरी हेर्ने			

Environmental & Social Management Plan (ESMP) Report for Ranikunda WSS Sub-Project

निर्माणमा महिला सहभागिता (संख्या)	अवलोकन गर्ने, सोध्ने र हाजिरी हेर्ने		
निर्माणमा जनजातिको सहभागिता (संख्या)	अवलोकन गर्ने, सोध्ने र हाजिरी हेर्ने		
निर्माणमा दलितको सहभागिता (संख्या)	अवलोकन गर्ने, सोध्ने र हाजिरी हेर्ने		
निर्माणमा बालबालिकाको (१४ र १६ वर्ष मुनिको) सहभागिता (संख्या)	अवलोकन गर्ने, सोध्ने र हाजिरी हेर्ने		

अनुगमनको गर्ने व्यक्तिको समग्र क्रियाकलापको बारेमा थप र व्यक्तिगत टिप्पणी	
अनुगमनकर्ताको सुझाव	

जाँच/रुजु गर्ने अधिकारीको नाम र सही	
-------------------------------------	--

रानीकुन्डा खानेपानी आयोजनाको

वातावरणीय प्रभाव अनुगमन फारम (संचालन चरण)

यस किसिमको अनुगमनलाई नियमित क्रियाकलापमा समावेश गर्ने, अवस्था हेरी मासिक, अर्धवार्षिक वा वार्षिक रूपमा अनुगमन गरी अभिलेख सुरक्षित राख्ने

अनुगमन गरेको मिति		समय	
अनुगमनको स्थान			
अनुगमन गर्ने व्यक्तिको नाम			
अनुगमन गर्ने व्यक्तिको पद			

तलको तालिकामा उल्लेख गरिएका सूचकहरूलाई दिइएको विधि प्रयोग गरी अनुगमन गर्ने परिणाममा छु छैन वा निश्चित संख्या (परिमाण) आउने भए सो उल्लेख गर्ने

सूचक	विधि	परिणाम वा परिमाण		सल्लाह सुझव वा निर्देशन केहि भए सो उल्लेख गर्ने
धुवाँ धुलो उत्सर्जन	बाटो र सार्वजनिक शौचालय क्षेत्र अवलोकन गर्ने	छु	छैन	
ध्वनी प्रदुषण	बाटो र सार्वजनिक शौचालय क्षेत्र अवलोकन गर्ने	छु	छैन	
खुला रूपमा दिशा पिसाब गरेको	सार्वजनिक शौचालय क्षेत्र वरपर अवलोकन गर्ने	छु	छैन	
फोहरमैला जथाभावी फालेको	सार्वजनिक शौचालय क्षेत्र वरपर अवलोकन गर्ने	छु	छैन	
नियमित सरसफाई गरिएको		छु	छैन	
वृक्षारोपण गरिएको बिरुवा जागेको हुर्केको	संख्या गन्ने र रोपेको संख्यासँग दाँज्ने			
सडकमा नयाँ खाल्टो परेको र हिलो भएको	बाटो अवलोकन गर्ने	छु	छैन	
स्थानीय व्यक्तिद्वारा संचालित व्यवसाय	अवलोकन गर्ने र सोध्ने			
स्थानीय महिलाद्वारा संचालित व्यवसाय	अवलोकन गर्ने र सोध्ने			
स्थानीय जनजातीद्वारा संचालित व्यवसाय	अवलोकन गर्ने र सोध्ने			
स्थानीय दलितद्वारा संचालित व्यवसाय	अवलोकन गर्ने र सोध्ने			

अनुगमनको गर्ने व्यक्तिको समग्र क्रियाकलापको बारेमा थप र व्यक्तिगत	
जाँच/रुजु गर्ने अधिकारीको नाम र सही	

रानीकुन्डा खानेपानी आयोजनाको

नियमपालन अनुगमन फारमको ढाँचा (निर्माणपूर्व वा निर्माण चरण)

अनुगमन गरेको मिति		समय	
अनुगमनको स्थान			
अनुगमन गर्ने व्यक्तिको नाम			
अनुगमन गर्ने व्यक्तिको पद			

सूचक	विधि	परिणाम वा परिमाण		कैफियत वा केहि थप टिप्पणी
		छ	छैन	
प्रस्तावित विकासलाई समावेश गरी सामूदायिक वनको कार्ययोजना स्वीकृतिको पत्र	कार्ययोजना र स्वीकृतिको पत्र अध्ययन	छ	छैन	
ठेक्का सम्झौतामा वातावरण व्यवस्थापन सम्बन्धी बुँदा संलग्न	स्वीकृत प्रस्ताव वा ठेक्का सम्झौता अध्ययन	छ	छैन	
वातावरण व्यवस्थापनको लागि बजेट विनियोजन	बजेट दस्तावेज अध्ययन	छ	छैन	
प्रभाव अनुगमन गरे नगरेको	अनुगमन बजेट वा अनुगमन प्रतिवेदन अध्ययन र सुधारात्मक कार्यको प्रगति	छ	छैन	

स्थलगत अवलोकनको आधारमा न्यूनीकरणका क्रियाकलापको कार्यान्वयनको अवस्था

सूचक	परिणाम वा परिमाण		कैफियत वा केहि थप टिप्पणी (उपाय आवश्यक भए नभएको बारेमा समेत)
	छ	छैन	
थोत्रा सवारीसाधनको प्रयोग	छ	छैन	
बाटो र कार्यस्थलमा पानी छर्केको	छ	छैन	
निर्माण सामग्री ढुवानीको क्रममा छोपेको	छ	छैन	
.....	छ	छैन	
.....			
.....			