



Government of Nepal
Ministry of Water Supply
Department of Water Supply and Sewerage Management
Water Sector Governance and Infrastructure Support Project
Project Implementation Unit
Sharada Municipality, Salyan

Detailed Project Report of Jarkhu Water Supply Project

Sharada Municipality, Salyan

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 VI: Environmental and Social Management Plan

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AARVEE-FBC-PARAGON

JV

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LIST OF ACRONYMS & ABBREVIATIONS

AMSL	Above Mean Sea Level
CBS	Central Bureau of Statistics
DLP	Defects Liability Period
DMA	District Metering Area
DWSSM	Department of Water Supply and Sewerage Management
DR	Dosing Unit
DoR	Department of Road
E&S	Environmental and Social Screening
EPR	Environment Protection Rule
ERVt	Existing RVT
ESRI	Environmental Systems Research Institute, Inc.
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
GESI	Gender Equality & Social Inclusion
GH	Guard House
GI	Galvanized Iron
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
GoN	Government of Nepal
HDPE	High-Density Polyethylene Pipe
HH	Household
HP	Horse Power
HIV	Human Immunodeficiency Virus
ICIMOD	International Centre for Integrated Mountain Development
IDA	International Development Association
JWSP	Jarkhu Water Supply Project
KM	Kilometre
Kph	Kilometre per Hour
kVA	kilo Volt Amperes
LHS	Left Hand Side
LMP	Labour Management Plan

MLD	Millions of Liters per Day
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
NDWQS	National Drinking Water Quality Standard
ODF	Open Defecation Free
PAP	Project Affected Person
PCP	Pump Control Panel
PIC	Project Implementation Committee
PIU	Project Implementation Unit
PMU	Project Management Unit
PPE	Personal Protective Equipment
PR	Primary Reservoir
PRVT	Proposed RVT
PST	Project Support Team
PST	Pumping Station
PH	Pump House
RAP	Resettlement Action Plan
RHS	Right Hand Side
RVT	Reservoir Tank
STD	Sexually transmitted Diseases
STO	Store
TL	Transmission Line
TRVT	Transmission Reservoir Tank
USD	United States Dollar
VDC	Village Development Committee
Vs.	Versus
WaSGISP	Water Sector Governance and Infrastructure Support Project
WASH	Water, Sanitation and Hygiene

WHO	World Health Organization
WSP	Water Supply Plan
WSUC	Water Supply & Sanitation Users 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

Sharada Municipality is located in the Salyan District of Karnali Province of Nepal. The municipality was established in 2014 (2071 BS) as a local government of Nepal by merging Dandagaun, Hiwalcha, Kajeri, Khalanga, Marke, Saijuwal Takura, and Syanikhal Village Development Committees (VDCs) on May 18, 2014.

Chatreshwari Rural Municipality and Bagchaur Municipality surround Sharada Municipality on the East, Bangad Kupinde Municipality on the West, Dhorchaur Rural Municipality on the North and Chatreshwari Rural Municipality and Kalimati Rural Municipality on the South. The headquarters of the Sharada Municipality is located in Khalanga, Salyan.

Sharada Municipality intends to implement proposed new Jarkhu Water Supply Project (JWSP) located at Sharada Municipality wards no. 4, 5, 8, 9 & 10 under WaSGISP with an estimated budget allocation of 7.6 million USD. The project area includes all settlements of Ward No 8 (Marke, Simkharkha, Jwalapur, Ood Gau, Rare, Kati Gau) and Ward No 10 (Madana, Takura, Syani Bajar, Jaluke, Thulokhola, Chhera, Badachaur, Bhanga Chaur etc), Ward No 9 (Aara, Mel Takura, Sun Chaur, Siure, Dhaanchhare etc), Ward No 5 (Duldhara Pokhara, Dhand, Ratamata, Kain Pani, Tallo Marke etc) and Ward No 4 (Suntakura, Basnet Gau).

Table 1: Service area of the WS System

SN	W. No.	Name of the Covered Settlements of JWSP
1	WN 4	Suntakura and Basnet Gau
2	WN 5	Tallo Marke, Dhuldhara Pokhara, Dhand, Ratamata and Kain Pani
3	WN 8	Marke, Ood Gau, Simkharka, Jwalapur, Kati Gau and Rare
4	WN 9	Aara, Mel Takura, Sun Chaur, Siure, Dhaanchhare
5	WN 10	Jaluke, Chhera, Bhanga Chaur, Madana, Syani Bazzar, Bada Chaur and Takura

Water Extraction and Discharge: There are several existing small water supply schemes which depend on local tiny sources which used to get deplete in dry season and insufficient in other season as well. Thus, the existing service is insufficient, unsafe and unreliable. To address these issues of water shortage, Jharkhu WSP is envisioned. So, this is totally new project where only three existing RVTs are proposed to use in this project.

Jarkhu Spring is the most reliable identified source for the proposed lift or pump. Jarkhu spring a source is the only perennial spring source located in Ward No. 10 of the municipality (former Ward 9 of Hiwalcha VDC). The required design discharge for the Jarkhu WS system will be collected in intake at the spring location and transferred to WTP and RVT1 on the same bank of the Jarkhu River at Tallo Jaluke by gravity.

The safe yield of this spring is greater than 30 LPS, measured by Venturi meter and bucket method in dry season. The amount of water required for the proposed Jharkhu WSP is only around 11 LPS or (0.001 m³/s) which is less than 40% of the safe yield. Also, there is a river alongside the spring which is known as Mosya khola. This project doesn't use water from this khola. The discharge of Mosya Khola has been calculated and corresponding high flood level is determined and required protection structures are proposed adequately.

The service area of the JWSP is hydraulically divided into two isolated service areas by Jarkhu Khola. Two separate transmission systems have been recommended. The major service area is on the left-hand side of Jarkhu Khola (referred to as TRANS-1 System). The other minor services area is on the right-hand side of the Jarkhu Khola in Ward No. 9 of the municipality. The other minor services area is on the right-hand side of the Jarkhu Khola in Ward No. 9 of the municipality, referred to as the TRANS-2 System. The service area of the TRANS-2 system comprises only 114 HHS, which is only about 4.5% of the total proposed Jarkhu WS service area. Therefore, two sets of Transmission (Pumping) Mains are proposed in JWSP.

1.2.1 Transmission System -1 (Service Area on Left Hand Side of Jarkhu Khola)

The water is tandemly pumped from the proposed WTP (1122 amsl) to the 5th reservoir (TRVT-5) at 1,838 amsl in this transmission system (TRANS-1). The cumulative pumping head of this system is about 713m. The reservoir TRVT-5 is the main reservoir for the service area at the top of the hill which serves about 95% of the system.

In the first pumping stage, water from TRVT-1 (elevation 1125 amsl) has been proposed to pump water to TRVT-2 (elevation 1,325 amsl). In the second stage pumping water from TRVT-2 has been proposed to pump TRVT-3. This reservoir has been proposed at 1536 m amsl.

In the third stage pumping water from TRVT-3 has been proposed to pump TRVT-4. This reservoir has been proposed at Thulo Khola 1,697 m amsl. The TRVT-4 serves as a distribution as well as a balancing reservoir. This settlement consumes about 5% of the total demand of the JWSP.

In the fourth and final stage of pumping in TRANS-1 system, the water from TRVT-4 will be pumped to TRVT-5 at Siddha Park (elevation 1,838 m amsl). This RVT-5 has been proposed

at the commanding location so that all the remaining service areas have a gravitational flow. This reservoir (TRVT-5) served almost all service areas (95% of the service area).

1.2.2 Transmission System -2 (Service Area on Right Hand Side of Mosya Khola)

This transmission system serves the service area on the RHS of Mosya Khola. The settlements are Salchour and Sunchour of WN 9 of the municipality. The water is tandemly pumped from the proposed WTP (1,122 amsl) to the 3rd reservoir (TRVT-4A) at Salchour (1,765 amsl) on this side of the service area. The cumulative pumping head of the service area is about 643m.

In the first pumping stage, water from TRVT-1 (elevation 1,125 amsl) has been proposed to pump water to TRVT-2A at Tallo Sunchour (elevation 1,412 amsl).

In the second stage pumping water from TRVT-2A has been proposed to pump TRVT-3A. This reservoir has been proposed at Sunchour (1636 m amsl). The TRVT-3A serves as a distribution as well as a balancing reservoir. This settlement consumes about 5% of the total demand of the JWSP.

In the third and final pumping stage, the water from TRVT-3A has been proposed to pump to TRVT-4A at Salchour (elevation 1765 m amsl). The reservoirs TRVT-2A and TRVT-3A serve as distribution as well as balancing reservoirs. Whereas, TRVT-4 is a distribution reservoir.

As the existing pipelines are very old and undersized, it is better to build a new water system instead of rehabilitation of these pipelines to provide a higher service level with the concept of the 'one household one tap principle'. The salient features of the sub-project are given below.

Table 2: Salient features of the project

SN	Items	Description
1	Name of Project	Jarkhu Water Supply Project (JWSP)
2	Type	4-stage Pumping (Lifting) in the LHS of the service area and 3-stage Pumping (Lifting) in the RHS of the service area
3	Study Level	Detailed
4	Location Area	
	Province	Karnali Pradesh
	District	Salyan
	Municipality	Sharada
	Ward	Ward No. 4, 5, 8, 9 & 10
5	Available Facilities	
	Road	Link by Rapti Highway and Chinchu-Jararkot-Dunae HW
	Water Supply System	16 schemes (DWSSM//WUSC and Other)
	Electricity	Available

SN	Items	Description	
	Communication	Available	
	Health Services	Available	
	Banking Facilities	Available	
6	Social Status		
	Present HHs Numbers (2024)	2,685	
	Present Population (2024)	10,740	
	Base Year Population (2026)	10,740 (service area population is static since few years)	
	Design Year Population (2046)	10,790	
	Weighted Growth Rate % (WGR)	Based on Growth Rate at Each Ward	
	Projected HHs in Design Year (based on WGR)	~2,686	
7	Water Demand (MLD)		
	Base Year (2026)	0.946649 (10.91 LPS)	
	Design Year (2046)	0.942623 (10.96 LPS)	
8	Source Characteristics		
	Source Name	Jarkhu Spring	
	Source Type	Surface	
	Source Location	Within Service Area WN 10	
	Safe Yield (lps)	>30 LPS	
9	Type of Structures		
9.1	Intake Arrangement	Dynamic Filter Type Spring Intake	
9.2	Slow Sand Filters	2 units of each unit with 2 chamber design discharge for 11 lps	
9.3	Pumps Location and Capacity on LHS of Proposed Service Area	Pumping Station	No and HP
	PST (Pumping Station)	PST-1 to PST-2	2-40
		PST-2 to PST-3	2-40
		PST-3 to PST-4	2-40
		PST-4 to PST-5	2-40
9.4	Pumps Location and		

SN	Items	Description		
	Capacity on RHS of Proposed Service Area			
		PST-1A to PST-2A		2-10
		PST-2A to PST-3A		2-7.5
		PST-3A to PST-4A		2-4
9.5	Electricity line	Cumulative length of about 2200 m in LHS and 2900m in RHS		
9.6	Transformer	4 - 100 kVA in PST-1, PST-2, PST-3 and PST-4 on LHS of Service Area 2 - 25 kVA in PST-2A and PST-3A on RHS of Service Area		
9.7	Reservoir Details (all Proposed RVT are of Circular RVT)	Total		16 Nos
		Incorporated Existing RVT		3 Nos
		Proposed New		13 Nos
		RVTs in LHS Transmission Line (TRANS-1)		5 Nos
		RVTs in RHS Transmission Line (TRANS-2)		3 Nos
		RVTs for Solely Distribution		11 Nos
9.8	Capacity and Number of Reservoirs along Transmission Line on LHS (TRANS-1) and RHS (TRANS-2) TRVT (Transmission Reservoir Tank)	TRVTs	Function of RVT	Size (m ³)
		TRVT-1	Balancing (Bal)	400
		TRVT-2	Bal	200
		TRVT-3	Bal	200
		TRVT-4	Bal+Dist	200
		TRVT-5	Bal+Dist	400
		TRVT-2A	Bal+Dist	30
		TRVT-3A	Bal+Dist	30
		TRVT-4A	Dist	30
9.9	Capacity and No of Reservoir solely for distribution (N: New, E: Existing)	SN	Reservoir Name	Size (m ³)
		1	PRVT-1 (Badachaur)	30 N
		2	PRVT-4 (Marke)	200 N
		3	PRVT-5 (Duldhara Pokhra)	100 N

SN	Items	Description															
		<table border="1"> <tr> <td>4</td><td>PRVT-7 (Dhada)</td><td>100 N</td></tr> <tr> <td>5</td><td>PRVT-8 (Suntakura)</td><td>100 N</td></tr> <tr> <td>6</td><td>ERVVT-1 (Sanibazzar)</td><td>40 E</td></tr> <tr> <td>7</td><td>ERVVT-2 (Mel Takura)</td><td>50 E</td></tr> <tr> <td>8</td><td>ERVVT-3 (Simkharka)</td><td>50 E</td></tr> </table>	4	PRVT-7 (Dhada)	100 N	5	PRVT-8 (Suntakura)	100 N	6	ERVVT-1 (Sanibazzar)	40 E	7	ERVVT-2 (Mel Takura)	50 E	8	ERVVT-3 (Simkharka)	50 E
4	PRVT-7 (Dhada)	100 N															
5	PRVT-8 (Suntakura)	100 N															
6	ERVVT-1 (Sanibazzar)	40 E															
7	ERVVT-2 (Mel Takura)	50 E															
8	ERVVT-3 (Simkharka)	50 E															
10	Number of BPTs/ICs (Nos)	37															
11	No. of RVT Chamber (Bricks/RCC)	80/20															
12	Office	1-Proposed 2-storey frame structure															
13	Small Guard House	4-Nos (at WTP, TRVT-3, TRVT-5, and TRVT-3A) of RRM															
14	Dosing + Pump Control House	8 NOS of RRM															
15	Household Connection																
	New	1,685 Nos.															
	Existing	1000 Nos.															
	Fire Hydrant	13															
16	Total Length of Transmission mains pipe (m):	The cumulative length in the TRANS-1 System is about 3200m The cumulative length in the TRANS-2 system is about 4444 m.															
17	Total Length of Bulk Distribution mains pipe (km):	17.723 km															
18	Total Length of Distribution Pipe (km):	99.456 km															
19	Base Cost of WS Component NRs.	397,328,049.59															
20	Total Cost of WS Component (Incl. of all) NRs.	528,446,305.95															
21	Per Capita Cost for W/S component																

SN	Items	Description
	Per Capita Cost (for base year pop.)	NRs. 49,203.56
	Per Capita Cost (for design year pop.)	NRs. 48,975.56

Details of Reservoir Name, Type, Size in volume, Water holding capacity, DMA (District Meter Area), RVT function have been tabulated below:

Table 3: Proposed component, site location, land requirement, ownership and availability status

S.N.	Site/ Component	Location	Required land (Sq.m) and ownership (private, forest or public)	Site condition	Land availability status
1	TRVT-1 (WTP + RVT + GH+ PCP)	Sharada Municipality- ward no. 10, Jarkhu	2762 sq. meter Ownership- public land (Ailani)	Barren land in public property near Jarkhu stream.	Available, ward 10. has given consent for its use.
2	TRVT-2 (RVT + PCP)	Sharada Municipality- ward no.10, Tallo Jaluke	371 sq. meter Ownership- Patihalne Kafalgaira Community Forest	Barren land in public property.	Available, Consent letter is taken from ward office.
3	TRVT-3 (RVT + GH+ PCP)	Sharada Municipality- ward no.10, Mallo Jaluke.	508.74 sq. meter Ownership- Sharada Municipality (Kitta No. 1246)	Barren flat land (sim/pakho) above Kachhi road, which is acquired by the Municipality.	Available, Land ownership certificate in the name of Sharada Municipality.
4	TRVT-4 (RVT + PCP)	Sharada Municipality- ward no.10, Thulokhola	416 sq. meter Ownership- Barren public land	Barren land at the slope with shrubs and bushes; rocky terrain.	Available, Consent letter is taken from ward office.
5	TRVT-5 (RVT + GH+ PCP)	Sharada Municipality – ward no.10, Siddha Park	1782 sq. meter Ownership- Siddha Baje Forest land	Siddha Park; open space available at the top of the park.	Available, Consent letter taken from respective ward office and CFUG.
6	TRVT-2A (RVT +	Sharada Municipality-	296 sq. meter Ownership-	Dense forest area in	Available, Consent letter

	PCP)	ward no.9, Tallo Sunchaur	Sundhara Community Forest, Marke-9.	surrounding but open space at the proposed site. Site belongs to national and community forest.	taken from respective ward office and Sharada Municipality.
7	TRVT-3A (RVT + GH+ PCP)	Sharada Municipality- ward no.9, Mallo Sunchaur, Pun Tole near Kalika Mandir. Altitude- 1662 meters.	671 sq. meter Ownership- Public land	Open hollow field in public land 90 meters above the earthen road.	Available, Consent letter taken from respective ward office.
8	TRVT-4A (RVT + Dosing +Store)	Sharada Municipality- ward no. 9, Siure, Altitude -1791 meters.	192 sq. meter Ownership- RVT is proposed in public land above the private land of Mrs. Seti Budha.	Open barren public land at the top of the village.	Available, Consent letter taken from respective ward office for the use of public land.
9	PRVT-8	Sharada Municipality- ward no. 8, Suntakura (Simkharka)	296 sq. meter Ownership- Forest land belonging to Dhungekhani Community Forest.	Above ERVT- 3 Simkharka with an access road on open space.	Available, Consent letter taken from ward office and commitment letter from CFUG.
10	PRVT-7	Sharada Municipality- ward no. 5, Dhad to the east of Dhad settlement.	135 sq. meter, 10 m X 13.5 m Ownership- Sharada Municipalit (kitta no. 2161)	Agriculture field (Sim/ Pakho), private land purchased by Municipality from the owners as per MPIC decision through negotiation process.	Available, Land ownership certificate in the name of Sharada Municipality(atta ched in Annex).
11	PRVT-4	Sharada Municipality- ward no. 8, Marke (Naula)	427 sq. meter	Open area in public property to the South of Simkharka Army Barrack and 68 meters above the access road nearby.	Available, Consent letter taken from ward office and commitment letter from municipality

12	PRVT-5	Sharada Municipality- ward no. 5, Duldhara Pokhra, Sabuj Chautara	271 sq. meter	Public area with some vegetation near the road.	Available, Consent letter taken from ward office and commitment letter from municipality
13	PRVT-1	Sharada Municipality- ward no.10, Badachaur above Primary Health post of ward 10.	152 sq. meter Ownership- Sharada Municipality, Kitta no. 1140	Public land with some vegetation cover.	Available, Consent letter taken from ward office and commitment letter from municipality
14	Main Office	Sharada Municipality- ward no. 8, Marke Bazaar near Ward Office	300 sq. meter	Open public area near ward no. 8 office.	Available, Consent letter taken from ward office and commitment letter from municipality
15	Intake	Sharada Municipality- ward no. 10, Jarkhu source	271 sq. meter Ownership- Public land (Ailani)	Full of bushes and shrubs; spring water coming from rocky slope aquifers	Available, Consent letter taken from ward office and respective CFUG.
16	ERV-1	Sharada Municipality- ward no. 10, Sanibazzar	128 sq. meter, where RVT of existing system is located.	One circular and one rectangular RVTs of 40 m ³ total capacity with well fenced GI chain.	Available, being used for the same purpose(existing RVT).
17	ERV-2	Sharada Municipality- ward no. 9, Mel Takura	Ownership- Lies in Khatreni Khola Community Forest	Rectangular RVT of 50 cubic meter capacity tested by storing water one time by water tanker.	Available
18	ERV-3	Sharada Municipality- ward no. 8, (Simkharka)	Ownership- lies is Dhungekhani Betini CF	Rectangular RVT of 50 cubic meter capacity 100 m below PRVT-8 with well fenced GI chain boundary.	Not applicable.

Further details of reservoir type and size are given in table below.

Table 4: Details of Reservoirs in JWSP

Summary Of Adopted RVT's and Their Sizes					
SN	Tank Name	Tank Type	Size (Litres)	Size (m3)	DMA ID
1	TRVT 1	Bal	400000	400	
2	TRVT 2	Bal	200000	200	
3	TRVT 3	Bal	200000	200	
4	PRVT 8	Bal + Dis	100000	100	DMA-1
5	PRVT 4	Bal + Dis	200000	200	DMA-2
6	PRVT 5	Bal + Dis	100000	100	DMA-2
7	PRVT 7	Bal + Dis	100000	100	DMA-2
8	PRVT 1	Bal + Dis	30000	30	DMA-3
9	TRVT 4	Bal + Dis	200000	200	DMA-5
10	TRVT 5	Bal + Dis	400000	400	DMA-6
11	TRVT 2A	Bal + Dis	30000	30	DMA-7
12	TRVT 3A	Bal + Dis	30000	30	DMA-7
13	TRVT 4A	Bal + Dis	30000	30	DMA-7
14	Intake				
15	ERVT1	Bal + Dis	40000	40	DMA-4
16	ERVT2	Bal + Dis	50000	50	DMA-2
17	ERVT3	Bal + Dis	50000	50	DMA-1
	Total				

The transmission mains comprise of seamless ASTM 106 Grade C pipe (seamless) of maximum 7.11 mm thickness with epoxy paint 300 microns (external and internal face). The pipe length of transmission mains has been estimated with slope correction. The summary of pipe type, size and length is given in table below.

Table 5: Summary of pipe type, size(diameter) and length of pipe

S.N	Pipe line	Type of Pipe	Length	Diameter
1	Transmission Pipe line (Pumping mains)	Seamless Steel	8368 m	65-150 mm
2	Bulk Distribution Network	PE Pipes, Seamless and GI pipes	13695 m	50-160 mm
3	Distribution Network	PE and GI pipes	90407 m	32-180 mm
4	House connection pipeline	PE pipes	50550 m	20 mm
5	Rehabilitation (existing pipeline)	No Rehabilitation	-	-
Total			163290 m	

Table 6: Details of proposed pipe for Transmission and Distribution Network

SN	Description	Trans. Sys (Pumping Main)	Intake	Pipe Casing	River X	SSF	Bulk Dist.	Dist. Sys.	Total
A	Seamless Pipe								
	65 mm OD	5129					49.00		5178
	80 mm OD						1,978.00		1978
	100 mm OD						299.00		299
	125 mm OD						3,850.00		3850
	150 mm OD	3658					-		3658
B	PE PIPES of 6 Kg/Sqcm								
	75 mm OD						0	2274	2274
	90 mm OD						0	1529	1529
	110 mm OD						884	4480	5364
	125 mm OD						0	165	165
	140 mm OD						0	0	0
	160 mm OD				20.00		314	0	334
	180 mm OD						0	11	11
C	PE PIPES of 10 Kg/Sqcm								
	40 mm OD						0	17466	17466
	50 mm OD						1639	5826	7465
	63 mm OD						1746	8532	10278
	75 mm OD						0	1140	1140
	90 mm OD						785	3550	4335
	110 mm OD						280	1513	1793
	125 mm OD						0	0	0
	140 mm OD						0	261	261
	160 mm OD						398	313	711
	180 mm OD						0	0	0
D	PE PIPES of 16 Kg/Sqcm								
	40 mm OD						-	25880	25880
	50 mm OD						1,066.00	8462	9528
	63 mm OD						-	4004	4004
	75 mm OD						-	1876	1876
	90 mm OD						566.00	1908	2474
	110 mm OD						985.00	1226	2211
	125 mm OD						-	0	0
	140 mm OD						-	0	0
	160 mm OD						233.00	0	233
	180 mm OD						-	0	0
E	GI pipe medium class								
	32 mm OD						-	8804	8804
	40 mm OD				5.00		-	138	143
	50 mm OD				13.00		-	99	112
	65 mm OD				13.00		-	0	13
	80 mm OD				8.00		-	0	8
	100 mm OD				8.00				8
Seamless, PE and GI Pipe Cost									
F	DI Pipe								
	Double Flanged DI Pipe of 80 ND			112.00					112
	Double Flanged DI Pipe of 100 ND				45.00				45
	Double Flanged DI Pipe of 150 ND		150	42.00					192
	Double Flanged DI Pipe of 300 ND			126.00		30.00			156

The BDS comprises PE Pipes, Seamless, and GI pipes of the different diameter and length. This bulk distribution is used to transfer water from the main reservoir to the distribution reservoirs, The distribution to households will not be allowed from transmission lines and BDS. The distribution system comprises a pipe network, which is looped in certain cases and branched in others. The network has been analyzed using EPA net, a design analytical software tool. The entire system has been designed using Polyethylene (PE) pipes. For proper saddle arrangement at the household connection in the distribution pipe, a minimum diameter of the distribution pipe has been adopted as 50mm. Existing pipes that are old and undersized or unable to withstand required pressure shall not be reused. Only PE pipes have been used in the distribution network. The pipelines have been proposed for laying and placing along a single side since most of the pipe laying area is hilly terrain with narrow roads and foot trails. This has been done to reduce the initial investment; all other narrow and rural roads are provided with only one pipe on either side of the road to optimize the use of available land space.

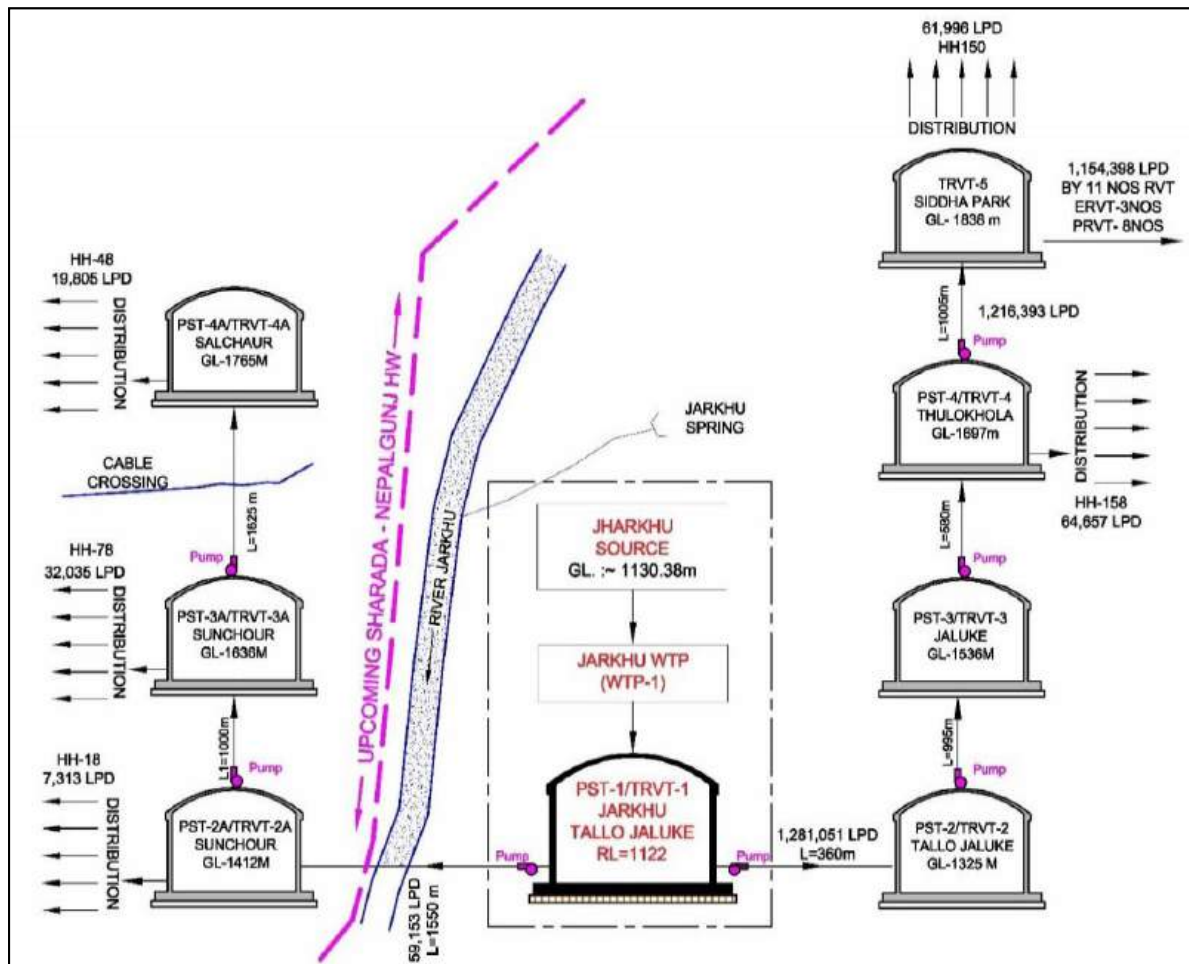


Figure 1: Schematic Diagram of the Project

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, section 3, subsections 1 & 2 clause (a) & (c) and section 10 of the legal provisions of EPA are compliant to Schedule 1 (a) – (6) & (8) of EPA 2020. Hence, a Brief Environmental Study (BES) and ESMP, is sufficient as the area taken by the structures of the project is less than 1 hectare of forest area.

The screening report revealed that the proposed WSP lie in community forests, but there are minimal environmental/or social impacts and no physical displacement 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 Environmental 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 identify and 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 and social impacts
- To prepare an environmental and social 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 that are relevant and applicable to the Jarkhu WSP.

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, 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 Jarkhu WS Project is located in Sharada Municipality which covers ward no. 4, 5, 8, 9 & 10 of Salyan district of Karnali province of Nepal. Geographically the project area lies in between 28°18' 51" N to 28°27'44" N latitude to 82°02'40" E to 82°16'36" E longitude in the Siwalik region of mid-west hill region near the bank of the Sharada River. The altitude ranges from 1120 to 1830 meters from the sea level.

The municipality is accessible from Kathmandu by approximately 494 km long road and about 97 km road from Birendranagar, Surkhet. It is connected to the East-West Highway at Lamahi via the 47 km long Lamahi-Tulsipur Road, which extends up to Tulsipur, and by the 64 km Rapti Highway from Tulsipur. Additionally, the municipality is accessible via the Rapti Highway, which begins at Ameiya Chowk on the East-West Highway. The nearest airport to the municipality is Birendranagar Airport, although the nearest airport is at Dang, which is not operational.

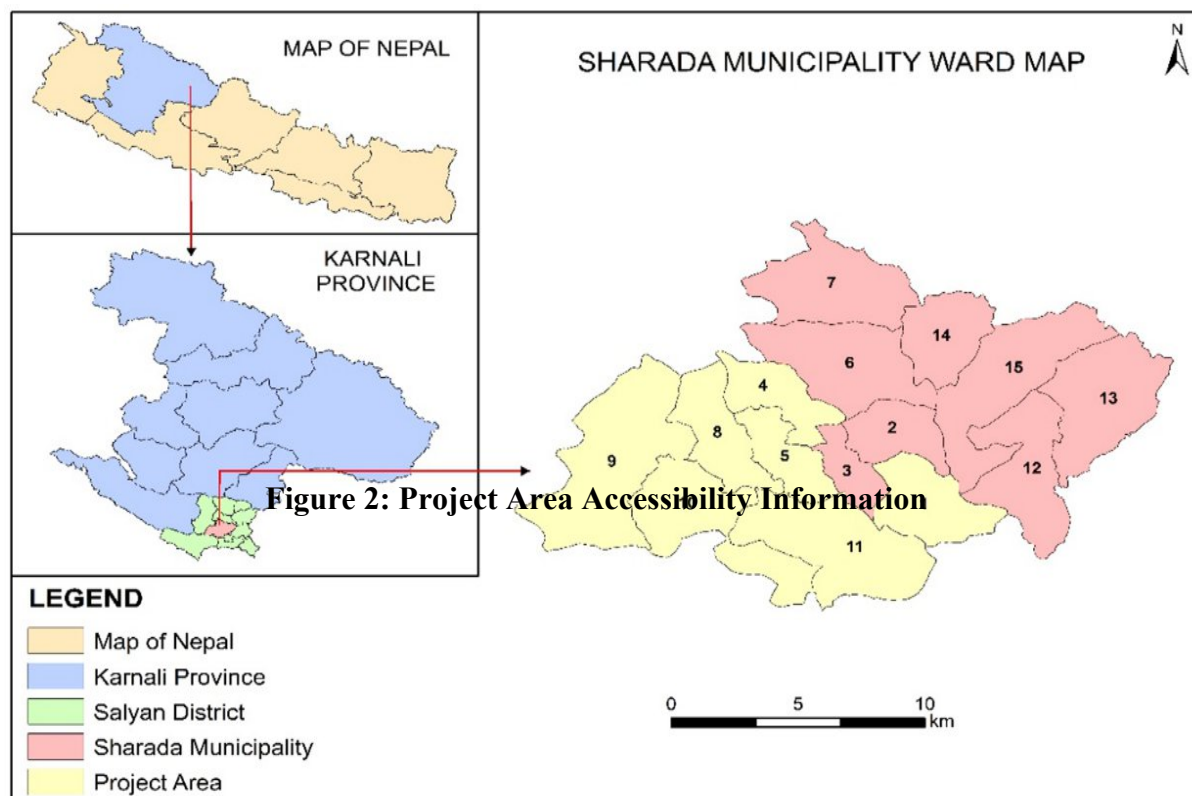
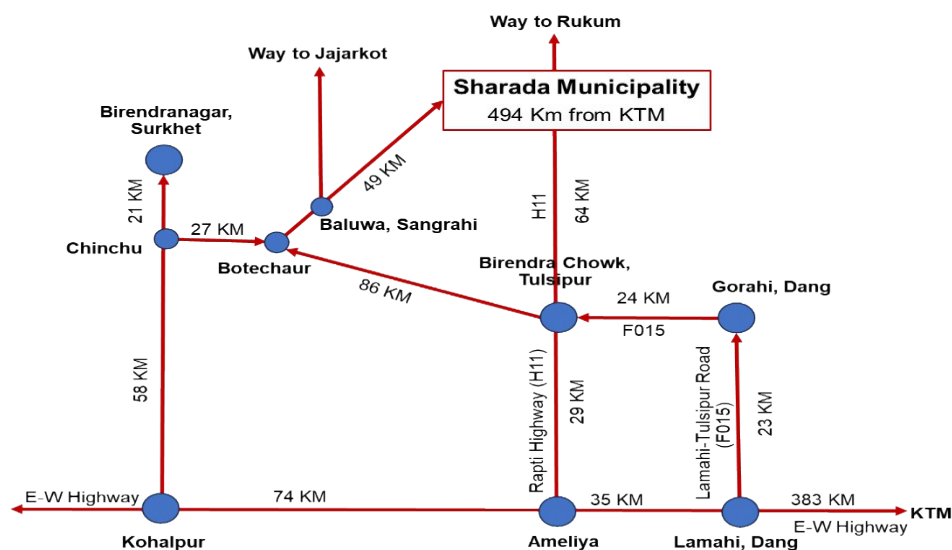


Figure 3: Map of Sharada Municipality and wards covered by JWSP

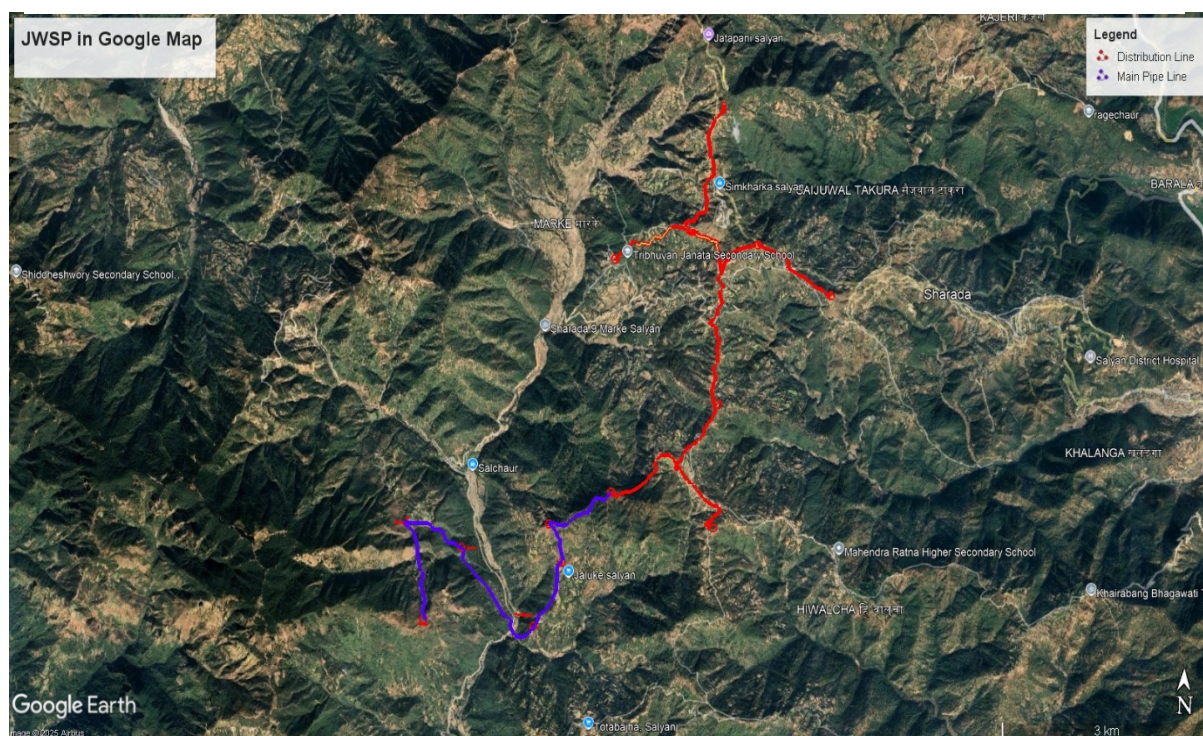


Figure 4: Location of JWSP in Google Map



Figure 5: Social Map of Jarkhu WSP Service area

2.2 Physical Features

2.2.1 Topography and Land Use

The Sharada Municipality is situated in the Siwalik Region of Nepal in the mid-west hilly area. Topographically the municipality lies between 28°18'51" N to 28°27'44" N latitude and 82°02'40" E to 82°16'36" E longitude. It is at an altitude of 1210-1830 meters from the mean sea level. Sharda Municipality is situated in the hilly area of Sharada River. Sharda River is considered important not only for the Sharada Municipality but also the main river of Salyan district. This river is considered to be economically and touristy important as it is irrigating the agricultural fields on the banks of Sharada and providing river bed materials for construction.

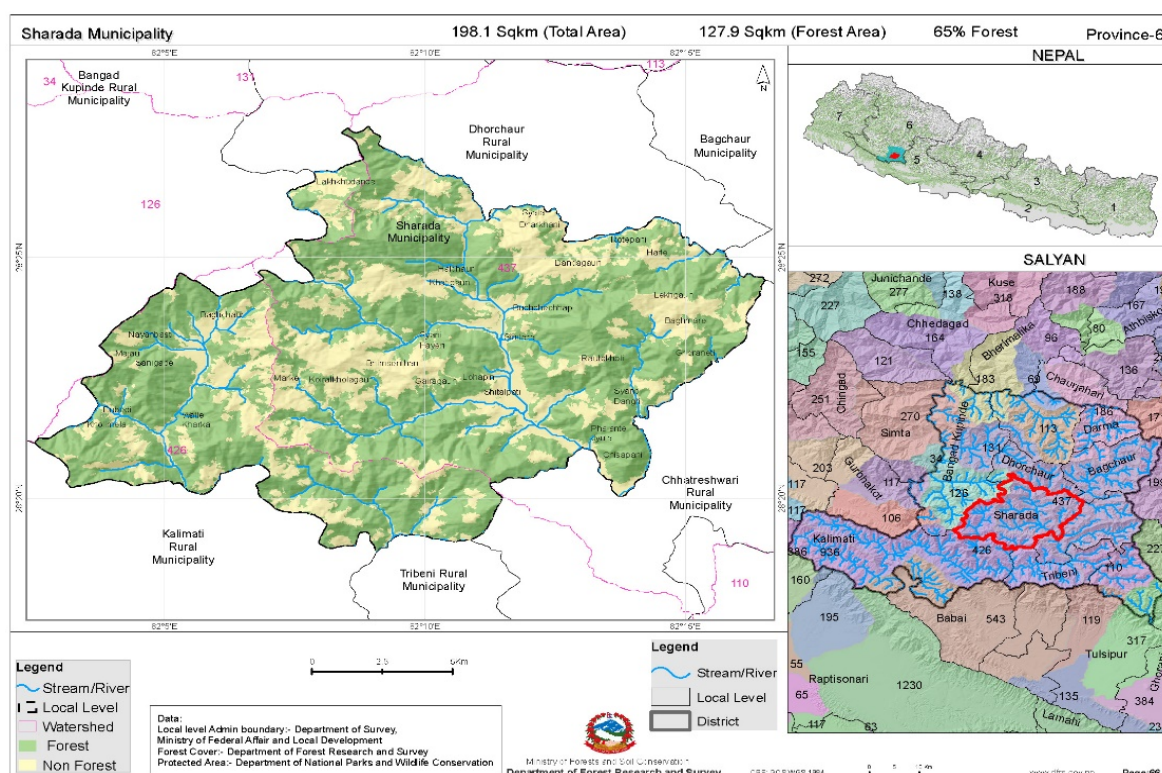


Figure 6: Land use and land cover map of Sharada Municipality

Table 7: Land Use and Land Cover Details of Sharada Municipality

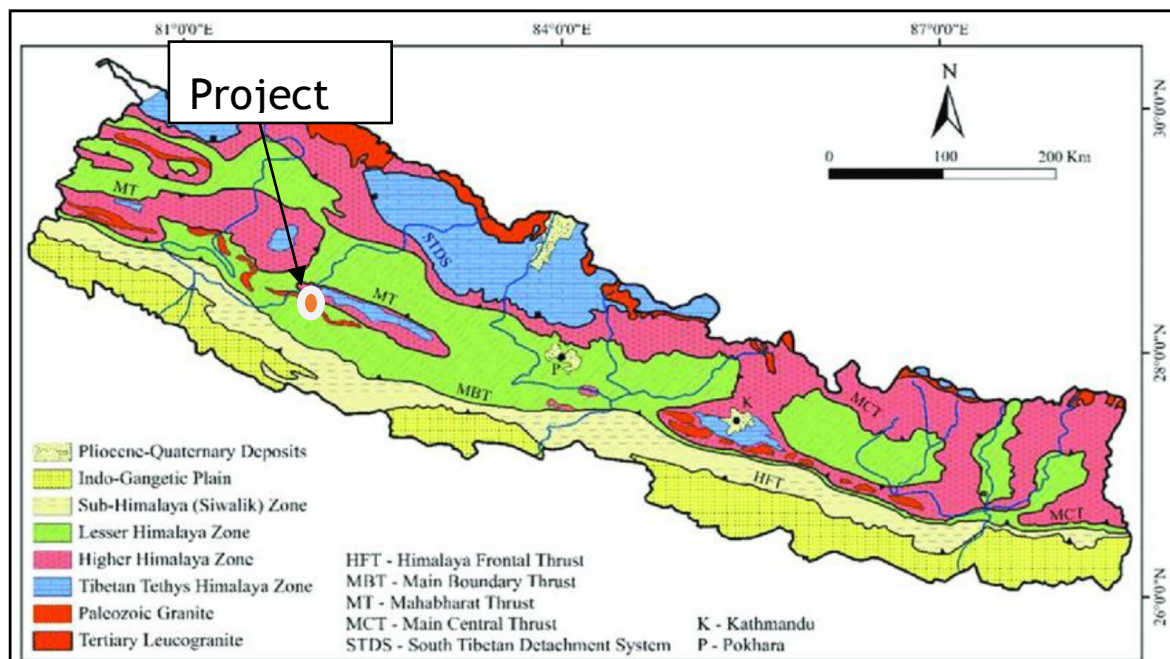
SN	Land Use and Land Cover	Area (Sq. km)	Percentage
1	Water	0.64	0.32
2	Forest	115.32	58.14
3	Cropland	55.03	27.75

4	Settlement	19.93	10.04
5	Bare Ground	0.15	0.08
6	Grass Land	7.27	3.7
Total		198.34	100

(Source: ESRI, 2023)

2.2.2 Geology

Salyan is mostly dominated by clay soil along with boulders. Based on field observations during the field visit study, the project area has flat alluvial land consisting of 1-1.5 m thick topsoil underlain by gravel, cobble, and boulders of about 25.0 to 30.0 m thick in the center and slightly thinning outward to the foothills around the Srinagar valley and followed by bedrock. Highly fractured sufficient joints and faults show highly permeable rocks around the areas.



(Source: Department of Mines & Geology, 1994)

Figure 7: Geological Map of Nepal

2.2.3 Climate

Temperature: A mixed type of climate from a Humid subtropical to dry winter climate is found in Salyan. Areas located along the Sharada River, have warm and temperate climate. The hot season lasts for 2.5 months, from April 13 to June 30, with an average daily high temperature above 86°F. The hottest month of the year in Salyan is June, with an average high

of 89°F and low of 69°F. The district's yearly temperature is 23.53°C and it is 1.53% higher than Nepal's average.

The cool season lasts for 2.8 months, from November 24 to February 18, with an average daily high temperature below 69°F. The coldest month of the year in Salyan is January, with an average low of 42°F and high of 64°F.

Rainfall: The annual rainfall occurs during monsoon between June and September. Average annual rainfall is around 1600 mm and has 149.94 rainy days (41.98% of the time) annually.

Table 8: Climatic Parameters (2010 to 2020 AD) of Salyan District

Annual high temperature	28.49°C
Annual low temperature	14.87°C
Average annual precipitation	1600 mm
Warmest month	May (35.78°C)
Coldest Month	January (5.34°C)
Wettest Month	July (704.14mm)
Driest Month	November (2.05mm)
Number of days with rainfall (≥ 1.0 mm)	149.94 days (41.08%)
Days with no rain	215.06 days (58.92%)
Humidity	55.72%

Source: Weather and Climate - The Global Historical Weather and Climate Data
[https:// weatherandclimate.com/nepal/rapti/salyan](https://weatherandclimate.com/nepal/rapti/salyan)

2.2.4 Climate Change and Disaster Vulnerability

According to Climate Change Vulnerability Mapping for Nepal (MoE, 2010) based on indices, Salyan district has moderate overall vulnerability, high landslide vulnerability, very low flood vulnerability and low adaptation capability to the impacts of climate change.

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 of the Jarkhu water sources located at the subproject site was done and found to comply with the NDWQS.

Human activities and vehicular movement plying along the Jaluke and Sunchaur road are the major sources of pollution around the construction premises, where significant construction work will take place. Additionally, dust generated by vehicular movement on the unpaved internal roads along the distribution pipeline areas; such as (specify the road name) is the main source of air pollution. Similarly, noise pollution in the project area primarily arises

from vehicular movement, wind activity, and frequent visitors. The air quality monitoring test and noise level monitoring has been conducted to establish the baseline and the monitoring report data is given in table below.

Date	Location	Description		
3/12/2025	Jaluke-Sunchaur road section	PM 2.5 Microgram/Cubic meter	PM 10 Microgram/Cubic meter	Air Temperature Degree Celsius
		65	57	32
National Standards of Air Quality, 2069		40 Microgram/Cubic meter	120 Microgram/Cubic meter	Noise level (at site of source) 68 dB

2.2.7 Soil Type and Quality

The soil types typically include sandy loam, clay loam, and silty soil. These soils are influenced by the surrounding Himalayan 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 Feature

2.3.1 Flora and fauna

Jarkhu WSP covers Sharada Municipality Ward No. 4, 5, 8, 9 and 10. In this project area, different species of flora are found, which are Rhododendron (*Rhododendron arboreum*), Banjh (*Quercus leucotrichophora*), Khasru (*Quercus semicarpifolia*), Angeri (*Lyonia ovalifolia*), Kafal (*Myrica esculenta*), Sallo (*Pinus roxburghii*), Tuni (*Toona sinensis*), Uttis (*Alnus nepalensis*), Katus (*Castanopsis indica*), Sal (*Shorea robusta*), Kyamuno (*Cleistocalyx operculatus*) and Amala (*Phyllanthus emblica*). Accordingly, the main fauna found in this area are Rabbit (*Lepus timidus*), Deer (*Muntiacus muntjak*), Jackal (*Canis aureus*), Marteen (*Martes flavigula*), Nyaurimusa-Mongoose (*Herpestes edwardsii*), Porcupine (*Hystrix indica*), Bear (*Ursus thibetanus*), Monkey (*Macaca mulatta*), Jungle Cat (*Felis bengalensis*), Ghoral (*Nemorhaedus goral*) and Chituwa /common leopard (*Panthera pardus*). Bird species include Koili/Asian Koel (*Eudynamys scolopaceus*), Fisto/Dusky Leaf warbler (*Phylloscopus fuscatus*), Kaag/House crow (*Corvus splendens*), Bhangera/house sparrow (*Passier domesticus*), Kanthe Dhukur/Eurasian Collared Dove (*Streptopelia decaocto*) and Bakulla/cattle egret (*Bulbulcus ibis*). Fish species include Asala (*Schizothorax richardsonii*), Raj Bam (*Angullia bengalensis*), Buduna (*Garra gotyla*), Cabre (*Pseudecheneis sulcatus*), Faketa (*Barilius bendelisis*), Lohari (*Garra annandalei*), Gardi (*Labeo dyrocheli*), Kalacha (*Labeo pangusia*), Katle (*Neolissochilus hexagonolepis*), Sidre (*Puntius ticto*), Sahar (*Tor tor*), 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

2.4.1 Demographic Characteristics

As the service area lies in the newly formed municipality by merging seven VDCs, the long-term population analysis of the municipality has been carried out with the help of the 2001, 2011, and 2021 censuses. This analysis has been used for population assessment of the concerned ward of the municipality to analyse the trend of the population growth in the proposed service area. The population growth rate of concern wards (WN 1, 4, 5, 8, 9, 10) for the last two decades is not very encouraging since the overall population of the service wards is almost constant in the last two decades.

The population of the concern wards was 14,289 during 2001 AD which marginally increased to 15,308 during 2011 AD by 0.69% annually. The trend of population growth rate is similar to that of the previous censal period, the population of the municipality has been increased only by 0.82% during 2011-2021 AD. The long-term population growth (2001-2021) of the municipality was only 0.75%.

Table 9: Total Population of Proposed Area

Ward No.	Population			Growth Rate (Geometric Projection Method)			Adopted Growth Rate %	Cluster
	2001	2011	2021	2001-2011	2011-2021	2001-2021		
4	1,609	1,475	1,433	-0.87%	-0.29%	-0.58%	0.00%	Suntakura
5	1,870	1,941	1,716	0.37%	-1.22%	-0.43%	0.00%	Duldhara/Dhada
8	2,075	1,844	1,595	-1.17%	-1.44%	-1.31%	0.00%	Sanibazar/Marke/Simkharka/ArmyBarack
9	2,225	2,330	2,158	0.46%	-0.76%	-0.15%	0.00%	Sunchaur/Salchaur/Meltakura
10	1,895	1,941	1,989	0.24%	0.24%	0.24%	0.24%	Thulokhola/Siddhapark
11	2,241	2,001	1,787	-1.13%	-1.12%	-1.13%	0.00%	Badachaur
Total	11,915	11,532	10,678	-0.33%	-0.77%	-0.55%		
Note: If pop. growth rate is negative in respective ward, 0% growth rate is adopted.								
Note: Growth rate is calculated based on Geometric Progression Method								

It has been envisaged that this trend of population growth will not change drastically in a decade or two. However, the population growth rate is expected to increase to a certain extent with the availability of water after the implementation of this project. Based on this, it has been assumed that the population of these wards will increase sluggishly after the base year and will then grow at a higher than the concerned wards of the municipality population growth rate (0.75%). Thus, the annual population growth rate for the next two decades for the project area has been taken as 1%.

Population Density

The population density of Sharada Municipality is 174.8 individuals per sq. km.

Literacy Rate

According to the National Population and Housing Census 2021, the population with skills in both reading and writing is 72.6 %. Accordingly, 0.4 % of people can only read, whereas the remaining population have no skills in reading and writing.

Caste and Ethnicity

The population in the Sharada Municipality is dominated by Chhetri, followed by Sanyasi, Brahmin, Thakuri, Janjati, and Dalit people, who have also inhabited the area for a long period of time. The major ethnic group is made up of 63% Brahmin/Chhetri and 23.65% Others. The percentages of the ethnic groups, Dalit and Janajati are lower, with 10.35% and 3%, respectively. Details of information are presented in the table below.

Table 10: Distribution of Households by Ethnic Composition

Ethnicity	Population	Percentage
Chhettri	21007	60.6
Brahmin	831	2.4
Janajati	1040	3
Dalit	3587	10.35
Others	8198	23.65
Total	34663	100

Source: Socio-economic Survey 2024

Language

Language spoken mainly depends on the caste/ethnicity. For the dominancy of people of Chhetri, Sanyasi, Brahmin, Dalit; Nepali is the most common language spoken in Sharada municipality.

2.4.2 Occupation, Source of Livelihood and Food Sufficiency

Agriculture and livestock rearing are the main occupations in the project area and 65.6 % of the total population depends on agriculture for livelihood. Likewise, 9.5 % depend on trade/business, 7.19% are depending on service of different types. The percentage of migrant worker to other country has counted 6.72 % whereas the people who depend on labor work in the same area is around 2%.

Subsistence type of agriculture is commonly found and 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 major cash are Timur, turmeric, ginger and orange, etc. Goat farming is common and major source of livelihood in this area. Accordingly, cow/oxen, buffalo, and piggery are also found in some extent. Poultry is also common in this municipality. As per the Municipal Profile, only 13.1% people have food sufficiency for 12 month from agriculture, 20.2 % have food sufficiency for 9 months, 30.7% have for 6 months and 36 % people have only for 3 months.

Besides agriculture, people are involved in other occupations like Business, Service, Labor and Foreign Employment. As understood from discussion with local people, they have adopted more than one occupation. The business ventures besides commercial agriculture includes labour, business and job sectors. However, international employment stands out indicating significant migration in search of employment possibilities overseas. This emphasizes how different the employment environment is and how crucial it is to comprehend

sectorial dynamics to formulate effective policies and build strategies for economic development.

2.4.3 Source of Drinking Water

Khalanga Shital Pati WSP is large sized water supply system in Sharada municipality which covers ward No 1, 2 & 3 in total and ward no 4 & 5 partially. As per the data available in NWASH system, there are 17 WSPs in Sharada municipality with low functionality and poor services and 4000 inhabitants depend on these schemes. All schemes are scattered and isolated schemes spread over the proposed service area of the Jarkhu. Out of these only three are in operation during the dry season also. All these systems are pumping schemes with intermittent water supply. The rest of the schemes are in operation only in the season when the water is available in spring/s. Out of these 17 schemes, three schemes (Bahun Padhero WSP, Simkharka WSP & Madana Badachaur Lift WSP) are a lift water supply project which also suffers from service level.

Table 11: List of Water Supply Schemes in the JWSP area

SN	Name of WSP	WN	Dependent HHs	Dependent Peoples	Monthly Tariff	Month of Operation
1	Sejwal WSP Scheme-1 Ratamata	5	21	143	90	8
2	Dhuldhara WSP Kainapani	5	30	149	100	10
3	Garelikhola WSP, Ratamata	5	52	265	90	8
4	Kaina Khola WSP	10	14	86	70	8
5	Bahun Padhero WSP-Lift	8	84	329	180	12
6	Sim Kharkha WSP Lift	8	150	761	190	12
7	Madana Badachaur Lift WSP	10	80	350	100	12
8	Dobri Chaibang WSP	1	51	220	65	12
9	Chaibang WSP	1	52	225	65	12
10	Thulapatal WSP	10	79	246	75	8
11	Rokka WSP	5	17	98	50	7
12	Marke WSP	8	104	558	75	7
13	Date Pipal WSP	8	8	48	70	6
14	Ritthe Chaur WSP	4	15	87	60	6
15	Rotepani WSP	4	8	50	55	6
16	Marke Rani Scheme -3	9	95	546	100	8
17	Sunchaur Bansghari WSP	9	71	356	65	7

The source of drinking water for majority of families is unsafe schemes connected by tap/piped water and the scarcity of drinking water for dry season is crucial and average water consumption ratio is 150-200 Liter per day/HH and around 99% of households have toilet facilities (Socio-Economic Survey 2080) and municipality was declared ODF before one decade.

2.4.4 Places of Religious and Cultural Importance

The religious and cultural importance places are Khairabang Temple, Radhakrishnan temple and Janaki Temple. Accordingly, Siddhapark is tourist place with scenic beauty and covered with deciduous forest.

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

As the data of Demographic Health Survey (DHS) 2022 shows, 23% of women in Nepal age 15–49 have experienced physical violence since age 15, and 8% have ever experienced sexual violence. Six percent of women who have ever been pregnant have experienced violence during pregnancy.

In case of service area, the GBV cases like beating by husband after alcohol drink, abusing by husband and mother in law are prevalent and found case registered in help desk for Women, Children and Dalit under District Police Office (DPO) Khalanaga, As per the help desk, in total 20 case were registered and dispute were settled from the help desk in fiscal year 2081/2082. According to the DPO, Issue Handling Section (Mudda Phant), in total 14 cases of rape has filed in Salyan district and among them two Cases were from Sharada municipality and only one from the project site, accordingly, three cases of polygamy and two cases attempt to rape have been filed in District Police Office in this FY in Salyan district.

As per the report available from the Judicial Committee of the Municipality, there were 27 cases registered among them; almost all were civil cases regarding the partition of land, seeking legal services and requesting the presence of a husband, wife or other members of the family. And few of them were settled by this committee (FY 2080/2081). Likewise, a total of 18 such cases were found registered in FY 2081/2082, and among them, only 3 have been settled by mediation, but GBV/SEA/SH cases have not been registered in the judicial committee of the municipality.

As per the information from District Administration Office, District Police Office and office of the municipality, Dalit Development Society (DDS) is working on this theme but its working area is out of the Sharada Municipality. During the course of DPR, a few focus group discussions were held with women, Dalits and local people to collect the issues regarding the GBV/SEA/SH in the project area and has found some issues regarding the GBV as mentioned below.

- Almost cases are family dispute after drinking alcohols, quarrel with wife for money to drink, beating son, daughter and wife, buying goat and hen without family consent for such activity.
- Caste and Gender Discrimination behaviour is very nominal in government and non-governmental organizations, urban areas and markets, but it is still prevalent in rural areas and at the household level.
- Awareness activity on GBV/SEA/SH, caste discrimination, gender discrimination is necessary in this area
- Most of the cases of GBV/SEA/SH have not been reported to the concerned authority
- Most of the survivors have no idea about legal procedure for it

- The nearest complaint institution/authority is the ward office and is used to settle complaints in the presence of female ward members (cases like abuse, Alcoholism, family disputes, etc).
- There is not any NGO/INGOs reported working on GBV/SEA/SH theme at present.

In case of sub-project there is Department of Women and Children (DWC) under social development unit of Sharada Municipality to resolve the GBV/SEA/SH issues. The Sharada Municipality has nominated GBV and SEA/SH focal person (Ms.Sangita Budha) for GBV grievance. The occurrence of such GBV issues in communities can further be triggered by the sub-project activities as workers will be mobilized during construction at the sub-project sites. Therefore, potential risks of SEA/SH will be assessed and for which orientation will be provided and a code of conduct will be adopted to mitigate the SEA/SH impacts of the sub-project.

3. STUDY METHODS

The methods adopted to achieve the objective consists mainly of map reading to understand the frame of reference and field investigation of the identified Jarkhu WS Project including collection of field-based information and mapping. The methods included:

3.1 Literature Review and Secondary Data Collection

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

3.2 Field Survey, Mapping and Verification of Secondary Data

The study was based on an actual walkthrough of the Jarkhu 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 a 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 collection of relevant information on existing physical, biological and socio-economic and cultural environmental setting through field walkthrough, survey, measurement, discussion, consultation and interactions and identification of possible issues to be addressed in ESMP.

3.3 Desk Work

Major part of the study was executed through desk work that included engineering design, drawing/mapping, analysis, quantification, planning (including ESMP) and estimation of costs based on the field level information acquired from field study and literature review.

4. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

4.1 Impacts and Mitigation

Nepal is considered highly vulnerable to climate change due to its rugged mountainous topography, extreme climatic conditions, and frequent climatic hazards. This climate change, such as rising temperatures, melting glaciers, changing precipitation patterns, floods, and droughts, has challenged the water security in Nepal. Over the past few decades, Nepal has observed declining surface water sources, groundwater, and spring flow. The water sources in the hilly and inner Terai region of Nepal are drying up gradually which makes the life of the people difficult day by day. The scarcity of drinking water expedites the migration process of people from their native places. Similarly, the demographic shift from rural to urban has brought about heightened challenges in managing water stress and sanitation issues due to increased population density and urban expansion exacerbating the challenges, impeding progress towards ensuring safe water and sanitation services. Climate Resilient WASH infrastructures with adaptation strategies are crucial to cope with climate change impacts on water security.

Like every other development intervention, Jarkhu WS Project also has various environmental implications. Although this proposal has been initiated to bring several benefits to different environmental domains of the project area, it brings some adverse impacts too. The impacts have been identified and listed in the following table with the corresponding mitigation measures. The impacts are identified and predicted by giving due consideration to all the activities related to construction and operation of the proposed project and decommissioning of the support facilities as well.

This chapter deals with the environmental and social risks, potential impacts and mitigation measures. Anticipated key potential impacts in the project are due to the physical construction works. The major components of JWSP consist of intake, water treatment plants, pumping mains, intermediate reservoirs, storage reservoir/s, disinfection units, distribution mains, and other allied structures and appurtenances such as Guard house, pump house and store.

While developing these structures, key construction activities involve: site clearance & preparation, excavation works; cut and fill of soil; quarry and borrow pits for construction materials; use of heavy equipment; workers camp site, facilities and supplies management, etc. The major environmental and social concerns due to the project include dust and noise at construction sites, vibration during construction; exposure of workers to occupational hazards and incidents; and pollution from construction and other wastes generated by the project. The operation of water treatment facilities may also pose additional risks and impacts in the form of odour and noise from operations of equipment, as well as occupational health and safety hazards including chemical handling. Operation of this project will provide easy access of safe drinking water to local people of Sharada Municipality. A total of 2685 households will be directly benefited from the project. Based on the demographic information of WASH Plan-2081 of the Sharada Municipality, the percentage of indigenous people is below 6 % of the total population of the municipality. In case of service area of the proposed Jarkhu WSP, there

are around 55 households of Magar community scattered in Syure and Sunchaur settlement of ward No -9. During planning phase series of consultation was conducted with the people of this area to get their views on project in common platform. People of Syure and Sunchaur are facing water crisis due to its remoteness, difficult geographical condition and lack of reliable spring sources. So, it was necessary and urgent to include them at any cost in this WSP. There is no any resettlement impact in this community and agriculture and livestock is main occupation of the community people. Sichuan pepper/Nepali pepper (Timur) is main cash crop and goat farming is another most reliable source of the income of this community and the proposed project will not results any negative impact on it. There is only one RVT Proposed in Sundhara CF (Only required 30/40 Sq. Meter of Land may require to install the proposed RVT). The proposed land station is at the lower side of the settlement. Accordingly, rest of all RVT of this location are proposed in government land (open land). In other side there is enough grazing and pasture land /public land for cattle rearing or grass collection except this Sundhara CF.

4.2 Impact on Land, Method/Process of Obtaining Land and Mitigation Measures

The proposed Jarkhu WSP, is a demand based priority project of the Sharda Municipality which is going to be implemented under WaSGISP. Jarkhu is proposed to serve large service area, which consist of scattered settlements with poor water supply. Given the lack of availability of sustainable water sources in service area, the viable source was Jarkhu spring source located in ward 10 of Sharada municipality. There are 16 RVTs including existing 3 RVTs in Jarkhu WSP. Local community have strong demand to harness water from proposed Jarkhu WSP. There will not remain economic and other adverse impacts on source of livelihood to the local people of service area. Accordingly, there will not negative impacts on irrigation or other water depended occupation in downstream basin of the Jarkhu spring source due to fetching water for WSP.

Land is required at 18 different sites for construction of different components of the sub-project. Out of them 9 sites are in public land, 4 in community forest, 3 are existing sites in public land where RVTs of existing WS system are already constructed, and 2 are municipality owned lands which were procured by the municipality from private land owners. The public land at 9 sites are mostly barren land, free of encroacher, illegal or informal user and the concerned Ward Offices have given the consent for the use public land. Hence, no land acquisition related issue and other E&S impacts as well as IP related Impacts are nor anticipated due obtaining these public land.

Due to the large coverage area, remoteness and terrain geology of the proposed area, it took a little bit more time to verify land ownership status by respective technical persons/ land surveyor. Initially it was verified by land surveyor of the municipality office, secondly it was verified by joint team of PIU, WASH Unit, Design Team and land surveyor of the municipality and finally verification was finalized by the land surveyor of Land Survey Office. During the course of field verification of private land, project officials had meet to respective land owners and process and provisions were shared verbally many times and willingness for the shelling land was asked and formal consultation meeting was seated with respective land owners, family members and neighbours (as witness) and matter on which discussed and decision made were documented properly (Minute attached in Annex).

Based on the technical design report and field verification by land surveyor, Approximately 508 Sq. meter land of plot no 735 of Mr. Tika Ram Kavar is purchased for the construction of Transmission Reservoir Tank -3 at Mathillo Jaluke of Sharada municipality-10 and 30 Sq. meter land of plot of 2149 of Mr.Kiran Shahi & Mrs. Rita Kumari Acharya –Joint Ownership for the construction of Planned Reservoir Tank-7 at Dhand area.

According to the record of Napi / Malpot office-Salyan, Kitta no. 735 land was registered in name of Mr.Tika Ram Kavar and Kitta No2149 in the name of Mr Kiran Shahi & Mrs.Rita Kumari Acharya (Joint Ownership) The land was being used by the owner's family themselves, and was free of other formal/informal users or encroacher. The obtained lands are less fertile barren lands without irrigation facility as well no drinking water facility. As per the record of Malpot Office Mr. Tika Ram Kavar, he has owned 7125 Sq.m of land and purchased quantity of land is only 508 Sq. m (only 7% of the total area). Accordingly, in case of Kiran Shahi & Rita Kumari Acharya (Joint Ownership), they have owned 7112 Sq. meter area of land in Dhand area and several land plots in various locations also. The land amount from this joint ownership is only 130 sq. (only 1.8% of the total area). In spite of this land seller are very happy for getting chances to sell land plots in reasonable price and chances of getting drinking in future in such scares area. It is explicit and true that the acquired land size is less than 10 % of the total land holding of the respective land owners. Therefore, the impact on the land owners due to land acquisition is considered as minimal in terms of land loss and loss of agricultural production.

During the process of land purchasing, project staff and municipality officials requested them that they have right to reject the selling of land if they are not interested. There were other alternate sites around the proposed sites, but the aforesaid land owners expressed their willing to sale the land. Therefore, the municipality decided to purchase the lands through negotiation process for the project.

Before purchasing the land plots several informal consultations and a formal consultation meeting was held with respective land owners and their family members and project related information including project provision on selling-buying process, Grievance Redress Mechanism (GRM) was discussed with the land owners and family members and they were fully aware that have freedom of rights to sale or refuse the aforesaid land registered in their name for the RVTs construction for WS system proposed in their community. They are also the direct beneficiaries of the project as the settlement is within the service area and their will get the safe drinking water facility. As reported by them they willingly agreed to sale the foresaid lands with family members' consent to the municipality to be utilized for the construction of the proposed RVTs without any undue pressure from anyone and also have commitment to provide support during construction phase participating as labor works.

During the process of land purchasing, few inclusive meeting were held between municipality authorized foal person and respective land owners separately and agreed for buying and selling and all administrative costs including travel, accommodation, hotel cost and local tax was paid by the municipality office.

The process of land obtaining for the sub-project clearly align with Resettlement Policy Framework of the WaSGISP. The table presented below illustrates the impact level, method/process of obtaining land and likely impact due to land use.

Table 11: Impact level, Methods of obtain and Likely impact of Land Use.

S.N	Name of the Proposed Structures	Location	Size (m ³)	Existing Use of the Land	Obtaining Methods	Likely Impact
1	TRVT-1 & Water Treatment Plant	Ward No 10 of Sharada Municipality Jarkhu Spring site, Mosy Khola bank	400 sq.m- RVT, WTP as per design	Barren Government Land with no vegetation	Consensus among Municipality, Ward Representatives and Community people to use it; respective Ward Office has offer consent letter for use of public land.	No adverse Impact. Local people will avail work during construction. Land will be protected and retaining wall will be erected.
2	TRVT-2	Tallo Jaluke Ward No 10, Jaluke Settlement	200	Open area, barren Government Land with no vegetation	Consensus among Municipality, Ward Representatives and Community people to use it; respective Ward office has given the consent for its use.	No Adverse Impact, Local people will get work during construction period, Land will be protected by erecting retaining walls
3	TRVT-3	Uphill side of Mathillo Jaluke Settlement Ward No 10	200	Non-irrigated land with no crop, used for grass, dry terrain, and stone mixed land	It was obtained through negotiation between land owner and the office of Sharada municipality	The impact on land owner is minimal in terms of loss (<10%) agricultural production livelihood. Local people will get sufficient and water for drinking

						and other purp
4	TRVT-4	Thulo Khola of Ward No 10	200	Paati Halne CF Open and vegetation less area ,	It was discussed with CFUG/CFUC members during the Detail Survey period and letter permitting the use of the area has been obtained from respective CFUC	Plantation w carried Contractors, includes estimated co plantation Local people Thulokhola settlement wi sufficient and water for dr and other purp
5	TRVT-5	Sidhha Baje CF Area , Ward No 10 of Sharada Municipality	400	Open and vegetation less area proposed , occasionally collection of grass for cattle	It was discussed with CFUG/CFUC members during the Detail Survey period and letter permitting the use of the area has been obtained respective CFUC	Plantation w carried Contractors, includes estimated co plantation wo
6	TRVT-2A	Sundhara CF area, Ward No 9 of Sharada Municipality	30	Open and vegetation less area with nominal bushy/throne plant, Occasionally collecting grass for cattle	It was discussed with CFUG/CFUC members during the Detail Survey period and letter permitting the use of the area has been obtained from respective CFUC	Plantation w carried Contractors, includes estimated co plantation wo
7	TRVT-3A	Open Barren Land of ward no 9 of Sharada Municipality , Uphill side of Sunchaur	30	Open area, Barren Government Land with no vegetation	Permission granted by the Municipality, Ward Representatives and Community	No adverse I Land will protected en retaining Local people get sufficien

		Settlement			people	safe water drinking and purpose.
8	TRVT-4A	Open Barren Land of ward no 9 of Sharada Municipality , Uphill side of Siyre	30	Open area, Barren Government Land with no vegetation	Consensus made among Municipality, Ward Representatives and Community people to use it	No Adverse Impact, people will get safe water during construction period, Land will be protected by erecting retaining walls. Local people will get sufficient and safe water for drinking and purpose.
9	PRVT -1	Badachaur of ward No -10	30	Open area, land previously owned by the office municipality	Land under ownership of Sharada Municipality	No Adverse Impact
10	PRVT -2	Marke of ward No -8	200	Open area, Barren land with no any vegetation	Government Land	No Adverse Impact
11	PRVT -5	Duldhara Pokhara, Ward No 5 of Sharada Municipality	100	Open area, Barren land with no any vegetation	Government Land	No Adverse Impact
12	PRVT -7	Dhad of Ward No -5	100	Non-irrigated private Land with no crop,	It was obtained through negotiation between land owner and the office of Sharada municipality, where the seller was willing to sell his land.	Only 130 Sq. land has been obtained and owner has been compensated. Ropani of land in this area, He got water tap facility and covered the remaining area for production use growing or animal

						after completion of the Jarkhu Project
13	PRVT -8	Suntakura , Ward No 8 of Sharada	100	Dhunge Khani Betinin CF area, the proposed area is open and terrain with no any vegetation and no grass in under story	It was discussed with CFUG/CFUC members during the Detail Survey period and Consensus Letter from respective CFUC	Plantation work carried out by Contractors, includes estimated cost of plantation work
14	ERVT-1	Sanibazaar	40	Existing RVT	No need to obtain land	
15	ERVT-2	Meltakura	50	Existing RVT	No need to obtain land	
16	ERVT-3	Simkharka	50	Existing RVT	No need to obtain land	
17	Intake	Sharada Municipality- ward no. 10, Jarkhu source	271 sq. meter Ownership - Public land (Ailani)	Full of bushes and shrubs; spring water coming from rocky slope aquifers	Consent letter taken from ward office and respective CFUG.	No likely impacts on construction
18	Main Office	Sharada Municipality- ward no. 8, Marke Bazaar near Ward Office	300 sq. meter	Open public area near ward no. 8 office.	Consent letter taken from ward office and commitment letter from municipality	No likely impacts on construction

During the land purchasing process consultation between the municipality representative and the land owners were held to discuss and determine the price of the land, and based on the District Malpot Office rate the price of the land was fixed as mutually agreed between the buyer and seller. The price of land is given in table below.

Table:12 Land Price Determination/Price Analysis Table:

Name of the Land Owner	Name of former (Saabik) VDC	Land Category as per Certificate	Land Price (per 500 Sq. Meter)-Maalpot Office Rate (Nrs..)	Local Selling –Buying Rate (Per Ropani)	Purchased Area (Sq Meter)	Selling –Buying Price (Nrs.)	Method of Price Fixation
Tika Ram Kawar	Hiwalcha VDC	Sim-Paakho	17600.00	Transection not found /Record not found	508.74	50,000.00	Negotiation
Kiran Shahi & Rita Kumari Acharya (Joint)	Khalanga VDC	Sim-Paakho	30000.00	Transection not found/Record not found	130.00	25000.00	Negotiation

4.3 Impact of the Project on Community Forests and Mitigation Measures

There are altogether 16 RVTs including 3 existing and 13 newly proposed RVTs for the Jarkhu Water Supply system and out of 13 newly proposed RVTs; the land required for the construction of four RVTs sites is located in open areas within the community forests (namely Siddhabaje, Pathihalne, Sundhara and Dhunge Khani Betini Community Forest). However, sites have been selected to avoid any tree cutting activities due to project construction work. The distribution pipelines pass along the roadside with minimal losses of bushes lies within the transmission pipeline stretches. Though tree felling will be avoided, and if any such cases occur, prior approval from the local bodies will be received and compensatory plantation at the ratio of 1:10 will be carries out species of local economic significance and values will be planted.

Table :13 Impact on Community Forests and Mitigation Measures

Name of the Community Forest	Address	Proposed Structures	Size (m ³)	Land Required Sq.m.	Possibility of Tree Loss	Mitigation Measures
Siddhabaje Community Forest	Sharada Mun-ward No-10	TRVT-5	400	600	Open area and no any tree loss /vegetation loss	Plantation will be carried to control soil erosion broom grass and other types of grass will be preferring to control soil

						erosion and which are useful for grass for cattle also.
Patihalne Community Forest	Sharada Mun-ward No-10	TRVT-4	200	250	Selected open area and no any tree available in the proposed location	Plantation will be carried to control soil erosion broom grass and other types of grass will be preferring to control soil erosion and which are useful for grass for cattle also.
Sundhara Community Forest	Sharada Mun-ward No-9	TRVT-2 A	30	50	Only few bushy plants available but any tree found	Plantation will be carried to control soil erosion broom grass and other types of grass will be preferring to control soil erosion and which are useful for grass for cattle also.
Dhunge Khani Betinin Community Forest	Sharada Mun-ward No-8	PRVT-8	100	150	Open area and no any tree loss /vegetation loss	Plantation will be carried to control soil erosion broom grass and other types of grass will be preferring to control soil erosion and which are useful for grass for cattle also.

Table 14: Environmental and Social Management Plan Matrix

Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
1. Prior to Construction Activities						
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.	- 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. - Develop necessary alternatives designs/programs for avoiding the impact on resources. - Acknowledge in writing and provide report on compliance all obtained consents, permits, clearance, NOs, etc. - Ensure that workers camp sites with all basic needs (lights, water, sanitation, proper ventilation) at designated area.	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 TRVT-4A site is 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	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
		consultation with the community and proper monitoring will be done.				
Drinking Water Supply	Extraction of unsatisfactory raw water quality	- During the detailed engineering design stage water samples test from the existing Jarkhu River and Jarkhu Spring was done. (refer Annex IV for details) - 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). - The reports of water quality test of Jarkhu River and Sump Well have been included in the Annex.	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	- Determine locations prior to award of contracts. The probable site for labor camp and storage area are near TRVT1 and TRVT5 construction areas at Jarkhu and Siddha Park, which are public land. - 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. - Choose stockpile locations away from water bodies, drainage channels, and sensitive environmental areas to reduce the risk of contamination and erosion. - Develop plans for rehabilitating areas that have	Sharada 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.3)	During detailed design phase

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
		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
	2. During Construction Activities					
	A. Physical Characteristics					
Community facilities	Damage to existing facilities like foot trails and pavements. Pressure on existing water	• Prior permission will be obtained from the respective local authority for the use of water for construction. Use of water for construction works will not disturb local water users. • If construction work is expected to disrupt, e.g. Transportation of materials in RVT sites and sometimes, use of water for construction	Sharada Municipality / Ward Office/PIU/ Contractor	List of any public or private infrastructure disturbed by the project works Minutes of		As per need, or field-inspection if any such case is foreseen

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
	facilities	activities, users of community shall be informed 7 days in advance and again 1 day prior to start of construction. • 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. • Ensure any damage to properties and utilities will be restored or compensated to pre-work conditions. • 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. • Avoid natural drainage pathways for pipe-laying works. • Stockpile the excavated material at safe but nearby place to construction site under the satisfaction of Construction Supervision Engineer.		meetings with the locals or affected persons.		
Ambient air	Conducting works at dry season and moving large quantity of materials may create dusts and increase in	• Confining earthworks according to an Excavation Segmentation Plan as part of the C-ESMP. • Water sprinkling at dry exposed surfaces and stockpiles of aggregates at least twice daily, or as necessary. • Require trucks/trippers delivering aggregates and cement to have tarpaulin cover and maintain a	Contractor	Location of stockpiles. Number of complaints from sensitive receptors.	200,000 (BoQ Provisional Sum, Item No-3) for water	Daily monitoring (when there are ongoing works) by MST/Contractor.

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
	concentration of vehicle-related pollutants (such as carbon monoxide, Sulphur oxides, particulate matter, nitrous oxides, and hydrocarbons) which will affect people who live and work near the sites mainly Jaluke and Sunchaur and to some extent nearby settlements	minimum of 2" free board • Limit speed of construction vehicles in access roads to maximum of 20kph. • Ensure use of equipment and fuel complying with applicable emission standards. • Do not allow construction equipment/vehicles that generate significant air pollution (above the applicable limit) and those that are poorly maintained on-site. • Conducting once a year Air Quality Test for dust nuisance (PM 10 and PM 2.5) at key locations such as settlement in ward no. 4, 5, 8, 9 & 10 of Sharada 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.		Heavy equipment and machinery with air pollution control devices. Certification that vehicles are compliant with air quality standards.	sprinkling near the construction sites	Monthly visual inspection by PIU. Air quality monitoring, if practical and reasonable.
Acoustic environment	Temporary increase in noise level and vibrations may be caused by excavation equipment, and the transportation of equipment	• 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. • Providing ear muffers to workers operating high dB construction equipment. • Implementing regular inspection & maintenance of construction/transportation vehicles to ensure compliance with National Noise Standard	Contractor	Results of monitoring noise levels (Maintain maximum sound levels not exceeding 70 decibels when measured at a distance of 10m		Daily monitoring (when there are ongoing works) by the Contractor/MST. Monthly inspection

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
	materials, and people in the communities namely, Sunchaur, Jaluke and Madana.	Guidelines (NVMES, 2069 B.S., 2012). • Horns should not be used unless it is necessary or unavoidable • 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. • Conduct noise level test once a year during the peak construction stage at specified locations near schools and hospital/health centers at the concerned wards of the project. • Minimize drop heights when loading and unloading coarse aggregates. • Utilize modern vehicles and machinery with the requisite adaptations to limit noise and exhaust emissions, and ensure that these are maintained to manufactures' specifications at all times. • All vehicles and equipment used in construction shall be fitted with exhaust silencers. Use silent type generators (if required).		or more from the construction sites) Number of complaints from sensitive receptors		by PIU. Noise level measurement, on as needed basis and/or if practical and reasonable.
Waste disposal	Pollution of water and land resources, and cases of vector borne diseases due to haphazard waste disposal.	• Waste minimization and waste segregation (organic and inorganic) at source will be carried out • Organic waste generated from the camps will be composted or properly managed in compost pit within the camp area by following the waste	Contractor	On-site situation in campsites (if any), work sites and their vicinities	100,000.00 (BoQ PS, Item No-3)	Monthly monitoring by PIU.

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
	Generation of solid waste and waste water from construction sites and labor camp Impact on existing road and its users during pipe laying	management guidelines. If feasible, compost will be distributed to be used in the nearby agricultural fields. • Hazardous wastes will be segregated from non-hazardous wastes. • 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. • 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 for inspections to monitor for leaks or spills. • Disposal of hazardous waste will comply with all applicable local and international regulations • Awareness raising event will be carried out. • Decommissioning waste will be re-used, sold to local scrap dealers • 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.				

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
		Backfilling will commence immediately.				
B. Biological Characteristics						
Impact on Flora and fauna	Loss of vegetation cover during construction works is unlikely. However, the subproject will address unexpected issues occurred during construction period if any. No direct impact on terrestrial and avian fauna is anticipated because the sub-project does not impact any forest area Increased pressure on the surrounding forest for its	- Greenery promotion around the construction sites where possible - 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 - Species of local economic significance and values will be planted. - Conduct Awareness program on environment conservation and protection at construction and labor camp site. - Providing alternative fuel to worker for cooking. - Scheduling work to avoid sensitive periods to reduce disturbance at night - Conduct the awareness on wildlife protection and in forcing monitoring and penalties for violations. - Restrict noise-generating construction activities to established working hours 8 hrs. (8 AM to 4 PM) as per the Labour Act 2017. For any work outside these hours, obtain a special permit in advance.	Contractor	Number of trees planted for greenery promotion	200000 BoQ PS, Item no.3 (Greenary Promotion)	Monthly monitoring by PIU.

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
	products like firewood, timber and non-timber forest products	- Establish and enforce a speed limit of 20 km/hr for construction vehicles. - Establish, implement, and enforce a Worker Code of Conduct that expressly prohibits illegal logging, clearing, hunting, poaching, and collection of animal and plant species in general, including fines and dismissal for repeat offences. - Implement a worker environmental awareness program as part of worker induction to inform personnel about the prohibition of hunting and poaching and the penalties associated therewith. - Collection of NTFP will be restricted during the construction of different infrastructure in the community forest area.				
C. Socio-economic Characteristics						
Community activities	The construction-related activities that impede access will disturb the local residents	- To minimize disturbances, construction work will be conducted at the earliest hour possible. - 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. - Temporary diversions and signboards will be provided to inform and make the pedestrian aware. - Ramps, where necessary, will be provided to	Contractor	Time schedule of construction work; Information related to construction activity to local residents Number of temporary diversions sign,		Daily (or whenever there are construction activities) by contractor Monthly visual inspection by PIU

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
		ensure access to houses, and other service areas. Ramps provided will be of sturdy material and of sufficient width • Traffic management plan if necessary will be prepared and implemented by the Contractor as part of the C-ESMP and approved by local authority. Necessary signage's will be used and placed where construction is being undertaken.		signboards etc.		
Labor Camp Management and Labor issues	Nearly 80% of the total workers will be hired directly from the project area. It mainly constitutes of unskilled and semi-skilled manpower. Around 40 workers will work in one day, among them around 10 workers will be migrants works. Poor sanitation practices by workforce may cause pollution of surrounding environment	• Provide adequate health care facilities within construction sites and provide first aid facility round the clock • Camp shall not be in the vicinity of landslide and flood plains. • The camp is constructed as per the technical specification considering the size, number and location of the camp • Provide and maintain proper drinking water, sewerage and waste disposal facilities at the camps. • Ensure no wood is burnt by any worker on or off site. Camps shall be provided free of cost, with electricity and regulator & adequate fuel supplies of LPG or Kerosene • Proper ventilation will be provided in the labor camp • Raised bed is the minimum standard of bedding in labor camp. • Separate rooms for men and women workers will	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.3)	

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
		- be managed • Standard ratio of room size of the camp and number of labors to be accommodated will be maintained • Separate toilets will be established in every campsite for male and female • Worker's Grievance Redress mechanism will be established for labor issues, and every laborer will be informed of the GRM. • Install the Grievance box in contractor and 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 zerotolerance for child labor and forced labor • Implement procedures to confirm workers age before they start work, verify their age through formal identification card. Maintain the register of workers, including their age, sex, caste/ethnicity and name of the contact persons with phone numbers in the case of emergency. • Camp shall not be in vicinity of landslides and flood plain,.				
Social harmony	Changes in social structure, cultural and traditional practices of the	• 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.	Contractor	Daily entry-sheet of the workforce in the camp sites		Monthly inspection at campsites (if any) by PIU

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
	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 practices of the rural people due to exposition to the outside workforce	• 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 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. These CoC will have to be signed by the labour and also make sure the labours understand what the CoC		(Public land of TRVT-1 site and TRVT-5 site) Number of local people versus outside workers in the project area will be regularly monitored		and Consultants.

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
		governs.				
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	• Prepare and implement OHS plan as part of the C-ESMP • Mandatory use of safety measures (PPEs) such as mask, helmet, hand gloves and rubber boots, etc. • The laborers will be insured for their health and safety. • Provide safe drinking water for labors • Prohibit child labor and forced labour in all construction activities. • 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. • 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 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 • 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	Contractor	Availability of personal protective equipment, F i r s t - a i d facilities, medical insurance coverage for workers, Housekeeping and condition of sleeping and sanitation facilities at campsite (if any), Roster of workers	100,000.00 (BoQ PS, Item No-3)	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
		fellow employees. • 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. • 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. • The contractor's supervisors will be instructed to conduct 'prework instructions' to the workers everyday - explaining them about the nature of works, condition of the site, and associated risks as well as safety measures. • Agreement with nearby health institution will be in place by the contractor. • Contractor will be responsible to maintain the records of each and every accident and incidence.				
Community Health & Safety	Overall, communities will be exposed to cross-cutting threats from construction's impacts on air and water quality,	• Contractor's will maintain adequate space and adequate lighting, temporary fence, barriers and signage at worksites; • Children and community members will be prohibited from active construction sites • Proper fencing of stockpile areas • Awareness programs on communicable diseases and hygiene practices will be carried out	Contractor	Number of permanent signs, barricades and flagmen on worksites	100,000.00 (BoQ PS, Item No-3)	Daily monitoring by contractor. Monthly visual inspection

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
	ambient noise level; Chances of accidents, Communicable and transmittable diseases like COVID may potentially be brought into the community by construction workers	• Disseminate the GRM to communities and affected stakeholders during consultations, community meeting, disseminate through local media and newspaper. • Sensitive localities in terms of risk of this environmental, social and health related impact in Sharada Municipality. • Inform and regularly update and organize awareness campaigns targeting the affected communities, including vulnerable groups, about potential project hazards and changes to project activities that may have environmental, health, or safety impacts, as well as the proposed prevention, mitigation, and emergency response measures. • Active sites will be well demarcated and bounded. Excavated sites will be well bounded with hard barricades. • -Unauthorized entry to active construction sites and stockpile sites will be strictly regulated. • -Movement of vehicles for construction activities will be strictly regulated under safety guidelines. • Code of conducts will be implied for the workforce so that they have no conflict with the local communities. • Provision of ramps will be made where trenching works are being carried out to provide access to houses and businesses.		Number of complaints from sensitive receptors;		by PIU
GRM, Social Disturbance / Risk	chances of unequal	(i) Regarding SEA/SH, GBV	PIU/MST	Regular monitoring	100,000.	Daily (or when there

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
of GBV, SEA/SH, Human trafficking, and , HIV AIDS and Communicable diseases & Staking Sign Board	wages between male and female workers for same nature of works 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.	- Locals will be given due priority for any employment opportunity - An SEA/SH focal person will be nominated at the PIU and project workers will be made aware about the SEA/SH grievances and procedure. - Follow Code of Conduct which applies to staff, laborers and others employees at works site, personnel of subcontractors, any other personal assisting in the execution of the subproject works. - CoC will be signed, workers oriented on the CoC to ensure it is understood by those signing, and strictly adhered to and monitored for all workers. Signed copies of code of conduct will be maintained. - Separate toilets will be provided for male and female workers - SEA/SH, GBV awareness raising activities, orientation/training and stakeholder engagements such as community-based- awareness program, school-based awareness program. The SEA/SH GRM nominated focal person of Sharada Municipality will be part of trainings, awareness programs regarding SEA/SH. - Awareness program for women and against the gender-based violence will be conducted for the workers as well as the local community including school children regarding these concerns 4 orientations/trainings with at least 25 participants in each training; to be conducted during Pre-construction and during Construction		and supervision of construction site/camp Information related to SEA/SH, Human trafficking, GBV, HIV AIDS and Communicable diseases	00 (BoQ PS, Item No-4)	is a construction activity) by contractor. MST/ PIU Municipality

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
		period. (ii) HIV AIDS & Communicable diseases • Awareness creation and sensitization to workers and other persons post- project to reduce or eliminate chances of infections of HIV-AIDS and other sexually transmitted diseases • Distribute HIV & AIDS awareness materials in collaboration with local health related agencies • Ensure protective measures for communicable diseases is followed, prepare and follow SOPs by all workers and staff (hand washing, using sanitizer, masks etc.) including the community health and safety awareness and management • Health screening of the workers will be carried out before joining them into workforce • Emergency Response Plan will be implemented during any critical circumstances (e.g. COVID spread)				
Child labour, forced labour and wage discrimination	During the construction work, the labourers involved in the construction activities may be a Children	• Grievance Redress Mechanism will be established for labor issues, focal person handling worker related GRM will be assigned and every laborer will be informed of the GRM. • Grievances box will be installed in contractor and labor camp. • Child labour & forced labour will be strictly prohibited • Copies of citizenship card or other valid personal	Municipality /Contractor	Copies of citizenship card or other valid personal ID card will be seen if any doubt		Daily by contractor. MST Monthly visual inspection by PIU

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
		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				
3. During Operation and Maintenance Phase						
Exposure chemicals	to 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 requires 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 Safety Data Sheet (MSDS) for each substance. This includes: - Storing chemicals in appropriate containers that are compatible with the substances. - Ensuring proper labeling and segregation	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
		- of incompatible chemicals (e.g., acids and bases, oxidizers and flammables). • Maintaining temperature, ventilation, and humidity controls as specified in the SDS. • Implementing secondary containment measures to prevent spills or leaks. • Ensuring easy access to spill kits, eye-wash stations, and fire extinguishers in case of emergencies." • Additional measures, as required, will be defined in the O&M manual of the water treatment facility and operation				
Drinking water supply system	Delivery of unsafe water due to source contamination, leakage in pipes	• Local people mostly from the vulnerable community will be given priority for employment during the operation stage. • 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 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.	Contractor/ WSUC	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.
Impact on Water bodies -Pollution and nuisance due to	If the effluents from the WTP and waste water from the operator's labor	• The treatment plant will be cleaned on regular basis. • Quality of the effluent will be regularly monitored to ensure that the effluent meets the	Contractor during DLP ; WSUC or Operator	Visual inspection		Daily or as needed visual inspection by the

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Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Estimated Cost NRs.	Frequency of Monitoring
sludge removal and its disposal	camp is not well treated, then there will be risk of pollution of local water bodies (Jarkhu Stream) due to the discharge of effluent and liquid waste. However, likelihood of occurrence of this case is very low.	GoN tolerance limits of discharge of waste water from combined wastewater treatment plant • The operation and maintenance of the WTP will be carried out on timely and regular basis as per O&M plan. • Standard Operation Procedure (SoP) will be adopted for the operation of WTP. • Sludge will be disposed to the sludge drying bed or other designated place under coordination and permission of the municipality	after DLP	Water Quality reports WTP records in the logbook		operator. Quarterly or as needed water quality testing by the operator.

4.4 Capacity Development and Training

To enhance the capacity of officials for effective implementation of proposed mitigation measures and monitoring the resultant effect, as well as create awareness among workers and supervision staff, trainings and awareness programmes have been planned and is given in Table 10. 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 15: 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 ESF and requirements • -Brief of latest environmental legislation • -Implementation, supervision and monitoring mechanism	Before awarding contract	1 Day	PMU/PST/PIU/MST/MWASH unit
2	Orientation workshop on ESMF Implementation by PMU/PST to MST/MWASH Unit /Contractor	• ESMF requirements • Roles & responsibilities of contractor & MWASH unit • Identification of environment and social issues • Addressing environment and social impacts • Preparing mitigation plans	Pre-construction stage (when contractors are substantially mobilized)	1 Day	PIU/MST/Contractor/MWASH unit
3	Focused orientation/training on specific issues	• Issues relating to wage disparity, child labour etc.	During construction or when needed	½ Day	PIU/MST/Contractor/MWASH unit
4	Training on STDs/HIV AIDS issues	• To increase the level of awareness about prevention and control of STDs/HIV Aids among communities.	During construction	1 Day	PIU/MST/Contractor/MWASH unit
5	Training / Orientation on occupational Health GBV, SEA/SH by PIU/MST to labours/Contractor	• To ensure the safety health and welfare of labours and others who may be affected	During construction	1 Day	PIU/MST/Contractor/MWASH unit

6	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
6	Training on WASH	• To raise awareness on WASH	During construction	1 Day	PIU/MST/Contractor/MWASH unit

4.5 Cost of Environmental Mitigation

A total of NRs. **1,000,000** has been allocated to implement mitigation measure for construction phase impacts. The tables with the total cost and tentative implementation itemized under different subjects are presented in **Table 15**. 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 duly considered the financial capability of the proponent.

Cost for most of the mitigation measures during operation phase like rehabilitation of infrastructures, periodic maintenance of Jarkhu WS Project during operation phase/Defect Liability Period are not included in this cost. The proponent will cover all the environmental management costs in addition to the legal liabilities of the contractors. Similarly, the proponent will cover the cost related to the legal role that the governmental institution will have to play.

Table 16: Mitigation Budget and Implementation Schedule

SN	Cost Bearing Mitigation Activities	Cost (NRs)	Implementation Schedule	Remarks
1	Water Sprinkling near the construction site, settlement, stockpiled area and school area during construction period	200,000.00 (BoQ Provisional Sum, Item No-3)	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 all RVT sites	100,000.00 (BoQ PS, Item No-3)	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 site and labor camp	48,000.00 (BoQ PS, Item No-3)	During construction period	16 bins in 13 RVT sites, office 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	100,000.00 (BoQ PS, Item No-3)	During construction period	Throughout the project period
5	Monitoring of ambient air quality, water quality and noise level at project site	176,000.00 (BoQ PS, Item No-3)	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 for compensatory forest land area use	200,000.00 (BoQ PS, Item No-3)	During construction and Operation period	Various species of trees will be planted around proposed 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.	70,000.00 (BoQ PS, Item No-3)	Prior to construction	At the rate of NRs 5,000 each for 14 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 or during 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	76,000.00 (BoQ PS, Item No-3)	During Construction	Throughout the construction period.

	Total	10,00,000.00		
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Note: The Environment mitigation cost of Rs. 1,000,000 is allocated as Provisional Sum (PS) in General works; Item No. 3. Similarly, Rs. 500,000 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.

4.6 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 17: Compliance Monitoring Plan

Issues	Indicators	Method	Schedule	Location	Agencies to be consulted	Responsible Agency
Construction Phase						
Approval of operation plan of Sharada Municipality with proposed intervention	Approval letter	Review of approval letter	Prior initiation of work or Prior procurement	Sharada 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	Sharada Municipality	Local authority	Contractor, PIU, MST
Mitigation management (Compliance with ESMP)	Budget allocation for mitigation measures and monitoring	Review of project budget document	Annual	Sharada Municipality	Local authority	PIU, MST
Implementation of construction phase monitoring	Monitoring report and budget allocation for corrective actions	Review of monitoring report and budget allocation for corrective actions	Annual	Sharada Municipality	Local authority	PIU, MST
Operation Phase						

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Operation phase mitigation management	Budget allocation for mitigation measures for operation phase	Review of project budget document	Annual	Sharada Municipality/MWASH 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	Sharada Municipality/MWASH Unit	Local authority	Municipality

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Table 18: Impact Monitoring Plan

Parameter	Indicators	Method	Location	Frequency & Schedule	Agencies to be consulted	Responsible Agency
Construction Phase						
Physical Environment						
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
Biological Environment						
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
Socio-economic and Cultural Environment						
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 of crimes in the project area; complaints in the local police	Discussions with the local people and the local police	Project area and surrounding	Monthly during construction	Local Police Office	Municipality, 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

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Parameter	Indicators	Method	Location	Frequency & Schedule	Agencies to be consulted	Responsible Agency
Labor Management	Camp 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 records	Visual inspection/monitoring report/photographs, review of workers' grievances register/ GRM committee formed in municipality and sub-committee already formed in ward level to address grievances arisen during implementation of the JWSP	Construction site	Regular	Contractor/ Municipality	PIU/MST/Contr actor
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	Contractor/ Municipality	PIU/MST/Contr actor
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,	Site visits, visual inspections, training completion reports/records and photographs	Construction site	Monthly	Workers, students and community people	

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Parameter	Indicators	Method	Location	Frequency & Schedule	Agencies to be consulted	Responsible Agency
	adolescent girl and as deemed necessary					
Information disclosure, stakeholder engagements, GRM	Number, type and topic of engagement activities Number, type and status of grievances Number and type of engagement activities with vulnerable groups	Site visits, consultations, records and photographs review of grievance register, meeting minutes, information boards Observation, discussion with the locals, GRM register and other reports/documents		Regular	Ward level & Municipality	
Traffic and road safety	Status of road for use; road accidents	Observation and record checking	Observation and record checking	Daily	Traffic police/ Municipal Police	Municipality
Operation Phase						
Occupational health and safety	Health status of workers	Field observation and consultation with workers	Project site	Monthly	Workers	Municipality
Water pollution	Water quality of spring	Direct observation and water quality testing	Jarkhu Spring	Quarterly	Municipality	Municipality

4.7 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 Sharada Municipality's regular management expenses. As a result, no additional funds have been allocated for monitoring in this Environmental and Social Management Plan (ESMP).

4.8 Project Environmental Management Framework and the Key Stakeholders

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

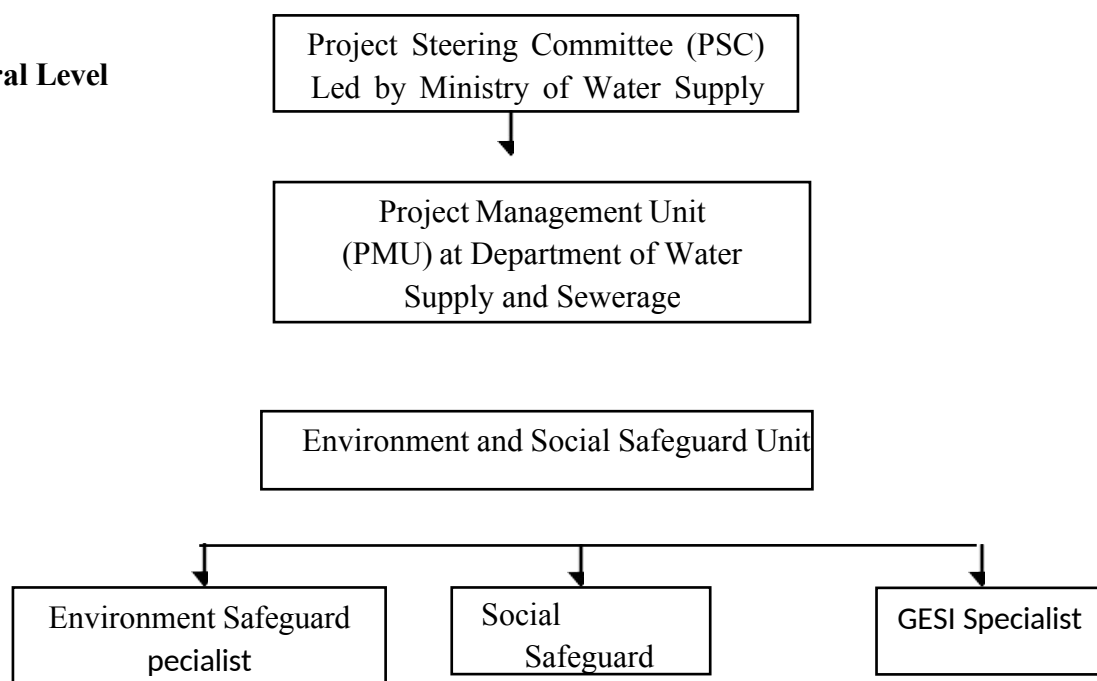
The key stakeholders including the Sharada Municipality, to be involved in the project management are discussed below and illustrated in Figure-7:

- 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.

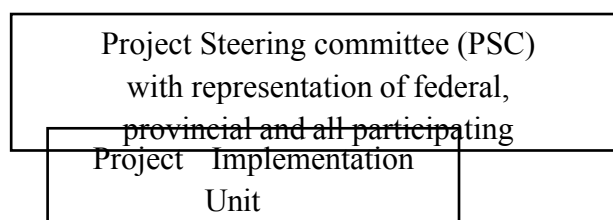
- f) Municipal Support Team (MST):** MST offers specialized technical aid to the PIU, focusing on governance, institutional support, planning, design and construction supervision of infrastructure project. It aims to strengthen the M-WASH Unit's capacity in planning and managing water and sanitation 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

At Federal Level



At Provincial Level



At Participating municipalities

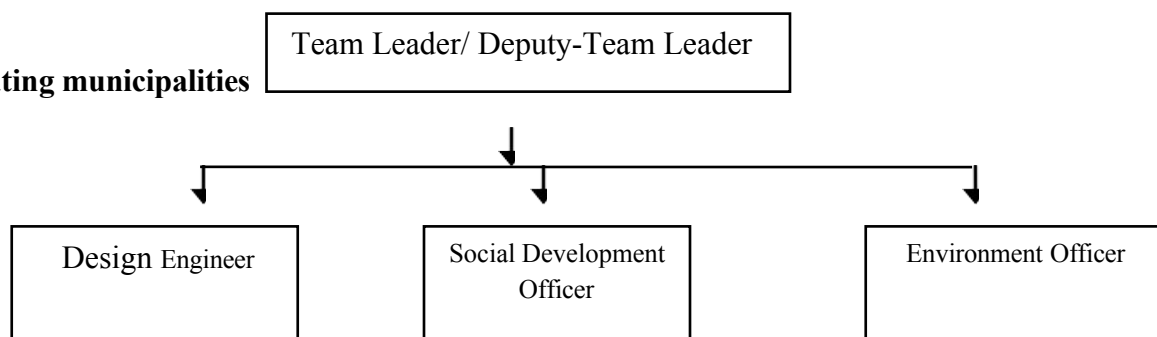


Figure-8: Organogram of E & S activities related to the project

4.9 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 stakeholders' 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). 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 analyse 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 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.

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Municipality level GRM has been established and the Grievance Redress Committee (GRC) has been formed on 2081 / 2 / 23. The composition of the GRC is given below.

Table-19: Composition of GRC at Municipality level

S.N.		Name	Organization/Position
1	Coordinator	Susmita Sapkota	Deputy Mayor / Chairperson
2	Member	Respective ward chairperson	Ward Chair-Member
3	Member	Kailash Chanara	WASH Focal Person-Member
4	Member	Mukunda Raj Aryal	MST/SDS-Member
5	Member-secretary	Deepak Maharjan	Project Manager/PIU

Ward level Grievance Redress sub-committees have also been formed in project wards as given in table below.

Table-20: Details of Ward level GR Sub-Committee Members in Jarkhu Service Area

S.N.	Ward No. 4	Name	Designation
1	Coordinator	Kishor Kumar Hamal	Ward Chairperson
2	Member	Kripa Kami	Ward member
3	Member	Gita Acharya	SM/ MST
S.N.	Ward No. 5	Name	Designation
1	Coordinator	Pradip Shahi	Ward Chairperson
2	Member	Pushpa Nepali	Ward member
3	Member	Bimala Oli Dangi	SM/ Municipality
S.N.	Ward No. 8	Name	Designation
1	Coordinator	Laxman Budhathoki	Ward Chairperson
2	Member	Dhana Devi BK	Ward member
3	Member	Bimala Oli Dangi	SM/ Municipality
S.N.	Ward No. 9	Name	Designation
1	Coordinator	Hemendra Kumar Budhathoki	Ward Chairperson
2	Member	Dil Maya B.K.	Ward member
3	Member	Bimala Oli Dangi	SM/ Municipality
S.N.	Ward No. 10	Name	Designation
1	Coordinator	Krishna Bahadur Bohara	Ward Chairperson
2	Member	Sita Kavar	Ward member
3	Member	Gita Acharya	SM/ MST

The existing GRM put in place for the project will also be utilized to address GBV and SEA/SH issues, and the PMU at the DoWSSM will oversee GBV-related complaints. The project will place its highest priority on handling and managing GBV-related grievances by maintaining the complete confidentiality of the survivor. The PMU will establish necessary mechanisms for confidential reporting, ensuring the safe and ethical documentation of GBV

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issues at both central and local levels. The first responders for grievances related to GBV will be the E&S staff of the participating municipalities, who will be trained in managing and handling such grievances. For this purpose, Mrs. Bimala Oli Dangi, working as a social mobilizer for the WASH Unit in Sharada Municipality, has been appointed as the focal person for GBV/SEA/SH by the PIU. GBV referral pathway will be established and communicated to both PMU at the DoWSSM and local level. Furthermore, the GRM will also establish a system to promptly notify both the PMU and the World Bank of any complaints of GBV.

5. Stakeholder Engagement and Information Disclosure

5.1 Public Consultations

The public consultation focused primarily on the project impacted people. For instance, the group of directly impacted people is those living near the WS project area. The aim was to identify possible environmental and social impacts that might arise from the proposed project activities. According to the site survey during the ESMP, within the directly impacted area of Sharada Municipality wards no.. 4, 5, 8, 9 & 10, people expressed their concerns about various kinds of environmental impacts caused by the project. From the consultation meeting, it was found that most of the people are positive towards the project. It was found that there are no significant negative impacts on physical, biological and socio-economic environment. A consultation meeting was conducted on 09/13/2024 in WN 10 (Madana) with PST, PIU, M-WASH Unit & MST about JWSP Operation & Maintenance cost and sustainability. Mr. Hari Prasad Sharma, Team Leader of PST made clear about necessary documents required for , clarified the necessary documents required for the Detailed Project Report (DPR) of Jarkhu WSP, with managerial support from local level representatives and water users.

The specific comments or issues raised from public consultation and suggestions or remedies given are listed below:

Comments:

- i) If the cost of the project is higher due to electric tariffs and maintenance and operation cost for low population of the service area?
- ii) Is the project viable and sustainable in the long run and will it be able to generate enough revenue to pay back the soft loans?

Remedies:

- i) The cost of the project was made cheaper by putting the electricity tariff in the modality of community use as the people's purchasing capacity also has increased due to flow of remittance and digital marketing with the enhancement of CIT sector.
- ii) The project was made viable and sustainable by forming board concept like Khalanga Sitalpati WSP and selling the water of Jarkhu spring in packaged product of PET water bottles and jar through the mobilization of dedicated and efficient manpower with expertise in water supply sector for smooth operation and timely maintenance.

A separate consultation meetings was conducted with the people of the IP community of Syure and Sunchaur and Focus Group Discussion with Women Groups as well as Dalit people of ward was conducted to collect their views on the proposed Jarkhu WSP. The summary of the issues raised by them during consultations is as follows.

- The communities of Syure and Sunchaur have long struggled with severe water shortages, particularly during the dry season. Residents often have to walk 15-20 minutes one way to collect water, and in some cases, round trips take up to 30 minutes. This has greatly affected their daily lives, especially for women and marginalized groups such as the Dalit community. The implementation of the proposed Jarkhu Water Supply project (WSP) would provide much-needed relief by ensuring easier access to safe drinking water. Seasonal migration, which has

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traditionally been necessary due to the lack of sufficient water for both people and livestock, would likely no longer be required.

- The proposed WSP is also expected to generate employment opportunities during the construction phase, and local residents have expressed willingness to work under the contractor. They believe that improved water access will significantly enhance their livelihoods.
- Moreover, the community-including women's groups and Dalit representatives have expressed strong support for the project. They have indicated their readiness to contribute to its successful implementation and ready to pay water tariff for proposed Jarkhu WSP. The residents have collectively requested the urgent implementation of the Jarkhu WSP and committed to active participation for its effective and sustainable execution.

5.2 Stakeholder Consultation Plan for Implementation Phase

Consultations during the implementation phase will involve direct interactions with the people who have been affected by the project. PIU, MST, and the contractor will conduct regular consultations with PAPs, as well as local user committees, local electricity office units, and other stakeholders. All consultations on social and environmental issues conducted during the implementation of subprojects will be inclusive, involving 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 Table 20

Table 21: Stakeholder Engagement Plan

During Construction				
Topic	Stakeholders	Engagement Method	Frequency	Responsibility
▪ Disclosure of ESMP (and updated ESMP), including C-ESMP ▪ ESMF, Project SEP, and LMP ▪ Delineate Labour Influx Management Procedures ▪ Activities planned for SEA/SH and GBV ▪ Awareness of HIV and other communicable diseases ▪ GRM for SEA/SH	▪ Sharda Municipality and concerned officials of the Municipality and MWASH Units ▪ Project-affected Ward chairs ▪ Tole Committees ▪ Local Community of the project area ▪ Community Leaders ▪ Local CBOs and NGOs working on WASH and GBV	▪ FGDs and targeted outreach activities with women, Ips, IPs organisations, and other vulnerable groups, such as Dalits (Application of audio/visual communication techniques and other accessible formats) ▪ Community radio and local media ▪ Notice Boards ▪ Periodic information disclosure activities	Periodically throughout project implementation For planned construction activities, the community will be informed a week in advance of the construction work and a day before the commencement of construction in the designated areas.	PIU/MST Contractors

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▪ Project GRM ▪ Planned construction activities				
▪ Beneficiary satisfaction survey	▪ Target beneficiaries of the project	▪ Beneficiary satisfaction survey	The first survey will be conducted two years after implementation, and the final survey during the final year of operation.	PMU/PST/MST

5.3 Information Dissemination

For the effective implementation of the project, all information about the proposed activities and their expected outcomes will be publicly shared with the local community and interested stakeholders. In collaboration with relevant local authorities and other community groups, the project will disclose all relevant information at various stages of the project cycle. Relevant organisations working on environmental and social issues will also be informed about ongoing and planned activities, enabling them to identify appropriate protective or corrective measures in collaboration. The following approaches will be adopted to make information accessible to all the concerned stakeholders throughout the project cycle;

- Mass Media: Utilize local media, such as newspapers, radio, and TV.
- Meeting/Workshops
- Distribution of project documents: Certain project documents will be disclosed in Nepali
(or other relevant local languages). Project-related information materials will be sent to other relevant offices, such as the municipality, ward, and Toile Committee.

The municipality office will serve as the project-level information sharing point during implementation and will 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.

6. CONCLUSION AND RECOMMENDATION

The Jarkhu WS Project, facilitated by WaSGISP in Sharada Municipality's Wards 8, 9, 10, 11, 4 & 5 utilizes a spring intake lift pumping system drawing from the Jarkhu Spring. By electrical- powered pumps, it optimizes clean energy usage with no harmful carbon footprints. 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 2685 households, promoting community well-being and sustainable development.

The Jarkhu WSP in Sharada 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 **1,098,000** 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.

Recommendations may include:

1. Implement erosion control measures and restoring any areas affected by construction activities.
2. Provide training and employment opportunities for local residents to promote community involvement and capacity-building.
3. Establish and activate a grievance mechanism to address any concerns or complaints raised by community members during the enhancement works.
4. Monitoring and evaluating the project's social and environmental performance regularly to ensure compliance with relevant regulations and standards.

Annex- I: Environmental and Social Screening Checklist

I- Sub-project Background

1.	Name of the Sub Project	Jarkhu Water Supply Project
2.	Location	Municipality/ Rural Municipality: Sharada Municipality Ward No: 4, 5, 8, 9 & 10 District: Salyan Province Karnali Altitude: (3708.6 – 6030) Ft.
3.	Co-ordinate (GPS) of Spring Source	Latitude: 28°20'19.31"N Longitude: 82° 5'24.58"E
	Project's boundaries in four directions and the area of influence	East: Ward No. 1, 2 & 6 of Sharada Municipality West: Banagad Kupinde Municipality North: Ward No. 6 of Sharada Municipality & Banagad Kupinde Municipality South: Kalimati Rural Municipality & Triveni Rural Municipality
4.	Type of Sub-project	Water Supply & Sanitation
5.	Proponent	Sharada Municipality, Salyan

II- Environmental and Social Screening

SN	Screening checklist	Yes	No	Comments Provide information/justification either for "Yes" or "No" if applicable
	Project's site information			
1.	Is the sub-project site adjacent to or within any of the following sensitive receptors?	Yes		Four community forests with no significant adverse impact.
	i. Natural habitats and /or legally protected areas (national park, wetlands, forests, estuary, buffer zones, nature reserves)	Yes		The transmission site runs through the three community forests. The proposed site is located in the Siddhabaje and Kafalgaira community Forests with spring source at Jarkhu of ward no. 10, TRVT-2A at Sundhara Community Forest of Marke-9, Sunchaur and PRVT 8 at Dhungekhani Community Forest of Simkharka-8.
	ii. Cultural heritage site (e.g. temples and sacred sites)		No	
	iii. Recreation or public gathering site	Yes		There is Siddha Park in Madana of ward 10.

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	iv. Aesthetically important sites		No	
	v. Located near the main settlement and market places. If “Yes” provide name of the settlement and marketplace, and brief description with estimated number of HHs		No	
	vi. Is there any history of flood/river cutting / landslides at the site or surrounding areas?	Yes		There is no high risk of flood/landslides at site, but along the access road to Jarkhu there is risk of landslides due to haphazard road cutting & unstable slope mostly in wet season.
	vii. Is there any public infrastructure (school, hospital, health post) in the surrounding area of the project site? If yes, provide brief descriptions.	Yes		There are around 27 public schools and 5 health facilities in the surrounding settlements.
	viii. Are canals and irrigation systems present in proximity to sub-project site?	Yes		There are existing irrigation pipes carrying water from the source to irrigate the agricultural land.
	ix. Are there any existing water sources near or within the site that may be impacted by the project?		No	There are existing water sources and water supply schemes such as Madana Badachaur WSS, Takura WSS, etc. within the site that will be integrated with proposed JWSP in future.
	x. Briefly describe the existing use of land in the surrounding area of the proposed site, nature (slope and facing)	Land has been used for agricultural activities on the bank of Jarkhu (Muhus) river. There is steep slope from where water will be transported from the intake source.		
	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.	Yes		There is gravelled road to reach the source intake site and (4 km width) access road built by the municipality to proposed RVTs on LHS. RHS has off road access.
	xii. Is the proposed site is being used by locals to access to other places or public resources such as forests, rivers, water sources, cultural and religious heritages/temples?	Yes		There are other existing water supply source and schemes in function with minimum yield and 3 community forests in the proposed site of transmission.
	xiii. Will the construction activities cause any damage to the existing local roads?		No	

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SN.	Screening checklist	Yes	No	Comments Provide information/justification either for “Yes” or “No” if applicable
General				
1.	Does the Subproject contravene Nepal’s obligations under its international agreements?		No	It follows Project ESMF, EPA 2019 and EPR 2020.
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 forest resources will have minimum adverse impacts and will positively impact existing drinking water supply system by merging with the new JWSS.
3.	Are any of the following activities planned within the Project area? • Earthworks, • Excavations/topsoil removal, • Borrow areas, • Stockpiles, • Storage facilities (e.g. tanks, silos).	Yes		The project implementation will lead to construction of WTP, 13 RVTs and office building. Similarly, protection works will be done in construction site by chain fencing. This will lead to earthworks and excavation of soil. Nearly 121483.7 m ³ soils will be excavated during the construction time for 3336 m ² of site clearance. Since nearly 80% of the soil (96339.9 m ³) is used in back filling, the material left is minimum and can be managed easily in the site and will have no significant impacts.
4.	Will natural resources (e.g. timber; water, sand, quarries) within the sub-project area be used for construction activities in a significant quantity?		No	water can be used from Jarkhu river source for construction and dust mitigation purpose.
5.	Is there potential for landslide and soil erosion impacts during construction or operation of the project?	Yes		Due to high slope gradient slope instability may result in soil erosion and landslides mostly during wet monsoon season.

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	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)	Dipesh KC, Salyan in-charge of the Soil Conservation Office in Surkhet, said that landslides occurred in 90 places in Salyan last year due to soil erosion caused by haphazard construction of roads, and deforestation. As per the data available at the District Administration Office in Salyan, a person died, 96 houses were destroyed, 133 other houses were partially damaged while 604 people were displaced in the district last year. The Dang-Salyan-Surkhet and the Kapurkot-Phalawang roads under the Madan Bhandari Highway have been blocked frequently due to landslides triggered by continuous rainfall. (Source: https://kathmandupost.com/karnali-province/2024/08/22/landslides-block-dang-salyan-surkhet-and-kapurkot-phalawang-roads https://kathmandupost.com/karnali-province/2024/07/06/126-settlements-in-salyan-district-at-risk-of-landslides)		
6.	Changes in drainage patterns and resulting effects due to construction of project components and access roads?		No	
7.	Loss or destruction of unique or aesthetically valuable land or natural resources		No	It won't damage unique or aesthetically valuable land.
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?	To be managed by contractor. 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 constitutes 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		

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		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: approx. 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 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 and identification card 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 nondiscrimination 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.

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11.	Does the Project ensure that all persons working for the project are above minimum age as per national laws?	Yes		Child labour and bondage labour is strictly prohibited 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 loaders 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 equipment?	Yes		There can be use of electrical drill machines and iron cutters which must be handled with safety and precaution.
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 and female toilets 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.

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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 to be organized by PIU/MST 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	Local people are very courteous and cooperative in nature.
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.
Resource Efficiency and Pollution Prevention and Management				
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 equipment, 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	Restrict noisy activities to daytime. Minimize drop heights when loading and unloading coarse aggregates. Horns should not be used unless it is necessary or unavoidable Utilize modern vehicles and machinery with the requisite adaptations to limit noise and exhaust emissions, and ensure that these are maintained to manufactures' specifications at all times.
6.	If the sub-project plans to transport, storage, 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		Waste minimization and waste segregation will be prioritized, Practices of composting will be promoted; 3R will be practiced.

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				The waste from 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?	Yes		Oil spillage of vehicles will be managed by collecting on oil drums and disposing to safe site by Contractor.
10.	Will any explosive and hazardous chemicals be used within the project?		No	No such use of explosive and hazardous chemicals will be used within the project.
11.	Will building materials containing asbestos be removed/disposed of?		No	
12.	Will any building materials be removed/disposed of that are coated with lead-based paint?		No	Paints are not lead based nowadays.
13.	Will mercury-containing devices (switches, gauges, thermostats) be removed/disposed?		No	Will use electronic digital devices rather than mercury (paro) devices.
14.	Will any building materials be removed/disposed of that contain lead, silver or chrome?		No	Will use zinc and iron sheets other than lead, silver or chrome containing building materials.
15.	Will the sub-project use batteries (lead- acid or nickel-cadmium) as its components?		No	The sub-project uses direct electricity from transformers of 11KV line and use of dry cells with minimum environmental hazards.
16.	If “Yes”, please briefly explain how the Project plans safe transportation, storage and use and disposal of hazardous materials.	Any hazardous materials will be disposed to safe place and stored by proper treatment using ESMP and World Bank Guidelines.		
17.	Will sub-project activities involve GHG emissions?		NA	Due to plenty of trees the GHG emissions will be carbon sequestered and ensure use of

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				equipment and fuel complying with applicable emission standards and air pollution control devices. Afforestation and tree plantation will be encouraged.
18.	If “Yes”, please provide description of the activities that will contribute to the GHG emission.			
Potential Community and Occupational Health and Safety Impacts				
1.	Are there any community health and safety risks due to the use of equipment, machinery, or the activities at the sub-project?		No	
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	The project uses land of forests and public for transmission & RVT.
4.	Are there any risks to community safety due to accidental and natural hazards during sub-project construction and operation?		No	Sub-project construction and operation will not affect the community but workers’ health & safety will be safeguarded on the work activities. Also ward level grievance sub-committee and monitoring committee will look after any unwanted accidents and natural hazards in co-ordination with the Municipality.
5.	Is there any possibility of traffic congestion or rise in road accident in the project area due to project activities?		No	Since the construction activities will go in rural setting so minimum traffic movement observed and any accidents will be taken care by traffic police from Khalanga HQ.
6.	Is there any provision to control possible trespassing of non-project staff on the project site during construction and operation?	Yes		Use of time card system for visitors and provision of supervisors and security guard for surveillance. The construction site will be separated by the Chain linked

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				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.
Land Acquisition and involuntary resettlement				
1.	Will there be permanent land acquisition for the sub-project?	Yes		
2.	If “Yes”, please provide information about the types of land that will be acquired. Private land Forest land Government/Public land	Four community forest lands and public lands will be used. Private land at two sites has been acquired through the negotiation process, and the ownership was transferred in the name of the Municipality.		
3.	If the sub-project is planning to acquire private land, please provide information about the process of acquisition Voluntary donation Involuntary acquisition Negotiation	The sub-project has acquired private land at two sites through willing buyer and seller, i.e., through negotiation process following		
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.			Not required.
6.	Will there be a loss of productive land?		No	Most of the land used will be of community forests and public (Ailani) land and pipe laying will not cause loss of productive land of private ownership.
7.	Will there be any physical/economic displacement and impact on livelihoods?		No	The proposed site belongs to four community forests and there is no any claim of IPs on this land. Thus, there will be no

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				any physical displacement of IPs.
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?	No physical and economic displacement.		
10.	Is there any impact on house or structures built on the land to be used for the project?		No	Structures such as pump house, guard house and RVT will be made by the project.
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?		No	Land acquisition will be made according to legal process if to be taken from private property as per land commitment from the Municipality.
13.	Apart from compensation, does the sub-project plans to provide additional supports to impacted person/family?		No	If any compensation issue arises, Municipality and ward will handle the problem by the commitment from the Mayor and GRM Unit.
14.	Will there be any adverse impact on non-titleholders including loss of shelter and livelihood?		No	
15.	Will land acquisition result in loss of income loss of access to common property resources?		No	
Biodiversity Conservation and Sustainable Management of Living Natural Resources				

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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	It will have less adverse impacts on natural flora and fauna.
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?	Yes		Some species Pine trees and Rhododendron sp. can be cleared to make access road for the project. Pipe line distribution will have no significant adverse impact.
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.	Yes		The site runs through four community forests with minimum adverse impact on flora and fauna.
5.	Is the loss of Non-Timber Forest Products (NTFP) possible? If so, provide the details if known at the time of screening.	Yes		Loss of some products such as pine cones, resins, rhododendron sp., <i>Rubus ellipticus</i> (Aiselu), <i>Myrica esculenta</i> (Kafal), etc.
6.	Is there presence of wildlife around the sub project area?	Yes		Mentioned below.
7.	If yes, provide information of the type of wildlife, if known at the time of screening? (Provide details of listed wild life and avi-faunal species according to national and international – specifically IUCN - classifications, if known at the time of screening).	Yes		Spotted some monkeys, snake and dogs during the field visit. Presence of variety of birds such as doves, crow, Koili, Maina, sparrow, parrot, <i>Hodgson's Redstart</i> , etc. Rabbit (<i>Oryctolagus cuniculus</i>), Jackal (<i>Canis aureus</i>), Jungle Cat (<i>Felis bengalensis</i>), Bandar/Monkey(<i>Macaca mulata</i>), Nyauri/Mongoose(<i>Herpestes</i>

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				<i>fuscus</i>), etc.
8.	Will there be any barrier to migratory birds or land animals by the construction of this project?		No	Transmission pipe will run through the ground with minimum impact on birds and land animals' habitat.
9.	Will the sub-project affect the aquatic fauna of river system and/or springs?		No	The water intake will use water of spring source and not river system.
10.	If yes, provide the details of the river/spring and existing fauna, if known at the time of screening?		No	Fish species includes Asala (<i>Schizothorax richardsonii</i>), Raj Bam (<i>Angullia bengalensis</i>), Buduna (<i>Garra gotyla</i>), Cabre (<i>Pseudecheneis sulcatus</i>), Faketa (<i>Barilius bendelisis</i>), Lohari (<i>Garra annandalei</i>), Gardi (<i>Labeo dyrocheli</i>), Kalacha (<i>Labeo pangusia</i>), Katle (<i>Neolissochilus hexagonolepis</i>), Sidre (<i>Puntius ticto</i>), Sahar (<i>Tor tor</i>), etc.
11.	Will the subproject involve draining or conversion of any wetland?		No	No impact on nearby agricultural land as the land is public.
12.	Other potential biodiversity impacts (specify)?		No	Biodiversity will be preserved through tree greenery and plantation activities.
Vulnerable People				
1.	Are there any indigenous people among the identified project-affected people?		No	Will not impact any vulnerable people
2.	Will the proposed sub-project include any activity that promotes or involves the incidence of child labour?	No		

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3.	Will the proposed sub-project benefit all 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.
4.	Are there any vulnerable people, such as Dalits, religious minorities, landless, people with disabilities/chronic disease, women-headed households and elderly households among project-affected people? If “Yes”, please mention how many such households are among the project- affected people.	Yes		There are some Dalit communities in WN8 - Simkharka.
5.	Are any vulnerable people losing their land?		No	
6.	Are any vulnerable people being physically displacement?		No	

Cultural Heritage

1.	Does the proposed site or surrounding area host any cultural and religious heritage, temples, or structures?	Yes		Shiva temple in ward no. 10 of Siddha park.
2.	Will the sub-project encroach on historical, cultural, or religious areas?		No	The sub-project will not cause encroachment on historical/cultural/ religious areas.
3.	Will there be any adverse impacts on cultural heritage due to sub-project activities?		No	Project site will not have structures to impact any cultural heritage.
4.	If “Yes”, please explain briefly			
5.	Does the proposed site or surrounding area host any cultural or religious event/ gathering?		No	The proposed site or surrounding area will not affect any cultural or religious event or gathering.
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 site provides access to some cultural/ religious heritages such as parks and temples in periphery.

Stakeholder engagement

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8.	Have the stakeholders of the sub-project been identified?	Yes		Local residents, ward employees, HCF, army and farmers.
9.	If “Yes”, please name them along with their level of influence and interest in the sub-project	The level of influence of ward chairperson and ward members have been found to be positive and progressive towards the project beneficiaries and stakeholders.		
10.	Have the stakeholders been categorized in terms of gender, age, and ethnicity?	Yes, detail social survey of each ward settlements have been taken.		
11.	Major issues raised by the stakeholders during the initial consultation?	Local residents have some queries about the high operation and maintenance cost and if they can go into integrated water user board model for its future sustainability with the help from the municipality.		
12.	What are the main sources of information for the stakeholders? [Hint: radio, TV, newspapers]	Mobile and internet, radio, television and others.		
13.	Is there social institution/practice for community consultation on common issues in the area?	Yes		There is practice for community consultation on common issues in the area through ward level meeting by formation of Grievance and Monitoring Unit.
14.	Is there any social/religious/cultural institution or practices for local dispute settlements?	Yes		There is coordination between ward and the municipality at the local level to resolve local dispute and other community organization such as Mother’s group.
Contextual risk				
SN	Screening checklist	Yes	No	Comments Provide information/justification either for “Yes” or “No” if applicable
1.	Is there any history of community conflict in the sub-project area?		No	
2.	Is there any history of protests against infrastructure projects in the area?		No	The sub-project has taken permission from required ward offices & CFUG involved in the sub-project for the infrastructure’s construction.

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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]	Most of the crimes committed are of drug smuggling and sexual molestation according to Municipality source.		
4.	Which political parties won the last local election? [Municipal and the ward of the project site]			Nepali Congress Party won the last local election. Ward has mixed chairperson from NC, United Socialist, Nepal Maoist Party and UML.
5.	Which political parties won the last parliamentary election from the constituency of the project site?			United Socialist Party.
6.	What are the major economic activities in the municipality? [Hint: Occupation, local exports, etc.]	Yes		Agriculture (Potato, ginger, livestock, vegetables), Salyani Khukuri, Business, Service, labor & Foreign Employment.
7.	Please name the major industries/institutions located in the municipality.	Khukuri Manufacturing Industry, Cottage Industry, Municipality Office, District Hospital, Schools & colleges, DAO, Survey Office, Nepal Telecom, Forest and Agriculture Office, Nepal Red Cross and other NGOs.		
8.	Which are the major market centers in the sub-project area and how far are they?	Yes		Khalanga Bazar in WN 2 and Shreenagar Bazaar in WN 1 are the major market centers in and around the sub-project area.
9.	Is there a board community support for the sub-project? [Hint: Community perception based on stakeholder consultation]		No	Municipality and 17 existing water users' association and committee are prevalent. Board community model to be formed to support the sub-project.
10.	Is there support from the local municipality for the project?	Yes		Municipality will provide 1 crore NRs. for WaSGISP including Jarkhu.

Checklist for ESS7 and particularly to FPIC Sharada Municipality

ESS7: Indigenous Peoples	Yes	No	No Impact	Positive Impact	Negative Impact	Remarks
Does the project footprints lie in areas		No	No Impact			The project footprints do not lie in specific wards of

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where indigenous people is present including (area of influence)						the Sharda Municipality. The surrounding community has mixed caste and ethnic groups, where Khas (Chettri) groups are the majority followed by Bahuns, Dalits and janjati groups like Newar and Magars. But the Newars and Magars are not considered to be the original inhabitants of this area.
Will the project lead to full or partial physical displacement of IPs (regardless of whether the IPs are recognised as IPs by the country's law)?		No	No Impact			There is no case of such displacement of the indigenous people by the project or any other groups since the project structures and footprints lie in the community forests and public land.
Will the project lead to full or partial economic (loss of assets/access to resources due to land acquisition and also access restriction—whether or not these affected are physically displaced or not) displacement of IPs?		No	No Impact			The project will not cause any full or partial economic displacement of IPs since the pipe-laying works will not affect the community's access to the forest. Proposed interventions will not result in loss of assets or access restriction to communal resources nor any full or partial economic loss.
Will the project impact land/restriction access to land subject to traditional use or under customary use or occupation (regardless of whether IPs possess legal titles to such areas,		No	No Impact			The project will not have any impact on land/restriction access to land subject to traditional use or under customary use or occupation.

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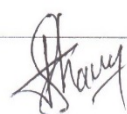
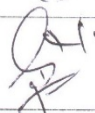
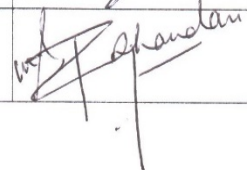
whether the project is located within or outside of the land and territories inhabited by IPs, or whether the IPs are recognized as IPs by the country's law)?						
Will the project impact natural resources (timber and non-timber forest products, other forest product, medicinal plants /grazing or pasture lands/forest/cropping areas)/loss of access to such assets and resources subject to traditional use or under customary use or occupation (regardless of whether IPs possess legal titles to such areas, whether the project is located within or outside of the land and territories inhabited by IPs, or whether the IPs are recognized as IPs by the country's law)?		No	No Impact			The project does not affect natural resources: timber and non-timber forest products, other forest products, medicinal plants, grazing or pasture lands/forest/cropped areas as the project is located outside the lands and areas inhabited by the IPs. In the past, firewood was exclusively used for cooking. But now this has been replaced by liquified petroleum gas due to road connectivity. However, the community forest is still used for the collection of firewood by some families. But fodder from the community forest is collected by the people since goat farming is popular in this area. Nonetheless, the proposed RVT lies further below the settlement. Since the IPs can also access the same forest near the settlement used for fodder and firewood collection, the construction of RVT further below will not impose any access restrictions or impacts that would prevent

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						them from using the forest.
Will the project lead to the utilization or commercial development of natural resources on lands and territories claimed by IPs?		No	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>		No	No Impact			The project will have no impact on cultural heritage or burial sites/religious places/stupas/pilgrimages/places of worship.
Will the project have significant impact on intangible cultural heritage that is material to the identity and/or cultural, ceremonial, or spiritual aspects of the affected community? <i>(Intangible cultural heritage may include</i>		No	No Impact			IP community groups have their own set of intangible heritages example, scared spaces, belief systems, knowledge and practices. But, during consultation with the IP community, it was reported that project footprints is unlikely to have a bearing on any intangible heritages.

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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)						
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Screening Team		Screening Date: January 10, 2024	
Designation	Name	Contact Number	Signature
Deputy Team Leader	Jaya Shankar Jha	9841360343	
Water & Sanitation Design Engineer	Subash Baral	9843064852	
Governance & Institutional Specialist	Rishi Ram Bimali	9851153869	
Financial Management Specialist	Gajendra Bahadur Singh	9846223510	
Environment Management Specialist	Adit Gurung	9849432164	
Social Development Specialist	Mukunda Raj Aryal	9841444933	
Construction Supervision Engineer	Sujit Man Rajbhandari	9841665190	

Annex I: Meeting /Consultation Meeting

(a) Sharada Municipality: Ward No. 10

वातावरणीय तथा सामाजिक स्वीकृति समन्वय बैठक

अन मिति २०७३/१२/०६ का दिन मन भारवा नगरपालिका वडा नं १० का अध्यक्ष श्री. कुपडा. ड. लोहरा. लु. को अध्यक्षतामा छानेपानी क्षेत्रगत सुसासन तथा पूर्वाधार सहयोग आयोजना (WaSGIP) शारवा अन्तर्गत निर्माणको लागि प्रस्तावित छ। छा.पा. योजनाको विस्तृत परियोजना प्रतिवेदन तयारीका क्रममा वातावरणीय तथा सामाजिक स्वीकृति (जांच)सम्बन्धमा बैठक बसी छलफल गर्नु जसरी भएकोले तल उपस्थित सम्मिलित भई पक्षको सहभागितामा तपशिल यमोजनिक निम्नोपहार गरीयो।

बैठकमा सहभागि हुने हरको उपस्थिति तथा हस्ताक्षर यस प्रकार छ।

क्र.स.	नाम तथा सम्बन्ध	फोन नं.	हस्ताक्षर
१	वडा अध्यक्ष श्री. कुपडा. ड. लोहरा. लु.	९८६९७१२६३७	
२	वडा सदस्य श्री. प्रेम. लोहरा. लु.	९८२९८८४९१८	
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४	प्रतिनिधिता धर्मचरिता कवर		
५	" " " " " " " "	९८५९२७८५५५	
६	रामचन्द्र श्रेष्ठ मेना कुटुम्बको	९८५५५६०५६	
७	शिवाजी ज्ञानकी मेने	९८६३५४६६२०	
८	विष्णु गुरु सा.व.उ.य. हत.पञ्चकुर		
९	राम. सा.पा. उ.उ.य. कुर		
१०	राम. निवात. स.उ.य. कुर	९८६९८८८८८	
११	मेना. रमेली. रम. उ.उ.य. कुर	९८५९८८८८८	
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३२	राम. रमेली. रम. उ.उ.य. कुर	९८५९८८८८८	

१. प्रस्तावित अर्थ... छानेपानी योजनाको निर्माणबाट हुन सक्ने वातावरणीय प्रभाव सम्बन्धमा

२. प्रस्तावित अर्थ... छानेपानी योजनाको निर्माणबाट हुन सक्ने सामाजिक तथा सांस्कृतिक प्रभाव सम्बन्धमा

३. छानेपानी क्षेत्रगत सुसासन तथा पूर्वाधार सहयोग आयोजना (WaSGIP) को वातावरणीय तथा सामाजिक चेक लिस्ट भन्ने सम्बन्धमा

निर्णयहरू

१. प्रस्तावित अर्थ... छानेपानी योजनाको निर्माणबाट हुन सक्ने वातावरणीय प्रभाव सँग सम्बन्धित

- प्रस्तावित अर्थ... छानेपानी योजनाको निर्माण गर्दा कुनै प्रकारको राष्ट्रिय निकुञ्ज, सरसित क्षेत्र, वन्यजन्तु आरक्षण जस्ता संवेदनशील क्षेत्रमा प्रवेश गर्नु नपर्ने देखिन्छ।
- प्रस्तावित अर्थ... छानेपानी योजनाको निर्माण तथा संचालनको कारणले कुनै पनि किसिमको वन्यजन्तु, वन्यपशु तथा जलचर आदिको बासस्थानमा प्रतिकूल असर नपर्ने देखिन्छ।
- प्रस्तावित अर्थ... छानेपानी योजनाको निर्माण तथा संचालनको कारणले कुनै पनि किसिमको वायु प्रदूषण, ध्वनी प्रदूषण, जल प्रदूषण तथा हाँसिकारक विषादी तथा पिचोटाइक पदार्थ आदिको प्रयोग नहुने देखिन्छ।
- प्रस्तावित अर्थ... छानेपानी योजनाको लागि निर्माण गरिने अधिकांस सरसुचनाहरू सावधानिक तथा खाँस जग्गामा प्रस्ताव गरिएको छ। योजनाको निर्माणका लागि निर्माण गरिने पट्टा मार्ग तथा पानी पोखरीबाट केही स्थानमा मृदाय तथा केही स साना रुख विरूवा कटान हुन सक्ने सम्भावना बावजोले यस प्रकारको प्रभावको घाँभिरताको पहिचान गरी वातावरणीय तथा सामाजिक व्यवस्थापन योजना तथा अन्य आवश्यक योजना बनाई कार्यन्वयन गर्ने सम्मिलित सबै पक्षलाई प्रयुक्त गर्ने।

प्रस्तावित अर्थ... छानेपानी आयोजनाको निर्माणबाट हुन सक्ने सामाजिक तथा सांस्कृतिक प्रभाव सम्बन्धित

- प्रस्तावित अर्थ... छा.पा. योजनाको निर्माण गर्दा आवश्यक पर्ने पाइप लाइन निर्माणबाट खन तथा पुन तथा संचालनको क्रममा कुनैपनि किसिमको विवाद गरिने छैन साथै यस योजनाको निर्माण तथा संचालनको क्रममा कुनैपनि जातजातीको दाह सम्कार गर्ने स्थान, मठ मन्दिर, गुम्बा, साँस्वर तथा चर्च आदिमा प्रतिकूल असर पर्दैन।
- प्रस्तावित अर्थ... छानेपानी आयोजनाको निर्माण तथा संचालनका लागि कोही कसै व्यक्तिको तथा सम्पाको निज जग्गा अधिग्रहण गर्न नपर्ने, अर्थव्ययक्त तथा स्वीकृति पुनर्दासको व्यवस्था गर्ने नपर्ने।
- यस आयोजनाको सेवा क्षेत्रमा काम गर्ने मजदुर तथा श्रमिकहरूको रोजगारीमा सकरात्मक असर पर्ने तर कुनै पनि किसिमको नकारात्मक असर नपर्ने।
- प्रस्तावित अर्थ... छानेपानी आयोजनाको सेवा क्षेत्रमा अल्पसंख्यक आदिवासी जनजाती, साँचामुख जनजाती आदिको बसोबास नभएको।
- छानेपानी क्षेत्रगत सुसासन तथा पूर्वाधार सहयोग आयोजना (WaSGIP) को वातावरणीय तथा सामाजिक चेक लिस्ट भन्ने सम्बन्धमा
- यस आयोजनाका लागि वातावरणीय तथा सामाजिक स्वीकृति चेकलिस्ट भन्ने र संश्लेषण गरी पठाउने।

(b) Sharada Municipality: Ward no. 9

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बैठकमा सहभागि हुने हरुको उपस्थिति तथा हस्ताक्षर यस प्रकार छ ।

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१. प्रस्तावित जर्खु खानेपानी योजनाको निर्माणबाट हुन सक्ने वातावरणीय प्रभाव सम्बन्धमा

२. प्रस्तावित जखु खानेपानी योजनाको निर्माणबाट हुन सक्ने सामाजिक तथा सांस्कृतिक प्रभाव सम्बन्धमा

3. खानेपानी क्षेत्रगत शुसासन तथा पूर्वाधार सहयोग आयोजना (WaSGIP) की वातावरणीय तथा सामाजिक चैक रिपोर्ट भर्ने सम्बन्धमा

निर्णयहरु

१. प्रस्तावित जर्खु खानेपानी योजनाको निर्माणबाट हुन सक्ने वातावरणीय प्रभाव संग सम्बन्धित

१. प्रस्तावित **आदर्श** : खानेपानी योजनाको निर्माण गर्दा कुनै प्रकारको राष्ट्रिय मिडियम, सरक्षित क्षेत्र, वन्यजन्तु आरक्षण जस्ता संवेदनशील क्षेत्रमा प्रवेश गर्नु नपर्ने देखिन्छ ।
२. प्रस्तावित **आदर्श** : खानेपानी योजनाको निर्माण तथा संचालनको कारणले कुनैपनि किसिमको वन्यजन्तु, चराचुरुङ्गी तथा जलचर आदिको बासस्थानमा प्रतिकूल असर नपर्ने देखिन्छ ।
३. प्रस्तावित **आदर्श** : खानेपानी योजनाको निर्माण तथा संचालनको कारणले कुनै पनि किसिमको वायु प्रदूषण, ध्वनी प्रदूषण, जल प्रदूषण तथा हातिकारक विषादी तथा पिस्फोटक पदार्थ आदिको प्रयोग नहुने देखिन्छ ।
४. प्रस्तावित **आदर्श** : खानेपानी योजनाको लागि निर्माण गरिने अधिकसं संरचनाहरू सांघजनिक तथा खालि जग्गामा प्रस्ताव गरीएको छ । योजनाको निर्माणका लागि निर्माण गरीने पहुँच मार्ग तथा पानी पोंछीबाट केही स्थानमा मुख्य तथा केही स साना रूख विरूडा कटान हुन सक्ने संभावना भएकाले यस प्रकारको प्रभावको गार्मियन्तको पहिचान गरी बातावरणीय तथा सामाजिक व्यवस्थापन योजना तथा अन्य आवश्यक योजना बनाइ कार्यन्वयन गर्ने सम्वन्धित सबै पक्षलाई अनुरोध गर्ने ।

२. प्रस्तावित जखि खानेपानी आयोजनाको निर्माणबाट हुन सक्न सामाजिक तथा साँस्कृतिक प्रभाव सम्बन्धित

- प्रस्तावित **अर्द्ध...** खानेपानी आयोजनाको निर्माण तथा संचालनका कममा कुनैपनि जातजातीको दाह संस्कार गर्ने स्थान, मठ मन्दिर, गुम्बा, मस्जिद तथा चर्च आदिमा प्रतिकूल असर नपर्ने ।
- प्रस्तावित **अर्द्ध...** खानेपानी आयोजनाको निर्माण तथा संचालनका लागि कोही कसै ब्याक्ति तथा संस्थाको निजि जग्गा अधिग्रहण गर्ने नपर्ने, अश्वैच्छिक तथा स्वैच्छिक पुनर्वासको व्यवस्था गर्न नपर्ने ।
- यस आयोजनाको सेवा क्षेत्रमा काम गर्ने मजदुर तथा श्रमिकहरुको रोजगारीमा सकारात्मक असर पर्ने तर कुनै पनि किसिमको नक्सरात्मक असर नपर्ने ।
- प्रस्तावित **अर्द्ध...** खानेपानी आयोजनाको सेवा क्षेत्रमा अल्पसंख्यक आदिवासी जनजाती, लोपामुख जनजाती आदिको बसोबास नभएको ।
- खानेपानी क्षेत्रगत शुवासैन तथा पुर्वाधार सहयोग आयोजना (WaS-GIP) को बातावरणीय तथा सामाजिक चर्क लिष्ट भरी आयोजनामा पठाउन नगर्नापलिक तथा नगरपालिका सहयोग टिमका सम्बन्धित विजहरुलाई अनुरोध गर्ने ।

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(c) Sharada Municipality: Ward no. 8

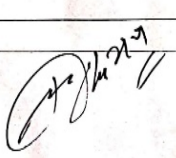
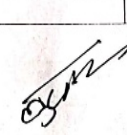
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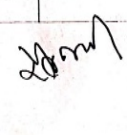
वातावरणीय तथा समाजिक स्कीनिंग सम्बन्धि बैठक

आज मिति २०८०/१२/१९ का दिन यस शारदा नगरपालिका वडा नं ८ का अध्यक्ष श्री तडा अक्षय झा ज्यू को अध्यक्षतामा खानेपानी क्षेत्रगत शुसासन तथा पूर्वाधार सहयोग आयोजना (WaSGIP) शारदा अन्तर्गत निर्माणको लागि प्रस्तावित जखु खा.पा योजनाको विस्तृत परियोजना प्रतिवेदन तयारीका क्रममा वातावरणीय तथा समाजिक स्कीनिंग (जाँच) सम्बन्धमा बैठक बसी छलफल गर्नु जरुरी भएकाले तल उपस्थित सम्बन्धित सबै पक्षको सहभागितामा तपशिल बमोजिमका निर्णयहरु गरीयो।

बैठकमा सहभागि हुने हरुको उपस्थिति तथा हस्ताक्षर यस प्रकार छ।

क्र.स.	नाम तथा संस्था	पद	फोन नं	हस्ताक्षर
१	वडा अध्यक्ष श्री <u>तडा अक्षय झा</u>	वडा अध्यक्ष	९८४२०४४४६८	
२	<u>तडा व. बुढाकोटी</u>	वडा सदस्य		<u>तडा व. बुढाकोटी</u>
३	<u>खेतो बुढा</u>	"		<u>खेतो बुढा</u>
४	<u>शता देवी कुमारी वि.उ.</u>	"		<u>शता देवी कुमारी वि.उ.</u>
५	<u>माछे बुढा</u>	वडा सदस्य	९८४२०४६०६५	<u>माछे बुढा</u>
६	<u>सुर्जनराज रायभाई</u>			<u>सुर्जनराज रायभाई</u>
७	<u>सन्धि राय वि.उ.</u>	सि.प्र.दे.व.	९८४७८४४४८०	<u>सन्धि राय वि.उ.</u>
८	<u>देव व. सुनार</u>			<u>देव व. सुनार</u>
९	<u>कृष्ण देव</u>			<u>कृष्ण देव</u>
१०	<u>भोल व. वन</u>			<u>भोल व. वन</u>
११	<u>परा व. वि.उ.</u>			<u>परा व. वि.उ.</u>
१२	<u>नेता बहादुर गुडाचौरा</u>			<u>नेता बहादुर गुडाचौरा</u>
१३	<u>नरेश देवी</u>			<u>नरेश देवी</u>
१४	<u>जोशी चिमल</u>			<u>जोशी चिमल</u>
१५	<u>बमला वि.उ.</u>			<u>बमला वि.उ.</u>
१६	<u>काजना बल्ले</u>			<u>काजना बल्ले</u>
१७	<u>प्रदिप सुनार</u>			<u>प्रदिप सुनार</u>
१८	<u>पुला दे. वि.उ.</u>			<u>पुला दे. वि.उ.</u>
१९	<u>चन्द्र व. वि.उ.</u>			<u>चन्द्र व. वि.उ.</u>
२०	<u>सुरेन्द्रा देवी</u>			<u>सुरेन्द्रा देवी</u>
२१	<u>कुलकर्णी चिमल</u>			<u>कुलकर्णी चिमल</u>
२२	<u>सुकुन्दा राज भुसाल</u>			<u>सुकुन्दा राज भुसाल</u>
२३	<u>विमला कुमारी</u>			<u>विमला कुमारी</u>
२४	<u>पद्मा देवी</u>			<u>पद्मा देवी</u>
२५	<u>सालेन देवी</u>			<u>सालेन देवी</u>
२६				
२७				
२८				
२९				



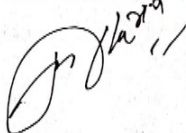
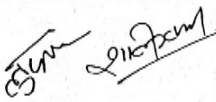
(d) Sharada Municipality: Ward No. 4

प्रस्तावहरू

१. प्रस्तावित जखु खानेपानी योजनाको निर्माणबाट हुन सक्ने वातावरणीय प्रभाव सम्बन्धमा
२. प्रस्तावित जखु खानेपानी योजनाको निर्माणबाट हुन सक्ने सामाजिक तथा सांस्कृतिक प्रभाव सम्बन्धमा
३. खानेपानी क्षेत्रगत शुसासन तथा पूर्वाधार सहयोग आयोजना (WaSGIP) को वातावरणीय तथा सामाजिक चेक लिष्ट भर्ने सम्बन्धमा

निर्णयहरू

१. प्रस्तावित जखु खानेपानी योजनाको निर्माणबाट हुन सक्ने वातावरणीय प्रभाव संग सम्बन्धित ।
- प्रस्तावित जखु खानेपानी योजनाको निर्माण गर्दा कुनै प्रकारको राष्ट्रिय निकुञ्ज, सरक्षित क्षेत्र, वन्यजन्तु आरक्षण जस्ता संवेदनशिल क्षेत्रमा प्रवेश गर्नु नपर्ने देखिन्छ ।
 - प्रस्तावित जखु खानेपानी योजनाको निर्माण तथा संचालनको कारणले कुनैपनि किसिमको वन्यजन्तु, चराचुरुडी तथा जलचर आदिको वासस्थानमा प्रतिकूल असर नपर्ने देखिन्छ ।
 - प्रस्तावित जखु खानेपानी योजनाको निर्माण तथा संचालनको कारणले कुनै पनि किसिमको वायु प्रदुषण, ध्वनी प्रदुषण, जल प्रदुषण तथा हानिकारक विषादी तथा विष्फोटक पदार्थ आदिको प्रयोग नहुने देखिन्छ ।
 - प्रस्तावित जखु खानेपानी योजनाको लागि निर्माण गरिने अधिकास संरचनाहरु सार्वजनिक तथा खालि जग्गामा प्रस्ताव गरीएको छ । योजनाको निर्माणका लागि निर्माण गरीने पहुँच मार्ग तथा पानी पोखरीबाट केही स्थानमा मुक्षय तथा केही स साना रुख विरुवा कटान हुन सक्ने संभावना भएकाले यस प्रकारको प्रभावको गाम्भिर्यताको पहिचान गरी वातावरणीय तथा सामाजिक व्यवस्थापन योजना तथा अन्य आवश्यक योजना बनाइ कार्यन्वयन गर्ने सम्बन्धित सबै पक्षलाई अनुरोध गर्ने ।
 - प्रस्तावित जखु खा.पा. योजनाको निर्माण गर्दा आवश्यक पर्ने पाइप लाइन निजि जग्गाबाट खनन तथा पुर्न तथा संचालनका क्रममा कुनैपनि किसिमको विवाद गरिने छैन ।
 - प्रस्तावित जखु खानेपानी आयोजनाको निर्माण तथा संचालनका क्रममा कुनैपनि जातजातीको दाह मस्कार गर्ने स्थान, मठ मन्दिर, गुम्बा, मस्जिद तथा चर्च आदिमा प्रतिकूल असर नपर्ने ।
 - प्रस्तावित जखु खानेपानी आयोजनाको निर्माण तथा संचालनका लागि कोही कसै व्याक्ति तथा सुस्थाको निजि जग्गा अधिग्रहण गर्न नपर्ने, अश्वैच्छिक तथा स्वैच्छिक पुनरवासको व्यवस्था गर्न नपर्ने ।
 - यस आयोजनाको सेवा क्षेत्रमा काम गर्ने मजदुर तथा श्रमिकहरुको रोजगारीमा सकारात्मक असर पर्ने तर कुनै पनि किसिमको नकारात्मक असर नपर्ने ।
 - प्रस्तावित जखु खानेपानी आयोजनाको सेवा क्षेत्रमा अल्पसंख्यक आदिवासी जनजाती, लोपान्मुख जनजाती आदिको बसोबास नभएको ।
 - खानेपानी क्षेत्रगत शुसासन तथा पूर्वाधार सहयोग आयोजना (WaSGIP) को वातावरणीय तथा सामाजिक चेक लिष्ट भरी आयोजनामा पठाउन नगरपालिका तथा नगरपालिका सहयोग टिमका सम्बन्धित विज्ञहरुलाई अनुरोध गर्ने ।

५५ २५/०५/१९


 कमला

(e) Sharada Municipality: Ward No. 4

Page No. _____

वातावरणीय तथा समाजिक स्कीनिंग सम्बन्धि बैठक

दिनांक २०७९/०९/१० का दिन यस शारदा नगरपालिका वडा नं. ४ का अध्यक्ष श्री किशोर हमाल ज्यू को अध्यक्षतामा खानेपानी क्षेत्रगत शुसासन तथा पूर्वाधार सहयोग योजना (WaSGIP) शारदा अन्तर्गत निर्माणको लागि प्रस्तावित जस्तै खा पा आयोजनाको विस्तृत तयारीका क्रममा वातावरणीय तथा समाजिक स्कीनिंग जाँच सम्बन्धमा छलफल गर्ने उपस्थित सम्बन्धित सबै पक्षको सहभागितामा बैठक बसी तपार्शल बमोजिमका निर्णयहरू गरियो।

बैठकमा सहभागि हुने हरूको उपस्थिति तथा हस्ताक्षर यस प्रकार छ।

क्र.सं.	नाम तथा संस्था	फोन नं.	हस्ताक्षर
१	वडा अध्यक्ष श्री किशोर हमाल	९८५७८२१२५२	
२	जिता वस्नेत (वडा सदस्य)	९८६४६२०८९	
३	सुरलाल श्रेष्ठ (" ")	९८०६९४३९३८	
४	विष्णु व. कुर्कछर्की (" ")	९८२२५६२९२८	
५	कृपा वि. श. वडा सदस्य	९८६६०८८९४२	
६	प्रकाश हमाल (प्रधान व्यापक)	९८४७८४४९६४	
७	कुमार बली (छि. भ. र. क.)	९८६६५७३०५	
८	केलाका कुमाल झाट - वडा सदस्य	९८५५८५५३५५	
९	सुरेश्वर खेडा.		
१०	पुनवती थापा - पनौतीसिला	९८०६२५९३५	
११	कृष्ण वि. कु. खेपिराम वस्नेत	९८६३०९६३८	
१२	हरि प्रसाद वस्नेत - पानीखोला (का.पा.)		९८६२५१५
१३	रेखाम सुजा - पिपलनेरा (का.पा.)	९८५९९३८०८	
१४	शोभा वस्नेत धाण्डेय (का.पा.)	९८६४०००९४	शोभा
१५	प्रमिला वस्नेत (का.पा.)	९८२९८०४२६	
१६	आम्रिमाया सिंह (का.पा.)	९८६४२८८२८	
१७	अश्वि शंकर का		
१८	सुन्दर शर्मा (वडा सदस्य)	९८५७९५५२१६	
१९	मुकुन्द रज शर्मा	९८५४६४५३३	
२०	केलाका वस्नेत	Washnumt f.p.	
२१	जिता आचार्य		जिता

असि

निर्णयहरू

- प्रस्तावित जर्बू खानेपानी योजनाको निर्माण गर्दा कुनै प्रकारको राष्ट्रिय निकुञ्ज, संरक्षित क्षेत्र, वन्यजन्तु आरक्षण जस्ता संवेदनशिल क्षेत्रमा प्रवेश गर्नु नपर्ने देखिन्छ।
- प्रस्तावित जर्बू खानेपानी योजनाको निर्माण तथा संचालनको कारणले कुनैपनि किसिमको वन्यजन्तु, चराचुरुङ्गा तथा जलचर आदिको वासस्थानमा प्रतिकूल असर नपर्ने देखिन्छ।
- प्रस्तावित जर्बू खानेपानी योजनाको निर्माण तथा संचालनको कारणले कुनै पनि किसिमको वायु प्रदूषण, ध्वनी प्रदूषण, जल प्रदूषण तथा हाहकारक विषादी तथा विष्फोटक पदार्थ आदिको प्रयोग नगर्ने देखिन्छ।
- प्रस्तावित जर्बू खानेपानी योजनाको लागि निर्माण गरिने अधिकांस संरचनाहरू सार्वजनिक तथा खास गरीगामा प्रस्ताव गरीएको छ। योजनाको निर्माणका लागि निर्माण गरिने पहुँच मार्ग तथा पानी पोखरीबाट केही स्थानमा मुख्य तथा केही स साना रूख खडा कटान हुन सक्ने सम्भावना भएकाले यस प्रकारको प्रभावको गाम्भिर्यतको पहिचान गरी वातावरणीय तथा सामाजिक व्यवस्थापन योजना तथा असर आवश्यक योजना बनाई कार्यान्वयन गर्ने सम्वन्धित सबै पक्षलाई अनुरोध गर्ने।

- यस खा.पा.योजनाको निर्माण गर्दा आवश्यक पर्ने पाइप लाइन निजि जग्गाबाट खन्ने तथा पुनर् तथा संचालनका कम्पना कुनैपनि किसिमको विवाद गरिने छैन र उड्डेका विवादहरु पनि स्थानीय स्तरमा नै समाधान गरिने छ।
- यस योजनाको निर्माण तथा संचालनका कम्पना कुनैपनि जाजगतीको दाह संस्कार गर्ने स्थान, मठ मन्दिर, गुम्बा, मस्जिद तथा चर्च आदिमा प्रतिकूल अथवा पदैनु र यसको निर्माण तथा संचालनका लागि कोही कसै ब्याक्ति तथा संस्थाको निजि जग्गा अधिग्रहण गर्ने नपर्ने, अश्रैच्छिक तथा स्वीच्छिक पुनरवासको व्यवस्था गर्ने यस नै देखिन्छ।
- यस आयोजनाको सेवा क्षेत्रमा काम गर्ने मजदुर तथा श्रमिकको रोजगारीमा सहयोग पुग्ने र यस खानेपानी आयोजनाको सेवा क्षेत्रमा अल्पसंख्यक आदिवासी जनजाती, तामासुख जनजाती आदिको बसोबास भएको देखिदैनु।

सुपा
 २२/१२/१६
पुनर्विचार
 सोमा
 ५२
 गिला
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अनुमति

(f) Sharada Municipality: Ward no. 5

आचार्य वि. 2009/9/90 का दिन यस शारदा नगरपालिका वडा नं ५ का अध्यक्ष
भी प्रदीप खत्री ज्यू को अध्यक्षतामा खानेपानी भेद्यगत शुशान्त तथा पुर्वाधार सहयोग
आचार्य (WaSGP) शारदा अन्तर्गत निर्माणको लागि प्रस्तावित खा.पा. आयोजनाको विस्तृत
परिचय तथा निवेदन तथ्यांक कममा वातावरणीय तथा समाजिक स्वीर्माण (जोड/अपस्थितमा छलफल गर्ने
नैव) सुनिष्ठ सम्बन्धित सबै पक्षको सहभागितामा बैठक बसी तर्पश्चित स्वीर्जिमका निर्णयहरू गरियो ।

[illegible]

मंगलशुक्र को	MST	१८४१३६०३३३	श्री मे
मुकुन्द (ज) अथवा MST			
ध्रुव तोड़ लाह	P1V		श्री
यह एक - N WASH UNIT			श्री N WASH UNIT
मैला - नंगल - N WASH UNIT			श्री
केर वाकड्ड रेड्डे			श्री
माधव - श्रेष्ठ			श्री
मेमुना धापा खा. ११.३५१.			UT 16.71
कामला कुंआरा की खा. ११.३५१.			श्री
सुमा लिष्ट (खा. ११.३५१.)			श्री

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ESMP Report of Jarkhu Water Supply Project

प्रस्तावहरू

१. प्रस्तावित  खानेपानी आयोजनाको निर्माणबाट हुन सक्ने वातावरणीय प्रभाव सम्बन्धमा

२. प्रस्तावित  खानेपानी आयोजनाको निर्माणबाट हुन सक्ने सामाजिक तथा सांस्कृतिक प्रभाव सम्बन्धमा

३. खानेपानी क्षेत्रगत शुसासन तथा पुर्वाधार सहयोग आयोजना (WaSGIP) को वातावरणीय तथा सामाजिक चैक लिट भर्ने सम्बन्धमा

निर्णयहरु

१. प्रस्तावित^अ खानेपानी आयोजनाको निर्माणबाट हुन सक्ने वातावरणीय प्रभाव संग सम्बन्धित

- ✓ प्रस्तावित **अ.दि.** खापानी आयोजनाको निर्माण गर्दा कुनै प्रकारको राष्ट्रिय निकुञ्ज, संरक्षित क्षेत्र, वन्यजन्तु आश्रय जस्ता संवेदनशील क्षेत्रमा प्रवेश गर्ने नपार्ने देखिन्छ।
- ✓ प्रस्तावित **अ.दि.** खापानी आयोजनाको निर्माण तथा संचालनको कारणले कुनैपनि किसिमको वन्यजन्तु, चराचुरुडि तथा जलचर आदिको वासस्थानमा प्रतिकूल असर नपर्ने देखिन्छ।
- ✓ प्रस्तावित **अ.दि.** खापानी आयोजनाको निर्माण तथा संचालनको कारणले कुनै पनि किसिमको वायु प्रदूषण, ध्वनी प्रदूषण, जल प्रदूषण तथा हासिकरण विषादी तथा विष्फोटक पदार्थ आदिको प्रयोग नहुने देखिन्छ।
- ✓ प्रस्तावित **अ.दि.** खापानी आयोजनाको लागि निर्माण गरिने संरचनाहरू सार्वजनिक तथा खास जग्गा (रुख विरुवा नभएको स्थान) भएकाले रुख, बाँट, विरुवा आदि कटान गर्ने नपर्ने देखिन्छ।

२. प्रस्तावित खानेपानी आयोजनाको निर्माणबाट हुन सक्न सामाजिक तथा साँस्कृतिक प्रभाव सम्बन्धित

- ✓ प्रस्तावित शु.स...... खानेपानी आयोजनाको निर्माण तथा संचालनका क्रममा कुनैपनि जातजातीको दाह संस्कार गर्न स्यान, भद मान्दिर, गुम्बा, मस्जिद तथा चर्च आदिमा प्रतिकूल अस्पर् नपर्ने ।
- ✓ प्रस्तावित अ.स...... खानेपानी आयोजनाको निर्माण तथा संचालनका लागि कोही कसै व्य्क्ति तथा संस्थाको निजि जग्गा अधिग्रहण गर्न नपर्ने, अवैच्छिक तथा स्वैच्छिक पुरवासको व्यवस्था गर्न नपर्ने ।
- ✓ यस आयोजनाको सेवा क्षेत्रमा काम गर्न मजदुर तथा श्रमिकहरुको रोजगारीमा संसारात्मक अस्पर् पर्ने तर कुनै पनि हिस्सामाको नकारात्मक अस्पर् नपर्ने ।
- ✓ प्रस्तावित स.स...... खानेपानी आयोजनाको सेवा क्षेत्रमा अल्पसंख्यक आदिवासी जनजाती, लोपाम्ख जनजाती आदिको बसोबास नभएको ।
- ✓ खानेपानी क्षेत्रगत शुसासन तथा पूर्वाधार सहयोग आयोजना (WaSGIP) को वातावरणीय तथा सामाजिक चेक लिष्ट भन्ने सम्बन्धमा
- ✓ यस आयोजनाको लागि वातावरणीय तथा सामाजिक स्वीनिंग चेकलिष्ट भन्ने र सहिष्णुप गरी पठाउने ।

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WSPs which are going to merge with Jarkhu WSP -Ward Level Validation Minutes

प्रमाणित करीय खा.पा.स.तथा स्वच्छता योजना तहसील तहसील तहसील प्रमाणीकरण मोटी
बहा नं. ७७...

आज मिति २०-०७-१०८८ का दिन यस गार्हा नगरपालिका बडा नं १९ काडा अग्रत
श्री. राजेश कुमार झा ज्यू को अध्यक्षता यस बडा मिति समाप्त खा.पा. योजनाहरु, निर्माणार्थ योजनाहरु,
प्रस्तावित योजनाहरु तथा विधानय तथा स्वास्थ्य संस्था उपलब्ध खा.पा.स.तथा स्वच्छता सेवा सम्बन्धित तहसील प्रमाणीकरण
गर्नु मिति उपस्थित निम्न संस्था प्रतिनिधित्वको उपस्थितिमा १ दिने मोटी आयोजना गरी उल्लेखित विषयमा छलफल गरी
तय्यार प्रमाणीकरण गरीने।

उपस्थिति तथा हस्ताक्षर

क्र.सं.	नाम तथा संस्था	फोन नं.	हस्ताक्षर
१	बडा अध्यक्ष श्री. राजेश कुमार झा	९८२४८४४४४४	राजेश झा
२	उप अध्यक्ष श्री. सुरेश कुमार झा	९८२४४४४४४४	सुरेश झा
३	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
४	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
५	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
६	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
७	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
८	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
९	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
१०	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
११	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
१२	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
१३	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
१४	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
१५	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
१६	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
१७	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
१८	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
१९	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
२०	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
२१	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
२२	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
२३	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा
२४	डा. अरुण कुमार झा	९८२४४४४४४४	अरुण झा

Ward No.		Name of the WSP	Served Hms	Population	M.Yield/LPS	Construction	No of RVT	No of Taps	Source	S.Rgd Status.	Remarks	
N	ID NO.											
1	60901	Dare Khola	32 170	199	0.19	2049	2	6	Dwar Kot	Yes	Bha matte	
2	60902	Maakha	31	170	0.16	2039	1	31	Simpakha	Yes ND		
4	60903	Bhakhane Anewali	93 99	559	0.19	2039	1	91 99	Bhakhane Mul	Yes		
5	60904	Bhukaneswor (Jat)	106 112	518	0.5	2063	1	117	Dabdbe Muhan	Yes		Chaiting
6	60905	Muthilo Baggaun	13	63	0.1	2067	1	2	Dabdbe Mul	Handble Not Updote		
7	60906	Kazakhola	48	359	0.16	2073	2	6	Pakha Marot Mul	Yes Handble Updote		-Bhaktim -Khatuwa -Bhawanaga -Padi
8	60907	Nyadhara	20	120	0.1	2070	1	1	Dabdbe Pakha Mul	Not Source		
9	60908	Tallo Syala Gaun	37	214	0.24	2067	1	1	Kalche Khola	"		Handble Updote
10	60909	Tallo Syala Gaun	8	54	0.1	2056	1	1	Kalche Khola	Not "		

नियम नं. १ मधील दलदल गरीबी प्रकृती इलेक्शन मोजकण, मध्ये प्रत्येक खोलीची मोजकण मध्ये दुहेरी मोजकण, प्रत्येकी मोजकण, मध्ये प्र

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ShardaMunicipality Ward No 10, Name list of Existing WSPs											
SN	ID NO.	Name of the WSP	Served HHs	Population	M.Yield /LPS	Constr action Year	No of RVT	No of Taps	Source	RGD Status	Remarks
1	609070081	Mogha	18	107	0.1	2024	1	1	Raut Gaire	Not	मोघा गाँव
2	609070083	Thapaha cantrole	39	218	0.18	2048	1	6	Taole Raha	yes	"
3	609070084	Thakle kholi	68	356	21+0.24	2051	1	1	Kalo Gara, Malin Kholi	yes	"
4	609070084	Thakle kholi	55	255	2	2075	1	2	Bhtra Kholi	yes	थुला खोला
5	609070093	Kalla	43	246	0.18	2066	1	3	Neudikhola	Not	नैनुदिखोला
6	609071227	Thupatal	87	79	246	0.2	2072	1	78 Thupatal	yes	थुपताल
8	609071228	Sripatal	15	87	0.1	2065	1	1	Sena Patal	not	सेना पताल
9	609071228	Thukola	56	74	135	0.1	2063	1	4 Thula khola	yes	थुला खोला
10	609071230	Vingachour	56	75	143	0.18	2063	1	4 Thula khola	yes	"
11	609073431	Krikhola	14	70	0.2	2075	1	1	Kaina Khola	Not	कैना खोला
12	60907354	Payashaha /Jhugani	8	50	0.25	2051	1	1	Pakhapani	Not	पखपानी
13	60907355	Payashaha /Juchheni	0	0	0.24	2052	1	1	Kauchhe Khola	Not	"
14	60907357	Tejura	48	203	0.25	2048	1	2	Parephara, Pakhe pani	Not	पारेफरा पखे पानी
15	60907374	Madana (Bichaur)chaur	18	22	117	0.2	2078	2	29 Jugekholi	yes	जुगेखोला

गिर्णप के. ७

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परिचय: हस्त लिखित या पा.स.तथा स्वच्छता योजना तयारीका लागि तथ्यांकहरू प्रमाणीकरण गरी
बडा नं. ८

आज मिति २०७३/०८/१३ का दिन यस शारदा नगरपालिका बडा नं. ८ का अध्यक्ष श्री महेन्द्रा बुढाथोकी ज्यू को अध्यक्षतामा यस बडा मित्र संचालित खा.पा. योजनाहरू, निर्माणधिन योजनाहरू, प्रस्तावित योजनाहरू तथा विद्यालय तथा स्वास्थ्य संस्थाहरूमा उपलब्ध खा.पा.स.तथा स्वच्छता सेवा सम्बन्धि तथ्यांकहरू प्रमाणीकरण गर्ने तय उपस्थित विभिन्न संस्थाका प्रतिनिधिहरूसँगको उपस्थितिमा १ दिने गोष्ठी आयोजना गरी उल्लेखित विषयमा छलफल गरी तथ्यांकहरू प्रमाणीकरण गरीयो।

उपस्थिति तथा हस्ताक्षर

क्र.सं.	नाम तथा संस्था	पद	फोन नं.	हस्ताक्षर
१	बडा अध्यक्ष श्री <u>महेन्द्रा बुढाथोकी</u>	अध्यक्ष	९८८८०४८२१७	<u>महेन्द्रा बुढाथोकी</u>
२	बडा सदस्य श्री <u>कुँडु बुढाथोकी</u>	सदस्य	९८४७९८८४९	<u>कुँडु बुढाथोकी</u>
३	बडा सदस्य श्री <u>बेला खत्री</u>	"	९८४७९८८४९	<u>बेला खत्री</u>
४	बडा सदस्य श्री <u>धनराज बुढाथोकी</u>	"	९८४७९८८४९	<u>धनराज बुढाथोकी</u>
५	महामन्त्री <u>महेन्द्रा बुढाथोकी</u>	महामन्त्री	९८४७९८८४९	<u>महेन्द्रा बुढाथोकी</u>
६	हजारराज बुढाथोकी	अध्यक्ष	९८४७९८८४९	<u>हजारराज बुढाथोकी</u>
७	समाना राम खत्री	समाना	९८४७९८८४९	<u>समाना राम खत्री</u>
८	उद्योग च.प.स.तथा स्वच्छता	उद्योग	९८४७९८८४९	<u>उद्योग च.प.स.तथा स्वच्छता</u>
९	उद्योग च.प.स.तथा स्वच्छता	उद्योग	९८४७९८८४९	<u>उद्योग च.प.स.तथा स्वच्छता</u>
१०	उद्योग च.प.स.तथा स्वच्छता	उद्योग	९८४७९८८४९	<u>उद्योग च.प.स.तथा स्वच्छता</u>
११	उद्योग च.प.स.तथा स्वच्छता	उद्योग	९८४७९८८४९	<u>उद्योग च.प.स.तथा स्वच्छता</u>
१२	उद्योग च.प.स.तथा स्वच्छता	उद्योग	९८४७९८८४९	<u>उद्योग च.प.स.तथा स्वच्छता</u>
१३	उद्योग च.प.स.तथा स्वच्छता	उद्योग	९८४७९८८४९	<u>उद्योग च.प.स.तथा स्वच्छता</u>
१४	उद्योग च.प.स.तथा स्वच्छता	उद्योग	९८४७९८८४९	<u>उद्योग च.प.स.तथा स्वच्छता</u>
१५	उद्योग च.प.स.तथा स्वच्छता	उद्योग	९८४७९८८४९	<u>उद्योग च.प.स.तथा स्वच्छता</u>
१६	उद्योग च.प.स.तथा स्वच्छता	उद्योग	९८४७९८८४९	<u>उद्योग च.प.स.तथा स्वच्छता</u>
१७	उद्योग च.प.स.तथा स्वच्छता	उद्योग	९८४७९८८४९	<u>उद्योग च.प.स.तथा स्वच्छता</u>
१८	उद्योग च.प.स.तथा स्वच्छता	उद्योग	९८४७९८८४९	<u>उद्योग च.प.स.तथा स्वच्छता</u>
१९	उद्योग च.प.स.तथा स्वच्छता	उद्योग	९८४७९८८४९	<u>उद्योग च.प.स.तथा स्वच्छता</u>
२०	उद्योग च.प.स.तथा स्वच्छता	उद्योग	९८४७९८८४९	<u>उद्योग च.प.स.तथा स्वच्छता</u>
२१	उद्योग च.प.स.तथा स्वच्छता	उद्योग	९८४७९८८४९	<u>उद्योग च.प.स.तथा स्वच्छता</u>
२२	उद्योग च.प.स.तथा स्वच्छता	उद्योग	९८४७९८८४९	<u>उद्योग च.प.स.तथा स्वच्छता</u>
२३	उद्योग च.प.स.तथा स्वच्छता	उद्योग	९८४७९८८४९	<u>उद्योग च.प.स.तथा स्वच्छता</u>
२४	उद्योग च.प.स.तथा स्वच्छता	उद्योग	९८४७९८८४९	<u>उद्योग च.प.स.तथा स्वच्छता</u>
२५	उद्योग च.प.स.तथा स्वच्छता	उद्योग	९८४७९८८४९	<u>उद्योग च.प.स.तथा स्वच्छता</u>
२६	उद्योग च.प.स.तथा स्वच्छता	उद्योग	९८४७९८८४९	<u>उद्योग च.प.स.तथा स्वच्छता</u>

निर्णयहरू:

DATE:

प्रस्तावित खा.पा. योजनाहरू:

१. उद्योग च.प.स.तथा स्वच्छता

निर्माणधिन खा.पा. योजनाहरू:

१. महेन्द्रा बुढाथोकी खा.पा. स्मार्ट डन्स

→ उद्योग च.प.स.तथा स्वच्छता खा.पा. योजनाहरूमा महेन्द्रा बुढाथोकी खा.पा. स्मार्ट डन्स

→ महेन्द्रा बुढाथोकी खा.पा. स्मार्ट डन्समा महेन्द्रा बुढाथोकी खा.पा. स्मार्ट डन्स

SN	Name of the School	Level	Number of Students		Teacher s and Staffs	Number of Toilets		Water Facility		MHM Facility	
			Boys	Girls		Boys	Girls	Limited	Sufficient	Yes	No
1	महेन्द्रा बुढाथोकी	१२	३०	४०	२३	१	१	✓	✓	✓	✓
2	महेन्द्रा बुढाथोकी	२	२८	१८	२	१	१	NO	✓	✓	✓
3	महेन्द्रा बुढाथोकी	२	२६	३२	२	१	१	✓	✓	✓	✓
4	महेन्द्रा बुढाथोकी	२	१२	१९	२	१	१	NO	✓	✓	✓
5	महेन्द्रा बुढाथोकी	२	८०	८२	१०	१	१	✓	✓	✓	✓

SN	Name of the Health Facility	Location	Number of Patient s/Day	Toilet		Water Supply Facility			Inciner ator	Remarks
				M	F	Sufficie nt	Not Sufficient	No Facility		
१	महेन्द्रा बुढाथोकी	महेन्द्रा बुढाथोकी	१२	१	१	✓	✓	✓	✓	

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मानक सतरीय खा.पा.स.तथा स्वच्छता योजना तयारीका लागि तयारकृत प्रमाणिकरण मोदी
वडा नं. ०५

आज मिति २०८०/१२/१३ का दिन यस शारदा नगरपालिका वडा नं ०५ का अध्यक्ष श्री हरीश्वर कुमार बुढाथोकी ज्यू को अध्यक्षतामा यस वडा भित्र संघालित खा.पा. योजनाहरु, निर्माणगतिन योजनाहरु, प्रस्तावित योजनाहरु तथा विचारले तथा स्वास्थ्य संस्थाहरु उपलब्ध खा.पा.स.तथा स्वच्छता सेवा सम्बन्धि तयारकृत प्रमाणिकरण गर्ने तल उपस्थित विविध संस्थाका प्रतिनिधिहरुको उपस्थितिमा १ दिने गोष्ठी आयोजना गरी उल्लेखित विषयमा छलफल गरी तयारकृत प्रमाणिकरण गरीयो।

उपस्थिति तथा हस्ताक्षर

क्र.सं.	नाम तथा संस्था	पद	फोन नं.	हस्ताक्षर
१	वडा अध्यक्ष श्री <u>हरीश्वर कुमार बुढाथोकी</u>	अध्यक्ष	९८६३१९८२६४	<u>हरीश्वर</u>
२	वडा सदस्य श्री <u>धनी कुमार बोहरा</u>	सदस्य	९८४९४६८८८	<u>धनी</u>
३	वडा सदस्य श्री <u>केदार राई</u>	सदस्य	९८४०४६८८८८	<u>केदार</u>
४	वडा सदस्य श्री			
५	श्री <u>जय बहादुर राई</u>	शिक्षक	९८६३२३८६६	<u>जय</u>
६	श्री <u>विष्णु राई</u>	सदस्य	९८६४८९०८०४	<u>विष्णु</u>
७	श्री <u>गोपाल सिंह बोहरा</u>	अध्यक्ष	९८४९४६८८८	<u>गोपाल</u>
८	श्री <u>जिता रेडुले</u>	मनिषा(को)	९८६४८८०६४	<u>जिता</u>
९	श्री <u>चम्पा रेडुले</u>	मनिषा(को)	९८६४८८०६४	<u>चम्पा</u>
१०	श्री <u>धन बहादुर राणा</u>	सदस्य(को)	९८४९४६८८८	<u>धन</u>
११	श्री <u>तन्व लाल बुढाथोकी</u>	मनिषा(को)	९८४९४६८८८	<u>तन्व</u>
१२	श्री <u>रविन्द्र राणा</u>	मनिषा(को)	९८४९४६८८८	<u>रविन्द्र</u>
१३	श्री <u>सुरेन्द्र राणा</u>	मनिषा(को)	९८४९४६८८८	<u>सुरेन्द्र</u>
१४	श्री <u>सुरेन्द्र राणा</u>	मनिषा(को)	९८४९४६८८८	<u>सुरेन्द्र</u>
१५	श्री <u>सुरेन्द्र राणा</u>	मनिषा(को)	९८४९४६८८८	<u>सुरेन्द्र</u>
१६	श्री <u>सुरेन्द्र राणा</u>	मनिषा(को)	९८४९४६८८८	<u>सुरेन्द्र</u>
१७	श्री <u>सुरेन्द्र राणा</u>	मनिषा(को)	९८४९४६८८८	<u>सुरेन्द्र</u>
१८	श्री <u>सुरेन्द्र राणा</u>	मनिषा(को)	९८४९४६८८८	<u>सुरेन्द्र</u>
१९	श्री <u>सुरेन्द्र राणा</u>	मनिषा(को)	९८४९४६८८८	<u>सुरेन्द्र</u>
२०	श्री <u>सुरेन्द्र राणा</u>	मनिषा(को)	९८४९४६८८८	<u>सुरेन्द्र</u>
२१	श्री <u>सुरेन्द्र राणा</u>	मनिषा(को)	९८४९४६८८८	<u>सुरेन्द्र</u>
२२	श्री <u>सुरेन्द्र राणा</u>	मनिषा(को)	९८४९४६८८८	<u>सुरेन्द्र</u>
२३	श्री <u>सुरेन्द्र राणा</u>	मनिषा(को)	९८४९४६८८८	<u>सुरेन्द्र</u>
२४	श्री <u>सुरेन्द्र राणा</u>	मनिषा(को)	९८४९४६८८८	<u>सुरेन्द्र</u>
२५	श्री <u>सुरेन्द्र राणा</u>	मनिषा(को)	९८४९४६८८८	<u>सुरेन्द्र</u>
२६	श्री <u>सुरेन्द्र राणा</u>	मनिषा(को)	९८४९४६८८८	<u>सुरेन्द्र</u>
२७	श्री <u>सुरेन्द्र राणा</u>	मनिषा(को)	९८४९४६८८८	<u>सुरेन्द्र</u>
२८	श्री <u>सुरेन्द्र राणा</u>	मनिषा(को)	९८४९४६८८८	<u>सुरेन्द्र</u>

Sanitary Survey Report

Name of the existing WSPs

No.	Name of the existing WSPs	Capacity (m³)	Height (m)	Cost (Rs.)	No. of HVI	Age	Source	Remarks
1	WSP-1	100	10	2000	1	5	Hand Pump	
2	WSP-2	100	10	2000	1	5	Hand Pump	
3	WSP-3	100	10	2000	1	5	Hand Pump	
4	WSP-4	100	10	2000	1	5	Hand Pump	
5	WSP-5	100	10	2000	1	5	Hand Pump	
6	WSP-6	100	10	2000	1	5	Hand Pump	
7	WSP-7	100	10	2000	1	5	Hand Pump	
8	WSP-8	100	10	2000	1	5	Hand Pump	
9	WSP-9	100	10	2000	1	5	Hand Pump	
10	WSP-10	100	10	2000	1	5	Hand Pump	
11	WSP-11	100	10	2000	1	5	Hand Pump	
12	WSP-12	100	10	2000	1	5	Hand Pump	

निर्देशन गर्ने कार्यहरू यसरी गर्ने हुनेछः

- १) उपलब्ध रहेको जानकारी अनुसार
- २) उपलब्ध रहेको जानकारी अनुसार
- ३) उपलब्ध रहेको जानकारी अनुसार
- ४) उपलब्ध रहेको जानकारी अनुसार
- ५) उपलब्ध रहेको जानकारी अनुसार

नोटः उपलब्ध रहेको जानकारी अनुसार

ESMP Report of Jarkhu Water Supply Project

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	Cover No	WSP Name Sewal WSP Scheme-1 Ratanmata	21	143	0.25	2049	1	Taps 6	Name Gaeli khola	Status Not	Remarks
✓	6007055	Ohi Idhara WSP, Dulchihara <td>30</td> <td>149</td> <td>0.3</td> <td>2049</td> <td>1</td> <td>38</td> <td>Dhung khan, Rodha khet<td>Not</td><td></td></td>	30	149	0.3	2049	1	38	Dhung khan, Rodha khet <td>Not</td> <td></td>	Not	
✓	6007056	Scheme-2 Garellikhola WSP, Ratanmata <td>50 52</td> <td>294</td> <td>0.12</td> <td>2061</td> <td>2</td> <td>16 11</td> <td>Garellikhola<td>Not Yes</td><td>Renewed</td></td>	50 52	294	0.12	2061	2	16 11	Garellikhola <td>Not Yes</td> <td>Renewed</td>	Not Yes	Renewed
✓	6007057	Simkholi WSP (Sewal Takura Sc-3), Tallo Marke <td>14 8</td> <td>88</td> <td>0.12</td> <td>2064</td> <td>1</td> <td>2 9</td> <td>Simkholi<td>Not</td><td>Expired but Not Renewed</td></td>	14 8	88	0.12	2064	1	2 9	Simkholi <td>Not</td> <td>Expired but Not Renewed</td>	Not	Expired but Not Renewed
✓	6007061	Merge with Khalanaga Shitalpati									
✓	6007062	Marke Rani Scheme-1									
✓	6007063	Tallo Marke Rani WSP	17	104	0.12	2062	1	3	Simkholi	Yes	
✓	6007065	Dhar WSP (Terchhapani) Panti Dhamtikaura	25 28	161	0.12	2061	1	2	Terchhapani	Yes	not Renewed
✓	6007066	Sim Kholi WSP, Masthillo Marke	21	141	0.1	2062	1	4	Simkholi	Yes	
✓	6007121	Kaina Pani WSP Kaina Pani	14	86	0.12	2062	1	3	Simkholi	Not	
✓	6007132		17	98	0.12	2064	0	2 1	Chhari khola	Yes	In Suffer
✓	6007133	Rokika WSP, Rokika									

निर्णयहरू

- मौखिक छलनेसित बा.पा. मा. क्षेत्रा. ढार खला पा (०६९), हुमा रूखपा बा.पा. (०७३) र रातामारा खलापा (०६८, ०६९), लाम्छ जर्जु बा.पा. मा. Monje गरी व्यवस्थीत गर्ने।
- नियमित प्र. १ मा छलनेसीत प्रोजेरा ब्राडेड अन्ध स्था.पा. मोजेरुपालाई मुल लेइका मोजेर मित्र क्षमाण्ड गरी व्यवस्थीत गर्ने।
- पह वडाको रातामाराला, हुमा रूखपा, दाहा डोपानी र तल्लो भाडी रोखेरुपालाई जर्जु बा.पा. मा. DPR मा समावेष्ट गर्ने।
- अझ नयाग शल कुट्टि पति बा.पा. मा निर्माणभक्त उद्देश।
- पह वडामा निर्माण भएका ढार-RVT र धामी ट्याङ्कल RVT REC गर्नुलाई जरुरी हुन्छ, DPR मा समावेष्ट गर्ने र दाडा Pipleलाई न.प्रमाण गरी चढ्ने गरी वडा समायोजन तस्विडो खल्गा सितालापारी निम्तो गरि RVT- र पिपलेटा को RVT मागे जरुरी हुन्छ, DPR मा समावेष्ट गर्ने।

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ESMP Report of Jarkhu Water Supply Project

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Existing Water Supply Schemes of Sharada Municipality											DATE
Code No	WSP Name	HHS	Population	Safe Yield (LPS)	Construction Year	No of RVT	No. of Taps	Source Name	RGD Status	Remarks	
60907156	Khalanga Sitalapati, 1, 2, 3 & 12 Shantinagar					2072	217		Yes		
60907046	WSP-1	80	438	0.12	2064	1	285	Simkhola	Yes		
60907047	Chaibang WSP-1	52	313	0.1	2058	1	285	Mulikhola	Yes	more	
60907051	WSP-1	91	546	0.9	2037	2	285	Khor Khola	Yes	more	
60907053	Dabri Chaibang WSP-1	60	258	0.15	2067	1	5	Chaibang Khola	Yes	P.T.	
60907114	Bhagawoti Khola WSP-1	45	267	0.3	2052	1	18	Jhapa Khola, Khor Khola, Kaina rukh ko	Yes	P.P.	
60907049	Chhapdanda WSP-1	116	813	0.9	2068	1	96	Mul	Yes	4-spring source	

Name of the School	Level	Number of Students		Teacher s and Staffs		Number of Toilets		Water Facility		M/HM Facility	
		Boys	Girls	Boys	Girls	Limited	Sufficient	Yes	No		
श्री गुरुदेव जी	12	757	835	56	3	2				✓	update
श्री गुरुदेव जी	10	3	3	5	9		✓			-	-
श्री गुरुदेव जी	3	20	28	5	9		✓				
श्री गुरुदेव जी	90	300	430	42	7	9		✓		✓	
श्री गुरुदेव जी	90	400	430	45	6	6				✓	

SN	Name of the Health Facility	Location	Number of Patient s/day	Toilet		Water Supply Facility			Inciner ator	Remarks
				M	F	Sufficient	Not Sufficient	No Facility		
9	श्री गुरुदेव जी	श्री गुरुदेव जी	30	9		✓				ND

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- श्री गुरुदेव जी
- श्री गुरुदेव जी
- श्री गुरुदेव जी
- श्री गुरुदेव जी

Consultation Meeting Minute in WN 10 (Madana) with PST, PIU, M-WASH Unit & MST about JWSP Operation & Maintenance cost and sustainability

DATE.....

आज दिनांक 2009 का 20 जनवरी यल शारदा न.पा. वडा खानेपानी क्षेत्रगत विकास तथा पुनर्वसन सहयोग आयोजना (WSS/ESF) अन्तर्गत प्रस्तावित जल स.पा. योजनाका विस्तृत परिचयना प्रतिवेदन (DPR) तयारी भई रहेको सहयोगी न.पा.का वडा नं. 90 का वडा प्रतिनिधिहरू यस क्षेत्रमा रहेका विभिन्न स-समा समूह पा.ड. समितिका पदाधिकारीहरू तथा उपप्रकारहरू साथै सहयोगी न.पा.का परामर्शदाताहरू नगरपालिका सहयोगी न.पा. (MST)का कर्मचारीहरू तथा शारदा न.पा.का कर्मचारीहरू बीच प्रस्तुतित जल स.पा. योजनाका निर्माण संयोजन यसको दिशापत्रा स्थानीय उपप्रकारहरूको पहिना, तयारी र संयोजन तथा मर्मत सम्भारमा पुगेर त्यसका लागि त्रिभुवन इन्टरनेशनल गरी आयोजना गरिएको बैठक भेलामा निम्न बमोजिमका उपस्थित रहेका थिए।

व्यक्ति	नाम थप	पद जिम्मेवारी	संस्था कोष नं.
होस्ट	कुल न. वडा	90 नं. वडा अध्यक्ष	
गोर्ण	होस्टकी बुढाथोकी	गुरु रेवाने पानी समिति	9688283556
सहयोगी	गजान वडा न.पा.	गुरु रेवाने पानी समिति	9688283556
	बाबु कुमारी बुढाथोकी	कार्यालय सहयोगी	9688283556
	समिरान भा.पा. - 2011 न.पा. समिति		9688283556
वडा न.पा.	हिपक वडा न.पा.		
वडा न.पा.	चित्तारिड वडा न.पा.		
वडा न.पा.	चानसिड वडा न.पा.		
वडा न.पा.	लिवा वडा न.पा. बुढाथोकी	जसु खानेपानी समिति	9688283556
वडा न.पा.	सोमराज वडा न.पा.	जसु खानेपानी समिति	9688283556
वडा न.पा.	गजान वडा न.पा.	जसु खानेपानी समिति	9688283556
वडा न.पा.	अर्द्धा गुरुङ	MST/ESF	9688283556
वडा न.पा.	बैलाहा - नारा	शारदा न.पा. वडा न.पा.	9688283556
वडा न.पा.	यसु कुमारी वडा न.पा.	कृषि समिति	9688283556
वडा न.पा.	पात वडा न.पा.	IST M4B वडा न.पा.	9688283556
वडा न.पा.	सहज सिंह वडा न.पा.	PIU manager	9688283556
वडा न.पा.	सुवास वडा न.पा.	MST/Design	9688283556

DATE.....

नाम	पद/विनोदारी/सिद्धा	फोन नं.
पवन कुशाग्रपकोटा	PST/Naam MDS Engineer	9864155356
जय शंकर झा	MST/DTL	9841360343
हरि प्रसाद शर्मा	PST Team leader	-9851134024
राजेश कुमार शर्मा	शास्त्र कर्मचारी	9864155356
हेमन्त कुमार शर्मा	"	9864155356
तेजराज यादव	"	9864155356
मुकुन्द राज यादव	MST/Social Expert	9864155356

हलकल प्रकाश विषय वस्तु

- * प्रस्तावित जल संचयन योजना निर्माण पर्याप्त प्रमाण तथा खेचाला खचले गरी समुदायमा लागतको सेवाको, आयोजनाको विनोदारी, जलसंचयन विनोदारी लगायतको लागि स्थानिय उपभोक्ता र वडा समिति/विनोदारीको लक्ष्यमा गतियोग्यतापछि लक्ष्यमा विनोदारी लगायतको विषयमा आवश्यक पर्ने खर्च भावी पुराउने विषयमा प्रतिबद्धता जनाइयो।
- * प्रस्तावित जल संचयन योजनाको DPR को बारेमा PST रिपोर्ट छिट्टै नै हरी प्रसाद शर्मा जसबाट प्रष्ट बनाउनु भयो।
- * प्रस्तावित जल संचयन योजनाको लागि आवश्यक पर्ने निम्न रिपोर्ट तयार गर्ने,

उपरोक्त

Grievances Recorded & Resolved

[illegible]

Minute of Consultation with Indigenous People

114

DATE:

हमने व डिजिटल कलपीन कममा एना. मा को प्रतिष्ठा देना
हुका भागोडाबमि दिने कार्येव मरुति जाली कभुमीडा
गर्केन / मालमदी गिता प्रविष
श्री लाल

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Annex II: Recommendation Letter

शारदा नगरपालिका १० नं. वडा कार्यालय मध्यानी, सल्यान शारदा नगरपालिका १० नं. वडा कार्यालय सल्यान कर्णाली प्रदेश, नेपाल मिति: २०८१/०९/३० प.सं. २०८०/०८१ च.नं. ८५० श्री खानेपानी क्षेत्रगत सुशासन तथा पूर्वाधार सहयोग आयोजना शारदा नगरपालिका, सल्यान। विषय: सहमति दिइएको बारे। उपरोक्त सम्बन्धमा त्यस आयोजना अन्तर्गत संचालन गरिने जर्खु खानेपानी योजनाको पाईप लाइन विस्तार तथा खानेपानी टाकी लगायतका संरचनाहरू निर्माण गरिने ठाउँमा कुनै किसिमको विवाद छैन, यस वडा भित्र कुनै कसैबाट विवाद आएको खण्डमा विवाद समाधान गर्नको लागि यस वडा कार्यालयले जिम्मा लिने भएकोले कार्यक्रम अगाडि बढाउन यो सहमति पत्र दिइएको व्यहोरा जानकारी गरिन्छ। कृष्ण बहादुर बोहरा वडा अध्यक्ष कृष्ण बहादुर बोहरा वडा अध्यक्ष	शारदा नगरपालिका ४ नं. वडा कार्यालय पिपलनेटा, सल्यान कर्णाली प्रदेश, नेपाल पत्र संख्या :- २०८०/०८१ चलानी नम्बर :- ३२८ मिति :- २०८१/०९/३० विषय : सहमती दिइएको बारे। श्री खानेपानी क्षेत्रगत सुशासन तथा पूर्वाधार सहयोग आयोजना शारदा नगरपालिका, सल्यान प्रस्तुत विषयमा त्यस आयोजना अन्तर्गत संचालन गरिने जर्खु खानेपानी योजनाको पाईप लाइन विस्तार तथा खानेपानी टाकी लगायतका संरचनाहरू निर्माण गरिने ठाउँमा कुनै किसिमको विवाद छैन, यस वडा भित्र कुनै कसैबाट विवाद आएको खण्डमा विवाद समाधान गर्नको लागि यस वडा कार्यालयले जिम्मा लिने भएकोले कार्यक्रम अगाडि बढाउन यो सहमती पत्र दिइएको व्यहोरा जानकारी गराइन्छ। किशोर कुमार हमाल वडा अध्यक्ष किशोर कुमार हमाल वडा अध्यक्ष
शारदा नगरपालिका ५ नं. वडा कार्यालय रानीकोट, सल्यान कर्णाली प्रदेश, नेपाल २०७३ शारदा नगरपालिका ५ नं. वडा कार्यालय सल्यान पत्र संख्या :- ०८०/०८१ चलानी नम्बर :- ८४९ मिति :- २०८१/०९/३० गते विषय: सहमति दिइएको सतपन्नमा। श्री खानेपानी क्षेत्रगत सुशासन तथा पूर्वाधार सहयोग आयोजना। शारदा नगरपालिका, सल्यान प्रस्तुत विषयमा त्यस आयोजना अन्तर्गत संचालन गरिने जर्खु खानेपानी योजनाको पाईप लाइन विस्तार तथा खानेपानी टाकी लगायतका संरचनाहरू निर्माण गरिने ठाउँमा कुनै किसिमको विवाद छैन, यस वडा भित्र कुनै कसैबाट विवाद आएको खण्डमा विवाद समाधान गर्नको लागि यस वडा कार्यालयले जिम्मा लिने भएकोले कार्यक्रम अगाडि बढाउन यो सहमति पत्र दिइएको व्यहोरा जानकारी गरिन्छ। प्रदिप शाही वडा अध्यक्ष प्रदिप शाही वडा अध्यक्ष	शारदा नगरपालिका ९ नं. वडा कार्यालय आरा, सल्यान पत्र संख्या :- ०८०/०८१ चलानी नम्बर :- ३३६ कर्णाली प्रदेश, नेपाल मिति: २०८१/०९/३० श्री खानेपानी क्षेत्रगत सुशासन तथा पूर्वाधार सहयोग आयोजना शारदा नगरपालिका, सल्यान विषय: सहमति दिइएको बारे। उपरोक्त सम्बन्धमा त्यस आयोजना अन्तर्गत संचालन गरिने जर्खु खानेपानी योजनाको पाईप लाइन विस्तार तथा खानेपानी टाकी लगायतका संरचनाहरू निर्माण गरिने ठाउँमा कुनै किसिमको विवाद छैन, यस वडा भित्र कुनै कसैबाट विवाद आएको खण्डमा विवाद समाधान गर्नको लागि यस वडा कार्यालयले जिम्मा लिने भएकोले कार्यक्रम अगाडि बढाउन यो सहमति पत्र दिइएको व्यहोरा जानकारी गरिन्छ। किशोर कुमार हमाल वडा अध्यक्ष किशोर कुमार हमाल वडा अध्यक्ष

ESMP Report of Jarkhu Water Supply Project

स्थानीय सरकार
Local Government
शारदा नगरपालिका
SHARADA MUNICIPALITY

नगर कार्यपालिकाको कार्यालय
OFFICE OF THE MUNICIPAL EXECUTIVE

खलंगा, सल्यान KHALANGA, Salyan
कर्णाली प्रदेश, नेपाल KARNALI PROVINCE, NEPAL

पत्र सं २०८१/८२
चलानी नं ५५६

मिति: २०८१/१०/१८

विषय:- हाल साविक विवरण खुलाइएको सम्बन्धमा।

प्रस्तुत सम्बन्धमा तल उल्लेखित किता नं का जग्गाहरूको विवरण तपसिल बमोजिम रहेको बेहोरा अनुरोध छ।

क्र.सं.	साविक गा.वि.स./वडा नं.	हालको शा.न.पा.-५	किता नं.	क्षेत्रफल	जग्गाधनी	विरह/कि.सिम	कैफियत
१	माके-८	शा.न.पा.-५	६९	५९६६-१-०-१	नेपाल सरकार	जंगल	सरकारी/सार्वजनिक
२	माके-९	शा.न.पा.-९	१०२	५०१३-०-२-०	नेपाल सरकार	जंगल	सरकारी/सार्वजनिक
३	हिबल्पा-९	शा.न.पा.-५	६३५	८०५३-५-०-२	नेपाल सरकार	जंगल	सरकारी/सार्वजनिक
४	हिबल्पा-६	शा.न.पा.-५	३३६	१६२०-३-३-०	नेपाल सरकार	जंगल	सरकारी/सार्वजनिक
५	हिबल्पा-७	शा.न.पा.-५	११४०	३-०-२-०	शारदा न.पा.	सिम/पाखो	सरकारी/सार्वजनिक
६	खलंगा-८	शा.न.पा.-५	३१०	१९-३-०-२	नेपाल सरकार	बाटो	सरकारी/सार्वजनिक
७	माके-४	शा.न.पा.-८	५४	१२१८-६-२-३	नेपाल सरकार	जंगल	सरकारी/सार्वजनिक
८	माके-७	शा.न.पा.-८	१७९	३६१५-१५-३-०	नेपाल सरकार	जंगल	सरकारी/सार्वजनिक
९	हिबल्पा-९	शा.न.पा.-५	७३५	३-३-०-०	टिकाराम कवर	सिम/पाखो	रैकर निधि
१०	खलंगा-८	शा.न.पा.-५	२१४९	१३६२-२६ वर्ग मि.	किरण शाही रिता आचार्य	सिम/पाखो	रैकर निधि

ओम प्रकाश देवकोटा
प्रमुख प्रशासकिय अधिकृत
सहसचिव/प्रशासकिय
प्रमुख प्रशासकिय अधिकृत

Phone No : ०८८-५०४३८ URL: www.sharadamun.gov.np Email ID : shfo@sharadamun.gov.np
lto.sharadamun@gmail.com "Green Sharada Clean Sharada" jto@sharadamun.gov.np

शारदा नगरपालिका
८ नं. वडा कार्यालय
माके, सल्यान कर्णाली प्रदेश, नेपाल

पत्र संख्या :- २०८०/०८१
चलानी नम्बर :- ४६००

मिति : २०८१/०९/३१

श्री खानेपानी क्षेत्रगत सुशासन तथा पुर्वाधार सहयोग आयोजना
शारदा नगरपालिका सल्यान।

विषय : सहमति दिइएको बारे।

उपरोक्त समबन्धमा त्यस आयोजना अन्तर्गत संचालन गरिने जर्बु खानेपानी योजनाको पाईप लाइन विस्तार तथा खानेपानी टंकी लगायतका संरचनाहरू निर्माण गरिने ठाउँमा कुनै किसिमको विवाद छैन यस वडा भित्र कसैबाट विवाद आएको खण्डमा विवाद समाधान गर्नको लागि यस वडा कार्यालयले जिम्मा लिने भएकोले लिने भएकोले कार्यक्रम अगाडि बढाउन यो सहमति पत्र दिइएको व्यहोरा जानकारी गरिन्छ।

लुट बहादुर बुढाथोकी
का.वा अध्यक्ष
का.वा अध्यक्ष

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नेपाल सरकार
भूमि व्यवस्था, सहकारी तथा गरिबी निवारण मन्त्रालय
भूमि व्यवस्थापन तथा अभिलेख विभाग
मालपोत कार्यालय
सल्यान

पत्र सं २०८१/८२
चलानी नं ५५६

मिति: २०८१/१०/१८

विषय: जग्गाको विवरण पठाइएको सम्बन्धमा।

प्रस्तुत विषयमा ल्याई कार्यालयको पत्र सं. १९९९ मिति २०८१/१०/१० को पत्रमा उल्लेखित किता नं. का जग्गाहरूको विवरण तपसिल बमोजिम रहेको बेहोरा अनुरोध छ।

क्र.सं.	साविक गा.वि.स./वडा नं.	हालको शा.न.पा.-५	किता नं.	क्षेत्रफल	जग्गाधनी	विरह/कि.सिम	कैफियत
१	माके-८	शा.न.पा.-५	६९	५९६६-१-०-१	नेपाल सरकार	जंगल	सरकारी/सार्वजनिक
२	माके-९	शा.न.पा.-९	१०२	५०१३-०-२-०	नेपाल सरकार	जंगल	सरकारी/सार्वजनिक
३	हिबल्पा-९	शा.न.पा.-५	६३५	८०५३-५-०-२	नेपाल सरकार	जंगल	सरकारी/सार्वजनिक
४	हिबल्पा-६	शा.न.पा.-५	३३६	१६२०-३-३-०	नेपाल सरकार	जंगल	सरकारी/सार्वजनिक
५	हिबल्पा-७	शा.न.पा.-५	११४०	३-०-२-०	शारदा न.पा.	सिम/पाखो	सरकारी/सार्वजनिक
६	खलंगा-८	शा.न.पा.-५	३१०	१९-३-०-२	नेपाल सरकार	बाटो	सरकारी/सार्वजनिक
७	माके-४	शा.न.पा.-८	५४	१२१८-६-२-३	नेपाल सरकार	जंगल	सरकारी/सार्वजनिक
८	माके-७	शा.न.पा.-८	१७९	३६१५-१५-३-०	नेपाल सरकार	जंगल	सरकारी/सार्वजनिक
९	हिबल्पा-९	शा.न.पा.-५	७३५	३-३-०-०	टिकाराम कवर	सिम/पाखो	रैकर निधि
१०	खलंगा-८	शा.न.पा.-५	२१४९	१३६२-२६ वर्ग मि.	किरण शाही रिता आचार्य	सिम/पाखो	रैकर निधि

ओम प्रकाश देवकोटा
प्रमुख प्रशासकिय अधिकृत
सहसचिव/प्रशासकिय
प्रमुख प्रशासकिय अधिकृत

नेपाल सरकार
खानेपानी क्षेत्रगत सुशासन तथा पुर्वाधार सहयोग आयोजना
शारदा आयोजना कार्यालय इकाई
शारदा नगरपालिका, खलंगा, सल्यान

पत्र संख्या: २०८१/०८२
चलानी नं. ६८

मिति: २०८१/१०/२९

श्री नापी विभाग
मिनभवन, काठमाडौं।

विषय: Cadastral Data (.shp file format) उपलब्ध गराइने बारे

यस आयोजना कार्यालयबाट इकाई अन्तर्गत सल्यान जिल्लाको शारदा नगरपालिका, वडा नं. ४, ५, ८, ९, १० मा संचालन हुने जर्बु खानेपानी आयोजनामा निम्नो हुने Treatment Plant, Reservoir Tank र अन्य संरचनाहरूको Digital Overlay गरी तपसिलमा उल्लेखित किता नम्बरहरूको जग्गाको Cadastral Data (.shp file format) आवश्यक पर्ने भएकोले उल्लेखित किता नम्बरहरूको Cadastral Data (.shp file format) निम्नानुसार उपलब्ध गराई सहयोग गरिनुहुन अनुरोध छ।

क्र.सं.	साविक गा.वि.स./वडा नं.	हालको शा.न.पा.-५	किता नं.	क्षेत्रफल	जग्गाधनी	विरह/कि.सिम	कैफियत
१	माके-८	शा.न.पा.-५	६९	५९६६-१-०-१	नेपाल सरकार	जंगल	सरकारी/सार्वजनिक
२	माके-९	शा.न.पा.-९	१०२	५०१३-०-२-०	नेपाल सरकार	जंगल	सरकारी/सार्वजनिक
३	हिबल्पा-९	शा.न.पा.-५	६३५	८०५३-५-०-२	नेपाल सरकार	जंगल	सरकारी/सार्वजनिक
४	हिबल्पा-६	शा.न.पा.-५	३३६	१६२०-३-३-०	नेपाल सरकार	जंगल	सरकारी/सार्वजनिक
५	हिबल्पा-७	शा.न.पा.-५	११४०	३-०-२-०	शारदा न.पा.	सिम/पाखो	सरकारी/सार्वजनिक
६	खलंगा-८	शा.न.पा.-५	३१०	१९-३-०-२	नेपाल सरकार	बाटो	सरकारी/सार्वजनिक
७	माके-४	शा.न.पा.-८	५४	१२१८-६-२-३	नेपाल सरकार	जंगल	सरकारी/सार्वजनिक
८	माके-७	शा.न.पा.-८	१७९	३६१५-१५-३-०	नेपाल सरकार	जंगल	सरकारी/सार्वजनिक
९	हिबल्पा-९	शा.न.पा.-५	७३५	३-३-०-०	टिकाराम कवर	सिम/पाखो	रैकर निधि
१०	खलंगा-८	शा.न.पा.-५	२१४९	१३६२-२६ वर्ग मि.	किरण शाही रिता आचार्य	सिम/पाखो	रैकर निधि

संलग्न कार्यावाहक :

- १) नापी कार्यालय सल्यानबाट प्राप्त नक्सा फिर्ताको प्रतिलिपी-१५ वटा
- २) नापी कार्यालय सल्यानबाट विभिन्न भेसिकिशन गरी पठाएको पत्रको प्रतिलिपी
- ३) नापी कार्यालय सल्यानबाट पठाईएको जग्गाको विवरणको प्रतिलिपी
- ४) शारदा न.पा. बाट हाल साविक विवरण खुलाईएको पत्रको प्रतिलिपी

रिपक महर्जन
आयोजना व्यवस्थापक

आयोजना व्यवस्थापक

Annex IV: Water Quality Test Report of Jarkhu Spring



Tel: +977 083 523248
E-mail: wqtlst80@gmail.com

Government of Nepal
Ministry of Water Supply
Department of Water Supply and Sewerage Management
Federal Water Supply and Sewerage Management Project
Water Quality Testing Laboratory
Birendranagar, Surkhet

WATER QUALITY TEST REPORT

Name of Client : Jherkhu Source Sample 2
Sampled By : Client
Source of Sample : Muhan water
sampling point : Direct Muhan
Location :
Date of Collection : 10/10/2080
Date Of Analysis : 10/10/2080
Date of Completion : 11/10/2080

S.N.	Category	Parameters	Observed values	NDWQS, 2079 Bs	Method used
1	Physical	Turbidity (NTU)	<5	5	2130 B, APHA, 21st EDITION
2		Temp. °C	12.7	-	2550 B, APHA, 21st EDITION
3		pH	7.3	6.5-8.5*	4500-H+ B, APHA, 21st EDITION
4		Electrical Conductivity (µS/cm)	160	1500	2510 B, APHA, 21st EDITION
5	Chemical	Iron (mg/L)	<0.05	0.3(3)	COLORIMETRY
6		Total Dissolved Solids (mg/L)	118	1000	INSTRUMENTAL
7		Total Hardness (mg/L)	105	500	2340C, APHA, 21st EDITION
8		Arsenic (mg/L)	<0.05	0.05	INSTRUMENTAL
9		Ammonia (mg/L)	<0.04	1.5	COLORIMETRY
10		Residual Chlorine (mg/L)	-	0.1-0.2*	COLORIMETRY
11	Microbiological	Faecal coliform E.coli (CFU/100 ml)	0	0	9222 D, APHA, 21ST EDITION

APHA: American Public Health Association, Standard Methods for Examination of Water and Waste Water.

* These values show lower and upper limits.

() Values in parentheses refers the acceptable values only when alternative is not available.

Note :- The entire test was conducted as per the National Drinking Water Quality Standard Guideline (NDWQS) 2079 B.S.

Analyzed By
Assistant Chemist

[illegible][illegible]

ESMP Report of Jarkhu Water Supply Project

संयोजक
महाराष्ट्र शासन, जल संसाधन विभाग, अहमदनगर (WSP/Jarkhu)
आमंत्रित प्रस्तावित अर्थ साधक/संस्था का नाम: जल संसाधन विभाग, अहमदनगर
प्रस्तावित कार्य/कार्यक्रम का नाम: जल संसाधन विभाग, अहमदनगर
निर्माण, स्थापना, सुरक्षा, उपायाने, निरीक्षण, प्रशासनिक विभाग
प्राप्त होने के दिनांक: 20/08/2018
कार्य/कार्यक्रम का नाम: जल संसाधन विभाग, अहमदनगर
प्रकार का नाम: जल संसाधन विभाग, अहमदनगर

क्र.सं.	नाम	पता	संस्था
1	श्री. राजेंद्र शिंदे	ज. सं. 10, डा. 10	जल संसाधन विभाग, अहमदनगर
2	श्री. राजेंद्र शिंदे	ज. सं. 10, डा. 10	जल संसाधन विभाग, अहमदनगर
3	श्री. राजेंद्र शिंदे	ज. सं. 10, डा. 10	जल संसाधन विभाग, अहमदनगर
4	श्री. राजेंद्र शिंदे	ज. सं. 10, डा. 10	जल संसाधन विभाग, अहमदनगर
5	श्री. राजेंद्र शिंदे	ज. सं. 10, डा. 10	जल संसाधन विभाग, अहमदनगर
6	श्री. राजेंद्र शिंदे	ज. सं. 10, डा. 10	जल संसाधन विभाग, अहमदनगर
7	श्री. राजेंद्र शिंदे	ज. सं. 10, डा. 10	जल संसाधन विभाग, अहमदनगर
8	श्री. राजेंद्र शिंदे	ज. सं. 10, डा. 10	जल संसाधन विभाग, अहमदनगर
9	श्री. राजेंद्र शिंदे	ज. सं. 10, डा. 10	जल संसाधन विभाग, अहमदनगर
10	श्री. राजेंद्र शिंदे	ज. सं. 10, डा. 10	जल संसाधन विभाग, अहमदनगर
11	श्री. राजेंद्र शिंदे	ज. सं. 10, डा. 10	जल संसाधन विभाग, अहमदनगर
12	श्री. राजेंद्र शिंदे	ज. सं. 10, डा. 10	जल संसाधन विभाग, अहमदनगर

हस्ताक्षर/सहस्रहस्ताक्षर: श्री. राजेंद्र शिंदे
दिनांक: 20/08/2018

Consultation Meeting with Land Affected People-Jarkhu WSP

FGD with Women & Dalit people of the Service Area about the project & Discussion on GBV and Social Discrimination

DATE: 20/08/2018

1. जल संसाधन विभाग, अहमदनगर का नाम: जल संसाधन विभाग, अहमदनगर
2. जल संसाधन विभाग, अहमदनगर का नाम: जल संसाधन विभाग, अहमदनगर
3. जल संसाधन विभाग, अहमदनगर का नाम: जल संसाधन विभाग, अहमदनगर
4. जल संसाधन विभाग, अहमदनगर का नाम: जल संसाधन विभाग, अहमदनगर
5. जल संसाधन विभाग, अहमदनगर का नाम: जल संसाधन विभाग, अहमदनगर
6. जल संसाधन विभाग, अहमदनगर का नाम: जल संसाधन विभाग, अहमदनगर
7. जल संसाधन विभाग, अहमदनगर का नाम: जल संसाधन विभाग, अहमदनगर
8. जल संसाधन विभाग, अहमदनगर का नाम: जल संसाधन विभाग, अहमदनगर
9. जल संसाधन विभाग, अहमदनगर का नाम: जल संसाधन विभाग, अहमदनगर
10. जल संसाधन विभाग, अहमदनगर का नाम: जल संसाधन विभाग, अहमदनगर
11. जल संसाधन विभाग, अहमदनगर का नाम: जल संसाधन विभाग, अहमदनगर
12. जल संसाधन विभाग, अहमदनगर का नाम: जल संसाधन विभाग, अहमदनगर

हस्ताक्षर/सहस्रहस्ताक्षर: श्री. राजेंद्र शिंदे
दिनांक: 20/08/2018

Consultation Meeting with Land Affected People-Jarkhu WSP

FGD with Saraswati Swastha Ama Samuha- Madana

ESMP Report of Jarkhu Water Supply Project



Consultation Meeting Ward No-5



Meeting with WB Consultant, PD, WASH Unit Representative and MST Experts



Jarkhu Spring Location, Sharada Municipality, Ward No- 10



Sunchaur Village interaction with local people, Ward No-9, which predominantly consist of Magars



Consultation/WASH Data Validation Workshop
Ward No -8



Observation and Survey of Access Road to
Siddhapark



Proposed RVT-4, Siddhapark Area



Interaction with Local People, Ward No-10, Takura
Settlement

ESMP Report of Jarkhu Water Supply Project



Consultation Meeting in Ward No-1



NWASH Data Validation Workshop in Ward No-4

[illegible]

Kitta No. 1140 for PRVT-1, Badachaur, Ownership-
Sharada Municipality



Socio –Economic Survey Jarkhu WSP Service-
2080, Data collection



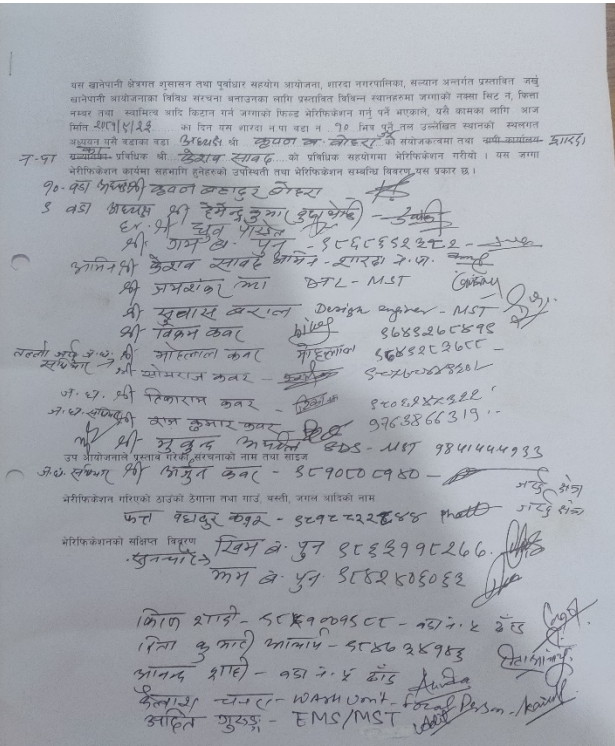
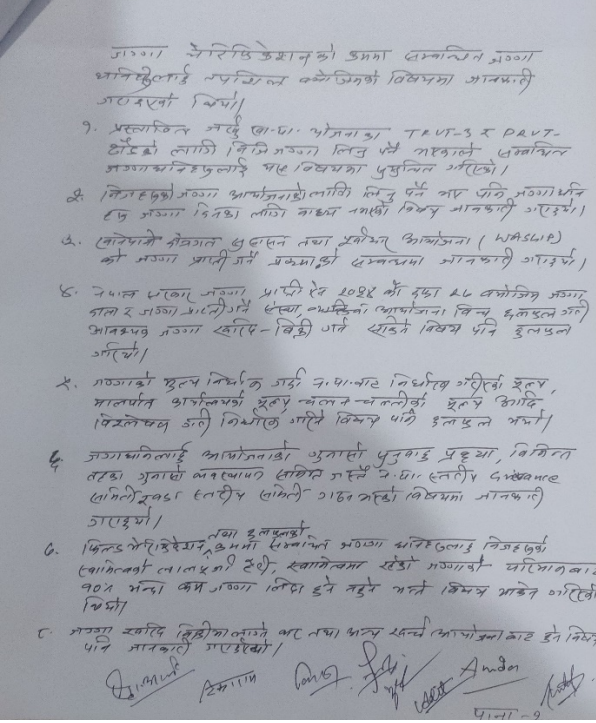
Field Preparation before starting Technical Survey



Meeting With Ward Representatives and WSP Members for Validation and Merge of the WSP (Ward No -11)



ESMP Report of Jarkhu Water Supply Project

Meeting With Ward Representative and WSP Members on Data Validation and Merge of the WSP (Ward No -8)	Source Conservation Practice- Thuldhara Source, Sh... Municipality-3
	
Land Verification and Consultation with Land Owners-Minute	Land Verification and Consultation with Land Owners-M

Land Verification and Consultation with Land Owners-Minute Consultation with Land Owners in Mathillo Jaluke of Ward No 10	Land Verification and Consultation with Land Owners-Minute Collecting opinion of the local people during field/Land verification Consultation with Land Owners in Tallo Jaluke of Ward No 10

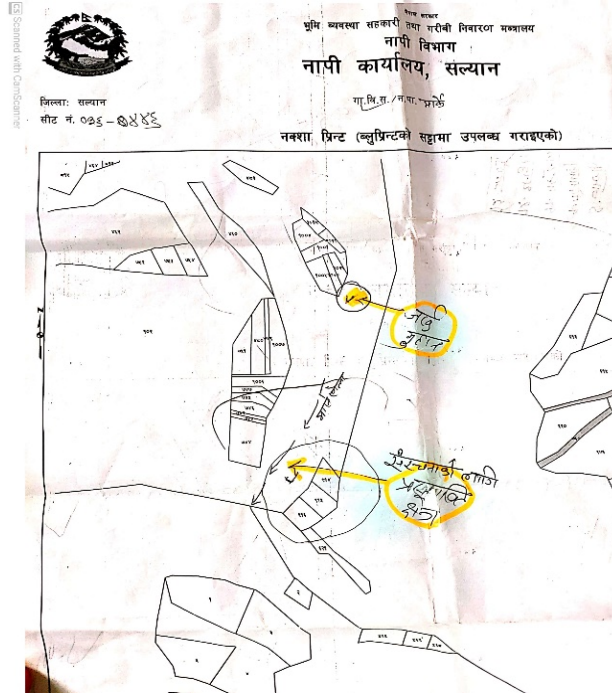
ESMP Report of Jarkhu Water Supply Project

यस ख्यातेपानी क्षेत्रगत व्यवसायन तथा पुर्वोधार सहयोग आयोजना (WASAP) अन्तर्गत प्रदत्तवित्त जस्तै खानेपानी योजनाको मुल तथा Inake माइडमा आयोजनाको लागि आवश्यक संरचनाहरु निर्माण गर्न आवश्यक पर्ने जग्गा सरकारी तथा पार्सलबाट दर्ता रोजी ब्याजम नपरोस् भै हो विद्येय यजिन गर्न स्याको म. पा. बाट सरकारीको आगिनको पढाम सँग जिति २०८१/२०८२ मा सहभागि हुने हलुको उपलब्धि यस प्रकार छ।

9. वडा २५० छिबखन श्री कृष्ण के मोहरा - १६
10. वडा २६ " श्री हेमन्त कुमारा कुपोखानी - ५५
11. P.O. Mager श्री महेंद्र सिंह शाक - १५
12. W.D.M. प्रतापश्री श्री कल्याण चन्दरा - २६
13. धामिन श्री केशव सावह - २०
14. M.T. - ५०५ श्री मुकुन्द राज काकोर - १४
15. M.A. - चारक श्री माधव खड्ड - २०

निर्वाच १९११. प्रस्तावित नरुय द्या वा. ठी मुला हे दिने १७० मीतला रेडो प्रथम धर्माचन
दि. १. १९१६, १९१७, १९१८ र पाश्चिममा गारु लोकांत इतला अलेख अंगल
दालिमा तथे गोरानोका खोला (सांगित मळे गा. वि. हे नं २१, दि. ३.
०६६-०६१६, लु पिटत मसा) ही अनुसा लु. गणदो २१. ११. १९
दायेंतर आमिन मी द्याव सांगद एमेनेनो, जमनीनो नवी तका
वर्मा नवी दलुगा एणलिनोका (गाथ उतलेलिन दि. २. वाला अगगावो
पिटत मेरीवेवेलान ५६१) गाथगोन ५६१) धर्मजिनको ररचगाऊ-
नली धामरुय वर अगगा सरकारी, लुगेजवेल जगा उतलेलिन रेडोने
लोने एलको, स्थगित जगा उतलेलिन री एलका वेसाड नु एमिले ल्या
प्रमाण रेडो निर्वाच नली. अगगा, निजी गणन/आयुध नयेन दगावो।
उत्तरांग

Minutes of Land Verification Team



Blue Print Map of Jarkhu Intake Site

[illegible]

Land Ownership Certificate

Annex IVI: Monitoring Format

जर्खु खानेपानी आयोजनाको
वातावरणीय प्रभाव अनुगमन फारम (निर्माण चरण)

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

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

सूचक	विधि	परिणाम वा परिमाण	प्रतिकार्य वा सुधारात्मक कार्य (सल्लाह सुझाव 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 कालेको	कार्यस्थल अवलोकन गर्ने	छ छैन	
काटिएको रुखको संख्या	टुटाको संख्या गन्ने र अभिलेख हेर्ने		
सडकमा नयाँ खाल्टो परेको र हिलो भएको	बाटो अवलोकन गर्ने	छ छैन	
कामदारका अभद्र व्यवहारका घटना	स्थानीयलाई सोध्ने	छ छैन	
कार्य क्षेत्रमा दुर्घटना र क्षतिको विवरण (संख्या र किसिम)	ठेकेदारलाई सोध्ने र अभिलेख हेर्ने		

निर्माणमा स्थानीय व्यक्तिको सहभागिता (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	
-------------------------------------	--

जर्खु खानेपानी आयोजनाको

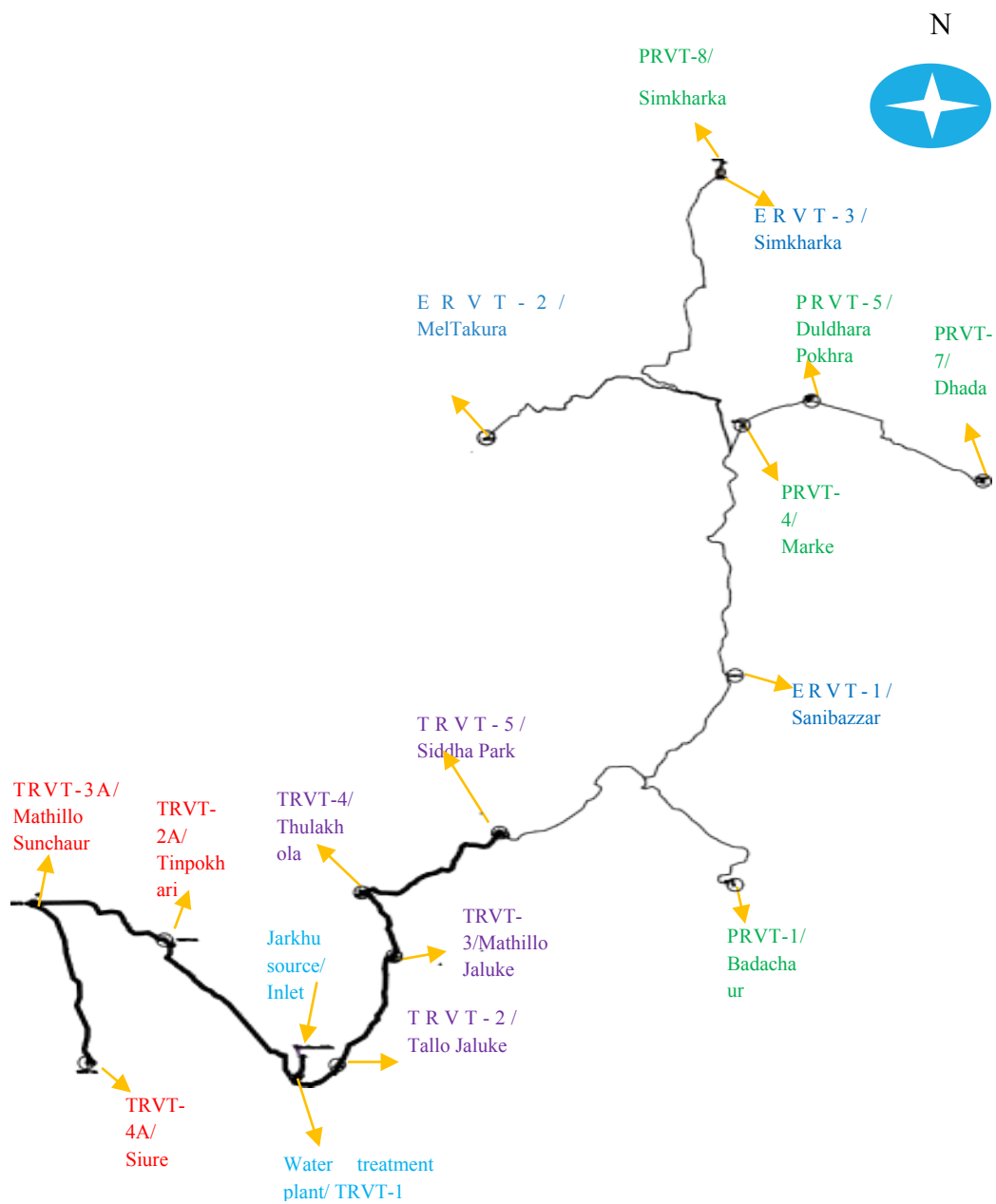
वातावरणीय प्रभाव अनुगमन फारम (संचालन चरण)

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

अनुगमन गरेको मिति		समय	
अनुगमनको स्थान			
अनुगमन गर्ने व्यक्तिको नाम			

अनुगमनको गर्ने व्यक्तिको
समग्र क्रियाकलापको बारेमा
थप र व्यक्तिगत

Annex VII: Schematic Diagram of the pipe layout



Annex VIII: Land ownership certificate of land transfer in the name of Sharada Municipality



स्थानीय सरकार
Local Government
शारदा नगरपालिका
SHARADA MUNICIPALITY
शारदा नगरपालिकाको कार्यालय
OFFICE OF THE MUNICIPAL EXECUTIVE

पत्र सं २०८१/८२
चलानी नं १८४३



खलंगा सल्यान
KHALANGA-SALYAN
शारदा नगरपालिका
नगर कार्यपालिकाको कार्यालय
खलंगा, सल्यान

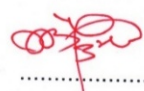
कर्णाली प्रदेश, नेपाल
KARNALI PROVINCE, NEPAL

मिति. २०८१/११/११

बिषय:- हाल साविक बिबरण खुलाइएको सम्बन्धमा ।

प्रस्तुत सम्बन्धमा तल उल्लेखित कित्ता नं का जग्गाहरुको बिबरण तपसिल बमोजिम रहेको ब्यहोरा अनुरोध छ।

क्र.स	साविक गा.वि.स/ वडा न.	हालको न.पा./वडा	कित्ता न.	क्षेत्रफल	जग्गाधनी	विरह/कि सिम	कैफियत
१	खलंगा -८	शा.न.पा-५	२१६१	१३०.०० वर्ग मि.	शारदा नगरपालिका	सिम/ पाखो	सरकारी/ सार्वजनिक
२	हिवल्चा-९	शा.न.पा-१०	१२४६	५०८.७४ वर्ग मि.	शारदा नगरपालिका	सिम/ पाखो	सरकारी/ सार्वजनिक



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ओम प्रकाश देवकोटा
प्रमुख प्रशासकीय अधिकृत
प्रमुख प्रशासकीय अधिकृत

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ito@shaaradamun.gov.np " Green Sharada Clean Sharada " ito@shaaradamun.gov.np

नेपाल सरकार

भूमि व्यवस्था सहकारी तथा गरिबी निवारण सन्त्रालय

भूमि व्यवस्थापन तथा अनिलेख विभाग

भूमिसुधार/मालपोत कार्यालय

जग्गाधनी सक्ती पत्र नं. ००००००५४१३

DR०००१८४४



जग्गाधनी दर्ता प्रमाण पुर्जा

सत्यापन नं.:

ठेगाना:

दर्ता नं.:

जारी गर्ने कार्यालय:

वेबसाइट:

दर्ता मिति (वि.स):

सत्यापन गर्नेको दस्तखत

सत्यापन गर्नेको नाम:

जिल्ला: सल्यान गा.पा. / न.पा. / गा. वि. स. खलगा वार्ड नं. २

७४३

नेपाल सरकार, सल्यान

ईमेल:

२०७८/०८/२४

साविक किरा नं.	प्रमाण संकेत	जिल्ला / गा. वि. स. / न.पा.	वार्ड नं. / नक्सा सीट नं.	किता नं. / खण्ड नं.	विवरण (घर, आखादी, इत्यादि)	जग्गाधनी को हकहिरसा	मोहीको नाम घर	किसिम वा वर्ग	क्षेत्रफल/व.मि.	कैफियत	प्रमाणित गर्नेको दस्तखत
२१६९	२०८१/११/०९	सल्यान	२	२१६९	आवासीय भवन टाँकर भित्री	एकलौटी		मिट/पाथी/बाँसरी	०-०-०-०		
	RL०००१९६०	खलगा	२	०				सीम	१३०.००		
	लिखत पारित										

शारदा नवगुप्तालीका नगर कार्यपालिका को कार्यालय सल्यान

प्रिन्ट गर्नेको दस्तखत

प्रिन्ट गर्नेको नाम: सुष्मा सुब्बा

२०८१/११/०९

प्रिन्ट मिति: २०८१/११/०९

रजु गर्नेको दस्तखत

०८/११/०९



नेपाल सरकार
भूमि व्यवस्था, सहकारी तथा गरिबी निवारण मन्त्रालय
भूमि व्यवस्थापन तथा अभिलेख विभाग
भूमिसुधार/मालपोत कार्यालय

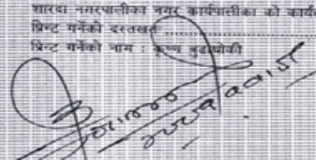
जग्गाधनी संकेत नम्बर:
00000005413
DR0001556

जग्गाधनी दर्ता प्रमाण पुर्जा

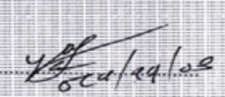
ठेगाना: जिल्ला: सल्यान गा.पा. / न.पा. / गा. वि. स. खलगा बाई नं.: २
दर्ता नं.: ७४३
जारी गर्ने कार्यालय: नेपाल सरकार, सल्यान
वेबसाइट: ईमेल:
दर्ता मिति (वि.स): २०७८/०८/२४

मालपोत कार्यालयको कार्यालय सल्यान

साविक कित्ता नं.	प्रमाण संकेत	जिल्ला / गा. वि. स. / न.पा.	बाई नं. / नक्सा सीट नं.	कित्ता नं. / खण्ड नं.	विवरण (घर, आवादी, इत्यादि)	जग्गाधनी को हकहिरसा	मोहीको नाम घर	किसिम वा वर्ग	क्षेत्रफल/व.मि.	कैफियत	प्रमाणित गर्नेको दस्तखत
१२४६	२०८१/११/०९	सल्यान	९	१२४६	आवासीय क्षेत्र	एकलोटी		फिट/पखो/चारी/सीम	०-०-०-०		
	RL0009953										
	सिखन पारित										
		हिबल्पा	९	०	रेकर्ड निजी			४०८.७४			

शारदा नगरपालिका प्रमुख कार्यालयको कार्यालय सल्यान
प्रिन्ट गर्नेको दस्तखत: 
प्रिन्ट गर्नेको नाम: रुनु बुढाथोकी

प्रिन्ट मिति: २०८१/११/०९

रुनु गर्नेको दस्तखत:  २०८१/११/०९