



Government of Nepal  
Ministry of Water Supply  
Department of Water Supply and Sewerage Management  
**Water Sector Governance and Infrastructure Support Project**  
Project Implementation Unit  
Dipayal Silgadhi Municipality, Doti

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## **Detailed Project Report of Tikha Goseda Sirkholigaon Gairagaon Water Supply Project**

**Dipayal Silgadhi Municipality, Doti**

NP-DWSSM-290178-CS-QCBS

### **Draft Report**

Volume I: Main Report

Volume II: Cost Estimate and Appendix

Volume III: Drawings

Volume IV: Bidding Document with Specification

Volume V: Environmental & Social Screening Report

**Volume IV: Environmental and Social Management Plan**

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## **LIST OF ACRONYMS & ABBREVIATIONS**

AMSL	Above Mean Sea Level
CBS	Central Bureau of Statistics
DWSSM	Department of Water Supply and Sewerage Management
DSM	Dipayal Silgadhi Municipality
E&S	Environmental and Social Screening
EPR	Environment Protection Rule
ESRI	Environmental Systems Research Institute, Inc.
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
GoN	Government of Nepal
HIV	Human Immunodeficiency Virus
ICIMOD	International Centre for Integrated Mountain Development
IDA	International Development Association
KM	Kilometre
Kph	Kilometre per Hour
MoFE	Ministry of Forests and Environment
MoWS	Ministry of Water Supply
MST	Municipal Support Team
MWASH	Municipal Water, Sanitation and Hygiene
NOC	No Objection Certificate
NRs	Nepalese Rupees
PAP	Project Affected Person
PIC	Project Implementation Committee
PIU	Project Implementation Unit
PMU	Project Management Unit
PPE	Personal Protective Equipment
PR	Primary Reservoir
PST	Project Support Team

PST	Pump Station
PV	Photovoltaic
RAP	Resettlement Action Plan
RVT	Reservoir Tank
STD	Sexually transmitted Diseases
TGSGWSP	Tikha-Goseda-Sirkholigaon-Gairagaon Water Supply Project
Vs.	Versus
WaSGISP	Water Sector Governance and Infrastructure Support Project
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization
WS	Water Supply
WSUC	Water Supply User Committee
WTP	Water Treatment Plant

## **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 Project Description**

Dipayal Silgadhi Municipality (DSM) plans to enhance the Tikha-Goseda-Sirkholigaon-Gairagaon Water Supply Sub-Project (TGSGWSP) in Wards 1 and 3 of Dipayal Silgadhi Municipality, Doti district, Sudurpaschim Province. The project area includes Goseda, Tikha, Sirkholi Gaon, and Gaira Gaon in Ward 1, as well as Ichhali, Saran, Patkani, Kholi, and Saltada in Ward 3.

The existing Tikha water supply system, built about 40 years ago by the Department of Water Supply and Sewerage, uses two water sources: Dhunde Khola (stream) and Rithhe Mul (spring) . This system includes 39 public tap stands but is now outdated, with most taps non-functional. Many residents, particularly in Tikha, collect water from damaged pipelines. Supply is limited to a few hours every three days.

The existing transmission and distribution is 7 km and 6 km long respectively, and the area has two reservoirs: a 35 m<sup>3</sup> stone masonry tank and a 15 m<sup>3</sup> ferro-cement tank, both in Tikha. However, the system serves only part of the population, distributes water unevenly due to varying elevations, and lacks proper treatment, leading to poor water quality and contamination risks. To address these issues, the TGSGWSP aims to upgrade the system to meet growing water demand, provide private connections, and ensure a consistent year-round water supply for the service area.

Under the current intervention, the TGSGWSP will extract 9.4 liters per second of water from an existing sump well located on the left bank of the Seti River at Basudhara. The Pumping Station (PST-1) is situated at an elevation of 509 meters above sea level. Water collected in the sump well will be pumped to the Pumping Station-2 (PST-2) area, located at 642 meters above sea level. The PST-2 area includes a reservoir with a capacity of 150 cubic meters (RVT-1) and a Water Treatment Plant (WTP). The treatment plant will include basic treatment unit using disinfection using Ca(CIO)<sub>2</sub> and provisions for laboratory units and test kits.

From PST-2, water will be pumped step-by-step to higher elevations by a hybrid pumping system, combining electrical and solar-powered pumps. It will first be pumped from PST-2 (642 meters) to reservoirs in Goseda: RVT-2 (824 meters), and then from PST-3 to RVT-3 at 1,043 meters. The total height (pumping head) covered by the project is approximately 534 meters.

RVT-3 is the main reservoir, supplying more than 70% of the service area. Another reservoir, RVT-4, located in Tikha, will receive water from RVT-3 through gravity flow. The capacities of RVT-2, RVT-3, and RVT-4 are 100 cubic meters each. Beyond RVT-3, water distribution will rely on gravity flow (*refer Figure- 1 for details*).

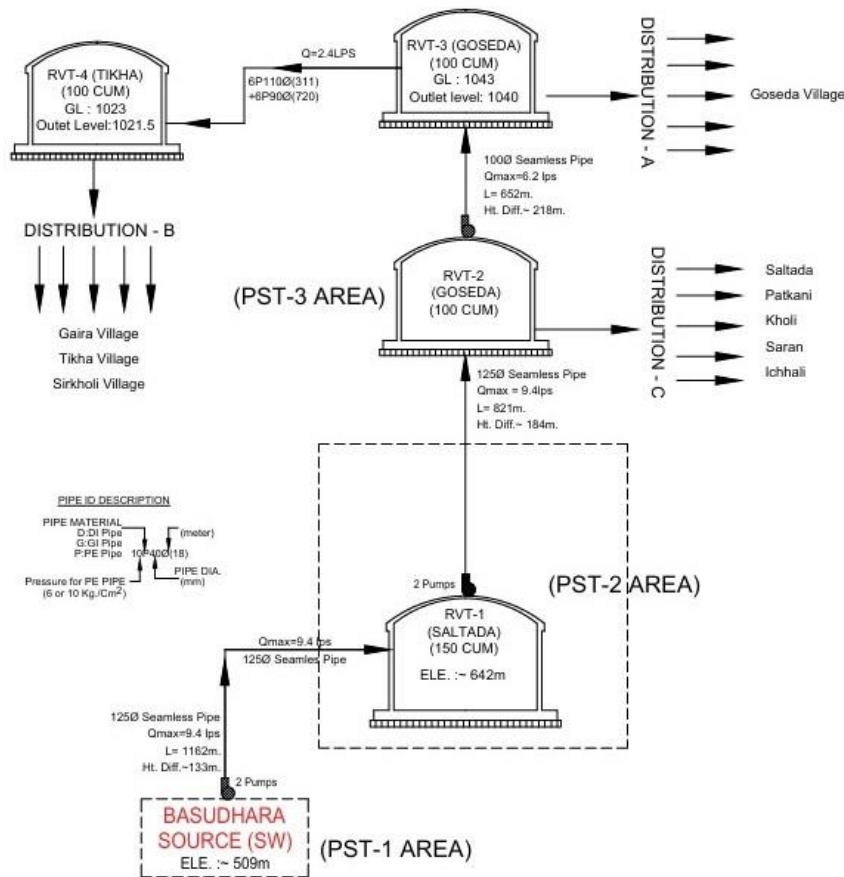


Figure 1: Schematic Diagram of the Project

Each of the three pumping stations will have two pumps—one electrical and one solar-powered. Solar pumps will work alongside electrical pumps to save energy. On cloudy or rainy days, electrical pumps will ensure the system’s reliability. With six hours of sunlight daily, the hybrid system is expected to reduce energy costs by 30-33%. Additionally, the hybrid system requires less installation space.

For transmission and distribution, the existing water distribution system will not be used. A completely new system has been planned, following the principle of "one household, one tap." New transmission pipelines (125 mm diameter, 1,984 meters long, and 100 mm diameter, 652 meters long) will run along the stream bank, public land, and foot trails wherever possible. Distribution pipes (14.52 km) will also be laid in public areas, but in some cases, they will pass through private land near RVT-2 and RVT-3 (*refer Table 1 for the details of the size and length pipes in distribution network*). To minimize impacts, pipes will be buried 90 cm deep, allowing landowners to use the surface. Pipes will be placed along property edges to avoid restricting land use or construction. Residential and structurally significant areas have been avoided in the design. The entire distribution system will use Polyethylene (PE) and Galvanized Iron (GI) pipes.

**Table 1: Details of pipe proposed for Distribution Network**

<b><u>PE PIPE</u></b> <b><u>OD (mm)</u></b>	<b><u>Actual Length (m)</u></b>				<b>GI Pipe</b>	
	<b>6 PN</b>	<b>10 PN</b>	<b>12.5 PN</b>	<b>16 PN</b>	<b>ND of GI Pipe</b>	<b>Length (m)</b>
40		4,671	938	1,569	32	463
50		1,900		77		
63		1,381	248	215		
75	1,146					
90	968					
110	600	172	84	80		
125	10					
	2,724	8,124	1,270	1,941		463
<b>Total</b>	<b>14,522</b>					

The proposed site/ components, site condition, the total land requirement for each component and its ownership, land availability status and likely environmental and social impacts during construction of each component are described in the Table-2 below:

**Table 2: Proposed components, site condition and land requirement status**

SN	Site/ Component	Location	Required land (Sq.m) and ownership	Site condition	Land availability status	Likely E&S Impacts
1	Sump Well site /Pump Station (PST1)	Basundhara, Dipayal Silgadhi Municipality, Ward No. 3 (DSM-3), on the bank of Seti River.	210 Sq.m for solar and control room, ownership- public land (river bank)	Barren land on the river bank, no vegetation and structures, free of encroacher/ informal /illegal user	Available, DSM-3 has given consent for use ( <i>Annex- III</i> )	Dilpeshwor temple and cremation site nearby but no likely E&S impacts expected as existing Sump Well will be used and no significant construction activities will be carried out at site.
2	Pump Station (PST-2) site (RVT1, Treatment plant, office building)	DSM-3, Saran	833 Sq.m for treatment plant, office building, Public land ownership belonging to Government/ Municipality	Site is clear, no vegetation and structures	Available, DSM-3 has given consent for use ( <i>Annex- III</i> )	There will be no use of chemicals and disinfectants except chlorination, No any harmful effluents will produced from this water treatment process.

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3	PST -3 (RVT-2)	DSM-1, Goseda	322 Sq.m for RVT2 and solar control room  Ownership- public land	Site is clear, no vegetation and other structures, free of encroacher/ informal /illegal user	Available- DSM-1 has given consent for use (Annex- III)	During construction, the excess spoil and deposition of construction materials may cause some minimal E&S impacts i.e foot trail which connect the Goseda settlement passes nearby the proposed site, the transportation of materials by workers may cause some disturbance in for public movement but these impacts are reversible, of short duration and can locally be managed. So impacts are considered less significant
4	RVT-3,	DSM-1, Goseda	115 Sq.m for RVT-3 and control room  Ownership- public land on the edge of the CF	Site is clear, no vegetation and other structures	Available- DSM-1 has given consent for use (Annex- III)	No significant E&S impacts are expected during construction . However, the access road to RVT3 site

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						is not defined except the foot trail that passes through the settlement, and the transportation of materials by workers may cause some disturbance in the community, but these likely impacts can be minimize through orientation and monitoring.
5	RVT-4	DSM-1, Tikha	117 Sq.m for RVT-4 and control room. Ownership- public land	Site is clear, no vegetation and other structures	Available- DSM-1 has given consent for use ( <i>Annex-III</i> )	Disposal of excess spoils might have minimal E&S impact but this can be managed within the construction site as there is enough barren public land

The Salient Features of the Tikha Gosed Sirkholigaon Gairagon Water Supply Project is presented in the Table-3 below:

**Table 3: Salient features of the project**

SN	Items	Description
1	Name of Project	Tikha-Goseda-Sirkholigaon-Gairagaon Water Supply Project (TGSGWSP)
2	Type	
		Sub-surface water (Sump Well) based pumping (10 lps). This is not pumping from Seti River. The WSP includes all the newly designed components except for using the existing Sump Well.
		Extension and enhancement of existing Tikha WS Project
3	Location Area	
	Province	Sudurpaschim Province
	District	Doti
	Municipality	Dipayal-Silgadhi Municipality
	Ward	Ward No. 1 and 3
	<b>Existing Water Supply Components</b>	
4	Status of the Existing Water Supply Project	
	Implemented	Implemented by DWSSM (former DWSS) as a rural water supply scheme
	Year of implementation	The existing WS system was constructed in 2050/51 (1993) Fiscal year
	Completed WS Components	15 cum capacity ferro-Cement tank during implementation Addition 35 Cum capacity RRM Tank added few years back.
	Operational Status	The existing system supplies water for 2 hours daily at Tikha only but experiences a significant decrease during the dry season. Capacity of source of existing WSS is 0.8 lps. The existing elements consist of 1 RVT of size 100 cum at Tikha and 7 Km transmission lines and 6 Km distribution HDPE pipe lines.
5	Available Service level and coverage	About 546 HHS in Tikha, Goseda, and Sirkholi Gaon with 39 public tap stands but most of taps are non-

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SN	Items	Description
		functional.
6	Type of Intervention	Rehabilitation of existing Sump Well and new construction of all other components like 4 RVTs, 1 WTP and 2.63 km transmission and 14.52 km distribution pipelines.
6	Study Level	DPR for immediate enhancement work
7	Available Facilities	
	Road	Syaule-Dipayal Road which connects the road at Syaule with Mahakali Highway.
	Water System	Operated/ managed by WSUC
	Electricity	Available
8	Social Status of a service area	
	Present HHs Numbers (2024)	614
	Present Population (2024)	3,855
	Base Year Population (2026)	3,932
	Design Year Population (2046)	4,799
	Growth Rate % (GR)	1
	Projected HHs in Design Year-based GR (Nos)	~765
9	Water Demand (MLD) in Design Year	0.4
	<b>Proposed Components under WaSGISP</b>	
10	Source Characteristics	
	Source Name	Existing Sump Well on the Bank of Seti River (Dimension: Inner diameter: 4 m, Depth: 9m below ground level and 2 m above ground level)
	Source Type	Sub-surface flow
	Source Location	Within the Service Ward
	Safe Yield (lps)	10 lps at Sump Well and it is sub-surface pumping (not a pumping from Seti River)
11	Sump well	Rehabilitation of an Existing Sump Well

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SN	Items	Description
12	Proposed Pumping of TGSGWSP	
	Total three-stage pumping	All pumping stations have electrical and PV facilities
	First Stage Pumping	2 Nos New 15 HP + 1 Nos Standby for 133m Q=4.7lps
	Second Stage Pumping	2 Nos New 22 HP+ 1 Nos Standby for 188m Q=4.7lps
	Third Stage Pumping	2 Nos New 22 HP + 1 Nos Standby for 188m Q=4.7lps
13	Electricity line,	Available
	Transformer	50 kVA in PST-1 & 100 kVA in PST-2 and PST-3
14	Reservoir	All four RVTs are new
	RVT-1 at WTP& Office premises (PST-2)	150 Cum Balancing Reservoir RCC Circular
	RVT-2 at PST-3	100 Cum Balancing +Distribution RVT for DMA-C
	RVT-3 at Goseda	100 Cum Balancing +Distribution RVT for DMA-B
	RVT-4 at Tikha	100 Cum Balancing +Distribution RVT for DMA-A
15	Other WS Components	
	Valve Chamber (Bricks/RCC)	50/20
	Office, Billing counter and Guard House located inside RVT 1 premises.	Proposed 2 storey frame structure
	Pump Control /Dosing House	Small RRM
	Numbers of Household Connection	614
	Fire Hydrant	As RVTs are located within a 1 km periphery only provision of filling fire brigade in RVT premises
	Total Length of Transmission mains pipe (m):	The cumulative length = 2,636m. (Seamless)
	Total Length of Bulk Distribution mains pipe (m):	L= 1030 (160 OD PE Pipes) from RVT-4 to RVT-5
	Total Length of Distribution of PE pipe (m):	14.52 km
16	Total Cost of WS Component (Incl. of all NRs.	171,887,969.52

### **1.3 Rationale of Environmental and Social Management Plan (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 compliant to Schedule 1 or 2 or 3. Hence, a 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 lie in any National Parks /Protected areas or any critical aquatic and terrestrial habitat area. So, there is minimal environmental/or social impacts and no any 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 Banks Environmental and Social Standards have been discussed and reviewed that are relevant and applicable to the TGSGWSP.

The ESMF reviewed country's legal and institutional framework, identified gaps from a comparison of national and World Bank ESF requirements, and suggested corresponding measures to meet the requirements. The following 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, and ESS10 on Stakeholder Engagement and Information Disclosure.

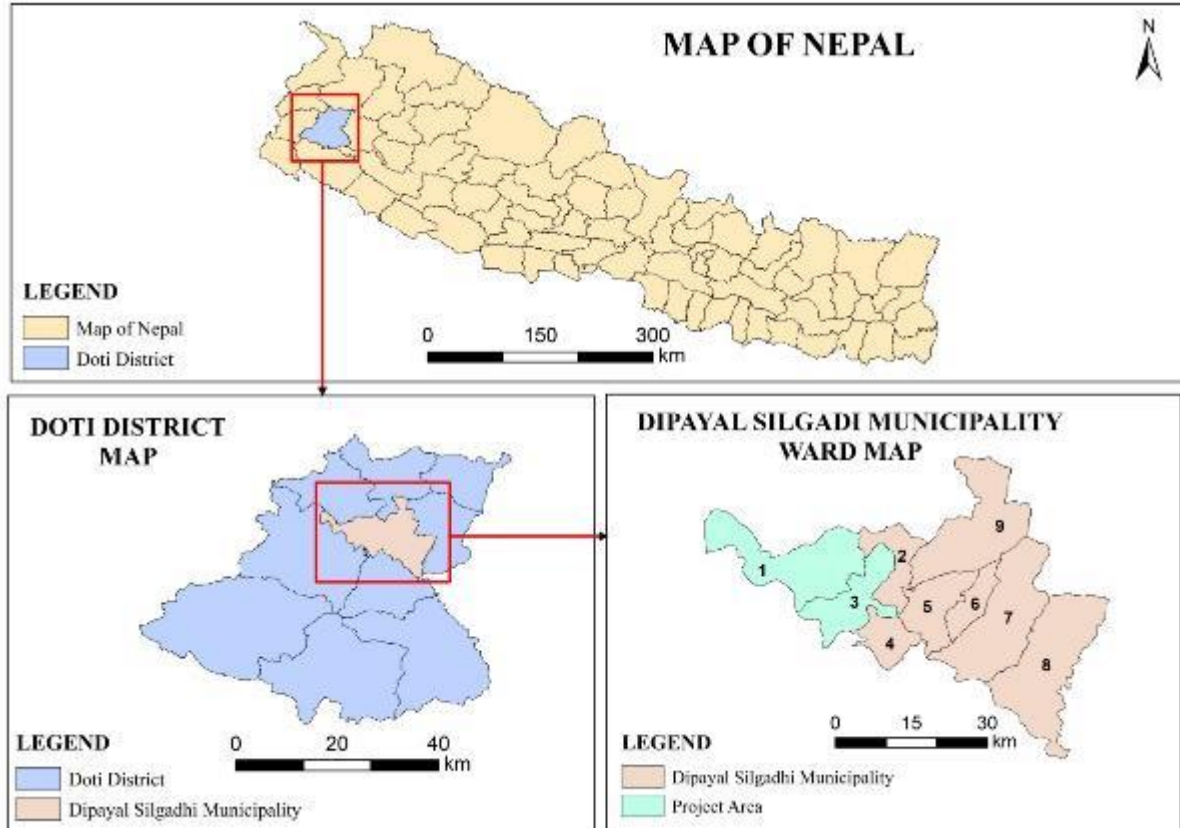
## 2 DESCRIPTION OF STUDY AREA

### 2.1 Location and Accessibility

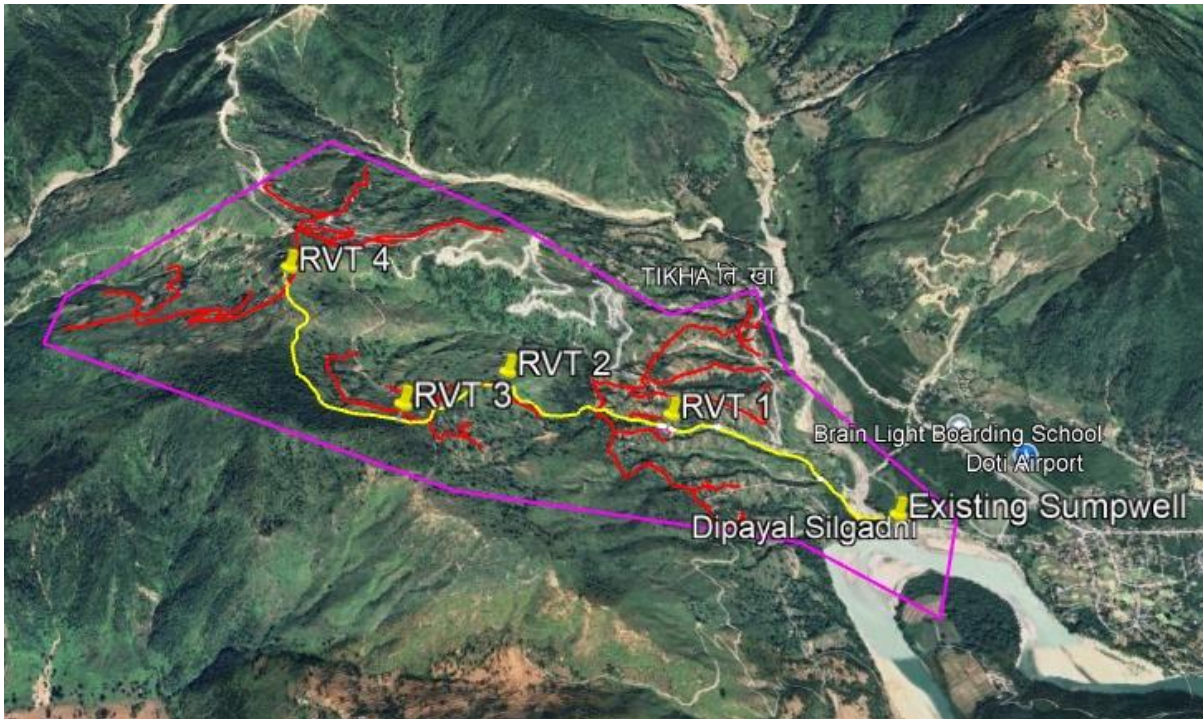
The TGSGWSP is located in Dipayal Silgadhi Municipality Ward no. 1 and 3 of Doti district which lies in the Sudurpashchim Province of Nepal. Geographically the project area lies in latitude 29°16'N and longitude 80°56'E in the middle hills on the bank of the Seti River.

Situated in the middle of Sudurpaschim Province, the municipality is accessible through Syaule-Dipayal Road which connects the road at Syaule with Mahakali Highway. The Mahakali Highway is connected to the East-West Highway at Attariya. The Municipality is also accessed through Surkhet via Midhill Highway, providing access to the Mid-Western Region. The municipality is also linked to nearby towns and villages through several feeder and district roads. The nearest airport is Dhangadhi, located approximately 180 KM away, although there is an airport at Dipayal, which is not operational. The daily flights are scheduled from Kathmandu to Dhangadhi airport and then the municipality is accessed via road (Mahakali & Seti Highway) transport from the airport.

There is black topped road from Dipayal, Pipalla to Tikha community and the distance is about 4 km and the distance to RVT1 is 2 Km (Black top + Gravel + Earthen road), RVT2 and RVT3- 3 Km (Black top +Foot Trail) from the Pipalla Bazar.

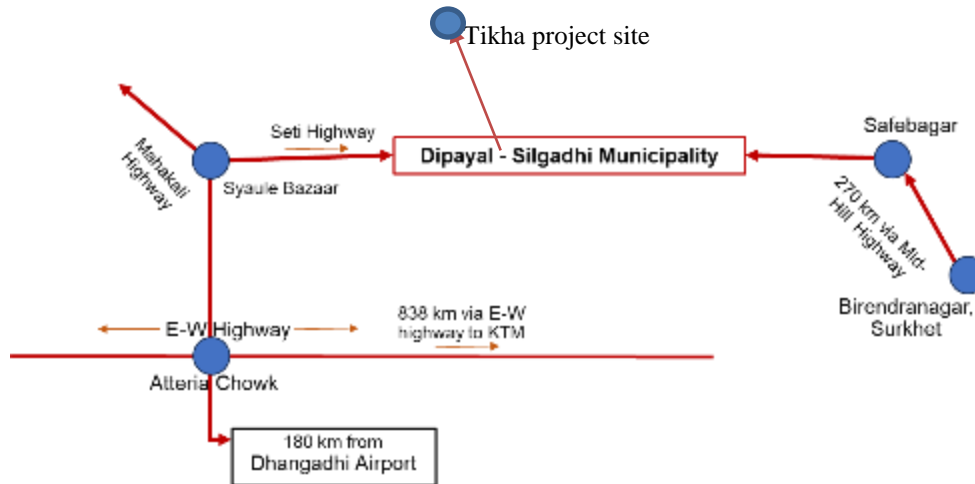


**Figure 2: Location of Dipayal Silgadhi Municipality Ward no. 1 & 3**



**Figure 3: Location for TGSGWSP**

(Source: Google Earth)



**Figure 4: Project Area Accessibility Information**

## 2.2 Physical Features

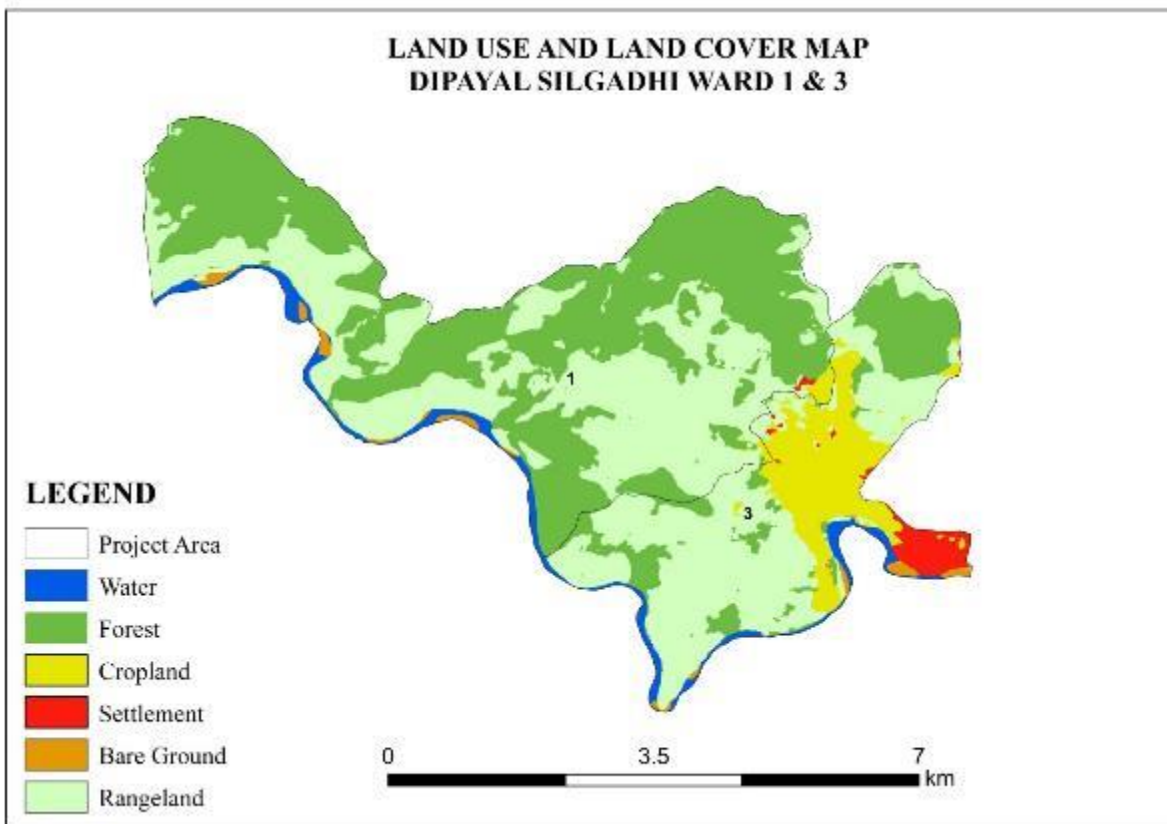
### 2.2.1 Topography and Land Use

Dipayal Silgadhi Municipality lies at 29°16' N, 80°56' E. The altitude of Dipayal Silgadhi Municipality is 600 meters to 1,500 meters above mean sea level. The highest altitude of the

municipality is Kalika Mandir, Bhukkaule Gad which is located near Baglek at 2,156 meters (DSM, 2018).

**Table 4: Land Use and Land Cover Details of Dipayal Silgadhi Municipality Ward 1&3**

S.N.	Land Use and Land Cover	Area (Sq. KM)	Percentage
1	Water	0.98	3.17
2	Forest	13.12	42.44
3	Cropland	2.35	7.60
4	Settlement	0.49	1.59
5	Bare Ground	0.30	0.97
6	Rangeland	13.67	44.23
<b>Total</b>		<b>30.91</b>	<b>100</b>

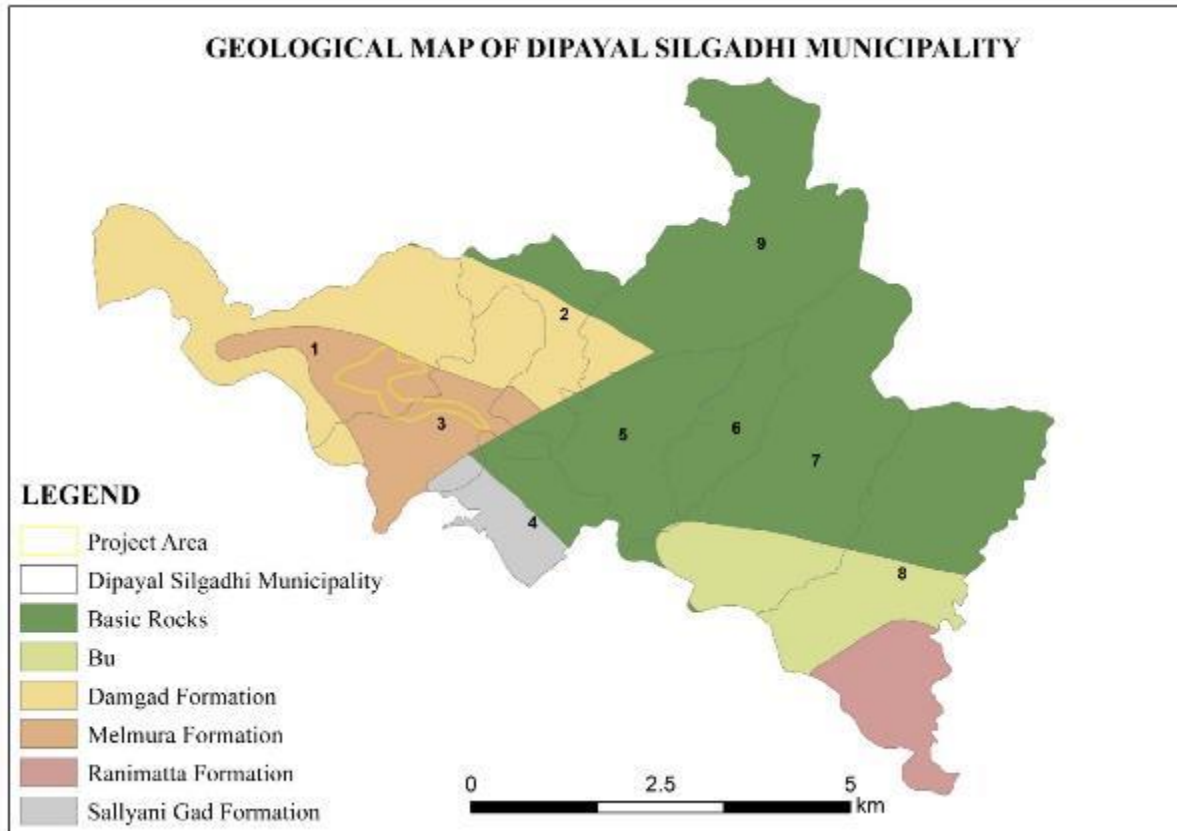


**Figure 5: Land Use and Land Cover Map of Dipayal Silgadhi Municipality Ward 1&3**

(Source: ESRI, 2023)

### 2.2.2 Geology

Dipayal Silgadhi Municipality, situated in Doti District, Nepal, is located within the Middle Hills region of the country. It lies within the foothills of the Himalayas, characterized by rugged terrain and steep slopes. The geological structure of this area is influenced by the tectonic processes associated with the Himalayan orogenic belt. It likely consists of a mix of rock types, including sedimentary, metamorphic, and igneous rocks, with formations shaped by folding, faulting, and uplift. Specific geological formations in the region may include the Basic Rock, Bu, Damgad Formation, Melmura Formation, Ranimatta Formation and Sallyani Gad Formation.



**Figure 6: Geological Map of Dipayal Silgadhi Municipality**

*(Source: ICIMOD, 2010)*

### 2.2.3 Climate

**Temperature:** A mixed type of climate is found in the Municipality. Areas located near the Seti River, have warm and temperate climate. The temperature here averages 18.4°C with maximum temperature being 30°C and minimum temperature 15°C.

**Rainfall:** Dipayal Silgadhi Municipality's annual precipitation is 1347 mm and the maximum rainfall occurs during June to September.

The relative humidity is in the range of 58% to 83%. The annual rainfall is 2,611 mm. (Climate Data, n.d.).

#### 2.2.4 Climate Change and Disaster Vulnerability

According to Climate Change Vulnerability Mapping for Nepal (*MoE, 2010*) based on indices, Doti district has moderate overall vulnerability, high landslide vulnerability, very low flood vulnerability and low adaptation capability to the impacts of climate change. This is the overall vulnerability of the Doti district. However, the project site has no landslide prone areas. So, this will not impact the project activities and the extreme weather events are not observed in the project area that would impact or prevent the work.

#### 2.2.5 Drainage Facilities

There is no proper drainage system for storm water as well as for the domestic sewage in the Project area. As the service area is predominantly rural and the terrain is mostly steep, people are less concerned about storm water drains.

#### 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 (*refer Annex IV*) of the existing sub-project site (Bashudhara-sumpwell) was done and the physical and chemical parameters found to comply with the NDWQS. Dust produced because of vehicles plying along the gravel road increase the suspended particulate matters in the air. There are settlements, health post, schools near the project site. Vehicle movement, wind movement and frequent visitors were the main sources of noise in the project area. **The existing air and noise measurements will be taken before the mobilization of contractor to establish the baseline.** This is proposed in the ESMP along with the sufficient budget.

The maximum instantaneous discharge (m<sup>3</sup>/s) and the minimum instantaneous discharge (m<sup>3</sup>/s) of Seti River near Belgaon were recorded at Station Number-260 and are shown below:

**Table 5: Maximum instantaneous discharge and minimum instantaneous discharge of Seti River**

SN	Year	Maximum Instantaneous Discharge (m <sup>3</sup> /s)	Minimum Instantaneous Discharge (m <sup>3</sup> /s)	Abstraction for sub-project from Sump Well (m <sup>3</sup> /s)
1	1980	2150	41.8	0.01
2	1983	6310	52.1	0.01
3	1985	5340	54.2	0.01
4	1988	3780	52	0.01
5	1995	3690	62.8	0.01

6	2000	5340	62.2	0.01
7	2005	6310	48.3	0.01
8	2008	4840	37.4	0.01
9	2009	8380		0.01
10	2012	2330		0.01
11	2013	9540		0.01
12	2014	4930	53	0.01
13	2016	2540	56	0.01
14	2019	1320	65.8	0.01

Source: DHM Data recorded at Belgaon (Station Number-260)

### 2.2.7 Soil Type and Quality

The soil types typically include sandy loam, clay loam, and Silt. These soils are influenced by the surrounding Hilly terrain. Soil quality varies, with some areas suitable for agriculture due to fertile soils, while others may experience degradation and erosion. 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 Flora and Fauna

TGSGWSP is located in Dipayal Silgadhi Municipality Ward No. 1 and 3 of Doti district. The sub-project area hosts common floral and faunal species typically found in the lower altitudes of the district. Notable among the floral species are Oak tree (*Quercus leucotrichophora*), Chir Pine (*Pinus roxburghii*), Uttis tree (*Alnus nepalensis*), Jamun (*Syzygium cumini*), Kaafal tree (*Myrica esculenta*), Mauwa tree (*Maduca longifolia*) etc. The common fauna found in this area are Wild Boar (*Sus scrofa*), Hdgehog (*Hytrix indica*), Jungle cat (*Felis chaus*), Hispid Hare (*Caprolagus hispidus*), Terai Gray Langur (*Semnopithecus hector*), Jackal (*Canis aureus*) etc. Similarly, common birds found in the sub-project area are Kalij Pheasant (*Lophura leucomelanos*), Sparrow (*Passer domesticus*), Red Legged Patridge (*Alectoris rufa*), Red Vented Bulbul (*Pycnonotus cafer*), Common Myna (*Acridotheres tristis*), Crow (*Corvus macrorhynchos*), Black francolin (*Francolinus francolinus*) etc. However, the sub-project area passes through human settlements and does not fall within any designated floral or faunal habitats.

## 2.4 Socio-economic and Cultural Features [\(Please see page no.18, No. 2.4.5\)](#)

### 2.4.1 Demographic Characteristics

#### Population

The total population of the project Municipality and Wards are given below:

**Table 5: Total Population of the project Municipality and Wards**

Area	Number of households	Population			Average household size	Sex ratio
		Total	Male	Female		
Dipayal Silgadhi Municipality	8385	33968	15469	18499	4.05	83.62
Dipayal Silgadhi Municipality Ward 1	891	3836	1558	2278	4.31	68.39
Dipayal Silgadhi Municipality Ward 3	824	3455	1457	1998	4.19	72.92

(Source: Population census, 2021)

#### Population Density

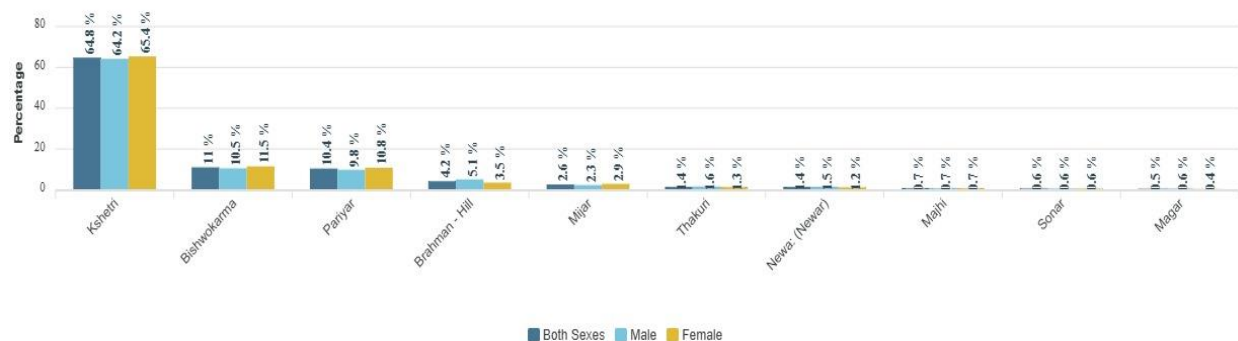
The population density of Dipayal Silgadhi Municipality is 268 individuals per sq. km.

#### Literacy Rate

According to the National Population and Housing Census 2021, the literacy rate of Dipayal Silgadhi Municipality is 73.3%, which is higher in males (86.6%) than females (62.7%).

#### Caste and Ethnicity

The population in Dipayal Silgadhi Municipality is dominated by Chhetri, followed by people of Dalit, Brahmin, and Magar caste/ethnicity. Though Magar has been classified as indigenous to Nepal, in this project area, the Chhetri, grouped as the Khas, are indigenous to this place as per the ESF standards on Indigenous Peoples. The National Census data for 2078 of Dipayal Silgadhi Municipality is mentioned in the chart below:



## Language

Language spoken mainly depends on the caste/ethnicity. For the majority of people of Chhetri, Dalit, Brahmin, and Magar group, Doteli and Nepali are the most common language of the people, followed by Baitadeli.

### 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 banana. Livestock reared in the area include cow/oxen, buffalo and goat. 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 businesses, service, labor and foreign employment. As understood from discussion with local people, they have adopted more than one occupation. However, international employment stands out, indicating significant migration in search of employment opportunities overseas. .

### 2.4.3 Available Public Services / Facilities:

There is one Dipayal Power Station in Dipayal Silgadhi Municipality Ward number. 3. The educational institutions in the project area are Shree Kalika Udhyak Secondary School, Shree Maglek Secondary School, Madigaun Elementary School, Bhageshwar Primary School, Khaptad English Boarding School, Dipayal Bahumukhi Campus and Dilpeshwor Secondary School. There are two hospitals, four health posts, four urban health centres and six non-public health facilities in Dipayal Silgadhi Municipality (Public Health Update, 2019). The source of drinking water for the majority of families is river/stream followed by tap/piped water, well (kuwa) in ward number. 1 and 3. Electricity supply through national grid has reached to the entire ward 1 and 3, but yet to benefit some 4% of the households. Around 94% of households have toilet facilities and 6% of households are without toilet facilities in ward no. 1 and around 86% of households have toilet facilities and 14% of households are without toilet facilities in ward no. 3.

#### **2.4.4 Places of Religious and Cultural Importance**

Each specific caste/social group in the project area has their own culture based on their religion and traditions. Many festivals are celebrated explicitly by specific types of social/caste groups. For instance, Bishu, Olke Sangranti, and Maghe Srakanti are some of the major festivals celebrated by the Doteli community in the area. Other groups also celebrate it. 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, such as sacred spaces, belief systems, knowledge, and practices. But, during consultations with the community, it was reported that project footprints are unlikely to have a bearing on these intangible heritages.

Likewise, in terms of tangible heritages, religious and cultural places of importance include the Salmuni Temple, Dilpeshwor Temple, Yogi Gorakhnath Maath and Khairatola (Patkani).

#### **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 the physical, emotional, and mental health of their children.

The Federal Ministry of Health and Population (MoHP) has managed the establishment of “One Stop Crises Management Centres (OCMCs)” in Doti Hospital. In this OCMC unit of Doti District Hospital, one trained counselor is also working there.

In the Doti district, the OCMC of District Hospital has registered 12 cases of SEA/SH and GBV in the 2080/081 fiscal year. In the case of the sub-project area, there is a Department of Women and Children under the Social Development Unit in Dipayal Silgadhi Municipality to look into GBV/SEA/SH issues. The Dipayal Silgadhi Municipality has nominated GBV and SEA/SH focal person Ms Sanumaya Limbu, who is also a municipal staff member. No cases of child labor, family disputes, and domestic violence have been recorded in the Department of Women and Children under the Social Development Unit of Dipayal Silgadhi Municipality. As per the consultation carried out at the local level, no registered cases of GBV were reported since such issues are not openly discussed. . However, it was also reported that if any such cases happen, then those cases will be settled with the facilitation of the local elites and community leaders. In case such cases are not resolved even under the facilitation of the local elites and , and

community leaders, then they are reported to the District Police Office. For the fiscal year 2080/81, the District Police Office also did not report any SEA/SH or GBV cases. However, if we are to go by the OCMC data, it suggests that there are cases of SEA/SH and GBV. Since there are prevalent forms of GBV in communities, which can be further triggered by the sub-project infrastructure work wherein it is expected that around ..... to ..... labors (.... local & .... migrant) will be mobilized per day during the peak construction at the sub-project sites. Therefore, the potential risks of SEA/SH are there as such, a code of conduct will be adopted to mitigate the SEA/SH impacts of the sub-project, and the sample of the personal code of conduct for the WSS sub-project is attached in Annex .....

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### **3 STUDY METHODS**

The methods adopted to achieve the objective consist mainly of map reading to understand the frame of reference and field investigation of the TGSGWSP, including collection of field-based information and mapping. The methods included:

#### **3.1 Literature Review and Secondary Data Collection**

The assignment commenced with a literature review and secondary data collection. The sources of relevant information included project documents such as feasibility studies and detailed engineering design reports, District and Municipal Profile of the project area, Topographical Maps, Geological Maps, Google Earth Images; Published and unpublished reports relevant to the project; climatological record of the project area held at Department of Hydrology and Meteorology.

#### **3.2 Field Survey, Mapping and Verification of Secondary Data**

The study was based on an actual walkthrough of the Tikha (Doti) WSS Sub-Project area, mainly focusing on the proposed location and Focused group discussions (FGDs), formal consultation meetings, and Key Informant Interviews (KII) with the local stakeholders, including the local government, chamber of commerce and local people. Separate consultations with women, Dalits, and other disadvantaged groups living in the service area were organized to discuss potential E&S issues related to the proposed water supply sub-project, and feedback and suggestions were collected.

The environmental and social screening checklist was prepared after desk study, review of sub-project related documents, filing of different parameters and matters outlined in the environmental and social screening checklist present in the project ESMF, and consultation with stakeholders and municipal personnel.

Environmental and social scoping included the collection of relevant information on existing physical, biological, socio-economic, and cultural environmental settings through field walkthroughs, surveys, measurement, discussion, consultation and interactions, and identification of possible issues to be addressed in the Environmental Social Management Plan (ESMP).

#### **3.3 Desk Work**

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

## **4 ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN**

### **4.1 Impacts and Mitigation**

The proposed TGSGWSP is anticipated to have physical, biological, and socio-economic impacts across different project phases, including pre-construction, construction, and operation. These impacts can be both positive and negative. Environmental management aims to enhance positive effects while minimizing adverse ones through mitigation measures. Key impacts and mitigation strategies are outlined below:

During construction, activities such as site clearance, excavation, soil cut and fill, use of heavy machinery, establishment of worker camps, and sourcing materials from quarry and borrow pits are expected. These activities may lead to environmental and social concerns, including:

- Dust and noise at construction sites.
- Vibration from machinery.
- Influx of workers and associated risks, such as SEA/SH (Sexual Exploitation, Abuse, and Harassment)
- Occupational hazards and community health and safety issues.
- Pollution from construction waste and other by-products.

The laying of transmission and distribution pipes on private land may impose land-use restrictions. Additionally, the operation of water treatment facilities could lead to issues such as odor, noise from equipment, and health and safety risks, particularly related to chemical handling. To address these concerns, manuals and guidelines will be developed for the operation phase, and mitigation measures will be implemented accordingly.

While no suitable quarry site exists near the project area, materials like sand and gravel may be sourced from the nearby Godre Khola and Seti rivers. The contractor must procure construction materials from municipality-approved sites and provide evidence of approval to the project authorities (*refer Annex VI for environmental clearance of the Godre Khola and seti River quarry sites*).

The project will significantly benefit the residents of Dipayal Silgadhi Municipality by providing reliable access to safe drinking water. Potential impacts and mitigation strategies have been detailed in Table 6: Environmental and Social Management Plan Matrix. Contractors are required to prepare and submit plans—such as Traffic Management plan, Quarry Site Management and Heavy Equipment Mobilization plans—for project approval as part of Contractors Environmental and Social Management Plans (C-ESMP).

**Table 6: Environmental and Social Management Plan Matrix**

Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
<b>1. Prior to Construction Activities</b>						
Consents, permits, Site clearance for construction works, workers camp, materials and equipment yards etc. no objection certificate (NOC), etc.	Failure to obtain necessary consents, permits, no Objections (NOs), etc. for use of land and other property can result to design revisions and /or stoppage of works.	<p>Obtain all of the necessary consents, permits, clearance, No Objections, etc., including the consent letter for the use of the public land given by the ward offices, decisions of the consultation meeting etc., prior to the start of civil works.</p> <p>Develop necessary alternatives designs/programs for avoiding the impact on resources.</p> <p>Acknowledge in writing and provide report on compliance all obtained consents, permits, clearance, NOs, etc.</p> <p>Ensure that workers camp sites with all basic needs (lights, water, sanitation, proper ventilation) at designated area.</p>	PIU/MST	Incorporated in final design and communicated to the Contractors.		Prior to award of the contract
Existing utilities	Disruption of services	Identify and include locations and operators of these utilities in the detailed design documents to prevent unnecessary disruption of services during construction. Since the RVT2 and RVT3 sites are not accessed by road facility, the transportation of construction materials by the workers through the foot trail may disturb the local community using it. However, this impact is temporary. Proper orientation to workers, scheduling of the transportation activities will be fixed in consultation with the community and proper	PST/MST/PIU	List of affected utilities and operators;		During detailed design phase

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
		monitoring will be done.				
Drinking Water Supply	Extraction of unsatisfactory raw water quality	<p>During the detailed engineering design stage water samples test from the existing Seti River and existing sump well was done. (refer Annex IV for details)</p> <p>The water quality measurement or test report indicates that sample water is free of Arsenic and all the observed values complied the prescribed Nepal Drinking Water Quality Standards (NDWQS).</p> <p>The reports of water quality test of Seti River and Sump Well have been included in the Annex.</p>	PST, PMU/PIU	Incorporated in final design and communicated to contractors		Prior to award of contract
Stockpile areas, Storage areas, Disposal areas, and workers camp (if needed)	Disruption to traffic flow, stock piling and muck disposal	<p>Determine locations prior to award of contracts. The probable site for labor camp and storage area are near RVT1 and RVT4 construction areas at Saran and Tikha, which are public land.</p> <p>The details will be included in C-ESMP (Contractor's Environment and Social Management Plan) of Sub-Project. The Contractor needs to submit the C-ESMP within 60 days after mobilization.</p> <p>-Choose stockpile locations away from water bodies, drainage channels, and sensitive environmental areas to reduce the risk of</p>	Dipayal Silgadhi Municipality / Ward Office/Contractor	List of selected sites for stockpile areas, storage areas, disposal areas and workers camp (if needed)	100,000.00 (BoQ PS, Item no.5)	During detailed design phase

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
		contamination and erosion. -Develop plans for rehabilitating areas that have been used for stockpiling, ensuring that they are restored to their original condition or better. -Cover stockpiles with tarps, plastic sheeting, or other materials to prevent dust from escaping, particularly for fine or powdery materials . -Erect proper signage and barriers around stockpiles to prevent unauthorized access, reduce the risk of accidents, and ensure worker safety.				
Waste Generation	Generation of solid waste, wastewater and other construction waste may cause pollution from work sites and workers camp (if any is established)	Mechanisms of safe disposal will be developed in the project site before the actual commencement of work, including the provision of waste bins. Prohibition of unwanted littering and discharge of waste. Proper management of solid waste will be done using lined pits for waste disposal.	PIU/Ward Office/contractor	Contractor's records, visual inspection		During construction phase
<b>2. During Construction Activities</b>						
<b>A. Physical Characteristics</b>						
Community facilities	Damage to existing facilities like foot trails and	Prior permission will be obtained from the respective local authority for the use of water for construction. Use of water for construction works	Dipayal Silgadhi Municipality	List of any public or private		As per need, or field-inspection if

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
	<p>pavements.</p> <p>Pressure on existing water facilities</p>	<p>will not disturb local water users.</p> <p>If construction work is expected to disrupt, e.g. Transportation of materials in RVT2 and RVT3 site at Goseda and sometimes, use of water for construction activities, users of community shall be informed 7 days in advance and again 1 day prior to start of construction.</p> <p>The timing of the use of foot trail for carrying materials should be scheduled such that it is of less use at locals at that time. eg. Early morning or it may be afternoon. Contractor should manage water and other necessities from outside area required for construction activities.</p> <p>Ensure any damage to properties and utilities will be restored or compensated to pre-work conditions.</p> <p>-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.</p>	/ Ward Office/PIU/ Contractor	<p>infrastructure disturbed by the project works</p> <p>Minutes of meetings with the locals or affected persons.</p>		any such case is foreseen
Ambient air	<p>Conducting works at dry season and moving large quantity of materials may create dusts and increase in concentration of vehicle-related</p>	<p>Confining earthworks according to an Excavation Segmentation Plan as part of the C-ESMP.</p> <p>Water sprinkling at dry exposed surfaces and stockpiles of aggregates at least twice daily, or as necessary.</p> <p>Require trucks/trippers delivering aggregates and cement to have tarpaulin cover and maintain a minimum of 2” free board</p>	Contractor	<p>Location of stockpiles.</p> <p>Number of complaints from sensitive receptors.</p> <p>Heavy equipment and</p>	200000 (BoQ, PS Item no.5)	<p>Daily monitoring (when there are ongoing works) by MST/Contractor.</p> <p>Monthly visual</p>

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
	pollutants (such as carbon monoxide, Sulphur oxides, particulate matter, nitrous oxides, and hydrocarbons) which will affect people who live and work near the sites mainly Saran and Goseda and to some extent Tikha settlements	<p>Limit speed of construction vehicles in access roads to maximum of 20kph.</p> <p>Ensure use of equipment and fuel complying with applicable emission standards.</p> <p>Do not allow construction equipment/vehicles that generate significant air pollution (above the applicable limit) and those that are poorly maintained on-site.</p> <p>-Conducting once a year Air Quality Test for dust nuisance (PM 10 and PM 2.5) at key locations such as settlement, 'Sirkholi Gaon, and Gaira Gaon in ward no.1 and Patkani, Kholi, and Saltada in ward no. 3 of Dipayal Shilghadi Municipality during the dry working season (January-June). The tests will be carried out by contractor and monitored by PIU/MST and test report will be made available to the local people. The determined pollutants will be compared with the National Ambient Air Quality Standards (NAAQS) of 2012.</p>		<p>machinery with air pollution control devices.</p> <p>Certification that vehicles are compliant with air quality standards.</p>		<p>inspection by PIU.</p> <p>Air quality monitoring, if practical and reasonable.</p>
Acoustic environment	Temporary increase in noise level and vibrations may be caused by excavation equipment, and the transportation of equipment materials, and people in the communities	<p>- 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.</p> <p>Providing ear muffers to workers operating high dB construction equipment.</p> <p>- Implementing regular inspection &amp; maintenance of construction/transportation vehicles to ensure compliance with National Noise Standard Guidelines (NVMES, 2069 B.S., 2012).</p> <p>-</p> <p>- Horns should not be used unless it is necessary</p>	Contractor	<p>Results of monitoring noise levels</p> <p>(Maintain maximum sound levels not exceeding 70 decibels when measured at a distance of 10m or more from</p>		<p>Daily monitoring (when there are ongoing works) by the Contractor/ MST.</p> <p>Monthly inspection</p>

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
	namely Saran, Goseda and Tikha.	<p>or unavoidable</p> <p>-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.</p> <p>-Conduct noise level test once a year during the peak construction stage at specified locations near schools and hospital/health centers at Tikha and Saran communities</p>		<p>the construction sites)</p> <p>Number of complaints from sensitive receptors</p>		<p>by PIU.</p> <p>Noise level measurement, on as needed basis and/or if practical and reasonable.</p>
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> <p>Impact on existing road and its users during pipe laying</p>	<p>- Waste minimization and waste segregation (organic and inorganic) at source will be carried out</p> <p>- 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. If feasible, compost will distributed to be used in the nearby agricultural fields.</p> <p>Hazardous wastes will be segregated from non-hazardous wastes.</p> <p>- Contractors responsible for handling, treating, and disposing of hazardous waste will be reputable, licensed by relevant national regulatory agencies, and follow good international industry practices for the type of waste handled.</p> <p>- Hazardous waste will be stored in sealed containers, kept away from sunlight, wind, and rain. Storage will prevent the commingling or contact between incompatible wastes and allow</p>	Contractor	On-site situation in campsites (if any), work sites and their vicinities	15000 (BoQ PS Item no.5)	Monthly monitoring by PIU.

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
		<p>for inspections to monitor for leaks or spills.</p> <ul style="list-style-type: none"> <li>- Disposal of hazardous waste will comply with all applicable local and international regulations</li> <li>- Awareness raising event will be carried out.</li> </ul> <p>Decommissioning waste will be re-used, sold to local scrap dealers</p> <p>Construction debris will be disposed at designated spoils site only where Municipality is also using for the same purpose (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.</p> <p>Backfilling will be done with an immediate effect.</p>				
<b>B. Biological Characteristics</b>						
Impact on Flora and fauna	Loss of vegetation cover during construction works is unlikely. However, the subproject will address unexpected issues occurred during construction	<p>Greenery promotion around the construction sites where possible</p> <p>Tree felling will be avoided (so far no tree felling is required and all the steps will be carried out in close coordination with Divisional Forest Office), and if any such cases occur, prior approval from the concerned government bodies will be received and compensatory plantation @ 1:10 will be carried out</p>	Contractor	Number of trees planted for greenery promotion	200000 BoQ PS, Item no.5 (Greenery Promotion)	Monthly monitoring by PIU.

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
	<p>period if any.</p> <p>No direct impact on terrestrial and avian fauna is anticipated because the sub-project does not impact any forest area</p>	<p>Species of local economic significance and values will be planted.</p> <p>Conduct Awareness program on environment conservation and protection at construction and labor camp site.</p> <p>-Providing alternative fuel to worker for cooking.</p> <p>-Scheduling work to avoid sensitive periods to reduce disturbance at night</p> <p>- Conduct the awareness on wildlife protection and in forcing monitoring and penalties for violations.</p>				
<b>C. Socio-economic Characteristics</b>						
Community activities	<p>The construction-related activities that impede access will disturb the local residents</p>	<p>To minimize disturbances, construction work will be conducted at the earliest hour possible.</p> <p>The local residents will be consulted and informed about the work schedule and possible disturbances preferably a week before the construction starts and one day before the construction starts.</p> <p>Temporary diversions and signboards will be provided to inform and aware the pedestrian.</p> <p>Ramps, where necessary, will be provided to ensure access to houses, and other service areas. Ramps provided will be of sturdy material and of sufficient width</p> <p>Traffic management plan will be prepared and implemented by the Contractor as part of the C-</p>	Contractor	<p>Time schedule of construction work;</p> <p>Information related to construction activity to local residents</p> <p>Number of temporary diversions sign, signboards etc.</p>		<p>Daily (or whenever there are construction activities) by contractor</p> <p>Monthly visual inspection by PIU</p>

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<b>Field</b>	<b>Impacts</b>	<b>Mitigations Measures</b>	<b>Responsible for Implementation</b>	<b>Monitoring Indicator</b>	<b>Estimated Cost NRs.</b>	<b>Frequency of Monitoring</b>
		ESMP and approved by local authority				
Labor Camp Management and Labor issues	Nearly 80% of the total workers will be hired directly from the project area. It mainly constitute of unskilled and semi-skilled manpower. Around 40 workers will work in one day, among them around 10 worker will be migrants works. Poor sanitation practices by workforce may cause pollution of surrounding environment	<ul style="list-style-type: none"> <li>- Provide adequate health care facilities within construction sites and provide first aid facility round the clock</li> <li>- Camp shall not be in the vicinity of landslide and flood plains.</li> <li>- The camp is constructed as per the technical specification considering the size, number and location of the camp</li> <li>- Provide and maintain proper drinking water, sewerage and waste disposal facilities at the camps.</li> <li>- Ensure no wood is burnt by any worker on or off site. Camps shall be provided free of cost, with electricity and regulator &amp; adequate fuel supplies of LPG or Kerosene</li> <li>- Proper ventilation will be given in the labor camp</li> <li>- Raised bed is the minimum standard of bedding in labor camp.</li> <li>- Separate rooms for men and women workers will be managed</li> <li>- Standard ratio of room size of the camp and number of labors to be accommodated will be maintained</li> <li>- Separate Toilet will be established in every camp site for male and female</li> <li>- Grievance Redress mechanism will be established for labor issues, and every laborer will be informed of the GRM.</li> <li>- Install the Grievance box in contractor and</li> </ul>	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	100000 (BoQ PS, Item no.5)	

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
		labor camp - Minimize contact with people outside the construction area/site or prohibit them from bringing outsiders especially minors to the camp during their contract - Adopt policy of Zero tolerance of using child labor and forced labor - Implement procedures to confirm workers age before they start work. Maintain the register of of workers including their age, sex, caste/ethnicity and name of the contact persons with phone numbers in the case of emergency.				
Social harmony	Changes in social structure, cultural and traditional practices of the rural people due to exposition to the outside workforce - Conflict between Local and Outside Workers and erosion of law and order situation of the project area -Changes in social structure, cultural and traditional	-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. - 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 about the general norms and values of society before deployment. The construction workforce will be instructed to respect local people, especially the female	Contractor	Daily entry-sheet of the workforce in the camp sites (Public land of RVT1 site Saran and RVT4 site Tikha)  Number of local people versus outside workers in the project area will be regularly monitored		Monthly inspection at campsites (if any) by PIU and Consultants.

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
	practices of the rural people due to exposition to the outside workforce	members and the local culture and tradition. -A code of conduct 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. -				
Occupational Health & Safety	During the construction work, the labours 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"> <li>- Prepare and implement OHS plan as part of the C-ESMP</li> <li>- Mandatory use of safety measures (PPEs) such as mask, helmet, hand gloves and rubber boots, etc.</li> <li>- The laborers will be insured for their health and safety.</li> <li>- Provide safe drinking water for labours</li> <li>- Prohibit child labour and forced labour in all construction activities.</li> <li>- Provide comprehensive training to all workers on occupational health and safety practices. This should include proper use of personal protective equipment (PPE), safe work procedures, emergency protocols, and awareness of specific hazards related to the construction site.</li> <li>- 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 on the site. Some</li> </ul>	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	COST??	Daily (or when there is a construction activity) monitoring by contractor.  Monthly visual and document inspection by PIU

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
		<p>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"> <li>- 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.</li> <li>- 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.</li> <li>-</li> </ul> <p>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.</p>				
Community Health & Safety	Overall, communities will be exposed to cross-cutting threats from construction's impacts on air and water quality, ambient noise	<ul style="list-style-type: none"> <li>- Contractor's will maintain adequate space and adequate lighting, temporary fence, barriers and signage at worksites;</li> <li>- Children and community members will be prohibited from active construction sites</li> <li>- Proper fencing of stockpile areas</li> <li>- Awareness programs on communicable diseases and hygiene practices will be carried out</li> <li>- Disseminate the GRM to communities and</li> </ul>	Contractor	<p>Number of permanent signs, barricades and flagmen on worksites</p> <p>Number of</p>	COST??	<p>Daily monitoring by contractor.</p> <p>Monthly visual inspection by PIU</p>

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
	level; Chances of accidents, Communicable and transmittable diseases like COVID may potentially be brought into the community by construction workers	<p>affected stakeholders during consultations, community meeting , disseminate through local media and newspaper.</p> <ul style="list-style-type: none"> <li>- Sensitive localities in terms of risk of this environmental, social and health related impact is in Dipayal silgadhi Municipality.</li> <li>- 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.</li> <li>- -Active sites will be well demarcated and bounded. Excavated sites will be well bounded with hard barricades.</li> <li>- -Unauthorized entry to active construction sites and stockpile sites will be strictly regulated.</li> <li>- -Movement of vehicles for construction activities will be strictly regulated under safety guidelines.</li> <li>- -Code of conducts will be implied for the workforce so that they have no conflict with the local communities.</li> </ul> <p>-Provision of ramps will be made where trenching works are being carried out to provide access to houses and businesses.</p>		complaints from sensitive receptors;		
GRM, Social Disturbance / Risk of SEA/SH, Human trafficking, GBV, HIV AIDS	chances of unequal wages between male and female workers for same	<p>(i) Regarding SEA/SH, GBV</p> <ul style="list-style-type: none"> <li>- Locals will be given due priority for any employment opportunity</li> <li>- GRM will be established for the workers, focal person handling GRM</li> </ul>	PIU/MST	Regular monitoring and supervision of	COST??	Daily (or when there is a construction activity)

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
and Communicable diseases	<p>nature of works</p> <p>Chances of sexual exploitation and abuse and sexual harassment to female workers in the labour camp and construction sites from the contractor's crew and other male workers.</p>	<p>including SEA/SH will be assigned, and every laborer will be informed of the GRM.</p> <ul style="list-style-type: none"> <li>- Follow Code of Conduct which applies to staff, laborers and others employees at works ite, personnel of subcontractors, any other personal assisting in the execution of the subproject works.</li> <li>- CoC will be signed, workers oriented on the CoC to ensure it is understood by those signing, and strictly adhered to and monitored for for all workers. Signed copies of code of conduct will be maintained.</li> <li>- Separate toilets will be provided for male and female workers</li> <li>- SEA/SH, GBV awareness raising activities, trainings and stakeholder engagements such as - community based- awareness program, school based awareness program. The GRM focal person of Department of Women and children under social development unit of Bardagoriya RM will be part of trainings, awareness programs regarding SEA/SH.</li> <li>- 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</li> <li>- 4 orientations/trainings with at least 25 participants in each training; to be conducted during Pre-construction and</li> </ul>		<p>construction site/camp</p> <ul style="list-style-type: none"> <li>- Information related to SEA/SH, Human trafficking, GBV, HIV AIDS and Communicable diseases</li> </ul>		<p>by contractor. MST/ PIU Municipality</p>

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
		<p>during Construction period.</p> <p>(ii) HIV AIDS &amp; Communicable diseases</p> <ul style="list-style-type: none"> <li>▪ 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</li> <li>▪ Distribute HIV &amp; AIDS awareness materials in collaboration local health related agencies</li> <li>▪ 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</li> <li>▪ Health screening of the workers will be carried out before joining them into workforce</li> </ul> <p>Emergency Response Plan will be implemented during any critical circumstances (e.g. CoVID spread)</p>				
Child labour, forced labour and wage discrimination	During the construction work, the laborers involved in the construction activities may be a Children	<ul style="list-style-type: none"> <li>- 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 the GRM.</li> <li>- Grievances box will be installed in contractor and labor camp.</li> <li>- Child labour &amp; forced labour will be strictly prohibited</li> <li>- Copies of citizenship card or other valid</li> </ul>	Municipality /Contractor	<ul style="list-style-type: none"> <li>- Copies of citizenship card or other valid personal ID card will be seen if any doubt</li> </ul>		Daily by contractor. MST Monthly visual inspection by PIU

Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
		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 Equal wage for male and female workers will be ensured				
<b>3. During Operation and Maintenance Phase</b>						
Exposure to chemicals	Excessive exposure to chlorine, hypochlorous acid, and hypochlorite ion generally results in irritation of the oesophagus, a burning sensation in the mouth and throat	Prepare OM manual that will include chemical and hazardous substances handling among other.  Disinfection chemical e.g. chlorine compound require proper storage and handling practices  Provide safe storage for chemical for disinfection namely chlorine compound  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 <b>Safety Data Sheet (MSDS)</b> for each substance. This includes: <ul style="list-style-type: none"> <li>• Storing chemicals in appropriate containers that are compatible with the substances.</li> </ul>	Contractor/ WSUC (Water supply user committee)	Visual inspection		Daily (or as needed) by the operator.

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
		<ul style="list-style-type: none"> <li>Ensuring proper labeling and segregation of incompatible chemicals (e.g., acids and bases, oxidizers and flammables).</li> <li>Maintaining temperature, ventilation, and humidity controls as specified in the SDS.</li> <li>Implementing secondary containment measures to prevent spills or leaks.</li> </ul> <p>Ensuring easy access to spill kits, eye-wash stations, and fire extinguishers in case of emergencies."</p> <p>Additional measures, as required, will be defined in the <b>O&amp;M manual</b> of the water treatment facility and operation</p>				
Drinking water supply system	Delivery of unsafe water due to source contamination, leakage in pipes	<p>- Local people mostly from the vulnerable community will be given priority for employment during the operation stage.</p> <p>-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 chemical in compliance with the Material Safety Data Sheet (MSDS) for each substance; (iii) ensure capacity of WUSC to implement quick response to hazardous</p>	Contractor/ WSUC	<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</p>

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
		substance/waste spills; (iv) monitor water quality. All norms and regulation including material safety data sheet will be followed during the handling and storing of chemicals.				the operator.
Impact on Water bodies  -Pollution and nuisance due to sludge removal and its disposal	If the effluents from the WTP and waste water from the operator's labor camp is not well treated, then there will be risk of pollution of local water bodies (Seti River) due to the discharge of effluent and liquid waste. However, likelihood of occurrence of this case is very low.	<ul style="list-style-type: none"> <li>- The treatment plant will be cleaned on regular basis.</li> <li>- 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</li> <li>- The operation and maintenance of the WTP will be carried out on timely and regular basis as per it O&amp;M plan.</li> <li>- Standard Operation Procedure (SoP) will be adopted for the operation of WTP.</li> <li>- Sludge will be disposed to the sludge drying bed or other designated place under coordination and permission of the municipality</li> </ul>	Contractor during DLP; WSUC or Operator after DLP	Visual inspection  Water Quality reports  WTP records in the logbook		Daily or as needed visual inspection by the operator.  Quarterly or as needed water quality testing by the operator.

## 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 programmed have been planned and is given in Table 4. The Project Management Unit (PMU), Project Support Team (PST), Project Implementation Unit (PIU), Municipal Support Team (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	Concept of Environmental & Social Management Framework (ESMF) by PMU/PST to MST/PIU.	-Brief of World Bank safeguards policies and requirements -Brief of latest environmental legislation - ESMF requirements Implementation, supervision and monitoring mechanism	Before awarding contract	1 Day	PMU/PST/PIU/MST/MWASH unit
2	Orientation workshop on ESMF Implementation by PST to PIU/MST/Contractor/MWASH unit	-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
3	Focused training on specific issues to contractor by the PIU/MST	-Issues relating to wage parity, child labor etc.	During construction or when needed	½ Day	PIU/MST/Contractor/MWASH unit
4	Training on STDs/ HIV Aids, COVID 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/locals

5	Training on occupational safety and Health, GBV, SEA/SH by PIU/MST to labours/Contractor	-To ensure the safety health and welfare of labors and others who may be affected	During construction	1 Day	PIU/MST/ Contractor/ MWASH unit
6	Training on O&M of the facilities (O&M Manual)	-To provide the knowledge on different components of system and there function uses, regular maintenance and operation after the system will establish  To train the O&M staff on the implementation of operation phase E&S measures	After construction as per O and M guideline and manual.	3 Days	Municipality/MWASH
7	Training on WASH to local people	-To raise awareness on WASH	During construction	1 Day	PIU/MST/ Contractor/ MWASH unit/locals

#### 4.3 Cost of Environmental Mitigation and Implementation Schedule

A total of NRs 1,200,000.00 has been allocated to implement mitigation measure for construction phase impacts. The tables with the cost and tentative implementation schedule itemized under different subjects are presented in Table 5. Note that, these costs do not include the mitigation actions that already fall under contractor's liability by practice. Most of the mitigation costs for physical environmental impacts are already included in the project cost and some will come in association with contract bids. Likewise, certain measures are non-cost bearing. Allocation of cost for implementation of mitigation measures has ensured the implementation of these measures.

Cost for most of the mitigation measures during operation phase like rehabilitation of infrastructures, periodic maintenance of Tikha-Goseda-Sirkholigaon-Gairagaon WS Project during operation phase/Defect Liability Period are not included in this cost as it is the contractor's liability. The contractor will cover all the environmental management costs, which the contractor is liable and is included in the bidding document in addition to its legal liabilities. Similarly, the proponent will cover the cost related to the legal role that the governmental institution will have to pay.

**Table 8: Mitigation Budget and Implementation Schedule**

SN	Cost Bearing Mitigation Activities	Cost (NRs)	Implementation	Remarks
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			<b>Schedule</b>	
1	Water Sprinkling near the construction site, settlement, stockpiled area and school area during construction period	250,000.00 (BoQ Provisional Sum, Item No-5)	During construction period (18 months)	Once in a day time and if necessary twice a day near stockpile area.
2	Management of stockpiles/ construction waste disposal at four RVT sites	100,000.00 (BoQ PS, Item No-5)	During construction period (18 months)	Spoil disposal sites will be finalized from the consultation meeting with local peoples and representatives and the detail will be included in Contractor's ESMP (C-ESMP).
3	Provision of Waste Collection Bins in every construction sites and labor camp	15,000.00 (BoQ PS, Item No-5)	During construction period	5 bins in 4 RVT sites and Labour Camp at the rate of Rs. 3000 each.
4	Provision of PPEs to all workers and First Aid Box at construction site and camp	80,000.00 (BoQ PS, Item No-5)	During construction period	Throughout the project period
5	Monitoring of ambient air quality, water quality and noise level at project site	200,000.00 (BoQ PS, Item No-5)	Prior to construction and at the middle of the construction period	Laboratory cost (2 times during the project period)
6	Greenery promotion/ enhancement activities near/around the project sites	200,000.00 (BoQ PS, Item No-5)	During construction and Operation period	Various species of trees will be planted around four RVT sites with fencing work/ or tree guard to

				protect them for at least five years. Adequate consultation with Division Forest Office will be done during plantation.
7	Installation of Sign Board/ Information Board near schools and settlements indicating code of conduct and raising awareness.	25,000.00 (BoQ PS, Item No-5)	Prior to construction	At the rate of NRs 5,000 each for 5 different places in project area.
8	Information dissemination and stakeholder engagement including Orientation program on Occupational Safety and Health (OSH), Gender Based Violence (GBV) and Sexual Exploitation and Abuse/ Sexual Harassment (SEA/SH)	30,000.00 (BoQ PS, Item No-4)	Prior to construction or at the starting of the construction activities with the assist of MST/PIU	Participants will be mainly construction workers, contractor's crew, project manager, focal person from municipality and other staffs from MST
9	Labour Camp Management	100,000.00 (BoQ PS, Item No-5)	During Construction	Throughout the construction period.
	<b>Total</b>	<b>10,00,000.00</b>		

Note: The Environment mitigation cost of Rs. 1,000,000 is allocated as Provisional Sum (PS) in General works; Item No. 5. Similarly Rs. 200,000 is allocated in PS in General works Item No. 4 for awareness programs and institutional strengthening activities as per the Engineer's approval. PIU/MST will conduct these activities listed in Item no. 4.

#### 4.4 Environmental and Social Monitoring and Reporting

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

- Compliance of the mitigation measures and specification in accordance with the ESMP;
- 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 a semi-annual E&S monitoring report. This semi-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	Agencies to be consulted	Responsible Agency
<b>Construction Phase</b>						
Approval of operation plan of Dipayal Silgadhi Municipality with proposed intervention	Approval letter	Review of approval letter	Prior initiation of work or Prior procurement	Dipayal Silgadhi Municipality	Local authority	Municipality
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, Quarry Site Management Plan, Earthwork Segmentation Plan, as applicable).	Review of proposed work plans, waste management plan, CSEMP, Labor Camp Management Plan submitted by contractor or executing authority	During contract negotiations	Dipayal Silgadhi Municipality	Local authority	Contractor, PIU, MST
Mitigation management (Compliance with ESMP)	Budget allocation for mitigation measures and	Review of project budget document	Annual	Dipayal Silgadhi Municipality	Local authority	PIU, MST

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	monitoring					
Implementation of construction phase monitoring	Monitoring report and budget allocation for corrective actions	Review of monitoring report and budget allocation for corrective actions	Annual	Dipayal Silgadhi Municipality	Local authority	PIU, MST
<b>Operation Phase</b>						
Operation phase mitigation management	Budget allocation for mitigation measures for operation phase	Review of project budget document	Annual	Dipayal Silgadhi Municipality/M WASH Unit	Local authority	Municipality
Implementation of operation phase monitoring	Monitoring report and budget allocation for corrective actions	Review of monitoring report and budget allocation for corrective actions	Annual	Dipayal Silgadhi Municipality/M WASH Unit	Local authority	Municipality

**Table 10: Impact Monitoring Plan**

Parameter	Indicators	Method	Location	Frequency & Schedule	Agencies to be consulted	Responsible Agency
<b>Construction Phase</b>						
Physical Environment						

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Community Infrastructure	Any damage to properties and utilities	Field observation and consultation meeting with local stakeholder	Construction site	Quarterly	Local authority	Contractor, Municipality
Air quality	Dust and smoke	Field observation	Construction site	Quarterly	Local authority	PIU, MST, Contractor
Noise pollution	Noise level	Field observation and discussion	Construction site	Quarterly	Local authority	PIU, MST, Contractor
Land pollution	Open defecation and garbage disposal places	Direct observation	Disposal site	Quarterly	Local authority	PIU, MST, Contractor
<b>Biological Environment</b>						
Vegetation	No. of trees felled if unavoidable (but not expected) and area of site cleared	Site observation and record checking	Construction site	Once during tree felling	DFO/ CF	PIU, MST
<b>Socio-economic and Cultural Environment</b>						
Construction activities	Noise quality, ambient air quality	Site observation and discussion with local people	Construction site	Quarterly	Local authority and local people	PIU, MST
Existing infrastructures	Damages of road and culvert, access to houses	Observation and discussion with local people	Access road	Weekly during construction		Contractor
Law and Order	Incidents of different types	Discussions with the	Project area and	Monthly	Local Police	Municipality,

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	of crimes in the project area; complaints in the local police	local people and the local police	surrounding	during construction	Office	PIU, MST
Occupational health and safety / Traffic and road safety	Cases of accidents and injury	Observation and record checking	Active construction sites	Monthly	Health institutions	PIU, MST, Contractor
Gender, children and vulnerable group	Number of such people employed	Review of attendance and discussion	Construction site	Weekly	Workers	PIU, MST, Contractor
Labor Camp Management	Maintaining the labor camp with minimum standards like size by number ratio, ventilation, lighting facility, cooking facility, water supply facility, separate toilets and room for males and females, sleeping arrangement, insect and rodent control, and waste management  Number and type of grievances related to workers, number of grievances resolved, labor	Visual inspection/monitoring report/photographs, review of workers' grievances register	Construction site	Regular		PIU/MST/Contractor

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	records					
Community Health and Safety	Establishment of warning signs, barricades, and guards to control the trace pass of unauthorized persons from construction sites, awareness campaign for the community and school children, supervision of children during pick up and drop from school, Sequenced and adjusted construction schedule to shorter community exposure to accidents, dissemination of construction work schedule through effective means of communication	Visual inspection/monitoring report/photographs, review of grievance register	Construction site	Monthly		PIU/MST/Contractor
Awareness/Orientation/Training Program	Training on road safety, GBV/ SEA/SH, HIV/HIDs, Human Trafficking, STIs, Local culture and tradition to labor, school children, community people, adolescent girl and as deemed necessary	Site visits, visual inspections, training completion reports/records and photographs	Construction site	Monthly		

ESMP Report of Tikha Goseda Sirkholigaon Gairagaon Water Supply Project

Information disclosure, stakeholder engagements, GRM	Number, type and topic of engagement activities Number, type and status of grievances <b>Number and type of engagement activities with vulnerable groups</b>	Site visits, consultations, records and photographs review of grievance register, meeting minutes, information boards <b>Observation, discussion with the locals, GRM register and other reports/documents</b>		Regular		
Traffic and road safety	Status of road for use; road accidents	Observation and record checking	Observation and record checking	Daily		
<b>Operation Phase</b>						
Occupational health and safety	Health status of workers	Field observation and consultation with workers	Project site	Monthly	Workers	Municipality
Water pollution	Water quality of river	Direct observation and water quality testing	Seti River	Quarterly	Municipality	Municipality

#### 4.5 Monitoring Cost

Monitoring is an on-going process crucial for enhancing project effectiveness. It ensures timely achievement of objectives and allows for corrective actions to be taken promptly. Given that the project is led by a community-based organization, monitoring indicators have been selected to be easily measurable by low-skilled group members without the need for advanced technology. Therefore, internal monitoring primarily covers reimbursement for monitoring personnel and stationery costs, which are already part of Dipayal Silgadhi Municipality's regular management expenses. As a result, no additional funds have been allocated for monitoring in this Environmental and Social Management Plan (ESMP).

#### 4.6 Project Environmental Management Framework and Stakeholders Engagement

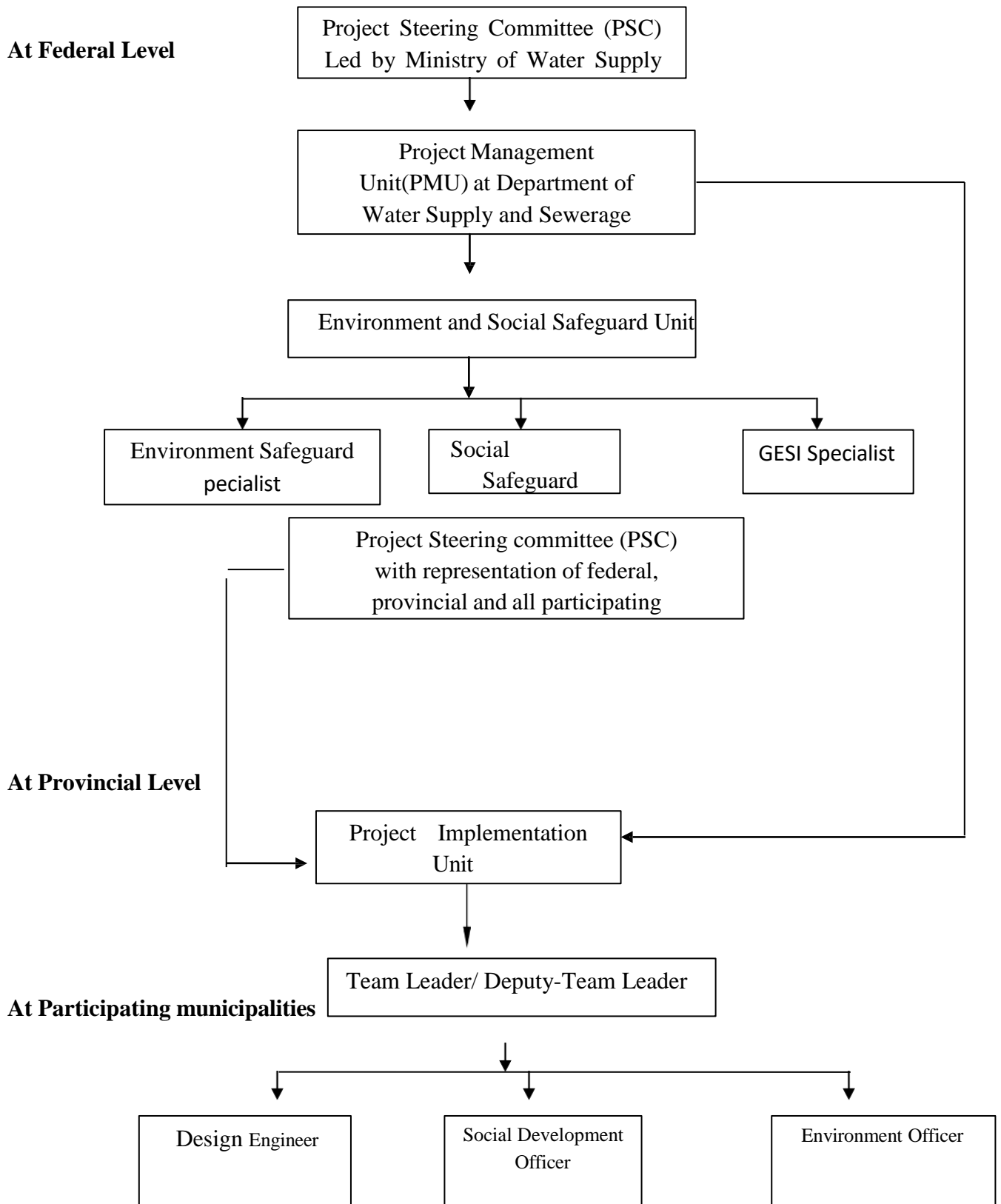
Overall project's environmental management framework is the responsibility of the project proponent, Dipayal Silgadhi Municipality. The Dipayal Silgadhi Municipality under its leadership will form a project implementation committee (PIC) including all other local level stakeholders. The Municipality is supported by PIU and MST, which will be responsible for E&S risk management at site and contractor's compliance. 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 Dipayal Silgadhi Municipality, to be involved in the project management are discussed below and illustrated in Figure-7:

- 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 Management Unit (PMU):** The PMU 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) **Project Support Team (PST):** The PST at federal level provides the support to PMU and MST. The PST supports the Municipal Support Team (MST) by offering guidance on local project execution, capacity building, and community engagement, as well as 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.
- d) **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.
- e) **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.

- f) Municipal Support Team (MST):** MST offers 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.
- g) 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.
- h) 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.
- i) 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.
- j) Affected Wards, Municipality and District Coordination Committee (DCC):** Provide recommendations to the proponent with comments and suggestions and assist proponent in the project implementation.

**Organogram of E & S activities**



**Figure-7 : Organogram of E & S activities related to the project**

#### **4.7 Social Accountability and Grievance Redress Mechanism (Project Level GRM and Central GRM)**

The social accountability mechanisms will be established for the project. The key approaches that would be adopted for ensuring social accountability would be any or a combination of participatory processes guiding social audit, citizen scorecard, and report card to acquire feedback on the performance of the projects and record citizens' recommendations for improvement. The social accountability mandate will be further strengthened through a strong grievance redress mechanism.

To address the incoming grievances two-level grievance redresses committee will be formed; one at the project level (Municipality Level) and next at the Central Level in line with the SEP.

All grievances relating to the project including engagement with PAPs when WS Project will be carried out, social issues, nuisance due to project activities, and so on (but not limited to) will be referred to the Project Level Grievance Redress Mechanism (GRM) formed in the Municipality. The projects Level GRM consists of a Project Level Grievance Redress Committee (GRC). The project level GRC will record all the grievances at the project site screen and analyzed the grievances. The project level GRC will initiate hearing process to resolve the incoming grievance at the site level and inform the decision accordingly to the complainers. If the grievance fails to settle at project level GRC then the project Level GRM will forward the grievance to Central level GRM with a recommendation for further action to Central Level Grievances Redress Committee (GRC). This committee will be three membered headed by PMU chief, supported by the Social Development Specialist at PMU and another person assigned by the PMU Chief. The three membered committee can seek support from other experts or institutions in course of investigating and resolving resolutions. If the GRC at project level (Municipality level) is unable to make any resolution within the stipulated time, the grievances will be scaled up to the Central level GRC.

The Central level GRC will take a decision and inform the complaining party regarding the decision it has made through an appropriate channel. If the complaining party is not satisfied with the decision of GRCs, they can appeal to the courts for the final determination of the case. If the court process is initiated, works shall not proceed on the point of impacts until the case is finally determined.

The functions of the GRC will include:

- (i) to provide redress to aggrieved project affected persons (PAPs) in all respects;
- (ii) oversee the implementation of mitigation measures where complainants are deemed to receive cash or mitigation measures in lieu of complaints;

The GRC will only deal/hear the issues related to WS Project and individual grievances. The committee will give its decision/verdict within 15 days after hearing the aggrieved PAPs. The final verdict of the GRC will be given by the Chairman/Head of GRC in consultation with other members of the GRC and will be binding to all other members.

The Dipayal Silgadhi Municipality's Grievance Redress Mechanism Guideline 2080 has been approved and published in Local Gazette on 12<sup>th</sup> March 2024 that clearly mention the composition of project level Grievance Redress Committee (GRC) formed at Municipality Level is as follows:

Chairperson- Mayor, Dipayal Silgadhi Municipality

Member- 2 members (ward chairperson) designated by Mayor

Member- PIU chief

Member- 2 members (at least one female member) from local WSUC

Member- MWASH chief

Member- staff of the municipality assigned for GRM

Member-Secretary – Chief Administrative Officer (CAO).

After the mobilization of the contractor on field, site office will be set up for the MST on site. At this site office, there will be box for collecting grievances at local level. SDS and EMS will be responsible for registering both written as well as verbal grievances and such grievances will be opened in the project level/ Municipality level grievance redress committee.

#### **Grievances about GBV**

There is an existing GRM for the project that will also be used to address GBV and SEA/SH-related issues at the PMU. In the case of the sub-project, the Department of Women and Children (DWC) under the Social Development Unit of the Municipality is responsible for resolving the GBV/SEA/SH issues. The Municipality has nominated GBV and SEA/SH focal person. 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 the complete confidentiality of the survivor. The first responders to 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

#### **4.8 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.

## 5 Stakeholder Engagement and Information Disclosure

### 5.1 Public Consultation

The public consultation focused primarily on the project impacted people. For instance, the group of directly impacted people is those living nearby WS project area. The aim was to identify possible environmental and social impacts that might arise from the proposed project activities and also the benefits of the project to the communities. During environmental and social screening of the proposed TGSGWSP, sufficient public consultations were done to identify the possible adverse impacts due to the project interventions. Two public consultation meetings were organized on 5<sup>th</sup> April 2024 at Goseda (ward 1) and Ward office of ward no. 3 in the chairmanship of Ward Chairperson where the total numbers of participants were 37 and 16 respectively. In both the consultation meeting, the decision was; there are no significant environmental and social impacts due to project components like pipeline distribution and construction of reservoir tanks. Similarly a FGD/ consultation meeting was conducted on 12<sup>th</sup> July 2024 with the vulnerable community (Dalit) at Saran which is near the WTP site. The total numbers of the participants were 18 including 10 female participants. The participants have expressed their view about the implementation of the project that they will be greatly benefitted by the project. They will get pure drinking water, employment opportunities during construction period and also the value of their land is expected to increase after the completion of the project. They have also committed that they will be always ready to support the project if needed during construction and operation period. They have also assured that there will be no any dispute from the community side regarding the construction of the WSP. Moreover, The applicable suggestions and recommendations have been incorporated in the proposed project design/ESMP preparation. The minutes of the public consultations are attached in the annex II.

### 5.2 Stakeholder Consultations Plan for Implementation Phase

Consultations during the 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 consultations on social and environmental issues carried out during the 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 ... below.

**Table ...: Stakeholder Engagement Plan**

<b>During Construction</b>				
<b>Topic</b>	<b>Stakeholders</b>	<b>Engagement Method</b>	<b>Frequency</b>	<b>Responsibility</b>
<ul style="list-style-type: none"> <li>▪ Disclosure of ESMP (and updated ESMP),</li> </ul>	<ul style="list-style-type: none"> <li>▪ Dipayal Silgadhi Municipality and concerned</li> </ul>	<ul style="list-style-type: none"> <li>▪ FGDs and targeted outreach activities with women, IP</li> </ul>	Periodically throughout project implementation	PIU/MST

<p>including C-ESMP</p> <ul style="list-style-type: none"> <li>▪ ESMF, SEP, and LMP</li> <li>▪ Delineate Labour Influx Management Procedures</li> <li>▪ Activities planned for SEA/SH and GBV</li> <li>▪ Awareness of HIV and other communicable diseases</li> <li>▪ GRM for SEA/SH</li> <li>▪ Project GRM</li> <li>▪ Planned construction activities</li> </ul>	<p>officials of the Municipality and MWASH Units</p> <ul style="list-style-type: none"> <li>▪ Project affected Ward chairs</li> <li>▪ Toile Committees</li> <li>▪ Local Community of the project area</li> <li>▪ Community Leaders</li> <li>▪ Local CBOs and NGOs working on WASH and GBV</li> </ul>	<p>organizations, and other vulnerable groups, such as Dalits (Application of audio/visual communication techniques and other accessible formats)</p> <ul style="list-style-type: none"> <li>▪ Community radio and local media</li> <li>▪ Notice Boards</li> <li>▪ Periodic information disclosure activities</li> </ul>	<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>Contractors</p>
<ul style="list-style-type: none"> <li>▪ Beneficiary satisfaction survey</li> </ul>	<ul style="list-style-type: none"> <li>▪ Target beneficiaries of the project</li> </ul>	<ul style="list-style-type: none"> <li>▪ Beneficiary satisfaction survey</li> </ul>	<p>The first survey after two years of implementation, and last survey during the final year of operation</p>	<p>PMU/PST/MST</p>

### 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 ...: Proposed Strategy for Information Disclosure**

Target stakeholders	List of information to be disclosed	Methods and timing proposed activities
<b>Project implementation phase</b>		
<ul style="list-style-type: none"> <li>• Government officials (Federal, provincial, and Municipality officials including the wards)</li> <li>• District line agencies</li> </ul>	<ul style="list-style-type: none"> <li>• Planned and ongoing activities</li> <li>• Regular updates on project status, including the implementation of ESMP, C-ESMP, ESMF, LMP, SEP</li> <li>• GRM</li> <li>• SEA/SH and GBV activities</li> </ul>	<ul style="list-style-type: none"> <li>• Sharing project update and reports through meetings</li> <li>• Consultation and face-to-face meetings</li> <li>• Information boards, leaflets, and brochures</li> <li>• PMU/PIU websites</li> </ul>
<ul style="list-style-type: none"> <li>• CBOs and NGOs working on WASH</li> <li>• Local NGOs and CBOs working on GBV</li> <li>• Community leaders</li> <li>• National &amp; local Media</li> <li>• Local Community</li> </ul>	<ul style="list-style-type: none"> <li>• Project concept and planned activities</li> <li>• ESMF, IEE, SEP, Labour Influx management procedures</li> <li>• SEA/SH Activities and GRM procedures for SEA/SH</li> <li>• GRM procedure</li> <li>• Planned construction activities</li> </ul>	<ul style="list-style-type: none"> <li>• Information boards, leaflets, and brochures</li> <li>• PMU/PIU websites</li> <li>• Meetings and workshops</li> </ul>
<ul style="list-style-type: none"> <li>• Individuals and communities with a focus on vulnerable groups, including IPs, women, and Dalits</li> <li>• Local NGOs and CSOs working on WASH and GBV</li> </ul>	<ul style="list-style-type: none"> <li>• Project concept and activities</li> <li>• E&amp;S procedures and management plans (ESMP, C-ESMP)</li> <li>• GRM procedures, ESMF and Labour Influx management procedures, SEP and</li> <li>• Planned construction activities</li> <li>• SEA/SH activities and GRM procedure for SEA/SH</li> <li>• Revised project information if any</li> </ul>	<ul style="list-style-type: none"> <li>• Regular release of public notices through mass media, community radio, television, and social media</li> <li>• Regular updates of information on the PMU/PIU website</li> <li>• Distribute information leaflets and brochures to public</li> <li>• Air project information/ messages through community radio</li> <li>• Periodic small group meetings with vulnerable and IP groups</li> <li>• Regular contacts with the representatives of IP and vulnerable groups through phone calls, emails, text messages</li> </ul> <p>(Application of audio/visual communication techniques, and other accessible formats)</p>

## **6 CONCLUSION AND RECOMMENDATION**

The Tikha Goseda Sirkholigaon Gairagaon WS Project, facilitated by WaSGISP in Dipayal Silgadhi Municipality's Wards 1 and 3, utilizes a hybrid pumping system drawing from the Seti River. By blending electrical and solar-powered pumps, it optimizes energy usage, saving up to 33% in costs. The project prioritizes environmental and social considerations, conducting public consultations to address community concerns. With pumping stations equipped for reliability in all weather conditions, it aims to provide safe drinking water access to 614 households, promoting community well-being and sustainable development.

TGSGWSP in Dipayal Silgadhi Municipality aims to enhance water supply infrastructure while minimizing environmental and social impacts. Its Environmental and Social Management Plan (ESMP) outlines measures to obtain necessary consents, manage waste, and mitigate disruptions during construction. Social harmony is prioritized through local employment and cultural sensitivity. Occupational health and safety measures include personal protective equipment and first aid provisions. During operation, water quality and infrastructure maintenance will be monitored for long-term sustainability. Overall, the project exemplifies responsible development practices, ensuring community well-being and environmental protection. A total of NRs 1,000,000.00 is allocated for mitigating construction and operation phase impacts. These costs are meticulously considered, ensuring financial feasibility and comprehensive coverage of environmental management responsibilities and legal liabilities.

In conclusion, the Environmental Monitoring Plan demonstrates the project's dedication to responsible environmental stewardship. Through compliance with environmental legislation and regulations, such as the Environment Protection Act and Environment Protection Rule, the project ensures accountability. The plan includes impact and compliance monitoring across various environmental 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. This comprehensive framework underscores the project's commitment to sustainable development and minimizing adverse environmental and social impacts.

**Annex I: Environmental and Social Screening Checklist**  
**Environmental and Social Screening Checklist for**  
**Tikha, Goseda, Sirkholigaon, Gairagaon Water Supply Project**  
**Dipayal Silgadhi Municipality-1 and 3**

This checklist is used by executing agency to review the potential environmental and social safeguard impacts of subprojects and determine whether the subprojects will trigger relevant safeguard policies of World Bank. It is a tool to screen, classify and evaluate the project activities during project preparation.

**(A) Project Background**

1.	Name of the Proposed sub-project	Tikha Goseda Sirkholigaon Gairagaon Water Supply Project
2.	Location	Municipality: Dipayal Silgadhi Municipality Ward No: 1 and 3 District: Doti Province: Sudurpaschim Province Geographical coordinates: latitude 29°16' N and longitude 80°56' E Altitude: 600m to 1500 m
3.	Major planned works, land required (in m <sup>2</sup> )	<b>Major planned works:</b> Water lifting from Seti River, construction of a Water Treatment Plant (WTP), 4 RVTs and transmission and distribution of drinking water <b>Land required:</b> Sump well site (PST-1)- 210 m <sup>2</sup> PST-2 site (RVT-1, WTP and office building)- 833 m <sup>2</sup> RVT-2 – 322 m <sup>2</sup> , RVT-3 – 115 m <sup>2</sup> and RVT-4 – 117 m <sup>2</sup>
4.	Project's area of influence	<b>Area of Influence:</b> Dipayal Silgadhi Municipality, ward no. 1 and 3
5.	Brief description of the project based on the location, terrain & immediate surroundings	The project site is located in Dipayal Silgadhi Municipality, ward no. 1 and 3 in the middle hills region of Doti district. The terrain of the project site differs from plain area (sump well site) to gentle slope (WTP site, RVT-2, RVT-3 and RVT-4). The immediate surroundings of the project are mostly barren public land, agricultural land and settlements.
6.	Other relevant information	The Tikha settlement has an existing drinking water system with small RVT. The water supply is not reliable and sufficient serving only 2 hours a day resulting in the scarcity of drinking water in these areas. The transmission and distribution pipes are old and undersized to withstand the discharge pressure of the newly proposed WSP. Thus proposed sub-project is completely a new project except for using existing sump well.

**(B) Environmental and Social Screening**

S.N	Screening checklist	Yes	No	Comments
				Provide information/ justification either for "Yes" or "No" if applicable

<b>Project site information</b>			
1.	Is the sub-project site adjacent to or within any of the following sensitive receptors?		
	i. Natural habitats and/or legally protected areas (national park, wetlands, forests, estuary, buffer zones, nature reserves)	No	No protected areas adjacent to or near the project area.
	ii. Cultural heritage site (e.g. temples and sacred sites)	No	
	iii. Recreation or public gathering site	No	The sub-project site is not adjacent to or within the area of recreation or public gathering site.
	iv. Aesthetically important sites	No	No Aesthetically important sites nearby.
	v. Located near the main settlement and market places. If "Yes" provide name of the settlement and market place, and brief description with estimated number of HHs	Yes	RVT-1 and WTP site is near the settlement named Saran approximately 150m from the site with HHs number nearly 30. There is no market area nearby.
	vi. Is there any history of flood/river cutting/ landslides at the site or surrounding areas?	Yes	The Sump Well area is located at Basudhara on the Bank of Seti River. It sometimes gets flooding during monsoon season but no risk of river cutting and landslide. The flood events and river cutting is not expected to increase due to project activities.
	vii. Is there any public infrastructure (school, hospital, health post) in the surrounding area of the project site? If yes, provide brief descriptions.	Yes	Shree Maglek Secondary School and Tikha Health Post are located in the surrounding area of RVT-4 Tikha approximately 1 Km from the construction site. So the impacts due to construction activities are not significant.
	viii. Are canals and irrigation systems present in proximity to sub-project site?	No	
	ix. Are there any exiting water sources near or within the site that may be impacted by the project?	No	
	x. Briefly describe the existing use of land in the surrounding area of the proposed site, nature (slope and		The project components like RVTs, Sump Well and WTP are constructed mostly in public land and small area of

facing)			private land (WTP). The surrounding land use is mainly agricultural land, settlements and barren public land around the proposed site. The nature of the land is plain (Sump Well) to gentle slope (RVTs).
xi. Is the sub-project site accessible by road through the year? Description of condition of road/track (blacktop, fair weather etc.) or needs to construct a new road, total length, nearest road head etc.		No	The Sump Well and PST-1 (WTP and RVT-1) site is accessible by fair weather road with little maintenance work. However the RVT-2, RVT-3 and RVT-4 sites are out of reach with the road access and nearest road head is around 400m. The settlement Tikha is connected by Blacktop road from Dipayal (Pipalla Bazar)
xii. Is the proposed site is being used by locals to access to other places or public resources such as forests, rivers and water sources, cultural and religious heritages/temples?		No	
xiii. Will the construction activities cause any damage to the existing local roads?	Yes		The vehicles transporting construction materials of the proposed project can cause minor damage to existing earthen roads up to Sump Well and WTP. However Contractor will be responsible for timely maintenance of such damage.

General				
S.N.	Screening checklist	Yes	No	Comments
				Provide information/ justification either for "Yes" or "No" if applicable
1.	Does the Subproject contravene Nepal's obligations under its international agreements?		No	
2.	Impacts on natural resources that constitute livelihoods of the community (e.g., water resources, drinking water supply system, forest resources, fishing, grazing, or hunting grounds)?		No	The subproject neither has impacts on such resources nor is such communities present in the project area.

3.	<p>Are any of the following activities planned within the Project area?</p> <ul style="list-style-type: none"> <li>• Earthworks,</li> <li>• Excavations/topsoil removal,</li> <li>• Borrow areas,</li> <li>• Stockpiles,</li> <li>• Storage facilities (e.g. tanks, silos)</li> </ul>	Yes		<p>The project implementation will lead to construction of WTP, 4 RVTs and office building. Similarly protection works will be done in PST-1 site. This will lead to earthworks and excavation of soil. Nearly 1842m<sup>3</sup> soils will be excavated during the construction time. Since nearly 40% of the soil is used in filling, the material left after backfill is minimum and can be managed easily in the site and will have no significant impacts.</p>
4.	<p>Will natural resources (e.g. timber, water, sand, quarries) within the sub-project area be used for construction activities in a significant quantity?</p>		No	<p>Such construction materials will be managed from approved Construction Query Sits outside i.e. <del>IEE approved sites.</del> Some materials will be managed through suppliers. Only water from the project area will be used during construction activities.</p>
5.	<p>Is there potential for landslide and soil erosion impacts during construction or operation of the project?</p>		No	
6.	<p>If yes, please provide the following information:  History of natural calamities in or surrounding areas of the proposed site (Dates, level of impacts in terms of loss of lives and property and mitigation measures applied so far and their impacts)</p>	NA		
7.	<p>Changes in drainage patterns and resulting effects due to construction of project components and access roads?</p>		No	
8.	<p>Loss or destruction of unique or aesthetically valuable land or natural resources</p>		No	

S.N.	Screening checklist	Yes	No	Comments
				Provide information/ justification either for "Yes" or "No" if applicable

Labor and working conditions			
1.	How many workers are likely to be hired for the proposed works? How many workers are estimated to be women?	The total of 17,000 man-days will be expected to be required for the proposed WSP. Out of it, approximately 5,700 md will be of women.	
2.	Will the project draw on migrant workers?	Yes	The skilled manpower for pipe fittings, construction of RVTs, WTP will be hired from outside.
3.	How many workers are estimated to be hired directly from the project area?	Nearly 80% of the total workers will be hired directly from the project area. It mainly constitute of unskilled and semi-skilled manpower. The total of 14,000 Md works will be done by the local workers.	
4.	Of the total workers, how many are estimated to be	Based on the total man days of work, it is estimated that approximately 30 workers (skilled, semi-skilled and unskilled) will be employed per day Skilled: 6                      Semiskilled: 4 Unskilled: 20 Engineers: 5                  Technician/overseer: 12 Security guards: 2          Others: 2	
5.	In terms of the categorization of the sub-project workers as the World Bank's ESF, how many of them will be	Direct workers: 80%    Contracted workers: 20% Primary suppliers' workers: 0 Community workers: approximately 80%	
6.	Will there be a labor camp? Or any form of accommodation for workers	Yes, there will be labor camp to be managed/constructed for the accommodation of workers.	
7.	If the sub-project is planning to manage/construct a labor camp, provide the information on	Probable location (s) of labor camp: WTP site and public land near RVT-4 site. But the finalization of the labor camp site will be done after consultation with the local representatives and community people.  Status of basic facilities (power, water etc.): available	
8.	Does the sub-project have policies and provisions in the project for all types of project workers?	Yes	The project will manage the labor camp for its workers with all the facilities like drinking water, toilets complying the standard of Nepal Government's Labor Act and ESMF of the project.
9.	Does the sub-project plan to maintain and regularly update a labor registry throughout the project lifecycle?	Yes	The sub-project will maintain and regularly update a labor registry throughout the project lifecycle.

				The record of the workers like name, address, age, education level etc. will be maintained clearly.
10.	Is there a policy that ensures non discrimination in wages and other facilities?	Yes		Yes, there is a strict policy that ensures equal wages among the workers irrespective of gender, caste etc. for similar nature of work.
<b>S.N.</b>	<b>Screening checklist</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b> Provide information/ justification either for "Yes" or "No" if applicable
11.	Does the Project ensure that all persons working for the project are above minimum age as per national laws?	Yes		The subproject will prohibit the child labor in all construction activities.
12.	Does the Project ensure it will abide by the national standards working hour rules and overtime?	Yes		The project will strictly ensure it will abide by the national standards working hour rules and overtime rules.
13.	Does the sub-project have plans to provide orientation to migrant workers about National labor laws, local tradition, culture, costumes, norms and values?	Yes		All the migrant workers in the labor camp will be oriented on national labor laws, local tradition, culture, customs, norms and values at the beginning of the construction work and in the middle of the project
14.	Will heavy machinery (e.g. excavators, cranes, trucks, jack-hammers) be used for construction activities?	Yes		The use of heavy machinery like excavator and JCBs will be little used for excavation of RVTs and WTP. Since the construction sites are away from the main settlements, impacts due to its use are expected minimal. The minimum use of such heavy machinery will be ensured and will be limited to day time.
15.	Will the Project activities involve the handling of hazardous materials/contaminants?		No	
16.	Will the Project activities involve the handling of risky electrical equipments?		No	
17.	Is there any safety concern to women once the migrant workers arrive in sub-project site?	Yes		Adequate orientation to female workers will be conducted. Similarly separate living space for female workers in the labor camp will be ensured. Regarding the safety concern of community women from the

				migrant workers, the frequent to and fro movement of the workers from the labor camp will be controlled.
18.	Does the sub-project plan to provide orientation to workers about the national laws and project policies on GBV & SEA/SH?	Yes		The sub-project will ensure such orientation programs to workers and such activities will be included in mitigation matrix of ESMP.
19.	Does the sub-project plan to provide orientation to workers about the risks of communicable diseases such as STDs?	Yes		The subproject has planned for such orientation programs to workers. Such orientation programs will be organized at the beginning and middle of the project period.
20.	Does the sub-project plan to provide orientation to workers about COVID-19 related national and WHO protocols?	Yes		The sub-project has planned to provide orientation to workers about COVID-19 related national and WHO protocols
21.	Is there any history of conflict between the migrant workers and the local in any infrastructure projects in the local area?		No	
22.	Is there any possibility of conflicts between migrant workers and the local community?	Yes		There is always some possibility of conflicts between local and migrated people but this impact is expected minimal since the subproject has planned for proper orientation to workers regarding social harmony and has planned for strict monitoring mechanism.
<b>Resource Efficiency and Pollution Prevention and Management</b>				
<b>S.N.</b>	<b>Screening checklist</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b> Provide information/ justification either for "Yes" or "No" if applicable
1.	Will construction activities result in production of waste that needs special treatment or disposal measures? If "Yes", describe types and expected amount of waste, if known at the time of screening?		No	
2.	Will the sub-project generate substantial amount of wastewater (liquid waste) during construction and operation?		No	

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3.	Will it create dust pollution around the sites?	Yes		The excavation works at WTP and RVT sites may create dust pollution during dry season due to wind blow. Similarly the vehicles carrying construction materials if not covered properly can cause dust pollution to the nearby settlements.
4.	Will be the subproject generate substantial amount of air emission during construction and operation?	Yes		The heavy equipments, transportation vehicles and generator used for pipe fittings and other purposes can cause emissions of air pollutants near the construction sites. These impacts will be localized, reversible and less significant.
5.	Will the sub-project create noise/vibration beyond the level permitted by the law?		No	
6.	If the sub-project plans to transport, store, and use and/or disposal of materials that may create physical, chemical, and biological hazards? If "Yes", please mention		No	
7.	Will it temporarily stop or impact/pollute the water supply and sanitation system in and around the site?		No	
8.	Will there be any solid waste generated by sub-project that needs to be transported off-site for reuse, recycle or disposal of?	Yes		However the solid waste generation is expected minimal from the labor camp which will be segregated at source in separate bins. The segregated waste will be transferred to the waste collection system of Municipality.
9.	Will any liquid waste, or an item containing liquids (including oils), needs to be transported off-site for reuse, recycle or disposal of?		No	
10.	Will any explosive and hazardous chemicals be used within the project?		No	
11.	Will building materials containing asbestos be removed/ disposed of?		No	

S.N.	Screening checklist	Yes	No	<b>Comments</b> Provide information/ justification either for "Yes" or "No" if applicable
12.	Will any building materials be removed/disposed of that are coated with lead-based paint?		No	
13.	Will mercury-containing devices (switches, gauges, thermostats) be removed/disposed?		No	
14.	Will any building materials be removed/disposed of that contain lead, silver or chrome?		No	
15.	Will the sub-project use batteries (lead-acid or nickel-cadmium) as its components?		No	
17.	If "Yes", please briefly explain how the Project plans safe transportation, storage and use and disposal of hazardous materials.	NA		
18.	Will sub-project activities involve GHG emissions?	Yes		But the emission is insignificant
19.	If "Yes", please provide description of the activities that will contribute to the GHG emission.	The vehicles used for transportation, excavation and generators used for pumping water and fitting purposes are likely to emit GHGs but the emission is very less so that it will have insignificant negative impacts.		
<b>Potential Community and Occupational Health and Safety Impacts</b>				
1.	Are there any community health and safety risks due to the use of equipment, machinery, or the activities at the sub-project?	Yes		During the construction period, the movement of heavy equipments and transportation vehicles will be increased in the nearby settlements which will increase the risk of road accidents
2.	Will the construction works disturb the normal functioning of other commercial/community/residential activities?  If "Yes", please mention the activities and period of disturbance.		No	

3.	Are there any potential impacts to public health and safety due to changes in the landscape for sub-project?		No	
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S.N.	Screening checklist	Yes	No	Comments
				Provide information/ justification either for "Yes" or "No" if applicable
4.	Are there any risks to community safety due to accidental and natural hazards during sub-project construction and operation?		No	
5.	Is there any possibility of traffic congestion or rise in road accident in the project area due to project activities?	Yes		But the impact is expected temporary during construction phase only. Since the road to Tikha has scarce vehicular movement, road accidents events will be rare.
6.	Is there any provision to control possible trespassing of non-project staff on the project site during construction and operation?	Yes		The construction site will be separated by the Chain linked fencing which will control the possible trespassing of non-project staff on the project site
7.	Does the sub-project plan to provide orientation to surrounding communities about the risks of communicable diseases and COVID-19?	Yes		The project plans to provide orientation on the risk of communicable diseases and COVID-19 to its construction workers and surrounding communities.
<b>Land Acquisition and involuntary resettlement</b>				
1.	Will there be permanent land acquisition for the sub-project?		No	Public land will be used in all sites, hence no private land acquisition is required.
2.	If "Yes", please provide information about the types of land that will be acquired.  Private land  Forest land  Government/Public land	. Government/Public land is available in all sites. For the use of public land, Ward office has given consent for its use.		

3.	If the sub-project is planning to acquire private land, please provide information about the process of acquisition Voluntary donation Involuntary acquisition Negotiation	Private land acquisition is not required for the sub-project.		
4.	Will there be a temporary land acquisition for the sub-project?		No	
5.	If "Yes", please provide information about the types of land that will be temporarily acquired.		NA	

S.N.	Screening checklist	Yes	No	Comments Provide information/ justification either for "Yes" or "No" if applicable
6.	Will there be a loss of productive land?		No	
7.	Will there be any physical/ economic displacement and impact on livelihoods?		No	
8.	Is there any household that needs relocation?		No	
9.	If there is any physical/economic displacement, please provide information on How many people/families will be displaced? What will be the scale of economic displacement? What will be the scale of impact on livelihoods of impacted people/families? How the project does plans to help the impacted people/families restore their livelihoods?	NA		
10.	Is there any impact on house or structures built on the land to be used for the project?		No	

11.	If yes, please provide details of such structures.  (floor area, height, materials used in floor, wall and roof)	NA		
12.	Is there any possibility of complaints/lawsuits claiming that land Acquisition didn't happen as per law of the country?	Yes		There is GRC in the Municipality. If someone feels he/she is in injustice regarding land acquisition, s/he can lodge a complaint on that issue.
13.	Apart from compensation, does the sub-project plans to provide additional supports to impacted person/family?		No	
14.	Will there be any adverse impact on non-titleholders including loss of shelter and livelihood?		No	
<b>S.N.</b>	<b>Screening checklist</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b> Provide information/ justification either for "Yes" or "No" if applicable
15.	Will land acquisition result in loss of income loss of access to common property resources?		No	
<b>Biodiversity Conservation and Sustainable Management of Living Natural Resources</b>				
1.	Is the Subproject going to encroach into national parks of protected area, including their buffer zone?		No	
2.	Is the Subproject going to convert or degrade critical natural habitats?		No	
3.	Will there be forest loss in terms of area (if yes, type of forest: National Forest, Community Forest, and Private Forest etc.?)  Will it lead to loss of forest species (provide details of the loss of listed species according to national and international –specifically IUCN - classifications), if known at the time of screening?		No	The proposed RVT-3 site of the TGSGWSP is located at Public land at edge of CF but no loss of forest species is expected.

4.	Will there be a need to remove trees to clear project sites?  If “Yes”, please provide brief information, including species and numbers to the extent possible at the time of screening.		No	
5.	Is the loss of Non-Timber Forest Products (NTFP) possible? If so, provide the details if known at the time of screening.		No	
6.	Is there presence of wildlife around the subproject area?		No	
7.	If yes, provide information of the type of wildlife, if known at the time of screening?  (Provide details of listed wild life and faunal species according to national and international – specifically IUCN - classifications, if known at the time of screening).		NA	
<b>S.N.</b>	<b>Screening checklist</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b> Provide information/ justification either for “Yes” or “No” if applicable
8.	Will there be any barrier to migratory birds or land animals by the construction of this project?		No	
9.	Will the sub-project affect the aquatic fauna of river system and/or springs?		No	Since the project will use the existing Sump Well, there will be very less construction activities on the site. So no significant impacts on aquatic fauna are expected.
10.	If yes, provide the details of the river/spring and existing fauna, if known at the time of screening?		NA	
11.	Will the subproject involve draining or conversion of any wetland?		NA	
12.	Other potential biodiversity impacts (specify)?		No	
<b>vulnerable People</b>				
1.	Will the sub-project involve activities that are	Yes	No	Does not impact on vulnerable people.

	likely to make irreversible adverse impact on indigenous communities, women and vulnerable Groups?			
2.	Will the proposed sub-project include any activity that promotes or involves incidence of child labour?		No	Child labour will be strictly prohibited
3.	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.	Will the proposed sub-project benefit ethnic groups living in the service area?
4.	Are there any vulnerable people, such as Dalits, religious minorities, landless, people with disabilities/ chronic disease,		No	There is a settlement of vulnerable people (Dalits) near the WTP site at Saran. The HHs will have positive impact by the project activities as they will get employment opportunities during construction, protection of their land due to protection works of WTP and pure drinking water after the completion of the work

S.N.	Screening checklist	Yes	No	<b>Comments</b> Provide information/ justification either for "Yes" or "No" if applicable
	Women-headed households and elderly households among project-affected people?  If "Yes", please mention how many such households are among the project-affected people.			No families of vulnerable people such as Dalits, religious minorities, landless, people with disabilities/chronic disease, women headed HHs and elderly HHs are considered as project affected.
8.	Are any vulnerable people losing their land?		No	
9.	Are any vulnerable people being physically displaced?		No	
<b>Cultural Heritage</b>				
1.	Does the proposed site or surrounding area host any cultural and religious heritages/temples/structures?	Yes		There is a Temple in the surrounding area of Sump Well. Since there will be no major construction works (as project will use the existing Sump Well), impacts expected are not significant. Rather Construction of retaining wall for protection of Sump Well will also play positive role for the protection of temple area.
2.	Will the sub-project cause encroachment on historical/cultural/ religious areas?		No	
3.	Will there be any adverse impacts on cultural heritage due to sub-project activities?		No	
4.	If "Yes", please explain briefly	NA		
5.	Does the proposed site or surrounding area host any cultural or religious event/gathering?		No	
6.	If "Yes", please provide a brief description of the event	NA		
7.	Does the proposed site provide access to any cultural/ religious heritages or temples or sites?	Yes		The proposed Sump Well site provides access to the Temple site. But temporary alternative way can be managed easily during construction period.

Stakeholder engagement				
8.	Have the stakeholders of the sub-project been identified?	Yes		Various stakeholders of the project have been identified.
9.	If “Yes”, please name them along with their level of influence and interest in the sub-project	The probable stakeholders are: Municipality, WS Division Office, WS Provincial Office, Nepal Electricity Authority, and existing WSUC etc. Among these stakeholders, Municipality has highest level of influence and interest in the sub-project.		

S.N.	Screening checklist	Yes	No	Comments Provide information/ justification either for “Yes” or “No” if applicable
10.	Have the stakeholders been categorized in terms of gender, age, and ethnicity?	No		
11.	Major issues raised by the stakeholders during the initial consultation?	They have raised concern regarding guaranteed implementation of the project (because they have bitter experience of ADB project) Stakeholders have committed for supporting the implementation of the project from their side as they all have faced the scarcity of drinking water.		
12.	What are the main sources of information for the stakeholders? [Hint: radio, TV, newspapers]	FM/radio, Newspaper and Meetings/consultation		
13.	Is there social institution/practice for community consultation on common issues in the area?		No	
14.	Is there any social/ religious/ cultural institution or practices for local dispute settlements?		No	
15.	Are there any youth clubs, women groups or NGOs active in the project area and in the district? If “Yes” please provide top five such clubs/groups/	NGOs youth clubs, women groups and contact number 1. Feminist Dalit Organization (FEDO), Nilam Kumari Budhakschetri (Chairperson) – 9848642035		
Contextual risk				
1.	Is there any history of community conflict in the sub-project area?		No	

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2.	Is there any history of protests against infrastructure projects in the area?		No	
3.	Provide a brief description about nature of crimes, if any, observed in the project area in last two years.  [Hint: Source of information local police station]	NA		
4.	Which political parties won the last local election?  [Municipal and the ward of the project site]			Nepali Congress won the last local election. Municipality: Nepali Congress Ward-1 : Nepali Congress Ward-3 : Nepali Congress
5.	Which political parties won the last parliamentary election from the constituency of the project site			Nepal Communist Party (Unified Samajwadi)

S.N.	Screening checklist	Yes	No	Comments
				Provide information/ justification either for "Yes" or "No" if applicable
6.	What are the major economic activities in the municipality? [Hint: Occupation, local exports, etc.]			Agriculture, Livestock rearing, fruit farming, job service, local level business etc.
7.	Please name the major industries/institutions located in the municipality.	Some of the industries located in the Municipality are: -Saileshwori Jal, Dipayal Silgadhi-4, Pipalla Bazar - Janaki Mineral Water, Dipayal -Badda Simail Bakery Industry, Rajpur -Khaptad Group Masala Udhog, Dipayal		
8.	Which are the major market centers in the sub-project area and how far are they?			Pipalla Bazar is the nearby market area which is approximately 4 Km from the project area.
9.	Is there a bold community support for the sub-project?  [Hint: Community perception based on stakeholder consultation]	Yes		Community has committed to support the project from their side. -Community support for the subproject can be understood by the event that one land owner is ready to donate the land voluntarily for WTP.
10.	Is there support from the local municipality for the project?	Yes		The Municipality has supported sufficiently when needed for the implementation of the project.

**Checklist for ESS7 and particularly to FPIC**

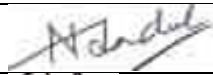
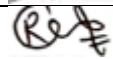

<b>ESS7: Indigenous Peoples</b>	<b>Yes</b>	<b>No</b>	<b>No Impact</b>	<b>Positive Impact</b>	<b>Negative Impact</b>	<b>Remarks</b>
Does the project footprints lie in areas where indigenous people is present including (area of influence)	<b>Yes</b>		No impact			Tikha Sub-Project is located Dipayal Silgadhi Municipality. The surrounding community is mixed with Indigenous Peoples group like Magar and other ethnic groups such as Dalit, Brahmin and Chhetri and other caste/ethnic groups. The Chhetri (Khas) are considered to be the indigenous people of this area as per the ESF standard.
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)?		<b>No</b>	No Impact			Construction will be carried out in public land and the distribution pipeline network it will be carried out along the existing public road. So, there will be no physical displacement.

<p>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?</p>		<b>No</b>	No Impact			<p>Construction will be carried out in public land and for distribution pipeline network will be carried out along the existing public road. Private land or community land is not required for the sub-project. Proposed interventions will not result in loss of assets or access restriction to communal resources nor any full or partial economic loss.</p>
<p>Will the project impact land/restriction access to land 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>		<b>No</b>	No Impact			<p>All constructions works will be carried out within the public land. 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</p>		<b>No</b>	No Impact			<p>Impact on natural resources or loss of access to such resources is not expected since the construction will be carried out in public land..</p>

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)?						
Will the project lead to the utilization or commercial development of natural resources on lands and territories claimed by IPs?		<b>No</b>	No Impact			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.
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 significance like burial grounds/ritual spaces/stupas/shrines/places of worship)</i>		<b>No</b>	No Impact			There will be no impact on tangible cultural heritage.
Will the project have significant impact on intangible cultural heritage that is material to the identity and/or cultural,		<b>No</b>	No impact			Community groups indigenous to that place have their own set of intangible

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<p>ceremonial, or spiritual aspects of the affected community?</p> <p><i>(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)</i></p>					<p>heritages, such as sacred spaces, belief systems, knowledge, and practices. But, during consultation with these communities, it was reported that project footprints is unlikely to have a bearing on any intangible heritages.</p>
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Screening Team			
Screening Team	Name	Contact Number	Signature
Team Leader	Nirmal Tandukar	9851223765	
Environmental Specialist	Ravi Gautam	9841707030	
Social Development Specialist	Ashok Prasad Pandey	9848722845	

Annex II: Meeting / Consultation Meeting

(a) Goseda, Dipayal Silgadhi Municipality Ward no. 1

शुभ मिति २०८० साल चैत्र २३ गतेका दिन यस दिपायल सिलगढी नगरपालिका अन्तर्गत स्थानीय स्वशासन क्षेत्रगत सुसाशन तथा पुनर्वासि समिति, काभ्रेपानि अन्तर्गत दिपायल-१ गौसेडा भन्ने स्थानमा गरिने स्वशासन पाइपलाइन, २ इन्चो निर्माण गरिने गरिनेले उक्त कार्य गर्न काठमाडौं वातावरण तथा सामाजिक अध्ययनको शिलसिलामा तपासिलको उपस्थितिमा निम्न पुस्तावद्धमाथि छलफल गरी निर्णय गरियो।

तपासिल

- |     |                             |                            |
|-----|-----------------------------|----------------------------|
| १.  | कृष्ण बहादुर साउद - अध्यक्ष | वार्ड नं-१                 |
| २.  | पद्म बहादुर साउदका          | सदस्य वार्ड नं-१           |
| ३.  | निर्मल लम्जुकार             | जल.म.स. कोषी               |
| ४.  | रवि गौतम                    | वातावरण विज्ञ -            |
| ५.  | पुष्पल श्रेष्ठ              | डिजायन इन्जिनियर           |
| ६.  | अशोक प्र. पाण्डेय           | सामाजिक विकास विज्ञ        |
| ७.  | लक्ष्मी राज जोशी            | सुसाशन तथा पुनर्वासि विज्ञ |
| ८.  | हर्क कामी                   | वार्ड नं. १ गौसेडा         |
| ९.  | बुद्धि रेपाली               | " "                        |
| १०. | रविन्द्र भुल                | " "                        |
| ११. | भोजराज साउद                 | " "                        |
| १२. | कुन्ता साउद                 | " "                        |
| १३. | कमल सिंह सावर्दे            | " "                        |
| १४. | गजान सिंह सावर्दे           | " "                        |
| १५. | दिकुम्वर सिंह सावर्दे       | " "                        |
| १६. | तवी देवी साउद               | वार्ड नं १ गौसेडा          |
| १७. | रवि " "                     | " १ "                      |
| १८. | काली " "                    | " १ "                      |
| १९. | दल साउद                     | " १ "                      |
| २०. | शारदा साउद                  | " १ "                      |
| २१. | धौली सावर्दे                |                            |
| २२. | ज्योती साउद                 |                            |

23	देवसरा साउंड	"	<del>कांठ</del>	कांठ न 9	कुसुम
24	कलु देवि साउंड	"	कलु		
25	दीक्षा देवि साउंड	"	दीक्षा		
25	पद्मदेवि देवि साउंड	"		पद्मपत	
26	देवि साउंड	"	देवी		
26	निर्मला देवि साउंड	"		निर्मला	
27	राम देवि साउंड	"	कांठ न 9		गोसडा
28	कुलक्षि देवि साउंड	"	"	"	"
29	गणेश देवि साउंड	"	"	"	"
30	लाली देवि साउंड	"	"	"	"
31	माता देवि साउंड	"	"	"	"
32	काली देवि साउंड	"	"	"	"
33	ज्योति देवि साउंड	"	"	"	"
34	साहू देवि साउंड	"	"	"	"
35	मन्धरी देवि साउंड	"	"	"	"

प्रस्ताव सर्व निर्गमकः  
 प्रस्ताव नं 9 मासि हस्तगत जर्दी वातावरणिय तथा सामाजिक प्रभावकी  
 अध्ययनकारण वातावरणिय तथा सामाजिक चैक लिबटके। ~~निर्गमक~~ प्रस्ताव  
 निरवा, गोसडा, सिरकोलीगाँउ, गैरागाँउ खोपानी योजना अन्तर्गत  
 निर्माण हुन जाँरेको पाइपलाइन र पानी टँकी निर्माण जर्दी वातावरणिय  
 तथा सामाजिक नकारात्मक प्रभाव उपर्ने एवं विवाद समेत नहुने  
 अती यस बँड काट निर्गम जस्यो।

*[Handwritten signatures and dates]*

(b) Dipayal Silgadhi Municipality Ward no. 3

आज मिति २०८०/१२/२३ गतेका दिन यस दिपायल सिलगढी नगरपालिका अन्तर्गत संचालित खानेपानी योजनाको सुशासन तथा पूर्वाधार सहयोग आयोजना अन्तर्गत दि.सि.नं.पा. वडा नं. ३ कैलाश, इटहरी सरन, घटकानी (खैरतीला), रबीला, सालडाडा मा पाईपलाईन विस्तार, पानी प्रशोधन इकाई, सौर प्लाट जनडान गर्नको लागि वातावरणीय तथा सामाजिक अध्ययनको अिलमिलामा तपासिलको उपस्थितिमा तपासिल समितिमा भिणय गरियो।:-

उपस्थित

१- नारायण सिंह साउदर	- वडा अध्यक्ष
२- रमेश क. खडका	- दि.सि.नं.पा. - ३ खैरतीला
३- यशराज खडका	"
४- निर्मल लडुका	- DAL/MST
५- प्रज्वल शर्मा	- डिजाइन इन्जिनियर
६- रावे उपेतम	- वातावरण विज्ञ
७- अशोक प्र. पाण्डेय	- सामाजिक विकास विज्ञ
८- लक्ष्मी राज जोशी	- सुशासन तथा संचालित विकास
९- रोहित खडका	- दि.सि.नं.पा. ३ खैरतीला
१०- रमेश नं. लडुका	" " "
११- देव नं. लडुका	" " "
१२- प्रमोद प्रमोद परमुपती (वडा)	" " "
१३- अनुष्ठा लडुका	" " "
१४- निता खडका	" " "
१५- काली देवी लडुका	" " "
१६- सन्तु खडका	" " "



c) Consultation with the Vulnerable Community at Saran

आज मिति २०२१/३/२८ गतेका दिन तिरवा, जोसेडा, सिखौली गाउँ, गैरा गाउँ खानेपानी आयोजना अन्तर्गत दलित वस्तिस्थानमा निर्माण गर्ने पानी प्रशोधन केन्द्र, आफिस भवन र पानी पोखरी निर्माण गर्ने तथा खानेपानी आयोजना सञ्चालन वाट हुने फ्यामदा चौ, तथा सिल बमोजिमको उपस्थितिमा तथा सिल बमोजिम निर्माण गरियो ।

उपस्थिति


- आयोजक १- प्रताप विक कठ  
 सहायक आयोजक २- वुल बहादुर वि.क.  
 गैरमा ३- गोलमा देवी वि.क.  
 मन्त्री ४- मन्दरी देवी वि.क.  
 पार्षद ५- जहदनी वि.क.  
 देवा ६- देवी वि.क.  
 सचिव ७- विक्रम वि.क.  
 राधा ८- राधा देवी वि.क.  
 सचिव ९- सनम वि.क.  
 फिदना १०- फिदना वि.क.  
 निर्माण ११- वसन्ती वि.क.  
 सचिव १२- स्यावित्री वि.क.  
 १३- पुष्पा वि.क.  
 सचिव १४- मन्वीर वि.क.  
 सचिव १५- रत्ना वि.क.  
 १६- अशाक स. पाण्डेय (MST) सच. वि. विज्ञ  
 १७- केकाव राज जोशी (MST) वा. वि. विज्ञ  
 १८- सञ्जय क्षेत्री (MST) सामाजिक परिचालक

निर्णय नं-१  
 तिरवा, जोसेडा, सिखौली गाउँ, गैरागाउँ खानेपानी आयोजना सञ्चालन अर्थात् यसले <sup>थप क्षेत्रमा</sup> नातावरणीय तथा सामाजिक रूपमा कुनै किसिमको नकारात्मक असर पर्दैन । आयोजना वाट गुणस्तरीय खानेपानी उपलब्ध हुने, रोजगारी सृजना हुने, जग्गाको मूल्य बृद्धि हुने, कालीनाली एवं तरकारी खेती



Annex III: Recommendation/ Consent Letters

(a) Dipayal Silgadhi Municipality Ward no. 1

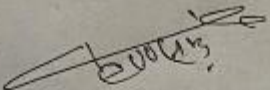
**द्विपायल सिलगढी नगरपालिका**  
१ नं. वडा कार्यालय  
तिखा,डोटी  
**Dipayal Silgadhi Municipality**  
1no.Ward Office  
Tikha, Doti  
सुदूरपश्चिम प्रदेश, नेपाल  
Sudurpashchim Province, Nepal  
मिति : २०८०/१२/२३

पु.सं. : २०८०/८१  
क्र.सं. : १६१

श्री खानेपानी क्षेत्रगत सुशासन तथा पुर्बाधार सहयोग आयोजना  
सिलगढी डोटी ,


बिषय : सहमति दिईएको बारे ।

उपरोक्त सम्बन्धमा त्यस आयोजना अन्तर्गत संचालन गरिने तिखा,गोसेडा,सिरखोला  
गाउ र गौरागाउ खानेपानी योजनाको पाईप लाईन बिस्तार तथा खानेपानी टंकी निर्माण  
गरिने ठाउँमा कुनै किसिमको विवाद छैन, कुनै कसै बाट विवाद आएको खण्डमा विवाद  
समाधान गर्नको लागि यस वडा कार्यालयले जिम्मा लिने भएको ले कार्यक्रम अगाडी  
बढाउन यो सहमति पत्र दिईएको व्यहोरा जानकारी गरिन्छ ।

  
कृष्ण बहादुर साउद  
वडा अध्यक्ष


कृष्ण बहादुर साउद  
वडा अध्यक्ष

(b) Dipayal Silgadhi Municipality Ward no. 3

**दिपायल सिलगढी नगरपालिका**  
३ नं. वडा कार्यालय, दिपायल डोटी  
**DIPAYAL SILGADHI MUNICIPALITY**  
3 No. Ward Office Dipayal, Doti  
2073

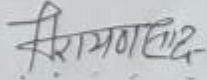
सुदूरपश्चिम प्रदेश, नेपाल  
Sudurpashchim Province, Nepal  
मिति: २०८०/१२/२३

उ.सं-०८०/०८१  
सं.सं-४४४




विषय:- सहमति दिइएको बारे  
खानेपानी क्षेत्रगत सुशासन तथा पूर्वाधार आयोजना  
सिलगढी डोटी,

उपरोक्त सम्बन्धमा तयस खानेपानी क्षेत्रगत सुशासन तथा पूर्वाधार  
सहयोग आयोजना अन्तर्गत संञ्चालन गरिने निखा, गोहेडा, खिरकोली  
गाडुं, गौडा गाड खानेपानी आयोजनाको पाइप लाइन विस्तार, सोलार  
प्लानल जडान तथा पानी प्रशोधन इकाई (Treatment Unit) काडने  
दाडमा कुनै किसिमको विवाद नरहेको र खानेपानी आयोजनाको पाइप  
लाइन विस्तार गर्ने कंन्डा, इकाई, सल, खैतीना, खोली सालतसु  
नुनुटे सम्म कुनै किसिमको विवाद आएस खण्डमा विवाद समाधान गर्न  
को लागी यस वडा कार्यालयले जिम्मा लिने भएको ले कार्यक्रम अघाडि  
बढाउन सहमति दिइएको बहोरा जानकारीको लपगो अनुपेक्ष ही

  
नारायण सिंह साउंद  
वडा अध्यक्ष

ईमेल:- dipayalsilgadhiwardthree@gmail.com    सम्पर्क नम्बर:- ०९४-४१२०८०


(c) Dipleswor Maath Basudhara Area Development Committee

**दिलपेश्वर मठ वासुधारा क्षेत्र विकास समिति**  
दि.सि.न.पा.-३ दिपायल,डोटी  
स्था:

पत्र संख्या :- ०८०-०८९  
चलानी नं. :- ९८  
श्रीमान खोतेपाती हरेप्रसाद शुभाश्रत तथा रैवधार  
सहयोग आयोजना  
शिवमठि डोटी  
विषय :- सहमति दिइएको सम्बन्धमा

मिति: २०८०।१२।२६

उपरि सम्बन्धमा त्यहाँ सार्थकता प्राप्त गरी संस्था  
द्वारा गरीने खोतेपाती कार्यक्रमको लागि वासुधारा तडीमा  
हाम्रो सल्लाह पाता उडाते गर्नु यस समिति बाट सहमति दिइएको  
कारण सहयोग कार्यक्रमको लागि अनुमति छ।

  
निशुकुमार खड्क  
सोच - दिलपेश्वर मठ -  
वासुधारा क्षेत्र विकास  
समिति



**Annex IV: Water Quality Test Report of Seti River**



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:	164/080/081	Sampled By:	Sender
Sender/Client:	AARVEE-FBC-PARAGON, JV (S3)	Sampling Date:	2080/12/09
Source:	Surface Water	Reported Date:	2080/12/18
Sampling Point:		Sample Condition:	OK
Address:	Dipayal Silgadhi- Doti		

S.N	Parameters	Unit	Observed Values	NDWQS, 2079 BS	Analyzed Methods
1.	Taste & Odor	-	Non-Objectionable	Non-Objectionable	Sense Observation
2.	pH	-	8.4 @25°C	6.5 - 8.5	4500-H <sup>+</sup> , APHA 22 <sup>nd</sup> Edition
3.	Turbidity	NTU	<0.01	5	2130 B, APHA 22 <sup>nd</sup> Edition
4.	Total Dissolved Solid	mg/l	176	1000	TDS Meter
5.	Electrical Conductivity	µS/cm	265@25°C	1500	2510 B, APHA 22 <sup>nd</sup> Edition
6.	Calcium	mg/l	44	200	3500 Ca- B, APHA 22 <sup>nd</sup> Edition
7.	Total Hardness as CaCO <sub>3</sub>	mg/l	90	500	2340 C, APHA 22 <sup>nd</sup> Edition
8.	Total Iron	mg/l	<0.01	0.30 (3)	3111 B, APHA 22 <sup>nd</sup> Edition
9.	Arsenic	mg/l	<0.01	0.05	Arsenic Test Kit
10.	Manganese	mg/l	<0.01	0.20	3111 B, APHA 22 <sup>nd</sup> Edition
11.	Ammonia	mg/l	0.12	1.50	Ammonia Test Kit
12.	Nitrate	mg/l	6	50	4500-NO <sub>3</sub> -B, APHA 22 <sup>nd</sup> Edition


*Bhatnagar*  
Analyzed by

*[Signature]*  
Verified by  
कमिष्ट

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.

Annex V: OCMC Report


 नेपाल सरकार  
 सार्वजनिक विज्ञान विभाग  
 जिल्ला प्रहरी कार्यालय  
 सिलगढी, डोटी

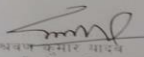
पत्र संख्या: ०८९/०८२  
 मिति: २०८१/०५/१२

श्री दिपायल सिलगढी नगरपालिका  
 नगर कार्यपालिकाको कार्यालय, डोटी ।


विषय: तथ्यांक उपलब्ध गराएको बारे ।

परस्त विषय सम्बन्धमा तहाँको च.नं.१२२, मिति २०८१/०२/१२ गतेको पत्रबाट  
 अस्पतालमा आधारित एकद्वार सफ्ट व्यवस्थापन केन्द्र, डोटीबाट रि सि न पा का ९, बट्टे  
 बढाका लैङ्गिक हिंसाको तथ्यांक उपलब्ध गराइ दिनहन माग लेखी आएकोमा आ.च.  
 ०८२/०८१ को तर्फाल बमोजिमको तथ्यांक पठाइएको व्यहोरा जानकारीका लागि  
 अनुरोध गरिन्छ ।

क्र.सं.	विवरण	महिला	पुरुष	जम्मा
१	घरेलु हिंसा	०	२	२
२	सोच हिंसा	२	२	४
३	अन्य	२	१	३

  
 डा. प्रबल कुमार यादव  
 प्रहरी निरीक्षक

"सम्बन्ध र महाम निजामती प्रशासन, समृद्धि र सुशासन"

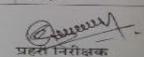

 नेपाल सरकार  
 गृह विभाग  
 जिल्ला प्रहरी कार्यालय  
 सिलगढी, डोटी

पत्र संख्या: ०८९/०८२  
 मिति: २०८१/०५/१२

श्री दिपायल सिलगढी नगरपालिका  
 नगर कार्यपालिकाको कार्यालय, डोटी ।



उपरोक्त सम्बन्धमा तहाँ कार्यलयबाट माग भए बमोजिम यस दिपायल सिलगढी नगरपालिकाको ९ वटै वडाहरूको  
 निम्नानुसारको डाटा उपलब्ध गराइएको व्यहोरा अनुरोध गरिएको छ ।

सि.न.	विवरण	निम्न:		आ.च.	कैफियत
		महिला	पुरुष		
१	घरेलु हिंसा	१६	-	२०७८/०७९	वडा नं. ९ मा १
२	सोच हिंसा	-	-		नभएको
३	अन्य	-	-		नभएको
१	घरेलु हिंसा	१७	-	२०७९/०८०	वडा नं. ९ मा २ र ३ मा २
२	सोच हिंसा	-	-		नभएको
३	अन्य	१२	१		नभएको
१	घरेलु हिंसा	१०	-	२०८०/०८१	नभएको
२	सोच हिंसा	२	-		नभएको
३	अन्य	४	-		नभएको

  
 प्रहरी निरीक्षक  
 (सूर्य प्रकाश भट्ट)

Website: <https://www.nepalpolice.gov.np> G-mail: [dpodoti@gmail.com](mailto:dpodoti@gmail.com)

Annex VI: Approved IEE Site

  
 अनुसूची - ११  
 (विषय ३ को उपविषय १३) को शर्त (१४) सँग सम्बन्धित।  
 दिपायल सिलगढी नगरपालिकामा रहेका सेती नदी र गोदरे खोला दिगोरूपमा  
 नदीजन्य पदार्थ (ढुङ्गा, गिट्टी, बालुवा, भरान आदि) उत्खनन तथा सङ्कलन  
 कार्यका लागि  
**प्रारम्भिक वातावरणीय परीक्षण अद्ययनको प्रतिवेदन**  
 (Initial Environmental Examination Report)  
 प्रतिवेदन पेश गरिने निकायको नाम र ठेगाना:  
  
 दिपायल सिलगढी नगरपालिका  
 नगरकार्यपालिकाको कार्यालय  
 सिलगढी, डोटी सुदूरपश्चिम प्रदेश, नेपाल  
 प्रस्तावकको नाम र ठेगाना:  
 दिपायल सिलगढी नगरपालिका,  
 नगर कार्यपालिकाको कार्यालय  
 सिलगढी, डोटी  
 २०८०

(ग) प्रस्तावित नदी क्षेत्रमा पर्ने संकलन तथा उत्खनन् साइटहरू

तालिका ३: सेती र गोदरे खोलाबाट संकलन तथा उत्खनन् क्षेत्र

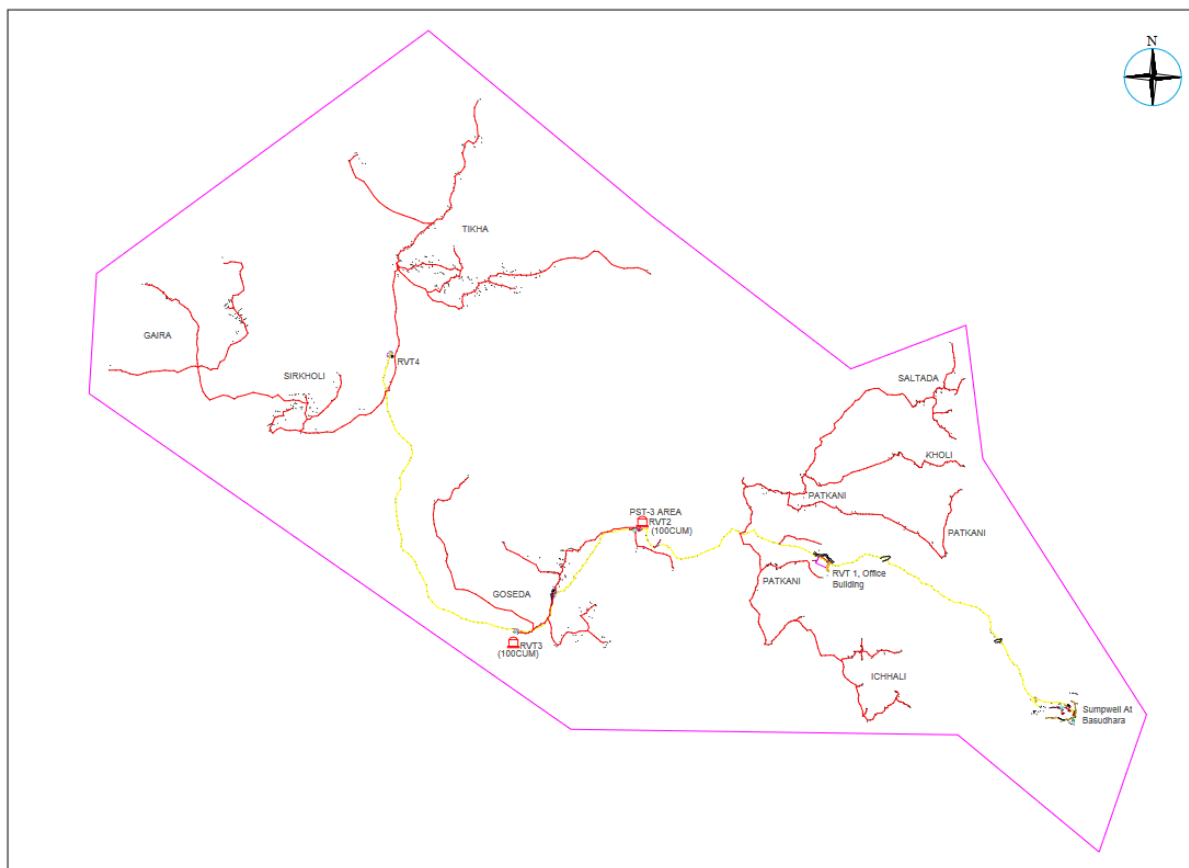
क्र.सं	संकलन/उत्खनन क्षेत्र	नदि/खोला	वार्ड नं.	जि.पि.स	संकलन / उत्खनन गरिने वस्तु	गहिराई मि.	क्षेत्रफल वर्ग मि.	परिमाण घन मि.	दिगो उत्खनन परिमाण			कैफियत
									गहिराई मि.	क्षेत्रफल वर्ग मि.	परिमाण घन मि.	
१	वाड	सेती	८	२९°११'२.१९"N ८१°११'१७.९२"E	ढुङ्गा, गिट्टी, बालुवा	०७०.	१०००	३१००	०३५.	२५००.	८७५.	उत्खनन् क्षेत्रमा सडकको पहुच भएको
२	गोदरे खोला	गोदरे	३	२९°१५'५५.१२"N ८०°५५'४२.४५"E	ढुङ्गा, गिट्टी, बालुवा	०६०.	३०००	१८००	०५५.	१५००.	८१०.	उत्खनन् क्षेत्रमा सडकको पहुच भएको
३	शोलाताडा	सेती	५	२९°१४'४६.१९"N ८०°५७'१८.१८"E	ढुङ्गा, गिट्टी, बालुवा	१००.	११०००	१५०००	०६०.	७५००.	४५००.	उत्खनन् क्षेत्रमा सडकको पहुच भएको
४	मटेला I	सेती	४	२९°१४'५८.१७"N ८०°५७'२४.८१"E	ढुङ्गा, गिट्टी, बालुवा	१३०.	३२००	४१६०	०६५.	२२४०.	१४५६.	उत्खनन् क्षेत्रमा सडकको पहुच भएको
५	बालुवा	सेती	७	२९°१३'५८.३४"N ८०°५७'३८.७२"E	ढुङ्गा, गिट्टी, बालुवा	१२५.	२००००	२५०००	०६३.	१००००.	६२५०.	उत्खनन् क्षेत्रमा सडकको पहुच भएको

प्रारम्भिक वातावरणीय परीक्षणको प्रतिवेदन दिपायल सिलगढी नगरपालिका, सिलगढी, डोटी

सेती नदी र गोदरे खोलाबाट दिगोरूपमा नदीजन्य पदार्थ (ढुङ्गा, गिट्टी, बालुवा, भरान आदि) उत्खनन तथा सङ्कलन

क्र.सं	संकलन/उत्खनन क्षेत्र	नदि/खोला	वार्ड नं.	जि.पि.स	संकलन / उत्खनन गरिने वस्तु	गहिराई मि.	क्षेत्रफल वर्ग मि.	परिमाण घन मि.	दिगो उत्खनन परिमाण			कैफियत
									गहिराई मि.	क्षेत्रफल वर्ग मि.	परिमाण घन मि.	
६	मटेला II	सेती	४	२९°१४'४२.८७"N ८०°५७'२२.९०"E	ढुङ्गा, गिट्टी, बालुवा	१२०.	१०४००	१२४८०	०६०.	५२००.	३१२०.	उत्खनन् क्षेत्रमा सडकको पहुच नभएको
७	बरातदेउ	सेती	३	२९°१५'१७.१९"N ८०°५६'९.०२"E	ढुङ्गा, गिट्टी, बालुवा	०८०.	१२०००	१६००	०४०.	६०००.	२४००.	उत्खनन् क्षेत्रमा सडकको पहुच नभएको
८	सेती नदी पुल नजिक	सेती	४	२९°१५'१३.९४"N ८०°५६'३५.२९"E	ढुङ्गा, गिट्टी, बालुवा	०९०.	११८००	१७८२०	०८९.	११००.	८०९९.	उत्खनन् क्षेत्रमा सडकको पहुच नभएको
जम्मा दिगो उत्खनन् परिमाण (वार्षिक)												२७४३०.
जम्मा दिगो उत्खनन् परिमाण (दैनिक)												१०१५९.

Annex VII: Schematic diagram of the pipe layout



## Annex VIII: Code of Conduct for Contractor's Personnel (ES) Form

### Note to the Bidder:

**The minimum content of the Code of Conduct form as set out by the Employer shall not be substantially modified.** However, the Bidder may add requirements as appropriate, including to take into account Contract-specific issues/risks.

The Bidder shall initial and submit the Code of Conduct form as part of its bid.

### CODE OF CONDUCT FOR CONTRACTOR'S PERSONNEL

We are the Contractor, [*enter name of Contractor*]. We have signed a contract with the Employer [*enter name of Employer*] to carry out Works [*enter description of the Works*]. These Works will be carried out at [*enter the Site and other locations where the Works will be carried out*]. Our contract requires us to implement measures to address environmental and social risks related to the Works, including the risks of sexual exploitation, sexual abuse and sexual harassment.

This Code of Conduct is part of our measures to deal with environmental and social risks related to the Works. It applies to all our staff, laborers and other employees at the Works Site or other places where the Works are being carried out. It also applies to the personnel of each subcontractor and any other personnel assisting us in the execution of the Works. All such persons are referred to as "**Contractor's Personnel**" and are subject to this Code of Conduct.

This Code of Conduct identifies the behavior that we require from all Contractor's Personnel.

Our workplace is an environment where unsafe, offensive, abusive or violent behavior will not be tolerated and where all persons should feel comfortable raising issues or concerns without fear of retaliation.

### REQUIRED CONDUCT

Contractor's Personnel shall:

1. understand the expected standards of conduct and behavior and carry out his/her duties competently and diligently ;
2. comply with this Code of Conduct and all applicable laws, regulations, the Environmental and Social Management Plans and other requirements, including requirements to protect the health, safety and well-being of other Contractor's Personnel and any other person;
3. comply with labor camp rules including returning to the camp at the designated time.
4. maintain a safe working environment including by:
  - a. ensuring that workplaces, machinery, equipment and processes under each person's control are safe and without risk to health;
  - b. wearing required personal protective equipment;

- c. using appropriate measures relating to chemical, physical and biological substances and agents; and
  - d. Following applicable emergency operating procedures.
5. report work situations that he/she /they believes are not safe or healthy and remove himself/herself from a work situation which he/she reasonably believes presents an imminent and serious danger to his/her life or health;
6. treat colleagues, supervisors and community members with respect, and not discriminate against specific groups such as women, people with disabilities, migrant workers or children;
  - a. Treat children, women, men, Dalit, Janajati, people with disability, elderly people, LGBTQI+ and other excluded groups with dignity and respect and treat them equally regardless of their ethnic or social origin, class, sexual orientation, race, color, language, religion, political or other opinion, beliefs, nationality, birth or other status. Any act of GBV will be in violation of this commitment.
7. maintain good relations with local community in the project's area of influence including ensuring socially and culturally appropriate behaviors.
8. respect and comply with the GBV-related laws, regulations and guidelines of Nepal and adhere to the national legislations and Acts <sup>1</sup>
9. not engage in Sexual Harassment, which means unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature around worksite with other Contractor's or Employer's Personnel or with local host community.
10. not engage in Sexual Exploitation around worksite, which means any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another;
11. not engage in Sexual Abuse around worksite, which means the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions;
12. not engage in any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage; - including grooming or contact through digital media. Mistaken belief regarding the age of a child is not a defense. Consent from the child is also not a defense or excuse. not use any language and behaviors that are demeaning, threatening, harassing, abusive, culturally inappropriate, or sexually provocative;

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1. <sup>1</sup> Nepal has many policies and legal framework to address GBV and is also signatory to several international treaties related to GBV several GBV related international treaties and safeguard instruments : the Domestic Violence (Offense and Punishment) Act 2009; the Human Trafficking and Transportation (Control) Act 2007; The Sexual Harassment at the Workplace (Prevention) Act, 2015; the Social Practices (Reform) Act 1976; the GBV Relief Fund Regulation; the Country Code of Nepal; The Children's Act 2075 and to the several international human rights standards that Nepal is a signatory to including the UN Declaration of Human Rights, International Labor Organization (ILO) standards, Committee on the Elimination of Discrimination against Women (CEDAW), Beijing Platform, Declaration on the Elimination of Violence Against Women and Children, and the United Nations Convention on the Rights of the Child (UNCRC)

13. not engage in physical touch or activities with sexual intention, sexual harassment demonstrating sexual object, audio visual object, or any other seductive materials as per The Sexual Harassment (Prevention) at Workplace Act 2015;
14. not engage in any sexual misconduct including SEA/SH using information and communication technology.
15. Promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex is considered “non-consensual” within the scope of this code;
16. complete relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH);
17. report violations of this Code of Conduct, including acts of GBV/SEA/SH by fellow contractors, staff, or supervisors; and
18. not retaliate against any person who reports violations of this Code of Conduct, whether to us or the Employer, or who makes use of the grievance mechanism for Contractor’s Personnel or the project’s Grievance Redress Mechanism.

### **RAISING CONCERNS**

If any person observes behavior that he/she believes may represent a violation of this Code of Conduct, or that otherwise concerns him/her, he/she should raise the issue promptly. This can be done in either of the following ways:

1. Contact [*enter name of the Contractor’s Social Expert with relevant experience in handling gender-based violence*] in writing at this address [ ] or by telephone at [ ] or in person at [ ]; or
2. Call [ ] to reach the Contractor’s hotline (*if any*) and leave a message.
3. Call or contact project GRM (in specific project GRM focal point)

The person’s identity will be kept confidential, unless reporting of allegations is mandated by the country law. Anonymous complaints or allegations may also be submitted and will be given all due and appropriate consideration. We take seriously all reports of possible misconduct and will investigate and take appropriate action. We will provide warm referrals to service providers that may help support the person who experienced the alleged incident, as appropriate.

There will be no retaliation against any person who raises a concern in good faith about any behavior prohibited by this Code of Conduct. Such retaliation would be a violation of this Code of Conduct.

### **CONSEQUENCES OF VIOLATING THE CODE OF CONDUCT**

Any violation of this Code of Conduct by Contractor’s Personnel may result in serious consequences, up to and including suspension, termination and possible referral to legal authorities.

### **FOR CONTRACTOR’S PERSONNEL:**

I have received a copy of this Code of Conduct written in a language that I comprehend. I understand that if I have any questions about this Code of Conduct, I can contact [*enter name of Contractor’s contact person(s) with relevant experience*] requesting an explanation.

Name of Contractor's Personnel: [insert name]

Signature: \_\_\_\_\_

Date: (day month year): \_\_\_\_\_

Countersignature of authorized representative of the Contractor:

Signature: \_\_\_\_\_

Date: (day month year): \_\_\_\_\_

**ATTACHMENT 1:** Behaviors constituting Sexual Exploitation and Abuse (SEA) and behaviors constituting Sexual Harassment (SH)

## **ATTACHMENT 1 TO THE CODE OF CONDUCT FORM**

### **BEHAVIORS CONSTITUTING SEXUAL EXPLOITATION AND ABUSE (SEA) AND BEHAVIORS CONSTITUTING SEXUAL HARASSMENT (SH)**

The following non-exhaustive list is intended to illustrate types of prohibited behaviors.

**(1) Examples of sexual exploitation and abuse** include, but are not limited to:

- A Contractor's Personnel tells a member of the community that he/she can get them jobs related to the work site (e.g. cooking and cleaning) in exchange for sex.
- A Contractor's Personnel that is connecting electricity input to households says that he can connect women headed households to the grid in exchange for sex.
- A Contractor's Personnel rapes, or otherwise sexually assaults a member of the community.
- A Contractor's Personnel denies a person access to the Site unless he/she performs a sexual favor.
- A Contractor's Personnel tells a person applying for employment under the Contract that he/she will only hire him/her if he/she has sex with him/her.
- A Contractor's Personnel dates or has a romantic relationship with a child under 18 years old, keeps secrets with children, or displays favoritism.
- A Contractor's Personnel has inappropriate physical contact with children under 18 years old, including kisses and showing affection of any kind in an isolated area.
- A Contractor's Personnel holds private electronic communication with children under 18 years old, including via social media, as well as transportation of children unless for authorized purposes.
- A Contractor's Personnel requests sexual favors in return for protection, food, shelter, payment of medical or school fees, or any other form of assistance or promise of assistance.

**(2) Examples of sexual harassment in a work context**

- Contractor's Personnel comment on the appearance of another Contractor's Personnel (either positive or negative) and sexual desirability.
- When a Contractor's Personnel complains about comments made by another Contractor's Personnel on his/her appearance, the other Contractor's Personnel comment that he/she is "asking for it" because of how he/she dresses.
- Unwelcome touching of a Contractor's or Employer's Personnel by another Contractor's Personnel.
- A Contractor's Personnel tells another Contractor's Personnel that he/she will get him/her a salary raise, or promotion if he/she sends him/her naked photographs of himself/herself.
- A Contractor's Personnel makes jokes that are uncomfortable, frightening, or hurtful, or name calls with sexual epithets.

## Form CON – 4

### Sexual Exploitation and Abuse (SEA) and/or Sexual Harassment Performance Declaration

*[The following table shall be filled in by the Bidder, each member of a Joint Venture and each subcontractor proposed by the Bidder]*

Bidder's Name: *[insert full name]*

Date: *[insert day, month, year]*

Joint Venture Member's or Subcontractor's Name: *[insert full name]*

RFB No. and title: *[insert RFB number and title]*

Page *[insert page number]* of *[insert total number]* pages

<b>SEA and/or SH Declaration</b> <b>in accordance with Section III, Qualification Criteria, and Requirements</b>
<p>We:</p> <p><input type="checkbox"/> (a) have not been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations</p> <p><input type="checkbox"/> (b) are subject to disqualification by the Bank for non-compliance with SEA/ SH obligations</p> <p><input type="checkbox"/> (c) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations. An arbitral award on the disqualification case has been made in our favor.</p> <p><input type="checkbox"/> (d) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations for a period of two years. We have subsequently demonstrated that we have adequate capacity and commitment to comply with SEA/ SH obligations.</p> <p><input type="checkbox"/> (e) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations for a period of two years. We have attached evidence demonstrating that we have adequate capacity and commitment to comply with SEA/ SH obligations.</p>
<i>[If (c) above is applicable, attach evidence of an arbitral award reversing the findings on the issues underlying the disqualification.]</i>
<i>[If (d) or (e) above are applicable, provide the following information:]</i>
Period of disqualification: From: _____ To: _____
If previously provided on another Bank financed works contract, details of evidence that demonstrated adequate capacity and commitment to comply with SEA/ SH obligations ( <b>as per (d) above</b> )
Name of Employer: _____
Name of Project: _____
Contract description: _____
Brief summary of evidence provided:

<hr/> <hr/> <p>Contact Information: (Tel, email, name of contact person): _____</p> <hr/>
<p>As an alternative to the evidence under (d), other evidence demonstrating adequate capacity and commitment to comply with SEA/ SH obligations (<b>as per (e) above</b>) [<i>attach details as appropriate</i>].</p>

**Annex IX: Photographs**

**1. During Public Consultation meeting**

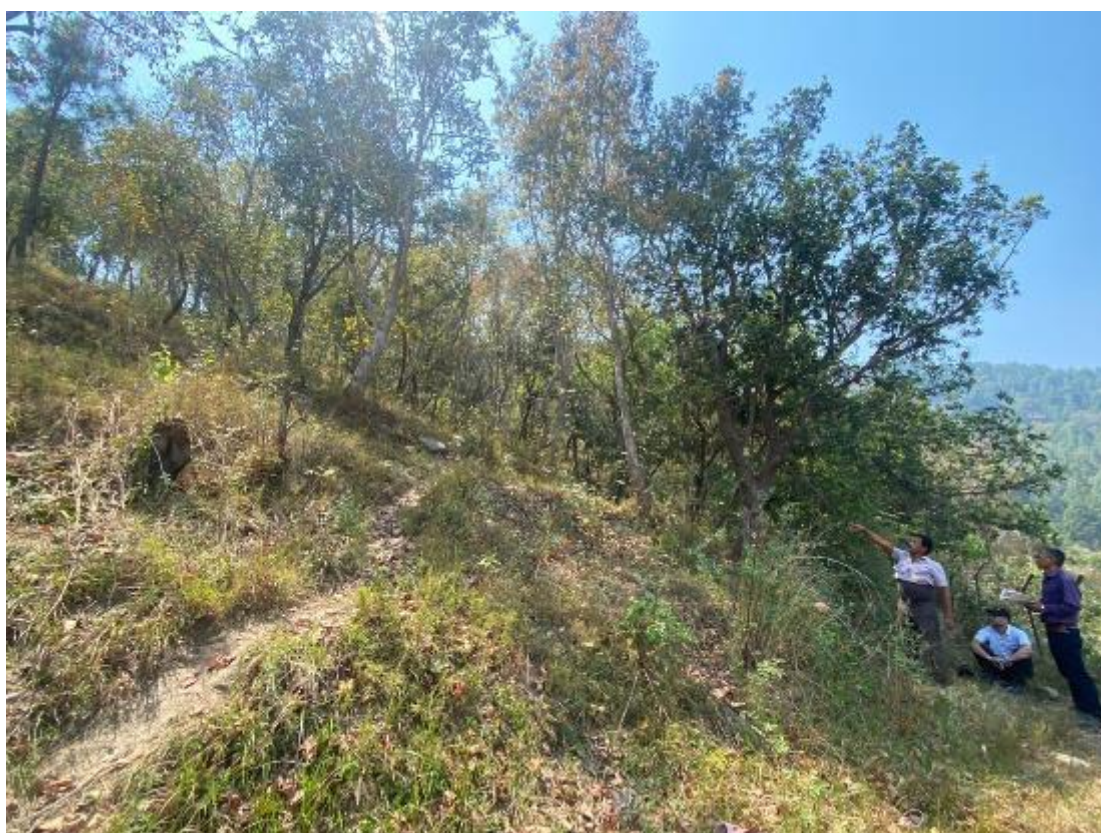
**(a) Goseda, Dipayal Silgadhi Municipality, Ward no 1**



**(b) Dipayal Silgadhi Municipality, Ward no 3**



**2. Reservoir Tank 3, Dipayal Silgadhi Municipality, Ward 1**



**3. Reservoir Tank 2, Dipayal Silgadhi Municipality, Ward 1**



**4. Treatment Plant Area, Dipayal Silgadhi Municipality, Ward 3**



**5. Sump Well Area, Basundhara, Dipayal Silgadhi Municipality, Ward no. 3**



**6. FGD/ Consultation with the vulnerable community at Saran**



**Annex X: Monitoring Format**

**तिखा, गोसेडा, सिरखोली गाउँ र गैरागाउँखानेपानीआयोजनाको**

**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 अबलोकन 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			
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	
-------------------------------------	--

## तिखा, गोसेडा, सिरखोली गाउँ र गैरागाउँखानेपानीआयोजनाको

### 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 सार्वजनिकशौचालय क्षेत्र अवलोकन गर्ने	छु छैन	
ध्वनी प्रदुषण	बाटो र सार्वजनिकशौचालय क्षेत्र अवलोकन गर्ने	छु छैन	
खुला रूपमा दिशा पिसाब गरेको	सार्वजनिकशौचालय क्षेत्र वरपर अवलोकन गर्ने	छु छैन	
फोहरमैला जथाभावी फालेको	सार्वजनिकशौचालय 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	छ	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	
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जाँच/रुजु गर्ने अधिकारीको नाम र सही	
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**Annex XI: Stakeholder Engagement Plan**



**Government of Nepal**  
**Ministry of Water Supply**  
**Department of Water Supply and Sewerage Management**  
**Water Sector Governance and Infrastructure Support Project**  
Project Implementation Unit  
Dipayal Silgadhi Municipality, Doti

**Tikha Goseda Sirkholigaon Gairagaon Water Supply Project**

**Dipayal Silgadhi Municipality, Doti**

**NP-DWSSM-290178-CS-QCBS**

**Stakeholder Engagement Plan**

**AARVEE–FBC–PARAGON JV**

**Lalitpur-1, Bakhundole**

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## **ABBREVIATIONS AND ACRONYMS**

CBOs : Community-based organizations

E&S : Environmental and Social

ESF : Environmental and Social Framework

ESMF: Environmental and Social Management Framework

ESMP : Environmental and Social Management Plan

ESS : Environmental and Social Standards

GBV : Gender Based Violence

GRM : Grievance Redress Mechanism

LL : Local Level

M&E : Monitoring and Evaluation

NEFIN : National Federation of Indigenous Nationalities

OH&S : Occupational Health and Safety

OHS : Occupational health and safety

PMU : Project Management Unit

PIU: Project Implementation Unit

MST: Municipal Support Team

SEP : Stakeholder Engagement Plan

WB : World Bank

## **1. Objectives of SEP**

The overall objectives of the SEP are as follows:

- To identify project stakeholders and assess their interest and support for the project, (particularly vulnerable groups, and to enable the views of stakeholders to be taken into improve environmental and social sustainability of the project, and to ensure inclusiveness in the project)
- To provide a means for effective and inclusive engagement with project-affected parties and other interested parties throughout the project life cycle.
- To ensure that appropriate project information on environmental and social risks and impacts are disclosed to stakeholders in a timely accessible.
- The SEP has been developed proportionate to the nature and scale of the project and its potential risks and impacts.

## **2. STAKEHOLDER IDENTIFICATION AND ANALYSIS:**

This section details the procedures that the project has followed to identify project stakeholders who will be informed and consulted about the project, including individuals, institutions, groups, or communities. It also identifies Indigenous Peoples (IPs), vulnerable and disadvantaged groups that may have limitations in participating and/or in understanding project information and/or in participating in the consultation process.

### **2.1 Procedures for Identification and Analysis**

For the purposes of this SEP, as defined in the World Bank ESF, “stakeholder” refers to individuals or groups who

(i) are impacted or likely to be impacted directly or indirectly, positively or adversely, by the project (also known as ‘affected parties’); and,

(ii) may have an interest in the project and includes individuals or groups whose interests may be affected by the project and who have the potential to influence the project outcomes in any way.

Stakeholder identification begins with initial screening of the project, often followed by stakeholder mapping through field visits and consultations with potential project stakeholders.

The project will:

- Contact officials at local levels to understand potential project stakeholders.
- Use secondary sources, such as consulting with women’s group, school teachers, community leaders and community-based organizations (CBO), among others, to gather the names of potential stakeholders .
- Prepare a list of stakeholders who represent the diversity in terms of gender, indigenous communities, ethnic minorities, vulnerable groups such as Dalits and others adversely impacted communities.

### **2.2 Stakeholder Categorization**

For the purposes of effective and tailored engagement, stakeholders of the project can be divided into the following core categories:

#### **Affected Parties:**

Individuals, groups and other entities within the project area that are directly impacted by the project-related activities and/or have been identified as most susceptible to the change associated with the project, and who need to be closely engaged in identifying impacts and their significance, as well as in decision-making on mitigation and management measures;

#### **Other Interested Parties:**

Individuals/groups/entities that may not experience direct impacts from the project but who consider or perceive their interests as being affected by the project and/or who could affect the project and the process of its implementation in some way.

### **3. Stakeholder engagement strategy**

#### **3.1 Major Engagement strategy:**

- ✓ Maintain contact details of the individuals/institutions categorized in the group and update regularly
- ✓ Maintain regular and close contact with stakeholders
- ✓ Organize pre-informed quarterly consultation meeting
- ✓ Provide updates about the project including the past and those upcoming.
- ✓ Organize exposure visits to showcase successful cases of implementation, if required.

**3.2 Other interested parties:** For stakeholders falling under this group, the project will engage in efforts to keep them informed. The E&S staff will organize targeted consultations with the group at least every six months and inform them about the project status, planned activities and possible E&S risks. The E&S staff will prepare a minute with signatures of the participants and the minutes will include the issues discussed and the decisions or actions agreed in the consultative meeting. At the end of every meeting E&S staff will readout the minutes and a copy of the minute will be made available to the local ward office of Dipayal Silgadhi Municipality.

#### **3.3 Disadvantaged /vulnerable individuals or groups:**

The disadvantaged and vulnerable groups represent those underrepresented and voiceless people who may not have access to project information, articulate their concerns and priorities about potential project impacts, take opportunities unveiled by the project and participant in various benefit sharing activities of the project mainly due to a number of socio-economic barriers, such as poverty, illiteracy and lower social status, among others.

#### **3.4 Stakeholder consultation during project implementation:**

During the implementation of the project, the PMU will continue to conduct stakeholder engagement activities, particularly with federal, provincial and local government agencies. Similarly, it will also engage local levels, affected people/communities, vulnerable groups and will provide regular updates on project development and implementation of the mitigation measures, along with sharing project related message and materials with all stakeholders.

**Table 1: Plan for Stakeholder Engagement**

Topic of consultation/Messag e	Target Stakeholders	Method(s) of Engagement	Frequency /Time Frame	Responsibi lities
<b>Project Phase: Planning and Preparation</b>				
<p><b>Project affected communities/families</b></p> <ul style="list-style-type: none"> <li>• The objective and scope of the project</li> <li>• The Environmental and Social policies and scopes</li> <li>• The potential Environmental and Social risks and impacts, and ESMF, RPF, SEP, LMP, and ESCP of the project</li> </ul> <p>ESIA, ESMP, IPDP, and other plans of Tikha Goseda Sirkholigaon Gairagaon Water Supply Project.</p> <ul style="list-style-type: none"> <li>• SEA/SH risks and impacts and SEA/SH Action Plan</li> <li>• Grievance Redress Mechanisms (GRM)</li> </ul>	<ul style="list-style-type: none"> <li>• Local community of project affected ward number of 1&amp;3 of Dipayal Silgadhi Municipality</li> <li>• Local level elected representatives of affected wards.</li> </ul>	<ul style="list-style-type: none"> <li>• Physical one –on-one or group meeting</li> <li>• Mass media/social media communication – Facebook, radio, brochures</li> <li>• Project information sheets such as project information document (PID), FAQs, GRM</li> <li>• Use of female facilitators or youth/ local facilitators</li> <li>• Use of local language.</li> <li>• Targeted outreach activities and FGDs with women and other such as Dalits</li> </ul>	Throughout project planning and preparation	PMU,PST, PIU,MST and concerned sub-projects
<p><b>Interested Parties</b></p> <ul style="list-style-type: none"> <li>• The objective and scope of the project</li> <li>• The Environmental and Social policies and scopes</li> <li>• The potential Environmental and Social risks and impacts, and</li> </ul>	<ul style="list-style-type: none"> <li>• Local community of project affected ward number of 1&amp;3 of Dipayal Silgadhi Municipality</li> <li>• Local level elected representatives of affected wards.</li> </ul>	Physical one –on-one or group meeting	Throughout project planning and preparation	PIU,MST and concerned sub-projects

Topic of consultation/Messag e	Target Stakeholders	Method(s) of Engagement	Frequency /Time Frame	Responsibi lities
<p>ESMF, RPF, SEP, LMP</p> <ul style="list-style-type: none"> <li>● SEA/SH risks and impacts and SEA/SH Action Plan</li> <li>● Grievance Redress Mechanisms (GRM)</li> </ul>				
<p><b>Disadvantaged/Vulnerable groups</b></p> <ul style="list-style-type: none"> <li>● The objective and scope of the project</li> <li>● The Environmental and Social policies and scopes</li> <li>● The potential Environmental and Social risks and impacts, and ESMF, RPF, SEP, LMP, and ESCP</li> <li>● SEA/SH risks and impacts and SEA/SH Action Plan</li> <li>● Grievance Redress Mechanisms (GRM)</li> </ul>	<ul style="list-style-type: none"> <li>● Disadvantage and vulnerable peoples</li> <li>● Ddalit partly in the project area.</li> <li>● Women headed HHs</li> <li>● Children and elderly people</li> <li>● People with disabilities (PWD)</li> </ul>	<ul style="list-style-type: none"> <li>● Mass media/social media communication – Facebook, radio, brochures</li> <li>● Project information sheets such as project information document (PID), GRM</li> <li>● Use of female facilitators or youth/ local facilitators</li> <li>● Use of local language.</li> <li>● Targeted outreach activities and FGDs with women and other vulnerable groups, such as Dalits</li> </ul>	Throughout project planning and preparation	PIU,MST and concerned sub-projects
<b>Construction Phase</b>				
<p><b>Project Affected Parties</b></p> <ul style="list-style-type: none"> <li>● Project scope and ongoing activities, and project status</li> <li>● Revision/updates of ESMF, ESMP, RAPs, LMP, SEP of the sub-project, SEA/SH Action Plan</li> </ul>	<ul style="list-style-type: none"> <li>● PIU/MST staffs, staffs of contractors, workforce of contractors, sub-contractors</li> <li>● Local community within the project area of Tikha,Goseda,Sirkholigau,Gairagau, Ichhali,Saran,</li> </ul>	<ul style="list-style-type: none"> <li>● Group meeting, physical one –on-one</li> <li>● Mass media/social media communication – Facebook, radio,</li> </ul>	Throughout the project implementation	PIU,MST and concerned sub-projects

Topic of consultation/Messag e	Target Stakeholders	Method(s) of Engagement	Frequency /Time Frame	Responsibi lities
<ul style="list-style-type: none"> <li>● Implementation of mitigation measures</li> <li>● Functioning of the GRM</li> <li>● Project-related information disclosure</li> <li>● Stakeholder consultations and related activities</li> <li>● Other E&amp;S concerns</li> </ul>	<p>Dipayal.</p> <ul style="list-style-type: none"> <li>● Representatives of Local government of affected wards (1&amp;3)</li> </ul>	<ul style="list-style-type: none"> <li>● brochures</li> <li>● Project information sheets such as project information document (PID), GRM.</li> <li>● Use of female facilitators or youth/ local facilitators</li> <li>● Use of local language.</li> <li>● Targeted outreach activities and FGDs with women and other vulnerable groups, such as Dalits</li> </ul>		
<p><b>Interested Parties</b></p> <ul style="list-style-type: none"> <li>● Project scope and ongoing activities, and project status</li> <li>● Revision/updates of ESMF, ESMP, SEP, SEA/SH Action Plan</li> <li>● Implementation of mitigation measures</li> <li>● Functioning of the GRM</li> <li>● Project-related information disclosure</li> <li>● Stakeholder consultations and related activities</li> </ul>	<ul style="list-style-type: none"> <li>● Leaders of Water Users Community, farmers group and CBOs</li> </ul>	<p>Group meeting</p>	<p>Throughout the project implementation</p>	<p>PIU,MST and concerned sub-projects</p>

Topic of consultation/Messag e	Target Stakeholders	Method(s) of Engagement	Frequency /Time Frame	Responsibi lities
<ul style="list-style-type: none"> <li>● Employment priority to project affected peoples</li> <li>● Other E&amp;S concerns</li> </ul>				
<p><b>Disadvantaged/Vulnerable groups</b></p> <ul style="list-style-type: none"> <li>● Project scope and ongoing activities, and project status</li> <li>● Revision/updates of ESMF, ESMP, SEP, SEA/SH Action Plan</li> <li>● Implementation of mitigation measures</li> <li>● Functioning of the GRM</li> <li>● Assistance to vulnerable HHs</li> <li>● Project-related information disclosure</li> <li>● Stakeholder consultations and related activities</li> <li>● Activities specific to disadvantaged and vulnerable groups</li> <li>● Other E&amp;S concerns</li> </ul>	<ul style="list-style-type: none"> <li>● Disadvantage and vulnerable peoples and dalit partly in the Project Area.</li> <li>● women headed HHs</li> <li>● Elderly people and children</li> <li>● People with Disabilities (PWD)</li> </ul>	<ul style="list-style-type: none"> <li>● Physical one-on-one and group meeting</li> <li>● Mass media/social media communication – Facebook, radio, brochures</li> <li>● Project information sheets such as project information document (PID), FAQs, GRM</li> <li>● Use of female facilitators or youth/local facilitators</li> <li>● Use of local language.</li> <li>● Targeted outreach activities and FGDs with women and other vulnerable groups, such as Dalits</li> </ul>	<p>Throughout the project implementation</p>	<p>PIU,MST and concerned sub-projects</p>
<p><b>Operation Phase</b></p>				

Topic of consultation/Messag e	Target Stakeholders	Method(s) of Engagement	Frequency /Time Frame	Responsibi lities
<ul style="list-style-type: none"> <li>● Environmental and Road Safety</li> </ul>	<ul style="list-style-type: none"> <li>● Disadvantage and vulnerable peoples and dalit partly in the Project Area.</li> <li>● women headed HHs</li> <li>● Elderly people and children</li> <li>● People with Disabilities (PWD)</li> <li>● Students of nearby basic and secondary schools</li> <li>● Other community people</li> </ul>	Orientations, group meetings	One-time	PIU,MST and concerned sub-projects
<b><i>Decommissioning Phase</i></b>				
<ul style="list-style-type: none"> <li>● Understanding the perception of beneficiaries about the activities and services provided by the project</li> </ul>	<ul style="list-style-type: none"> <li>● All targeted beneficiaries of-Tikha,Goseda,Sirkho li Gau, Gaira Gau.</li> </ul>	Orientations, group meetings	One time	PIU,MST and concerned sub-projects

### 3.5 Reporting Back

The project recognizes that enabling stakeholders to understand how the feedback they provided during consultations has been received and either adopted or not considered, during project design and implementation are important factors to build trust. Reporting back to stakeholders helps demonstrate that the project seriously takes suggestions, comments and complaints raised by local community and if/how these have been incorporated and addressed into the project. Understanding stakeholder concerns and addressing these early in the project design and before implementation can help to avoid any project issues during implementation and can help to secure consensus for the project from key stakeholders. The project will adopt the following mechanisms to manage stakeholder feedback and comments, and to report back to the stakeholders:

- The project will ensure that feedback and comments received through comments boxes, online platforms in the social media, project email, and dedicated telephone numbers are acknowledged by registering them in a logbook and will be addressed in an appropriate and timely manner.

□ A periodic review of the implementation of the SEP will continue to incorporate new issues that have come to light, and concerns and queries raised by the stakeholders during the project implementation. It will also provide information on how the feedback has been considered and addressed by the project.

#### **4. IMPLEMENTATION ARRANGEMENTS**

This section explains that institutional arrangements that the project aims to deploy for the effective implementation of the SEP.

##### **4.1 Organizational structure for implementing SEP**

The project will appoint an Environmental Specialist and a Social Development Specialist, who will be core team members of PIU/MST, which is led by a Project. The E&S Specialists will have the overall responsibility of ensuring effective implementation of the SEP, monitoring SEP-related activities and preparing a quarterly report on implementation of the SEP,

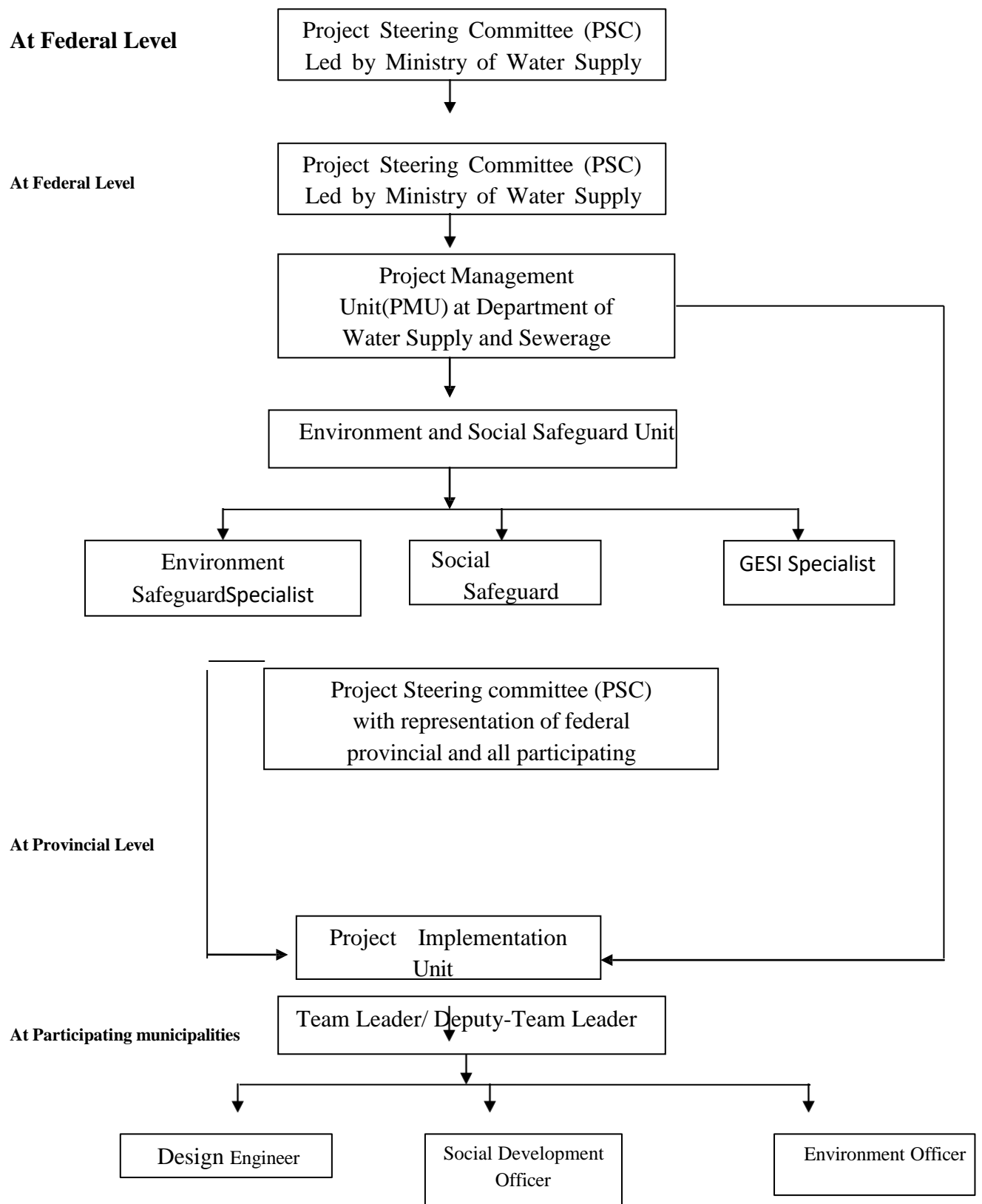
##### **6.1 4.1 Social Accountability and Grievance Redress Mechanism (Project level GRM and Central GRM)**

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 stakeholder raise any concerns or complaints, or to appeal any disagreeable decisions, practices and activities arising from the project. 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 WNo.1 and 3.

**Figure 4.1: Organizational Structure for Implementing SEP**



## 4.2 The roles and responsibilities of concerned units/agencies and individuals

The roles and responsibility of key agencies/units envisaged for the implementation and operation of the project is shown in the table below.

**Table 4.1: Roles and Responsibility of Related Units/Agencies**

Key units/agencies	Roles and responsibilities
<b>World Bank:</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Implementation of World Bank’s Environmental and Social Framework (ESF), work plans, directives and guidelines as required, review monitoring report.</li> <li><input type="checkbox"/> Ensuring the project activities as per the various guidelines and directives issued by the government and other relate organizations,</li> <li><input type="checkbox"/> Planning and guiding stakeholder engagement activities for the success of project.</li> <li><input type="checkbox"/> Ensuring effective management of GRM and timely resolutions.</li> <li><input type="checkbox"/> Taking prompt corrective actions as and when required to ensure effective implementation of the SEP.</li> <li><input type="checkbox"/> Overall evaluation of the SEP.</li> </ul>
<b>Project Implementation Unit (PIU)</b>	<p>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.</p>
<b>Municipal WASH (M-WASH) Unit</b>	<p>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</p>

	Operations Act, 2017.
<b>Project Support Team (PST)</b>	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.
<b>Municipal Support Team (MST)</b>	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.
<b>Contractor</b>	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.
<b>Sub-Contractor</b>	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.
<b>E&amp;S Specialist/E&amp;S Consultant</b>	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.
<b>Affected Wards, Municipality and District Coordination Committee (DCC)</b>	Provide recommendations to the proponent with comments and suggestions and assist proponent in the project implementation.