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

Detailed Project Report of Lokhari Water Supply Project Joshipur Rural Municipality-06, Kailali

NP-DWSSM-290176-CS-QCBS

Final Report

Volume I: Main Report and Appendix
Volume II: Drawings
Volume III: Quantity and Cost Estimation
Volume IV: Bidding Document with Specification
Volume V: Environmental & Social Screening Report
Volume VI: Environmental & Social Management Plan

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AARVEE–FBC–PARAGON JV
MST, Joshipur RM, Kailali
Sudurpaschim Province
E-mail: mst.palikas@gmail.com, ourparagon2009@gmail.com

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ABBREVIATIONS & ACRONYMS

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

Executive Summary

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).

The Lokhari WSS Sub-Project is located in Joshipur Rural Municipality of Kailali district of Seti Zone which lies in the Far-Western Development Region. The Lokhari Water Supply is an incomplete groundwater-based project. The implementation of the project started about 5 years ago (2076 BS). The proposed Lokhari WSS covers all the settlements of Ward 6 of Joshipur Rural Municipality which includes Lokhari, Mahadeva, Pakariya, Jhabahi Kunaithi, Ratanpur & Simari. Geographically the project area lies in latitude 28°36'33" N and longitude 80°59'45.45" E and altitude 154 m from mean sea level (MSL). This area has hot and humid climate. It is surrounded by gravel road to the west, gravel road to the east, Rastriya Ma. B.'s Land to the south and Nala to the north.

Categorization: Every proposed sub-project needs to be subjected to an environmental and social screening process before it is selected for implementation, complying with National regulatory requirements, such as Nepal's EPA 2019 and EPR 2020, as well as the World Bank's Environmental and Social Standards (ESSs). The sub-project will utilize the existing infrastructures including OHT and buildings after repair and rehabilitation and construction of necessary additional infrastructures within the premise of existing OHT belonging to WUSC as well as extension of distribution network within the service area. The execution of proposed sub-project necessitates the trench excavation potentially leading to impacts on construction waste management. The Environmental and Social screening has identified that any adverse impacts on human and environmental factors will be confined to the specific site and limited to the construction phase, with the potential for reversal. Moreover, mitigation measures can be readily devised. 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.

Scope of 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 ad beneficial impacts.

Description of the Environment: The subproject components are located in Lokhari, Joshipur Rural Municipality. The subproject components will be located in WUSC sites, public road that is in public use. There are no protected areas, wetlands, mangroves, or estuaries in or near the subproject locations. The major construction work of this WSS sub-project has already completed. So, Under the scope of WaSGISP project, additional RCC frame structure building has been proposed to accommodate the billing counter room, pump control room, dosing room, and toilet facilities (male and female) for visitors and 42.451 km pipe laying work, stretching of 11KVA transmission line from adjacent road as well as installation of 100KVA transformer, 955 HHs connection as well as a pair of pressure vessel treatment plants with multi-grade filter material has been proposed and other minor repair and maintenance work for this sub-project will likely impact in this area.

Environment and Social Management Plan: An Environment and Social Management Plan (ESMP) matrix is included as part of this ESMP, which includes i) mitigation measures for environmental impacts during implementation, ii) an environmental monitoring program, and the responsible entities for mitigating, monitoring, and reporting, iii) public consultation and information disclosure, and iv) a grievance redress mechanism. A number of impacts and their significance have already been reduced by amending the designs. The ESMP and cost of EMP implementation will be included in civil works bidding and contract documents. Indicative cost for EMP implementation is NRs 10,49,000.00.

During the construction phase, impacts mainly arise from the need to dispose of moderate quantities of waste soil; and from the disturbance of residents, businesses, and traffic. These are common impacts of construction in urban areas, and there are well developed methods for their mitigation. These are common temporary impacts of construction and will be minimized by using best construction methods. Traffic management will be necessary during pipe laying on busy roads.

During operation, the delivery of unsafe water is a crucial concern that can be mitigated with good operation and maintenance, prompt action on leaks and quality monitoring of supplied water. The operation and maintenance will be carried out timely during this phase.

The Mitigation measures have been proposed for adverse environmental impacts. The ESMP will suggest mitigation of adverse impacts during construction phase and operation phases.

To ensure that the recommended mitigation and monitoring actions are duly implemented, monitored, assessed, evaluated and disseminated to the stakeholders for feedback and

improvement, the Project Implementation Unit, Rural Municipality will monitor the implementation of the environmental mitigation measures and direct project supervising engineers through project management office for needed action and coordination.

Consultation, Disclosure, and Grievance Redress Mechanism: Public consultations, Focus Group Discussion were done in the preparation of the subproject and ESMP. On-going consultations will be carried throughout the subproject implementation period. A grievance redress mechanism is described to ensure any public grievances are addressed quickly.

Monitoring and 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. 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.

Conclusions and Recommendations: Lokhari Water Supply and Sanitation Project will bring a series of benefits to the local people. However, there are some risks in the commencement of the subproject on time and sustainability of the subproject which requires to be identified and measures taken to mitigate them. But the analysis shows that subproject benefits outweigh the risks and these potential risks can be overcome through proper planning, coordination and management. Therefore, the proposed subproject is unlikely to cause significant adverse impacts. Based on the findings of ESMP, there are no significant adverse impacts and the classification of the subproject as Category III for environment is confirmed. No further special study or detailed Environmental and Social Impact Assessment (ESIA) needs to be undertaken.

कार्यकारी सारांश

नेपाल सरकार (खानेपानी मन्त्रालय) एक कार्यकारी निकायको रूपमा र खानेपानी तथा ढल व्यवस्थापन विभाग (DWSSM) / सहभागी नगरपालिकाहरु कार्यान्वयन निकायको रुपमा र अन्तराष्ट्रिय विकास संघ (IDA) बीच खानेपानी क्षेत्रगत शुसासन तथा पूर्वाधार आयोजना को लागि ८ करोड अमेरिकी डलर वित्तिय सम्झौता भएको छ।

लोखरी खानेपानी उपआयोजना— सेती अञ्चलको कैलाली जिल्लाको जोशीपुर गाउँपालिकामा अवस्थित छ, जुन सुदूरपश्चिम विकास क्षेत्रअन्तर्गत पर्दछ। लोकहरी खानेपानी आयोजना अधूरो भू गर्भीय— स्रोतमा आधारित आयोजना हो। यस आयोजनाको कार्यान्वयन करिब ५ वर्षअघि (वि.सं. २०७६) शुरू भएको हो। प्रस्तावित लोकहरी खानेपानी योजना जोशीपुर गाउँपालिका—६ का सम्पूर्ण बस्तीहरू समेट्छ, जसमा लोकहरी, महादेवा, पकरिया, झबही कुणैठी, रतनपुर र सिमरी पर्दछन्। भौगोलिक रूपमा यो आयोजना क्षेत्र २८°३६'३३उत्तरी अक्षांश र ८० "°५९'४५ ४५" पूर्वी. देशान्तरमा तथा समुद्री सतहदेखि १५४ मिटरको उचाइमा अवस्थित छ। यस क्षेत्रमा तातो तथा आर्द्र (चिस्यानयुक्त) मौसम पाइन्छ। यस क्षेत्रको पश्चिमतर्फ ग्राभेल सडक, पूर्वतर्फ ग्राभेल सडक, दक्षिणतर्फ राष्ट्रिय मार्गको जमिन र उत्तरतर्फ नाला रहेको छ।

नेपालको वातावरण संरक्षण ऐन २०१९ र वातावरण संरक्षण नियमावली २०२०, साथै विश्व बैङ्कको वातावरणीय र सामाजिक मापदण्ड (ESSs) जस्ता राष्ट्रिय नियामक आवश्यकताहरुको पालना गर्दै प्रत्येक प्रस्तावित उप-परियोजना कार्यान्वयनको लागि छनोट गर्नु अघि वातावरणीय र सामाजिक जाँच प्रक्रिया हुनुपर्छ। उप परियोजनाले लोखरी खानेपानी तथा सरसफाइ समिति अन्तर्गत रहेको ओभरहेड ट्याङ्कीको परिसर भित्र मर्मत र पुनर्स्थापना र आवश्यक थप पूर्वाधारहरुको निर्माण र साथै सेवा क्षेत्र भित्र वितरण सञ्जाल विस्तार गरी ओभरहेड ट्याङ्की र भवनहरु लगायत अवस्थित पूर्वाधारहरुको उपयोग गर्ने छ। प्रस्तावित उप-परियोजनाको कार्यान्वयनले खाल्डो उत्खनन् आवश्यक छ। जसले सम्भावित रुपमा निर्माण फोहर व्यवस्थापनमा प्रभाव पार्न सक्छ। वातावरणीय र सामाजिक स्क्रिनिङले पहिचान गरेको छ कि मानव र वातावरणीय कुनैपनि प्रतिकुल प्रभावहरु विशिष्ट स्थनमा सिमित हुनेछ। यस बाहेक न्युनीकरण उपायहरु सजिलैसँग तयार गर्न सकिन्छ। फलस्वरुप ESMF को अध्याय ६ मा उल्लिखित वातावरणीय र सामाजिक जोखिम व्यवस्थापन प्रक्रियाहरु अनुसार यस उप-परियोजनालाई मध्यम प्रभावको जोखिम (श्रेणी ३)को रुपमा वर्गीकृत गरिएको छ। समग्र परियोजनाको लागि विकास गरिएको ई.एस.एम.एफ. ले विश्व बैङ्कको नीति र तदनुसार परियोजना स्तर मापदण्डहरु अनुरुप स्थान विशिष्ट वातावरणीय र सामाजिक अनुगमन योजना अध्ययनको लागि मार्गनिर्देशन ढाँचा प्रदान गर्दछ। यो ई.एस.एम.पी. प्रस्तावित उप-परियोजनासँग सम्बन्धित प्रत्यासित प्रभावहरु,जस्तै:वायु प्रदुषण ध्वनि प्रदुषण लगायत अन्य प्रभावहरुलाई ध्यनमा राखेर नेपाल र विश्व

बैङ्कको राष्ट्रिय वातावरण कानून र नियमहरुको आवश्यकताहरु अनुरुप तयार गरिएको हो। खानेपानी आपूर्ति उप-परियोजनाहरुका लागि ई.एस.एम.पी. अध्ययनले उप-परियोजना कार्यान्वयनलाई मार्गदर्शन गर्नेछ र प्रस्तावित निर्माण कार्यहरुसँग सम्बन्धित कुनैपनि सम्भावित प्रतिकूल वातवरणीय र सामाजिक प्रभावहरुको संरक्षण र न्यूनीकरण गर्न प्रयाप्त उपायहरु लिइएको छ भनी सुनिश्चित गर्नेछ। यस ई.एस.एम.पी. ले महत्वपूर्ण सकारात्मक प्रभावहरुलाई बढाउँदै प्रस्तावित खानेपानी आपूर्ति योजनाको नकारात्मक प्रभावहरु र जोखिमहरुको व्यवस्थापनको लागि आवश्यक कार्यहरु गर्दछ।

उपआयोजनाका संरचनाहरू ज—ोशीपुर गाउँपालिका अन्तर्गतको लोखरीमा अवस्थित छन्। उप—) आयोजनाका संरचनाहरू डब्ल्यूयूएससीWUSC) को साइट तथा सार्वजनिक प्रयोगमा रहेको सडकमा निर्माण गरिने छन्। उपआयोजना क्षेत्र वा त्यस वरपर कुनै पनि संरक्षित क्षेत्र—, जलधारा क्षेत्र)wetlands), म्याङ्ग्रोभ वा नदीमुख)estuaries) छैनन्।

यस खानेपानी उपआयोजनाको प्रमुख निर्माण कार्यहरू पहिल्यै सम्पन्न भइसकेका छन्। तर—, WaSGISP परियोजनाको दायराभित्र अब थप रूपमा आरसीसी फ्रेम संरचनायुक्त भवन प्रस्ताव गरिएको छ, जसमा बिलिङ काउन्टर कोठा, पम्प नियन्त्रण कोठा, डोजिङ कोठा तथा आगन्तुकहरूको लागि शौचालय (पुरुष तथा महिला) समेटिएको छ। त्यसैगरी, ४२ ४५१ किलोमिटर पाइप बिछ्याउने. कार्य, छेउको सडकबाट ११ केभीए प्रसारण लाइन तान्ने कार्य, १०० केभीए ट्रान्सफर्मर जडान, ९५५ घरधुरीहरूमा पानी जडान, मल्टिग्रेड फिल्टर सामग्रीसहितको प्रेसर भेसल उपचार संयन्त्रको जोडी स्थापना तथा अन्य साना मर्मत सम्भार कार्यहरू पनि प्रस्ताव गरिएको छ, जसले यस क्षेत्रमा केही हदसम्म प्रभाव पार्ने सम्भावना छ।

वातावरण र सामाजिक व्यवस्थापन योजना (इ.एस.एम.पी) म्याट्रिक्स यस इ.एस.एम.पी को भागको रुपमा समावेश गरिएको छ, जसमा i) कार्यान्वयनको क्रममा वातावरणीय प्रभावहरुको लागि न्यूनीकरण उपायहरु, ii) वातावरणीय अनुगमन कार्यक्रम र न्युनीकरणका लागि जिम्मेवार निकायहरु समावेश छन्। डिजाइनहरु परिमार्जन गरेर धेरै प्रभावहरु कम गरिएको छ। इ.एस.एम.पी र इ.एम.पी कार्यान्वयनकों लागत सिभिल कार्य बोलपत्रमा समावेश गरिनेछ। इ.एम.पी कार्यान्वयनको लागि लागत १०,४९,०००.०० छ।

निर्माण चरणको दौर।न पर्ने प्रभावहरुमा मुख्यतया माटोको मध्यम परिमाणको डिस्पोजल उत्पन्न फोहरबाट प्रभाव पर्ने सम्भावना छ। यी शहरी क्षेत्रहरु निर्माणका सामान्य प्रभावहरु हुन् र तिनिहरुको न्यूनीकरणका लागि विधिहरु छन्। यी निर्माणका सामान्य अस्थायी प्रभावहरु हुन् र

उत्कृष्ट निर्माण विधिहरु प्रयोग गरेर न्यूनीकरण गरिनेछ। व्यस्त सडकमा पाइप बिछ्याउँदा ट्राफिक व्यवस्थापन आवश्यक हुनेछ।

सञ्चालनको क्रममा,असुरक्षित पानीको डेलिभरी एक महत्त्वपूर्ण चिन्ता हो जुन राम्रो सञ्चालन र मर्मत सम्भार, चुहावटमा तुरुन्त कारबाही र आपूर्ति गरिएको पानीको गुणस्तर अनुगमनबाट कम गर्न सकिन्छ। यस चरणमा सञ्चालन र मर्मतसम्भार समयमै गरिनेछ।

प्रतिकुल वातावरणीय प्रभावहरुको लागि न्यूनीकरण उपायहरु प्रस्ताव गरिएको छ। इ.एस.एम.पी ले निर्माण चरण र सञ्चालन चरणहरुमा प्रतिकूल प्रभावहरु कम गर्न सुझाव दिनेछ।

सिफरिस गरिएका न्यूनीकरण र अनुगमन कार्यहरुमा कार्यान्वयन, अनुगमन, मूल्याङ्कन र सुधारका लागि सरोकारवालाहरुलाई सुनिश्चित गर्न परियोजना कार्यान्वयन इकाई र गाउँपालिकाले वातावरणीय न्यूनीकरण उपायहरुको कार्यान्वयनको अनुगमन गर्नेछ ।

परामर्श, र गुनासो निवारण संयन्त्र: उप परियोजना र इ एस एम पी को तयारीमा सार्वजनिक परामर्श, सामुहिक छलफल गरियो। उप परियोजना कार्यान्वयन अवधिभर परामर्शहरु सञ्चालन गरिनेछ। कुनैपनि सार्वजनिक गुनासोहरु चाँडै सम्बोधन गरिएको सुनिश्चित गर्न गुनासो निवारण संयन्त्रमा वर्णन गरिएको छ।

अनुगमन र प्रतिवेदनः ठेकेदारको E & S पालनको दैनिक अनुगमन र रिपोर्टिङको लागि MST जिम्मेवार छ। MST ले मासिक E & S प्रगति रिपोर्टहरु तयार गरी PIU मा पेश गर्नेछ। PIUले यी मासिक रिपोर्टहरु संकलन गर्छ र MST सँग समन्वय गरी त्रैमासिक अनुगमन प्रतिवेदन तयार गर्नेछ। यो त्रेमासिक प्रतिवेदन त्यसपछि PMU मा पेश गरिनेछ । यी नियमित रिपोर्टहरुको अतिरिक्त PMU ले PIU,PST र MST सँग समन्वयमा वार्षिक E & S अनुगमन प्रतिवेदन तयार गर्नेछ। यो वार्षिक प्रतिवेदन बिश्व बैङ्क मा पनि पेश गरिनेछ।

निष्कर्ष र सिफारिसहरु लोखरी खानेपानी तथा सरसफाइ आयोजनाले स्थानीय जनतालाई धेरै फाइदाहरु ल्याउनेछ। तर समयमै उपपरियोजनाको प्रारम्भ र उपपरियोजनाको दिगोपनमा केही जोखिमहरु छन् जसलाई पहिचान गरी न्यूनीकरणका उपायहरु अपनाउनु आवश्यक छ। तर विश्लेषणले देखाउछ कि उप परियोजना लाभहरु जोखिमहरु भन्दा बढी छन् र यी समभावित जोखीमहरुलाई उचित योजना समन्वय र व्यवस्थापनद्वारा हटाउन सकिन्छ। तसर्थ प्रस्तावित उप परियोजनाले महत्त्वपूर्ण प्रतिकूल प्रभाव पार्ने सम्भावना छैन। ESMP को निष्कर्षहरुको आधारमा त्यहाँ कुनै महत्त्वपूर्ण प्रतिकुल प्रभावहरु छैनन् र उप परियोजनाको वातावरणको लागि श्रेणी iii को रुपमा

पुष्टि भएको छ। थप विशेष अध्ययन वा विस्तृत वातावरणीय र सामाजिक प्रभाव मूल्याङ्कन (ESIA) गर्नु पर्दैन।

1. INTRODUCTION

1.1 Background

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

1.2 Sub-Project Description

Joshipur Rural Municipality have intended to enhancement of Lokhari WSS Sub-Project located at Joshipur RM 06. with the help of WaSGISP. Lokhari WSS system is under construction by the province Division Water Supply and Sewerage Management (DWSSM) office started in 2071 BS. The construction work of Overhead Tank having the capacity of 225 cum, 1 no. of Deep Tube well, office building, 1 Pump House, Boundary wall and toilet has completed. Besides that, around 10.214 km pipe laying work also has completed.

The Lokhari WSS Sub-Project is located in Joshipur Rural Municipality of Kailali district of Seti Zone which lies in the Far-Western Development Region. The Lokhari Water Supply is an incomplete groundwater-based project. The implementation of the project started about 5 years ago (2076 BS). The proposed Lokhari WSS covers all the settlements of Ward 6 of Joshipur Rural Municipality which includes Lokhari, Mahadeva, Pakariya, Jhabahi Kunaithi, Ratanpur & Simari. Geographically the project area lies in latitude 28°36'33" N and longitude 80°59'45.45" E and altitude 154 m from mean sea level (MSL). This area has hot and humid climate. It is surrounded by gravel road to the west, gravel road to the east, Rastriya Ma. B.'s Land to the south and Nala to the north. Simari Bazar is its largest market. Most of the area is flat. Sukti Nala, which drains into the Kanda River towards the west of the project site. The project area is at a distance of around 2 km South from the Simari Bazar. The settlement pattern of the project area is heterogeneous. Under the scope of WaSGISP project, additional RCC frame structure building has been proposed to accommodate the billing counter room, pump control room, dosing room, and toilet facilities (male and female) for visitors and 42.451 km pipe laying work, stretching of 11KVA transmission line from adjacent road as well as installation of 100KVA transformer, 955 HHs connection as well as a pair of pressure vessel treatment plants with multi-grade filter material has been proposed in detailed design report. Proper drainage system has also been proposed in detailed designed report.

Under WaSGISP intervention following is planned:

a) Rehabilitation of the existing tube well

b) Drilling, development and installation of new tube well.

c) Stretching of 11 kVA by tapping from adjacent Road.

d) Installation of a 100 KVa capacity Transformer

e) Installation of 2 sets of Electro-mechanical WTP sets

f) Minor Repair and maintenance of the existing 225 cum capacity OHT.

g) Households' connection for 955 HHs

h) Minor repair and maintenance of existing one-storey office buildings

i) Construction of a new single-storey frame structure office building.

j) Construction of Dosing and Chemical store

k) Installation of valves, pipe fittings, and other appurtenances as required.

l) Two pressure vessel treatment plants equipped with multi-grade filtration system. (Layered water filtration system, typically made of gravel, sand, and anthracite coal. Each layer filters particles of different sizes, with coarser materials at the bottom and finer ones at the top). The plants also include a well-designed drainage system.

The stretching of 11KVA high voltage transmission line from adjacent road as well as installation of 100KVA transformer. The proposed transformer is a three-phase, 50 Hertz, oil-immersed, natural–cooled transformer suitable for outdoor installation.

The most important part of this sub-project is laying 42.451 km of pipe along the existing road width like: Lokhari, Mahadeva, Pakariya, Jhabahi Kunaithi, Ratanpur & Simari. These roads are in public use and require no felling of trees and do not transverse any protected areas and private land. Since the existing road is clear and is already in public use there are no issues of land acquisition nor any outstanding grievances with the current public use of the road. Similarly, the pipe trench will have a depth of 90 cm and a width of 60 cm. During the excavation period, caution boards will be installed, and the area will be barricaded with caution tape to ensure pedestrian safety and prevent any impact on pedestrian movement. The trench will be immediately backfilled upon completion of the pipe-laying work. The land proposed for other structures of the sub-project is located on OHT premises of the existing Lokhari WSP site and the ownership belongs to Lokhari WSP of Joshipur Rural Municipality. The existing land area of OHT premises for the Lokhari WSP is four Kattha (252.928 sq. meter) and the land ownership certification letter from RM office is attached in Annex-III. All the structures proposed under WaSGISP will be accommodated within this proposed site, except distribution pipeline which will follow the existing road, which is in public use. Hence, additional land acquisition is not required. The salient features of the Lokhari WSP are given in table below.

Table 1: Salient features of Lakhari WSP

S.N.	Items	Description
1	Name of Project	Lokhari Water Supply Project
2	Type	
		Groundwater-based pumping (Pumping)
		Extension and enhancement of existing uncompleted project.
3	Location Area	
	Province	Sudurpashchim Province
	District	Kailali
	Municipality	Joshipur Rural Municipality
	Ward	Ward No. 6
4	Status of the Project	
	Status and implementation.	Partially completed by the province DWSSM office
	Year of implementation	Started in 2075/76 Fiscal year
	Completed WS Components	Only 225 Cum capacity OHT, boundary wall, installation of 1 TWs and about 10.214 km of distribution lines
	Operational Status	In operation and needs to introduce major Interventions for enhancement
5	Available Service level and coverage	Not stared for distribution
6	Type of Intervention	Make functional of all existing WS components for operation. Enhancement of the required components.
6	Study Level	DPR for immediate enhancement work
5	Available Facilities	
	Road	Link road from the East-West Highway
	Supply Water System	WSUC WS system and Hand pumps
	Electricity	Available
6	Social Status of the Service Area	
	Present HHs Numbers (2024)	955
	Present Population (2024)	5,367
	Base Year Population (2026)	5,367
	Design Year Population (2046)	5,367
	Growth Rate % (GR)	0
7	Water Demand (MLD) in Design Year	0.70
8	Source Characteristics	
	Source Name	Deep Tube well
	Source Type	Ground Water
	Source Location	Within Service Area

	Safe Yield (lps)	13 lps / TW
9	Type of Structures and Major Intervention	
	Proposed number of Bore Hole Drilling	Rehabilitation of existing 1 tube well + Installation of a new TW with SS screen
	Pumps in Deep Tube Well	2 Nos of New 22 HP + 1 Nos Standby
	Electricity line,	Available
	Transformer	Installation of 100 kVA Transformer
	Overhead Storage Reservoir (Nos.-Capacity m^3)	1 No existing 225 cum
	Valve Chamber (Bricks/RCC)	28/28
	Office Building	The existing building is incorporated into the proposed system with minor repairs for guard unit & pump control room and new one storey frame building proposed for office.
	Dosing & Chemical Store	A new dosing shed with store has been recommended near the WTP.
	Household Connection	955
	Fire Hydrant	5
	Total Length of Distribution pipe (m):	52,665 (10,214m existing pipeline)
10	Total Cost of WS Component (Inclusive of all) NRs.	136,212,126.46

Under WaSGISP, the following intervention is planned and the site condition as well as the land availability status is as per the Table 2 below:

Table 2: Proposed Components, Site Condition and Land Requirement Status

S.N.	Site/ Component	Location	Required land (Sq.m) and ownership	Site condition	Land availability status	Likely E&S Impacts
1	Deep tube well (PST-1)	Joshipur Rural Municipality, ward no. 6, outside from boundary of OHT premises .	7.39 Sq.m ownership-public land	Barren Land, no vegetation will be cut	Available, Rural Municipality (Annex-III)	no likely E&S impacts expected Construction of deep tube well will disturbed birds habitat.
2	Treatment plant	Joshipur Rural Municipality-ward no.6, Lokhari	90 Sq.m for Treatment plant, ownership-Public land	Site is clear, no vegetation and structures	Available-Rural Municipality (Annex-III)	Since it is a Pressure Filter system, no likely E&S impacts are likely to occur by its operation.
3	Office building	Joshipur Rural Municipality-6, Lokhari	57.91 Sq.m for RVT2 and solar control room ownership-public land	Site is clear, no vegetation	Available-Rural Municipality has given Consent Letter (Annex-III)	No likely E&S impacts during construction

Table 3: Pipe Used for Distribution Network (meter)

Pipe Type	Length of Pipe (m)		Length of Existing Pipe (m)	Pipe Type	Length of Pipe (m)
PE Pipe	PE PN 6	PE PN 10		DI Spigot-socket Pipes	
PE pipe 50 OD		30,315	702	Pipe of 100 Ømm	
PE pipe 63 OD		5,661	1,908	Pipe of 125 Ømm	
PE pipe 75 OD	1,507		1,375	Pipe of 150 Ømm	
PE pipe 90 OD	18		2,400	Pipe of 200 Ømm	
PE pipe 110 OD	1,757		1,033	Pipe of 250 Ømm	
PE pipe 125 OD	55		2,003	Pipe of 300 Ømm	
PE pipe 140 OD	16		793		
PE pipe 160 OD	2,040		-	DI Flanged Pipes	
PE pipe 180 OD	1,062		-	Pipe of 100 Ømm	
PE pipe 200 OD	0		-	Pipe of 125 Ømm	

PE pipe 225 OD	0		-	Pipe of 150 Ømm	20
PE pipe 250 OD	0		-	Pipe of 200 Ømm	
PE pipe 280 OD	0		-	Pipe of 250 Ømm	
Sub-Total (m)	**6,455**	**35,976**	**10,214**		**20**
Totally New Pipe Used (m)			**42,451**		
Total Pipe Used (m)			**52,665**		

1.3 Rationale of the ESMP

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

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

The ESMF which was developed for the overall project provides the guiding framework for the site specific environmental and social monitoring plan study in conformance with World Bank policy and accordingly the project level standards. This ESMP is prepared in line with the requirements of the National Environmental Law and Regulations of Nepal and World Bank considering the anticipated impacts associated with the proposed sub-project, such as: air pollution, noise pollution among other effects. The ESMP study for Water Supply sub-projects will guide the sub-project implementation and ensure that adequate measures are taken to protect and minimize any potential adverse environmental and social impacts associated with the proposed construction works. This ESMP provides the actions required to be taken for managing and keeping the negative impacts and risk of the proposed water supply scheme to a minimum, while enhancing the significant positive ad beneficial impacts.

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

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

1.5 Legal and Policy Framework

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

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

2. DESCRIPTION OF STUDY AREA

2.1 Location and Accessibility

The Lokhari WSS Sub-Project is situated in Joshipur Rural Municipality, Ward No. 06, Kailali District, Sudurpaschim Province. The project area is located 12 km south from East-West Highway of Bauniya Bazar. Simari Bazar serving as the largest market in this ward. The terrain is predominantly flat, and the Kanda river traverse the ward. The settlement pattern in the project area is heterogeneous.

Geographically, the area lies at a latitude 28°36'33" N and longitude 80°59'45.45" E, and an altitude of 154 meters above mean sea level (MSL). The climate is characterized as hot and humid. The project site is bounded by gravel road to the west, gravel road to the east, Rastriya Madhyamik Bidhyla Land to the south and Nala to the north.

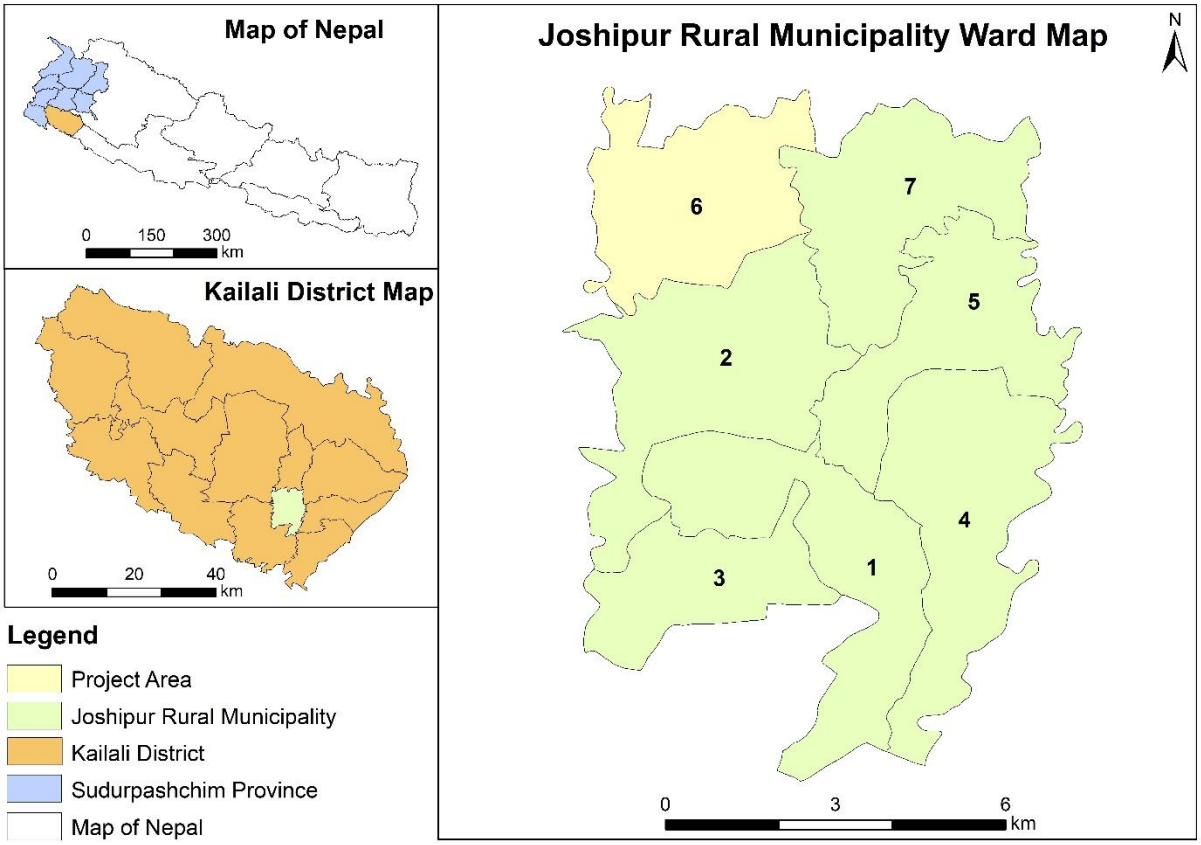

Figure 1: Location of Joshipur Rural Municipality Ward-06

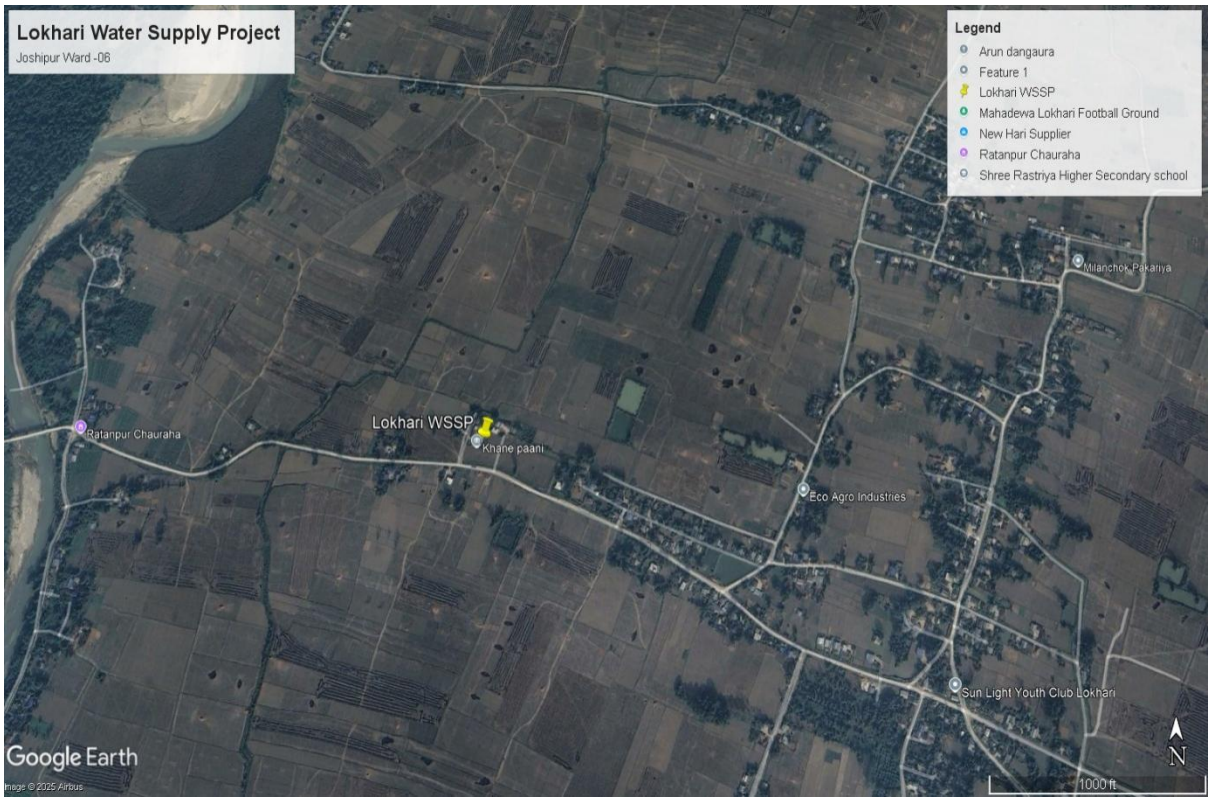

Figure 2: Location of proposed land for Lokhari WSS Sub-Project in google Map

2.2 Ground water Availability

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

The sub-project's tube wells have a pumping discharge capacity of 13 liters per second (lps), with a safe yield of 13.57 lps. This indicates that the safe yield capacity exceeds the pumping rate, affirming that the current groundwater abstraction rate is within safe limits. This conclusion is supported by geophysical logs of existing tube wells at the Overhead Tank (OHT) premises, which show sufficient yield to meet the projected demand without overexploitation of the ground water resource.

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

Table 4: Assessment of Existing Tube well Design

Description	Unit	Values
Pumping Discharge	lps	**13**
Discharge of Well (m^3/s)	m^3/sec	0.013
Optimum screen entrance velocity (m/s)	m/sec	0.03
Screen Clogged	%	60%
Screen Diameter	m	0.20
Percent of Open Area	%	10%
Length of screen	m	**15**
Discharge Capacity of Tube Well	lps	16.96
Safe Yield (80% of Yield)	lps	13.57
The Length of Screen Provided in the TW is OK		

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

2.3 Physical Features

2.2.1 Topography and Land Use

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

Among the total 6557 sq. km. area of the Joshipur Rural municipality, 3837 sq. km. (58.52%) is cultivable land, 1400 sq. km. (21.35%) is forest and pastureland, 500 sq. km. (7.62%) is road, 200 sq. km. (3.05%) is River and 20 sq. km. (0.30%) is ponds. The existing land use of the area consists of mainly settlement.

2.2.2 Geology

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

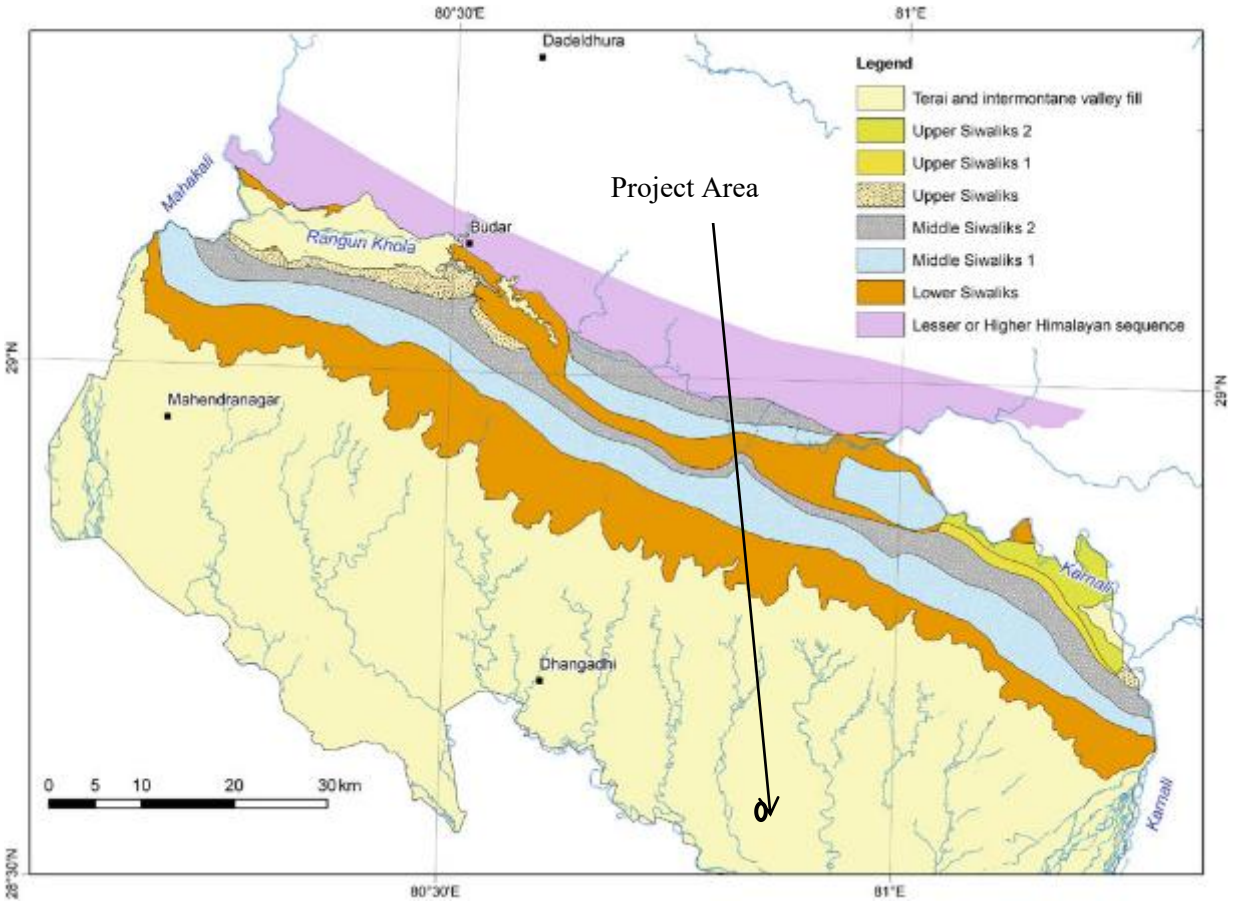

Figure 3: Modified Geological Map of Western Siwaliks and Terai. Source: Dhital, 2015

2.2.3 Climate

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

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

2.2.4 Climate Change and Disaster Vulnerability

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

2.2.5 Drainage Network

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

2.2.6 Air and Water Quality and Noise Level

Point sources of air and water pollution were not visible in and around the project area. The water quality test of the existing tube wells located at the subproject site was done and found to comply with the NDWQS. Generally, the ground in Terai shows occasional increases in iron and turbidity. Therefore, a water treatment system comprising aeration, filtration, and disinfection is recommended to meet the requirements of the NDWQS for drinking water (*Water Quality Test report of Deep Tube wells is attached in Annex VI*). Additionally, dust generated by vehicular movement on the unpaved internal roads along the distribution pipeline areas; such as; Lokhari road, Mahadeva road, Pakariya road, Kunaithi road, Ratanpur road & Simari is the main source of air pollution. The project area is near settlements. Similarly, noise pollution in the project area primarily arises from vehicle traffic, wind, and frequent visitors. The air quality monitoring test and noise level monitoring has been conducted to establish the baseline and the monitoring report details given in table below.

Table 5: Air Quality Monitoring Report

Date	Location	Description		
10th January 2025	Joshipur RM-06; Lokhari East	PM 2.5 Microgram/Cubic meter	PM 10 Microgram/Cubic meter	Air Temperature Degree Celsius
		35	80	10^0 C
National Standards of Air Quality, 2069		40 Microgram/Cubic meter	120 Microgram/Cubic meter	

Table 6: Sound Level Monitoring Report

Date	Location	Noise Level (decibel) dB	National Standards of Sound Level, 2069 Day Time Limits Leq (Decibel) dB
4th February 2025	Joshipur RM-06; Lokhari East	53	50
4th February 2024	West	52	50
4th February 2024	North	53	50
4th February 2024	South	54	50

National Ambient Air Quality Standards, 2012 (NAAQS)

2.2.7 Soil Type and Quality

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

2.4 Biological Features

2.4.1 Vegetation

The Lokhari WSS Sub-Project is located in Joshipur RM, Ward No. 06 of Kailali district. Kailali district possesses abundant forest resources and a diverse range of biodiversity when compared to other districts of Nepal. The major tree species of the district are: Jamun (*Syzygium cumini*), Kusum (*Schleichera oleosa*), Peepal (*Ficus religiosa*), Mango (*Mangifera indica*), Bamboo (*Bambusa vulgaris*), Bel (*Aegle marmelos Correa*), Sisam (*Dalbergia sissoo*) etc. managed by the neighboring settlements at their home yards of Ward No. 6 of RM, surrounding the sub-project area. However, the project site is adjacent to human settlements, and the sub-project does not require any tree clearance.

2.4.2 Fauna/Birds

The study gathered information on the presence of fauna in the vicinity of the sub-project area. This data was obtained through interviews with local residents. Forests of Kailali district host the mammalian species such as Jackal (*Canis aureus*), Wild Cat (*Felis silvestris*),

Monkey (*Macaca mulatta*), etc. However, the sub-project is situated within the settlement area of Ward no. 6 of RM and does not serve as a designated habitat for any terrestrial fauna.

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

2.5 Socioeconomic and Cultural Features

2.4.1 Demographic Characteristics

According to population census 2021, the total population of the rural municipality is 37,187 including 17,754 males and 19,433 females. This shows that female population outnumbers male population in the municipality. The sex ratio is 91.36%. The total number of households is 7,751 and the average size of a household is 5.70. The population density is 567 individuals per sq. km. The proposed system covers whole area of ward number 6 of the rural municipality. It shows that the total population of the service area is 5,367 which includes both house owners and the population residing in rented accommodation. The survey revealed the notable presence of Janjati/ethnic (Tharu Chaudhary, Magar, etc.) comprising about 91.4% and the Dalit group comprising about 3.2% of total households in the project area. The rest are Brahmin/Chhetri and Muslim. Details of information are presented in table 7 below. The population in the municipality is dominated by Tharu, followed by people of Chhetri and Brahman ethnicity. Dalits constitute significant portion of the population as well. People of more than 25 different castes and ethnicities were reported in the municipality. Language spoken mainly depends on the caste/ethnicity. Tharu is the most common language of the people, followed by Nepali.

Table 7: Ethnicity / Caste composition of Beneficiaries' households

Caste/Ethnic Status	Percentage
Brahmin/ Chhetri	4.3 % (of a total 5,367 population)
Dalit	3.2 %
Janjati	91.4 %
Muslim	1.1 %
Grand Total	**100.0 %**

2.4.2 Major Crops

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

Besides agriculture, people are involved in other occupations like Business, Service, Labor and Foreign Employment. As understood from discussion with local people, they have adopted more than one occupation. The business ventures besides commercial agriculture includes wholesale and retail shops of daily utilities, electronics and electrical, packaged food, garments, construction materials, etc. Joshipur, Jhabahi, Lakkad and Simari are the growing market centers in the rural municipality.

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

2.4.3 Available Public Service Facilities

According to the 2024 AD socio-economic survey, 29.8% of people are illiterate overall. While only 20.2% of people have completed an education at the secondary level.

According to the institutional data obtained from the survey, 11 educational institutions including a secondary school as well as a primary school in a service area with 3,735 people including students, staff, and teachers. Similarly, all educational institutions have water-sealed latrines. However, almost all educational institutions lack proper water supply systems. The primary medical facility in the project area is provided by the Lokhari Adharbhut Swasthya Sewa Kendra which has 3 male and 5 female staff and provides facility to about 50 patients per day

2.4.4 Places of Religious and Cultural Importance

Each specific caste/ethnic groups in the project area have their own cultures based on their religion and traditions. There are many festivals that are specifically celebrated by specific types of social/ethnic groups. For instance, Maaghi/Maanghey Sakraanti is the major festival celebrated by the Tharu community in the area. groups. Additionally, Dashain, Tihar, Janaipurnima, Naag Panchami, Buddha Jayanti, Thulo Ekadashi, Holi, Shivaraatri, 'Eid, etc., are other major festivals celebrated by general people in the project area. Similarly, all of these groups have their own set of intangible heritages, for example, sacred spaces, belief

systems, knowledge, and practices. However, during consultation with the community, it was reported that the project footprints are unlikely to have a bearing on these intangible heritages.

In terms of tangible heritages, there are four places of religious and cultural importance in this ward. They are Durga Mandir, Ram Janaki Mandir, Shiva Mandir and Krishna Mandir.

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

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

In the case of project district, there is a hospital-based One Stop Crisis Management Centre (OCMC) at Seti Zonal Hospital of Kailali district. In this OCMC, a total of 433 cases were registered in the 2080/81 fiscal year. Out of them there were nine cases of child labour, one case of cyber-crime, 109 cases of denial resources, and one case of human trafficking, 53 cases of mental abuse, 95 cases of physical assault/violence, 123 cases of rape, 39 cases of sexual abuse and three cases of social discrimination.

In case of sub-project there is Department of Women and Children (DWC) under social development unit of Joshipur Rural Municipality to resolve the GBV/SEA/SH issues The Joshipur RM has nominated GBV and SEA/SH focal person to Ms. Kalpana Mishra (letter attached in annex). As per the consultation carried out with the local women and with Joshipur Area Police Office, there are eight cases (two cases of SH, two cases of child labour & four domestic violence) in 2080/081 fiscal year related to GBV. Usually, if such cases are brought to the public, then those cases are settled under facilitation by the local elite and social figures. In case such cases are not resolved even under the facilitation of the local elite and social figures, then they are reported to the Rural Municipality Office and Area Police Office. There are occurrences of GBV issues in the communities, and it can be further triggered by the sub-project infrastructure work, wherein it is expected that around 40 to 45 labours (15 local & 20-25 migrant) will be mobilized per day during the peak construction at the sub-project sites. Since there are potential risks of SEA/SH, a code of conduct will be adopted to mitigate the SEA/SH impacts of the sub-project. A sample of personal code of conduct for the WSS sub-project is attached in Annex VII.

3. STUDY METHODS

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

3.1 Literature Review and Secondary Data Collection

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

3.2 Field Survey, Mapping and Verification of Secondary Data

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

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

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

3.3 Desk Work

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

4. ENVIRONMENT AND SOCIAL MANAGEMENT PLAN

4.1 Impacts and Mitigation

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

1. **Disruption of natural drainage and pavements**: The pipe-laying activities along the public road through ; Lokhari road, Mahadeva road, Pakariya road, Kunaithi road, Ratanpur road & Simari road may disrupt the existing roadside drainage system. Construction tasks such as earthworks, backfilling, and material stockpiling could obstruct natural drainage flows. This interference might lead to issues such as localized flooding, channel erosion, and other related impacts along these routes.

2. **Disruption to traffic flow and accessibility:** The excavation and installation of pipelines (trenches 90 cm deep and 60 cm wide) along the public road from ; Lokhari road, Mahadeva road, Pakariya road, Kunaithi road, Ratanpur road & Simari road will cause temporary road disruptions. These disruptions may affect traffic flow, leading to delays and congestion. To minimize the impact, the pipeline installation will be carried out in short sections of 500 meters at a time, with testing and backfilling completed promptly, within a week.

3. **Impact to Communities:** Communities will face a range of interrelated challenges due to construction activities, including impacts on air and water quality, increased ambient noise levels, traffic congestion, road safety concerns, and disruptions to the mobility of people, goods, and services. The pipe laying and conducting pre-cover testing will temporarily limit access to homes and may negatively affect businesses in; Lokhari road, Mahadeva road, Pakariya road, Kunaithi road, Ratanpur road & Simari road. However, these impacts can be effectively mitigated with proper management. The pipe trenches will be relatively small, measuring 90 cm in depth and 60 cm in width, and construction will be sequenced to ensure that trenches are backfilled promptly, typically within a week, following the completion and testing of pipe-laying work.

4. **Occupational health and Safety**: Given the nature of construction activities, exposure to extreme weather conditions and the non-observance of health and safety measures could trigger occupational health and safety issues for workers. Additionally, an inadequate supply of safe, potable water; insufficient sanitation facilities; poor sanitation practices on-site; and substandard housing conditions may pose significant threats to their well-being. Workers employed informally, such as migrant workers or individuals newly entering the labor market, are most vulnerable. This is particularly critical given that a strong occupational health and safety culture is not prevalent in Nepal. Therefore, the onus will be on the Project to ensure that workers are advised of their rights, and to actively promote and protect those rights on behalf of the workers.

The impacts have been identified and predicted by considering all activities related to the construction, operation, and decommissioning of support facilities. The possible impacts and their corresponding mitigation measures are listed in Table 8 below.

Table 8: Environmental and Social Management Plan Matrix

Field	Impacts	Mitigations Measures	Responsible for Implementation	Monitoring Indicator	Cost NRs.	Frequency of Monitoring
1. Prior to Construction Activities						
Consents, permits, clearance, no objection certificate (NOC), etc.	Failure to obtain necessary consents, permits, NOCs, etc. for use of land and other property can result ~~to~~ in design revisions and /or stoppage of works.	- Obtain all of the necessary consents, permits, clearance, NOCs, etc. prior to start of civil works. - Acknowledge in writing and provide report of compliance on all consents, permits, clearance, NOCs, etc.	PIU/MST	Incorporated in final design and communicated to the Contractors.		Prior to award of contract
Existing utilities	Disruption of services-existing water supply and electricity supply temporarily.	- Identify and include locations and operators of utilities, including roads in the detailed design documents to prevent unnecessary disruption of services and traffic during construction, especially since the pipes will be lined along the roads, which could significantly impact traffic flow. - Coordinating with local water authorities and communicating with public. - Avoid relocating transformers and electrical pole as much as possible.	PST/MST/PIU	List of affected utilities and operators		During detailed design phase
Drinking Water Supply	Extraction of unsatisfactory raw water quality	- During the detailed engineering design stage, test water samples from existing tube wells located near proposed tube wells. The water Quality Test of Deep Tube well has been done and Report is attached in ANNEX VI. - The cumulative total daily water	PST, PMU	Incorporated in final design and communicated to contractors	60,000.00	Prior to award of contract

		demand for the Lokhari Water Supply Sub-Project has been estimated to be 0.927 MLD by the end of the design period in 2046 and discharge of 13lps per DTW has been recommended for a safe yield. - Design to include basic treatment using lime dosing, pressure filter and disinfection using Ca(CIO)2 and provisions for lab unit and kits.				
Stockpile areas, Storage areas, Disposal areas, and workers camp (if needed)	Disruption to traffic flow and sensitive receptors	- Stockpile area, storage areas and workers camp area is proposed within OHT premises. Contractor's camp will be located in existing OHT premises at Lokhari, Joshipur RM-06. - Disposal areas are finalized barren area adjacent to Construction site and the ownership belongs to RM. - The details will be included in C-ESMP (Contractor's Environment and Social Management Plan) of Sub-Project by the Contractor within 60 days after site mobilization.	PIU	OHT periphery for stockpile areas, storage areas, disposal areas and workers camp (Workers camp is separated from contractor's camp within the Existing OHT premises) (Estimated No. of workers is 20 man/day) Written consent of landowner/s (not lessee/s) for reuse of excess spoils to agricultural land	140,000.00	During detailed design phase
Waste Generation	Generation of solid waste, wastewater and other construction waste may cause pollution from work sites and workers camp (if any is established)	- Mechanism of safe disposal will be developed in the subproject site before the actual commencement of work, including provision of waste bins. - Prohibition of unwanted littering and discharge of waste. - Proper management of solid waste	Joshipur RM/Ward Office	Contractor records. visual inspection		During detailed design phase

		will be done using lined pits for waste disposal.				
	2. During Construction Activities					
	A. Physical Characteristics					
Community facilities	Disruption of natural drainage Damage to existing facilities like water supply and pavements (roads along ; Lokhari road, Mahadeva road, Pakariya road, Kunaithi road, Ratanpur road & Simari road).	- Avoid natural drainage pathways for pipe-laying works. - Stockpile the excavated material at safe but nearby place to construction site under the satisfaction of Construction Supervision Engineer. - Restore natural drainage system if the drainage system during the construction is blocked. - Conduct a detailed assessment if any drainage system exists. - Design and implement temporary drainage solutions to manage water flow during construction. - Prior permission has been obtained from respective local authority for use of water for construction. Use of water for construction works shall not disturb local water users. - If construction work is expected to disrupt, users of community shall be informed 7 days in advance and again 1 day prior to start of construction. - Coordinate with local water supply authorities to schedule any necessary rerouting or upgrades during low-demand periods, minimizing disruption. - Set up temporary water distribution points or alternative supply lines to ensure continuous	PIU/RM/Contractor	List of any public or private infrastructure disturbed by the subproject works Minutes of meetings with the locals or affected persons.		As per need, or field-inspection if any such case is foreseen

		access to water for affected areas.				
Ambient air	Conducting works at dry season and moving large quantity of materials may create dusts and increase in concentration of vehicle-related pollutants (such as carbon, monoxide, Sulphur oxides, particulate matter, nitrous oxides, and hydrocarbons) which will affect people who live and work near the sites (; Lokhari road, Mahadeva road, Pakariya road, Kunaithi road, Ratanpur road & Simari road.).	- Confining earthworks according to an Excavation Segmentation Plan as part of the C-ESMP, which the contractor is required to prepare before construction begins. The C-ESMP should also include all necessary permits and documents that need to be obtained by the contractor before works commence. - Water sprinkling at dry exposed surfaces and stockpiles of aggregates at least twice daily, or as necessary. - If re-surfacing of excavated portion of roads cannot be done immediately, spread of crushed gravel over backfilled surfaces - Require trucks delivering aggregates and cement to have tarpaulin cover and maintain a minimum of 2" free board - Limit speed of construction vehicles in access roads to maximum of 20 kph. - Ensure use of equipment and fuel complying with applicable 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. Require all vehicles to be attested and certified for emissions compliance before use.	Contractor/MST/PIU	Location of stockpiles. Number of complaints from sensitive receptors. Heavy equipment and machinery with air pollution control devices. Certification that vehicles are compliant with air quality standards.	50,000.00	Daily monitoring by MST in coordination with PIU Monthly visual inspection by PIU. Air quality measurement, once a year.

		- Conducting once a year Air Quality Test for dust nuisance (PM 10 and PM 2.5) at key locations such as settlement, Lokhari Chowk of Joshipur RM-06 during the dry working season (January-June). The tests will be carried out by the MST in coordination with the PIU or by a third party and the determined pollutants will be compared with the National Ambient Air Quality Standards (NAAQS) of 2012. -				
Acoustic environment	Construction activities will be along the Row of existing roads (; Lokhari road, Mahadeva road, Pakariya road, Kunaithi road, Ratanpur road & Simari road.). Temporary increase in noise level and vibrations may be caused by excavation equipment, and the transportation of equipment materials, and people.	- Plan activities in consultation with local administration so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance. - Restrict noisy activities to daytime. - Minimize drop heights when loading and unloading coarse aggregates. - Horns should not be used unless it 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. - All vehicles and equipment used in construction shall be fitted with exhaust silencers. Use silent type generators (if required) - If it is not practicable to reduce noise	Contractor/MST/PIU	-Results of monitoring noise levels (Maintain maximum sound levels not exceeding 70 decibels when measured at a distance of 10m or more from the construction sites) -Number of complaints from sensitive receptors	50,000.00	Daily monitoring by MST in coordination with PIU Monthly inspection by PIU. Noise level measurement , once a year.

		levels to or below noise exposure limits, the contractor must post warning signs in the noise hazard areas. Identify any building at risk from vibration damage and avoiding any use of pneumatic drills or heavy vehicles in the vicinity. Complete work in - these areas quickly. - Providing ear mufflers to workers operating high dB construction equipment. - Implementing regular inspection & maintenance of construction/transportation vehicles to ensure compliance with National Noise Standard Guidelines (NVMES, 2069 B.S., 2012). - Conduct noise level test once a year during the peak construction stage at specified locations near Lokhari WSS. The test will be carried out by the MST in coordination with the PIU or by a third party.				
Waste disposal	Pollution of water and land resources, and cases of vector borne diseases due to haphazard waste disposal. Generation of solid waste and waste water from construction sites and labor camp	- Waste minimization and waste segregation (organic and inorganic) will be carried out. - Practices of composting will be promoted - Hazardous waste will be segregated from nonhazardous waste and stored in closed, labeled containers, away from direct sunlight, wind, and rain. Incompatible wastes will be kept separate by physical barriers or	Contractor	On-site situation in campsites (if any), work sites and their vicinities	10,000.00	Monthly monitoring by PIU/MST.

		sufficient spacing, with secondary containment systems in place to prevent leaks. Only licensed contractors, following local and international regulations, will handle, treat, and dispose of the waste. - Waste minimization and waste segregation will be prioritized; 3R approach will be promoted. - Organic waste generated from the camps will be composted or properly managed in compost pit within the camp area by following. the waste management guidelines. If feasible, compost will distributed to be used in the nearby agricultural fields. - 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 (as recommended in the C-ESMP) and the efforts will be made to minimize such waste through reuse, reduction, and recycling concepts. While hauling and storing spoil temporarily, spoil will be covered with plastic/tarpaulin cover. - Backfilling will be done with an immediate effect.				
Impact on road during pipe laying	Damages of road due to pipe laying	- Re-sealing of black top road -Re-sealing of gravel road -Will be initiated timely without causing delay for the road construction	Contractor			Daily monitoring by MST in coordination with PIU

	B. Biological Characteristics					
Vegetation	- Loss of vegetation cover during construction works. However, at present, no tree clearance is envisaged during construction	- Greenery promotion around the construction sites and road alignments where possible - Tree felling will be avoided, and if any such cases occur, prior approval from the local bodies will be received and compensatory plantation @ 1:10 will be carried out - Species of local economic significance and values will be planted - Providing alternative fuel to worker for cooking - Establish, implement, and enforce a Worker Code of Conduct that expressly prohibits illegal logging, clearing, and collection of plant species in general, including fines and dismissal for repeat offences. - Conduct Awareness program on environment conservation and protection at construction and labor camp site. -	Contractor	Area of greenery that has been cleared Number of trees cut (only if unavoidable) Complaints or grievances by the locals	150,000.00	Monthly monitoring by PIU/MST.
Impacts on fauna	- Disturbance to possible occasional movement of wildlife and birds and its surroundings from construction activities - Possible hunting and poaching by workers	- Restrict noise-generating construction activities to established working hours 8 hrs. (8 AM to 4 PM) as per the Labour Act 2017. For any work outside these hours, obtain a special permit in advance. - Establish and enforce a speed limit of 20 km/hr for construction vehicles - Horn prohibited sign will be placed near the settlement. There is no evidence of human-animal conflict	Contractor	- Number of complaints from sensitive receptor on disturbance of hunting, poaching etc.		Monthly monitoring by PIU/MST

		within the project area, which is adjacent to the WSS sub-project, so additional measures for this concern are not necessary. - Establish, implement, and enforce a Worker Code of Conduct that expressly prohibits illegal logging, clearing, hunting, poaching, and collection of animal and plant species in general, including fines and dismissal for repeat offences. - Implement a worker environmental awareness program as part of worker induction to inform personnel about the prohibition of hunting and poaching and the penalties associated therewith				
	C. Socioeconomic Characteristics					
Community activities	- The construction related activities that impede access will disturb the local residents - Disturbances to local activities due to obstacle in movement during pipe laying may occur in service areas of ; Lokhari road, Mahadeva road, Pakariya road, Kunaithi road, Ratanpur road & Simari road.	- To minimize disturbances, construction work will be conducted at earliest possible. - The pipe trench will have a depth of 90 cm and a width of 60 cm. During the excavation period, caution boards will be installed, and the area will be barricaded with caution tape to ensure pedestrian safety and prevent any impact on pedestrian movement. To minimize the impact, the pipeline installation will be carried out in short sections of 500 meters at a time, with testing and backfilling completed promptly, within a week. - The local residents will be consulted	Contractor	Time schedule of construction work; Information related to construction activity to local residents Number of temporary diversions sign, signboards etc.		Daily (or whenever there are construction activities) by the Contractor/MST Monthly visual inspection by PIU

		and informed about the work schedule preferably a week before the construction starts and one day before the construction starts. - Temporary diversions and signboards will be provided for the pedestrian. - Ramps, where necessary, will be provided to ensure access to houses, and other service areas. Ramps provided will be of sturdy material and of sufficient width.				
Labor Camp Management	Poor sanitation practices by workforce of 40 to 45 labours (15 local & 20-25 migrant) may cause pollution of surrounding environment. Social problems may arise due to bad behavior of the workforce such as gambling, alcoholism and disrespect to local people and culture	- Provide adequate health care facilities within construction sites and provide first aid facility round the clock - Camp shall not be in the vicinity of landslide and flood plains. - Provide and maintain proper drinking water, sewerage and waste disposal facilities at the camps. - Proper ventilation will be provided in the camp - Separate room for men and women workers will be managed. - Separate toilet will be established for male and female. - Raised bed is the minimum standard of bedding in labor camp. - Ensure no wood is burnt by any worker on or off site. Camps shall be provided free of cost, with electricity and regulator & adequate fuel supplies of LPG or Kerosene.	Contractor	Daily entry-sheet of the workforce in the campsites Number of local people versus outside workers in the subproject area will be regularly monitored	100,000.00	Monthly inspection at campsites (if any) by PIU.
Occupational Health &	During the construction work, the laborers	- Mandatory use of safety measures (PPEs) such as mask, helmet, hand	Contractor	Availability of personal	75,000.00	Daily (or when there is a

Safety	involved in the construction activities may be exposed to different level of health risks and are prone to accidents	gloves and rubber boots, etc. - The laborers will be insured for their health and safety. - Provide safe drinking water for labours - Prohibit child labour and forced labour in all construction activities. - Provide OHS orientation training to all new employees to ensure they are apprised of the basic site rules of work at / on the site and of personal protection and preventing injury to fellow employees - Provide comprehensive training to all workers on occupational health and safety practices. Training should consist of basic hazard awareness, sites specific hazards, safe work practices, and emergency procedures for fire, evacuation, and natural disaster, as appropriate. Any site-specific hazard or color coding in use should be thoroughly reviewed as part of orientation training. - Adopt systematic 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		protective equipment, First-aid facilities, Medical insurance coverage for workers, Housekeeping and condition of sleeping and sanitation facilities at campsite (if any), Roster of workers		construction activity) by the Contractor/MST. Monthly visual and document inspection by PIU

		nearest hospital, if needed - 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 incident -				
Social Harmony	-Changes in social structure, cultural and traditional practices of the rural people due to exposition to the outside workforce - Conflict between Local and Outside Workers and erosion of law and order situation of the project area	- -Workforce will be informed about the culture and living style of the project area. They will be instructed to respect the locally accepted culture and living style. - - Special instruction will be given to all workers to act in responsible manner during and after the working hours, respecting the rights, properties and practices of local people. - - The use of local workers will be maximized in order to mitigate the impact. The use of locals will not only help in minimizing the adverse impact associated with the change in lifestyle				

		but also a milestone to enhance the local economy through employment and cash flow. - - Preference will be given to the local people in project related jobs and subsidiary opportunities - - Construction workers from outside the project area will be well-informed about the general norms and values of society before deployment. The construction workforce will be instructed to respect local people, especially the female members and the local culture and tradition. - -A code of conduct (CoC) will be prepared for the construction workforce and the project staff on how to behave with the local people of the project area, which besides others will include a) Respect to the local people their culture, traditions and women; b) Not indulge in any conflict with the local people; c) Not to gamble with the local community people; d) Not to drink alcohol outside the construction camps and roam local markets after consuming alcohol. -				
GRM, Social Disturbance / Risk of SEA/SH, Human trafficking, GBV, HIV	During the construction work, the laborers including the community, may be exposed to risk of SEA/SH, Human Trafficking, GBV, HIV AIDS and Communicable diseases.	Regarding SEA/SH, GBV: - Locals will be given due priority for any employment opportunity - GRM will be established for the workers, focal person handling GRM including SEA/SH will be assigned, and every laborer will be informed of	PIU	Regular monitoring and supervision of construction site/ camp - Information	50,000.00	Daily (or when there is a construction activity) by the Contractor. MST/ PIU Rural

AIDS and Communicable diseases		the GRM. - Follow Code of Conduct which applies to staff, laborers and others employees at worksite, personnel of subcontractors, any other personal assisting in the execution of the subproject works. signing - CoC will be COC signed, oriented on the CoC to ensure it is understood by those, and strictly adhered to and monitored for all workers. Signed copies of code of conduct will be maintained. - Separate toilets will be provided for male and female workers - SEA/SH, GBV awareness raising activities, trainings and stakeholder engagements such as - community based- awareness programs and school based awareness program. The GRM focal person related to GBV (Kalpana Mishra) of Department of Women and children under social development unit of Joshipur RM will be part of trainings, awareness programs regarding SEA/SH. - SEA/SH grievances received by Levels 1 and 2 GRM will be referred to PIU/RM with utmost confidentiality. Individuals can also take their grievances to the focal person of Department of Women and children under social development unit of Joshipur RM. - Awareness program for women and		related to SEA/SH, Human trafficking, GBV, HIV AIDS and Communicable diseases		Municipality

		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 period. Regarding 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 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)				
Gender, Child labour, forced	Chances of low number of female workers and unequal	- Ensure at least 33% of female workers in construction activities.	Rural Municipality/	- Copies of citizenship		Daily by the Contractor.

labour and wage discrimination	wages between male and female workers for same nature of works. During the construction work there is chance of involvement of child labour.	- 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 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	Contractor	card or other valid personal ID card will be seen if any doubt		MST Monthly visual inspection by PIU
Community Health & Safety	Overall, communities will be exposed to cross-cutting threats from construction's impacts on air and water quality, ambient noise level; Chances of accidents, Communicable and transmittable diseases may potentially be brought into the community by construction workers	- Contractor's will maintain adequate space and adequate lighting, temporary fence, barriers and signage at worksites; - Children and community members will be prohibited from active construction sites - Proper fencing of stockpile areas - Awareness programs on communicable diseases and hygiene practices will be carried out - Disseminate the GRM to communities and affected stakeholders during consultations, community meeting, Bhalmansa meeting, disseminate through local media and newspaper. - Sensitive localities in terms of risk of this environmental, social and health	Rural Municipality/Contractor	-Number of permanent signs, barricades and flagmen on worksites -Number of complaints from sensitive receptors; Number of walkways, signs, and metal sheets placed at subproject location	100,000.00	Daily by the Contractor/ MST. Monthly visual inspection by PIU

		related impact is Joshipur Rural Municipality ward-06. - Inform and regularly update and organize awareness campaigns targeting the affected communities, including vulnerable groups, about potential project hazards and changes to project activities that may have environmental, health, or safety impacts, as well as the proposed prevention, mitigation, and emergency response measures. - -Active sites will be well demarcated and bounded. Excavated sites will be well bounded with hard barricades. - -Unauthorized entry to active construction sites and stockpile sites will be strictly regulated. - -Movement of vehicles for construction activities will be strictly regulated under safety guidelines. - -Code of conducts will be implied for the workforce so that they have no conflict with the local communities. - -Provision of ramps will be made where trenching works are being carried out to provide access to houses and businesses.				
	3. During Operation and Maintenance Phase					
Exposure to chemicals	Excessive exposure to chlorine, hypochlorous acid, and hypochlorite ion generally results in irritation of the esophagus, a burning sensation in the	- All disinfection chemicals require proper storage and handling practices - Provide safe storage for chemicals - Ensure that the person is hired, with knowledge of chlorine use for disinfection process during operation	Contractor during DLP; WSUC or Operator after DLP	Visual inspection		Daily (or as needed) by the operator.

	mouth and throat and spontaneous vomiting.	- 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 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 of the pipeline.				
Water bodies	Water pollution due to effluent produced from the periodic	- A settling tank is proposed for decanting of the slurry from the effluent during backwash	Contractor during DLP; WSUC or	Visual inspection		For first year, DSMC After that WSUC daily

	Back washing of the filter plant, if discharged directly to the river course may cause harm to the water bodies and aquatic life especially during the dry season when flow will be less.		Operator after DLP	Effluent sampling		inspection or as needed. Effluent sampling by the operator, only when necessary or practical.
Drinking water supply system	Delivery of unsafe water due to source contamination, leakage in pipes	- The operations and maintenance plan and training for staff will cover; - (i) Competent/cautions handling and storage of calcium Hypochlorite and qualified persons to implement/oversee disinfection and treatment; (ii) Providing safe storage for chemicals; in compliance with the Material Safety Data Sheet (MSDS) for each substance. - (iii) ensure capacity of WSUC to implement quick response to hazardous substance/waste spills; - (iv) Implement Safeguard Policy Statement (SPS)-complaint EMP and a WSP. This policy ensures that the water supply sub-project is environmentally and socially sustainable; and - (v) Monitor water quality.	Contractor during DLP; WSUC or Operator after DLP	Visual inspection Water Quality reports WTP records in the logbook		Daily or as needed visual inspection by the operator. Quarterly or as needed water quality testing by the operator.

-Pollution and nuisance due to sludge removal and its disposal	If the effluents from the WTP and waste water from the labor camp is not well treated, then there will be risk of pollution of local water bodies due to the discharge of effluent and liquid waste. However, likeliness of occurrence of this case is very low.	- The treatment plant will be cleaned on regular basis. - Quality of the effluent will be regularly monitored to ensure that the effluent meets the GoN tolerance limits of discharge of waste water from combined wastewater treatment plant - The operation and maintenance of the WTP will be carried out on timely and regular basis as per it O&M plan. - Standard Operation Procedure (SoP) will be adopted for the operation of WTP. - Sludge will be handled only by designated trained team authorize by the municipality and taken to the Tikapur fecal Sludge management (FSM) treatment plant. - Sludge will be disposed to the sludge drying bed or other designated place under coordination and permission of the municipality	Contractor during DLP; WSUC or Operator after DLP	Visual inspection Water Quality reports WTP records in the logbook		Daily or as needed visual inspection by the operator. Quarterly or as needed water quality testing by the operator.

4.2 Capacity Development and Training

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

Table 9: Details of proposed training program

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

4.3 Summary of cost of ESMP activities

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

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

Table 10: Summary of costs of ESMP Activities

S.N.	Items & Headings	Unit	Qty.	Rate	Total, NPR	Reference
	Provisional Sum amount					
1	Water quality test	Samples	12	5000	60,000.00	Dhangadhi Lab
2	Air quality and Noise level monitoring	Samples	2	50,000	100,000.00	Consulting with the air, water and noise level monitoring lab. (Once in a year)
4	Greenery promotion	Job	LS	1,50,000	1,50,000.00	Consulting with Nursery.
5	Water Sprinkling	Job	LS	50,000	50,000.00	As per the site accessibility.
6	No horn sign installation	Job	LS	20,000	20,000.00	As per local market price
7	Waste collection bins	Job	LS	10,000	10,000.00	As per local market price
8	First Aid and medication	Job	LS	75,000	75,000.00	As per local market price
9	Environment and Social Awareness, Worker's & Community's Health and Safety and WASH Promotion *(Events will be conducted by MST/PIU/MWASH unit for workers as well as community)*					
(i)	Environmental and Social Awareness (during Pre-construction phase and construction phase; at least 30 participants/event)	Events	2	25,000	50,000.00	
(ii)	Occupational Health and Safety (including GBV, SEA/SH, HIV AIDS & Communicable diseases at least 35 participants in each orientation/training, during pre-construction and construction phase)	Events	2	25,000	50,000.00	
(iii)	Community level awareness on WASH and Sanitation and on	Events	2	20,000	40,000.00	

	SEA/SH					
(iv)	Labour Camp management	Job	LS	1,00,000	1,00,000.00	
10	Stockpile/Construction Waste Disposal Management	Job	LS	1,40,000	1,40,000.00	
11	Environment & Social safeguards (grievance meetings, site monitoring, etc.)	Meetings /Events	18	8,000	1,44,000.00	
12	Information dissemination materials and medium					
	(a) Leaflets	Job	LS	10,000	10,000.00	Consulting with local press & media.
	(b) PSA (local media)	Job	2	25,000	50,000.00	Consulting with local press and media.
	Total				**10,49,000.00**	

(In Words: Ten Lakhs and forty-nine thousand Rupees Only)

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

4.4 Environmental and Social Monitoring

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

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

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

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

- Monitoring of the impacts of the project on physical, biological and socioeconomic and cultural environment of the area;
- Monitoring of the accuracy of the predicted impacts;

- Identification of the emerging impacts due to project activities or natural process and development of remedial action; and
- Monitoring of the effectiveness of mitigation measures.

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

- Compliance of the mitigation measures and specification in accordance with the environmental and social management plan;
- Allocation of adequate budget for implementation of mitigation measures and monitoring;
- Compliance of existing act, regulation and guidelines and mandate relevant with the proposal; and
- The regular Contractor's E&S compliance monitoring by PIU/MST 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. In addition to these regular reports, the PMU, in coordination with the PIU, PST, and MST, will prepare an 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 11: Compliance Monitoring Plan

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

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

Table 12: Impact Monitoring Plan

Parameter	Indicators	Method	Location	Frequency & Schedule	Agencies to be consulted
Construction Phase					
Physical Environment					
Air quality	Dust and smoke	Field observation	Construction area and access road	Once in a Year	
Noise pollution	Noise level	Field observation and discussion	Construction site and access road	Once in a Year	
Land pollution	Open defecation and garbage disposal places	Direct observation	Disposal site	Daily	
Biological Environment					
Vegetation	No. of trees felled and area of site cleared	Site observation and record checking	Embankment site	Daily	
Socio-economic and Cultural Environment					
Existing infrastructures	Damages of road and culvert, access to houses	Observation and discussion with local people	Access road	Weekly during construction	
Law and Order	Incidents of different types of	Discussions with the local people	Project area and	Monthly during	Local Police Office

	crimes in the project area; complaints in the local police	and the local police	surrounding	constructio n	
Labor Issues	Number and type of grievances related to workers, number of grievances resolved, labor records	Site visits, visual inspections, reports and photographs, review of workers' grievances register		Regular	
Information disclosure, stakeholder engagements, GRM	-Number, type and topic of engagement activities Number, type and status of grievances -Number and type of engagement activities with vulnerable groups	Observation, discussion with the locals, GRM register and other reports/document s		Regular	
Occupational health and safety	Cases of accidents and injury	Observation and record checking	Active construction sites	Weekly	Health institutions
Traffic and road safety	Status of road for use; road accidents	Observation and record checking	Observation and record checking	Daily	
Gender, children and vulnerable group	Number of such people employed	Review of attendance and discussion	Construction site	Weekly	
Operation Phase					
Physical Environment					
Land pollution	Open defecation and garbage disposal places	Direct observation	Water Supply & Sanitation Project site and surrounding	Monthly	
Biological Environment					
Vegetation	Survival of plantations	Site observation and counting	Plantation sites	Monthly for 5 years	
Socio-economic and Cultural					
Existing	Damages of road	Discussion with	Access road	Monthly	

infrastructures	and culvert	local people			
Law and Order	Incidents of different types of crimes in the project area; complaints in the local police	Discussions with the local people and the local police	Surrounding settlements	Monthly	Local Police Office
Gender and social inclusion	Involvement of women and vulnerable groups in tourism business	Interview with local people	Water Supply & Sanitation Project site and surrounding	Biannually	Municipality / Wards
Livelihood of local users	Involvement of users in commercial agriculture/tourism business/other related ventures	Interview with local people	Water Supply & Sanitation Project site and surrounding	Annually	Municipality / Wards

4.5 Implementation Schedule

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

4.6 Project Environmental Management Framework and the Key Stakeholders

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

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

a) **World Bank:** Implementation of World Bank's Environmental and Social Framework (ESF), work plans, directives and guidelines as required, review monitoring report.

b) **Project Implementation Unit (PIU):** The PIU will supervise the Municipality Support Team (MST) to aid in infrastructure development, construction oversight, and reporting. It will spearhead federal and provincial efforts to enhance sector governance, institutional capacity, and resilience of water supply and sanitation

infrastructure through integrated watershed management, in collaboration with the municipalities.

c) **Municipal WASH (M-WASH) Unit:** It include developing WASH governance, policy, and institutional arrangements, programming and regulation of municipality-wide water and sanitation services, as well as planning, managing, and monitoring the implementation of local water supply and sanitation services as provided for by the Constitutional provision and Local Governance Operations Act, 2017.

d) **Project Support Team (PST):** The PST supports the Municipal Support Team by offering guidance on local project execution, capacity building, and community engagement, while also aiding the Project Management Unit (PMU) by providing essential data, reports, and on-the-ground insights to inform decision-making and ensure alignment with project objectives.

e) **Municipal Support Team (MST):** MST offer specialized technical aid to the PIU, focusing on governance, institutional support, planning, design and construction supervision of infrastructure project. It aims to strengthen the M-WASH Unit's capacity in planning and managing water and sanitation services effectively. MST is also responsible for contractor's daily compliance monitoring.

f) **Contractor:** The Contractor is responsible to plan, execute, supervise, inspect and direct a construction project from start to finish regardless of the scope of the project. The contractor ensures that the project complies with the ESMP and all the specifications as outlined in the contract documents.

g) **Sub-Contractor:** Subcontractor/Supplier is an institution, awarded a portion of an existing contract by a principal or general contractor. Subcontractor/Supplier performs work under a contract with a general contractor. Essentially, a Subcontractor/Supplier will perform and abide by all the obligations of the principal or general contractor's contract, including compliance to ESMP and all specifications in the contract documents.

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

i) **Affected Wards, Municipality and District Coordination Committee (DCC):** Provide recommendations to the proponent with comments and suggestions and assist proponent in the project implementation.

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

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

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

GRM has been initiated, and ward Level GRC has been formed at project's ward level. At the Ward level, the member of the Grievance Redress Committee (GRC) includes ward representatives, WSUC Chairman, PIU representative under coordination of Chairperson of WN 06. Mr. Bhojraj Dangaura. Likewise, RM Level GRC has already been established under coordination of the Chairperson of the Joshipur RM (Mr. Chitra Bahadur Chaudhary). At the RM level, the member of the Grievance Redress Committee (GRC) includes RM Vice Chairperson, Administrative officer, PIU Manager, MWASH Unit. (The details are provided in Annex 2). The notice regarding formation of ward Level GRC and RM Level GRC has been published and shared to the stakeholders.

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

Grievances about GBV
An existing GRM is in place for the project, which will also be utilized to address GBV and SEA/SH-related issues at the PMU. In the case of the sub-project, there is the Department of

Women and Children (DWC) under social development unit of Joshipur Rural Municipality to look into GBV/SEA/SH issues. The Joshipur RM has nominated GBV and SEA/SH focal person (Ms. Kalpana Mishra). However, the PIU/MST will also map out any GBV service providers in the project area, so that the focal person can access support and timely advice in cases related to GBV and SEA/SH. The project will place its highest priority on handling and managing GBV-related grievances by maintaining the full confidentiality of the survivor. The first responders for grievances related to GBV will be the GBV focal person, who will be trained in managing and handling such grievances. 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 GBV complaints, with the survivor's consent. In accordance with the World Bank's requirements, the PMU, in collaboration with the World Bank, will prepare and implement the SEA/SH Action Plan during the project's implementation.

Organogram of E & S activities

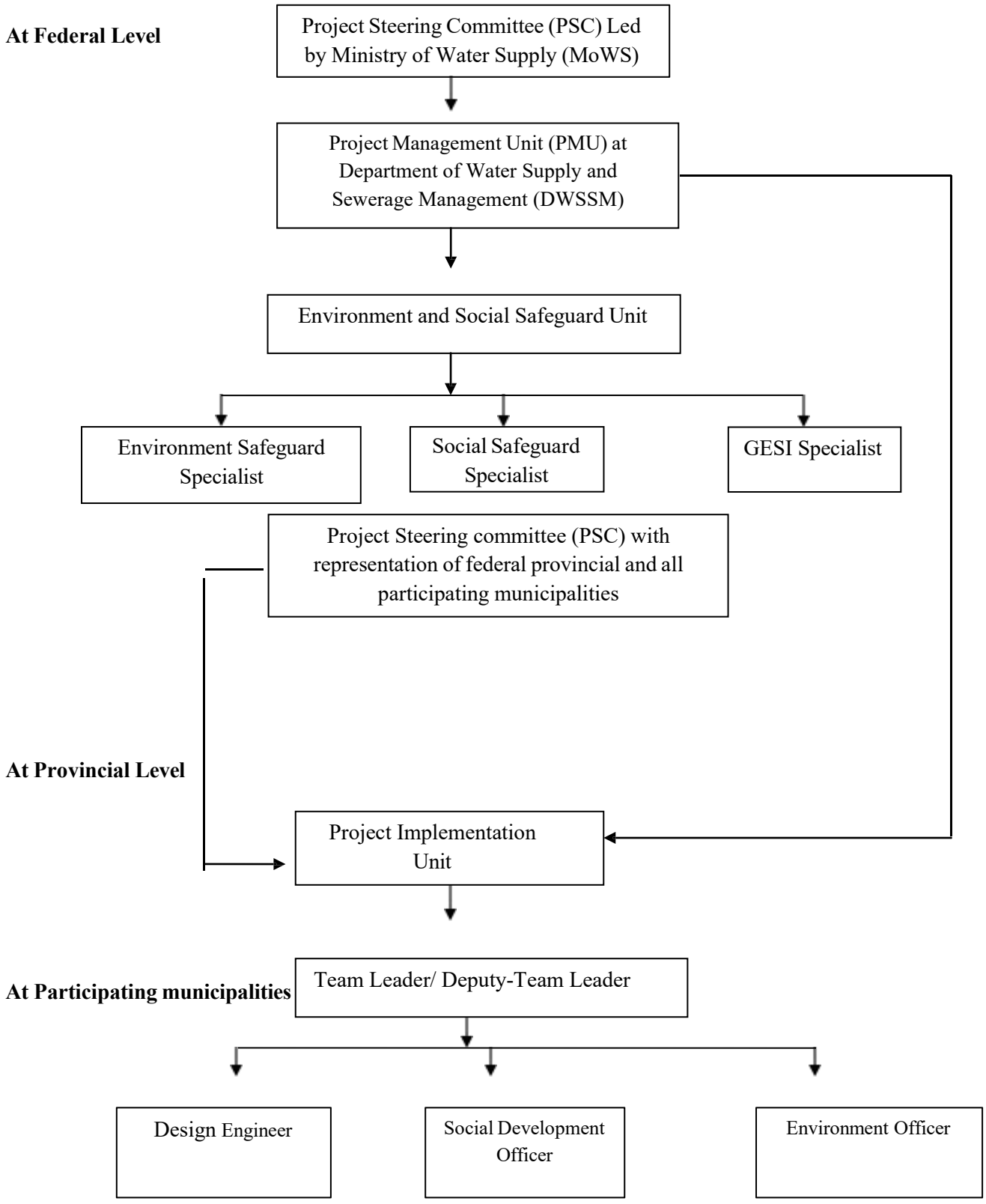

Figure 4: Organogram of E & S activities related to the project

5. STAKEHOLDER ENGAGEMENT AND INFORMATION DISCLOSURE

5.1 Public Consultation

Public consultation meetings and Key informant interviews (KII) were used to engage as many locals as possible during the public consultation process. The details of the design aspects of the sub-project, social & environmental risks, and GBV aspects were discussed during the public consultations. Separate consultations with women, Dalits, Tharu, 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. (Please see Annex II for details) The major concerns discussed during the public consultations were as followings;

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

For instance, the group of directly impacted are those people living near the WSS project area. The aim was to identify possible environmental and social impacts that might arise from the proposed project activities. Moreover, the applicable suggestions and recommendations have been incorporated into the proposed project design and ESMP preparation. According to the site survey conducted during the ESMP, within the directly impacted area of Joshipur Rural Municipality, Ward No. 6, people expressed concerns about various environmental impacts caused by the project. People around the selected site of Joshipur expressed some comments on construction at that site, citing noise and other impacts on the surrounding communities. Public concerns and corresponding mitigation measures are summarized in table.

Table 13: Public Concern and Mitigation Measures

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

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

5.2 Stakeholder Consultations Plan for Implementation Phase

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

Table 14: Stakeholder Engagement Plan

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

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

5.3 Information Dissemination

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

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

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. The information disclosure activities are as per the table below.

Table 15: Proposed Strategy for Information Disclosure

Target stakeholders	List of information to be disclosed	Methods and timing proposed activities
Project implementation phase		
• Government officials (Federal, provincial, and Municipality officials including the wards) • District line agencies	• Planned and ongoing activities • Regular updates on project status, including the implementation of ESMP, C-ESMP, ESMF, LMP, SEP	• Sharing project update and reports through meetings • Consultation and face-to-face meetings • Information boards, leaflets, and brochures • PMU/PIU websites

	• GRM • SEA/SH and GBV activities	
• CBOs and NGOs working on WASH • Local NGOs and CBOs working on GBV • Community leaders • National & local Media • Local Community	• Project concept and planned activities • ESMF, IEE, SEP, Labour Influx management procedures • SEA/SH Activities and GRM procedures for SEA/SH • GRM procedure • Planned construction activities	• Information boards, leaflets, and brochures • PMU/PIU websites • Meetings and workshops
• Individuals and communities with a focus on vulnerable groups, including IPs, women, and Dalits • Local NGOs and CSOs working on WASH and GBV	• Project concept and activities • E&S procedures and management plans (ESMP, C-ESMP) • GRM procedures, ESMF and Labour Influx management procedures, SEP and • Planned construction activities • SEA/SH activities and GRM procedure for SEA/SH • Revised project information if any	• Regular release of public notices through mass media, community radio, television, and social media • Regular updates of information on the PMU/PIU website • Distribute information leaflets and brochures to public • Air project information/ messages through community radio • Periodic small group meetings with vulnerable and IP groups • Regular contacts with the representatives of IP and vulnerable groups through phone calls, emails, text messages (Application of audio/visual communication techniques, and other accessible formats)

6. CONCLUSION AND RECOMMENDATION

Lokhari (Simri) Water Supply Project in Joshipur Rural Municipality aims to enhance water supply infrastructure while minimizing environmental and social impacts. The major construction work of this WSS sub-project has already completed. The current intervention under Lokhari (Simri) WSS sub-project include the enhancement of additional stretching of transmission line from adjacent road as well as , and proposed of 42.451 Km pipe laying work and 1144 HH connection work, office building and other minor repair and maintenance work for this sub-project. A key component of this sub-project is the installation of 42.451 kilometers of pipeline along existing roads.

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

A total of NRs 1,049,000.00 is allocated for mitigating impacts during the construction and operation phases. These costs have been carefully considered to ensure financial feasibility and comprehensive coverage of environmental and social management responsibilities and legal liabilities.

Annex- I: Environmental and Social Screening Checklist

I- Sub-project Background

1	Name of the Sub Project	Lokhari (Simri) Water Supply and Sanitation Project
2	Location	Municipality/ Rural Municipality: Joshipur Ward No: 06 District: Kailali Province: Sudurpaschim Altitude: 154 m.
3	Co-ordinate (GPS)	Latitude: N 28° 1' 33'' Longitude: E 81°2'54.67''
	Project's boundaries in four directions and the area of influence	East: Masura Dangaura and Rastriya Ma B Land, West: Gravel Road North: Nala South: Rastriya School's Land
4	Type of Sub-project	Water Supply
5	Proponent	Rural Municipality

II- Environmental and Social Screening

S.N.	Screening Checklist	Response (Yes/No)	Remarks/Comments (Provide information/ justification either for "Yes" or "No" if applicable)
A	Environmental Screening		
1	Is the sub-project site located within any National parks/ protected areas or any critical aquatic and terrestrial habitat area?	No	The sub-project will utilize existing major infrastructures of Lokhari WSS system and additional required infrastructures will be constructed within the premises of existing OHT. The proposed site is located near the Simari Bazar, which is barren land and far from Bardiya National Park.
2	Is the sub-project site located in the surrounding national parks or protected areas including buffer zone?	No	Sub-project is located at Joshipur RM-06 which is far from Bardiya National Park.
3	Will the sub-project be located in areas surrounding forest or wildlife areas other than national parks and protected areas?	No	The allocated area (existing OHT premises) is already enclosed by boundary wall and it does not transverse in any protected area or wildlife area.

4	Will the sub-project be implemented in the areas surrounding water bodies, lakes and ponds and intend to use or depend on them for the Implementation?	No	About 500m far from sub-project area.
5	Will the sub-project be implemented in Areas located in high risk zone such as landslide prone area, steep slopes, highly degraded land in hills, riverine area susceptible to annually flooding, or in areas causing large-scale soil erosion?	No	Proposed site is flat land of Terai region. So, there is no risk of landslide, soil erosion prone area.
6	Will the sub-project involve land Clearance on very steep slopes?	No	The sub-project is already a running project so no need of land clearance.
7	Will the proposed sub-project involve logging?	Yes	There is history of water logging during rainy season.
8	Will the proposed sub-project endanger indigenous plant species of ecological significance?	No	There is no any impact on plant species because major structures have already been constructed and additional structures will be constructed within the existing OHT premises which is barren land. The sub-project area don't bear flora/fauna species with ecological importance.
9	Is there any public infrastructure (School, hospital, health post) in the surrounding area of the project site? If yes, provide brief descriptions.	No	There are no any public infrastructure near project site.
10	Will the construction activities cause any damage to the existing local roads and other infrastructures/Utilities?	No	The construction activities will not cause any damage to the existing local roads and other infrastructures because major infrastructure has already completed. There is enough allocated land to construct required additional structures.
B	**Social Screening**		
	Land acquisition		
1	Does the sub-project require land acquisition?	Yes	Land will be needed for construction of required structures. There is enough land within the premises of existing OHT, which is already acquired by the existing Lokhari WSS system.

2	If Yes, please provide information about the types of land that will be acquired. Private land Government/Public land Forest land (specify ownership i.e private, Government)		The sub-project will use public land belonging to existing Joshipur Rural Municipality. The available land is sufficient; hence private land acquisition is not required for this sub-project.
3	Has sub-project managed enough land for Construction? If Yes, how? explain briefly	Yes	The sub-project has managed enough land belonging to the existing Joshipur RM.
4	If the sub-project is planning to acquire private land, please provide information about the process of acquisition Voluntary donation Involuntary acquisition Negotiation	No	Private land acquisition is not required because the sub-project will utilize the existing Lokhari WSS site which is sufficient.
5	If private land acquisition is required, will there be a loss of productive land?	No	Private land acquisition is not required.
6	If private land acquisition is required, will there be any physical/economic displacement and impact on livelihoods?	No	Private land acquisition is not required. So that there is no any physical and economical displacement.
7	Will there be a temporary land acquisition for the sub-project?	No	Temporary land acquisition is not needed as there is enough land of existing Lokhari WSS system.
8	If "Yes", please provide information about the types of land that will be temporarily acquired.	No	
9	Will there be any adverse impact on non-titleholders including loss of shelter and livelihood due to land acquisition?	No	The land is free of encroachers or non-titleholders/ illegal users, hence such impacts were not observed during field visit.
10	Will land acquisition result in loss of income loss of access to common property resources?	No	Since the proposed land belongs to Joshipur RM, no such impacts are anticipated.
	Cultural Heritage		
11	Will the proposed sub-project be implemented in or surrounding heritage site, religious temple and other religious site?	No	The proposed site is located at barren land. There is no any heritage site around it.
12	Will the sub-project cause encroachment on historical/cultural/religious areas?	No	There is no any cultural /religious areas to project.
13	Will there be any adverse impacts on cultural heritage due to sub-project activities? If "Yes", please explain briefly	No	There will be not any adverse impacts on cultural heritage due to sub-project activities.
	Indigenous and vulnerable People		

14	Will the sub-project involve activities that are likely to make irreversible adverse impact on indigenous communities, women and vulnerable Groups?	No	Does not impact on vulnerable people.
15	Will the proposed sub-project include any activity that promotes or involves incidence of child labour?	No	Child labour is strictly prohibited.
16	Will the proposed sub-project benefit ethnic groups living in the service area?	Yes	The proposed sub-project will benefit all the local people irrespective of their caste and ethnicity and will be given priority to backward/ ethnic groups in construction activities.

	Labor and working conditions			
1.	How many workers are likely to be hiredfor the proposed works? How many workers are estimated to be women?	About 40 workers will be hired for proposed works and about 35% are estimated to be women.		
2.	Will the project draw on migrant workers?	Yes		It is hard to get Skilled workers in project area.
3.	How many workers are estimated to behired directly from the project area?	May be 10 to 15 workers are estimated to be hired from project area.		
4.	Of the total workers, how many areestimated to be	Skilled: 25 Semiskilled:10 Unskilled: 10 Engineers: 3 Technician/overseer: 3 Security guards: 2 Others: 10		
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: 10 Contracted workers: 15 Primary suppliers' workers: 5 Community workers: 10		
6.	Will there be a labor camp? Or any form ofaccommodation for workers	On their own (In the host community): _____ In a labor camp to be managed/constructed by project: will be constructed within OHT Periphery		
7.	If the sub-project is planning to manage/construct a labor camp, provide the information on	Probable location (s) of labor camp: within OHT premises **Drinking water, Electricity, LPG Gas for cooking.** Status of basic facilities (power, water etc.):		

8.	Does the sub-project plan to maintain andregularly update a labor registry throughout the project lifecycle?	Yes		Attendance register will be kept at construction site and daily attendance will b done.
9.	Is there a policy that ensures nondiscrimination in wages and otherfacilities?	Yes		There is Labour Act 2017 for nondiscrimination in wages and other facilities.
10.	Does the Project ensure that all personsworking for the project are above minimum age as per national laws?	Yes		Child Labour will be strictly prohibited.
11.	Does the Project ensure it will abide by the national standards working hour rules and overtime?	Yes		As National Standards worker will work for 8 hours per day.
12.	Does the sub-project have plans to provide orientation to migrant workers about National labor laws, local tradition, culture,costumes, norms, and values?	Yes		One-day orientation to migrant workers about National labor laws, local tradition, culture,costumes, norms, and values has been scheduled prior to construction.
13.	Will heavy machinery (e.g. excavators, cranes, trucks, jack-hammers) be used forconstruction activities?	Yes		Excavators, truck and Jack Hammers will be used during construction period.
14.	Will the Project activities involve thehandling of hazardous Materials/contaminants?		No	There is no any hazardous material required.
15.	Will the Project activities involve the handling of risky electrical equipment?	Yes		Stretching of 11 kV three-phase line in the project area from adjacent road, the remaining electrical works and installation of 100KVA transformer are also risky.
16.	Is there any safety concern to women oncethe migrant workers arrive in sub-project site?	Yes		The arrival of migrant workers at a sub-project site can raise concerns about the safety of women in the area. It is essential to address these concerns through a combination of policies, preventive measures, and community engagement.
17.	Does the sub-project plan to provide orientation to workers about the nationallaws and project policies on GBV & SEA/SH?	Yes		One day orientation to workers about the national lawsand project policies on GBV & SEA/SH is planned.
18.	Does the sub-project plan to provide orientation to workers about the risks ofcommunicable diseases such as STDs?	Yes		One day orientation to workers about the risks ofcommunicable diseases such as STDs is planned.

19.	Does the sub-project plan to provide orientation to workers about COVID-19related national and WHO protocols?	Yes		One day orientation to workers about communicable diseases is planned in which one class will be of COVID-19.
20.	Is there any history of conflict between the migrant workers and the local in any infrastructure projects in the local area?		No	There is no history of conflict between the migrant workers and the local during OHT construction in sub-project area and other projects in the local area.
21.	Is there any possibility of conflicts between migrant workers and the localcommunity?		No	There is no possibility of conflict as the community of Lokhari are peaceful.
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?	Waste produced from construction site are most of cement bags so there is no production of waste that needs special treatment or disposal measures		
2.	Will the sub-project generate substantial amount of wastewater (liquid waste) during construction and operation?		No	There is no generation of waste water during construction.
3.	Will it create dust pollution around the sites?	Yes		Due to transportation dust pollution will create in sites.
4.	Will be the subproject generate substantial amount of air emission during construction and operation?	Yes		During construction period there will be air emission from concrete mixture, generator.
5.	Will the sub-project create noise/vibrationbeyond the level permitted by the law?	Yes		Not regularly but while using generator, concrete mixture, metal cutter.
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	Such hazardous creating material will not be used.
7.	Will it temporarily stop or impact/pollute the water supply and sanitation system inand around the site?		No	No water supply will not be affected.

8.	Will there be any solid waste generated bysub-project that needs to be transported off-site for reuse, recycle or disposal of?	Yes		Some amount of solid waste will be generated.
9.	Will any liquid waste, or an item containing liquids (including oils), needs to be transported off-site for reuse, recycle or disposal of?		No	Not any liquid waste, or an item containing liquids (including oils), needs to be transported off-site for reuse, recycle or disposal is needed.
10.	Will any explosive and hazardous chemicals be used within the project?		No	Not any explosive and hazardous chemicals be used.
11.	Will building materials containing asbestosbe removed/disposed of?		No	Such asbestos containing materials are not disposed.
12.	Will any building materials be removed/disposed of that are coated with lead-based paint?		No	Old building will be repaired but not any material are coated with lead-based paint.
13.	Will mercury-containing devices (switches, gauges, thermostats) beremoved/disposed?		No	Such devices are not used.
14.	Will any building materials be removed/disposed of that contain lead,silver or chrome?		No	Old building will be removed but not any material contain lead, silver or chrome.
15.	Will the sub-project use batteries (lead-acid or nickel-cadmium) as its components?		No	No use of batteries.
17.	If “Yes”, please briefly explain how the Project plans safe transportation, storageand use and disposal of hazardous materials.			
18.	Will sub-project activities involve GHGemissions?	Yes		
19.	If “Yes”, please provide description of theactivities that will contribute to the GHG emission.	During construction activities such as using of generator, concrete mixture etc		
Potential Community and Occupational Health and Safety Impacts				

1.	Are there any community health and safetyrisks due to the use of equipment, machinery, or the activities at the sub-project?	Yes		To use such equipment Skilled manpower should be mobilized.
2.	Will the construction works disturb thenormal functioning of other commercial/community/residential activities? If "Yes", please mention the activities andperiod of disturbance.		No	There will not disturb due to construction works on commercial/community/residential activities.
3.	Are there any potential impacts to publichealth and safety due to changes in the landscape for sub-project?		No	Sub-project site is already finalized and some infrastructures are already constructed.
4.	Are there any risks to community safety due to accidental and natural hazards during sub-project construction and operation?		No	Sub-project site is already surrounded by a boundary wall. But during pipe laying there may be any risk.
5.	Is there any possibility of traffic congestion or rise in road accident in theproject area due to project activities?	Yes		There may be possibility of traffic congestion and road accidents due to transport used in project.
6.	Is there any provision to control possible trespassing of non-project staff on the project site during construction and operation?	No		Such provision is not envisaged.
7.	Does the sub-project plan to provide orientation to surrounding communities about the risks of communicable diseasesand COVID-19?	Yes		One day orientation for community level on STDs has been planned prior to construction.
	Stakeholder Engagement			
8.	Have the stakeholders of the sub-project been identified?	Yes		Stake holder are already identified during survey
9.	If "Yes", please name them along with their level of influence and interest in thesub-project	WB, RM, PIU, MWASH unit, Local people of Joshipur RM		
10.	Have the stakeholders been categorized interms of gender, age, and ethnicity?	No		
11.	Major issues raised by the stakeholders during the initial consultation?	-Job opportunity for local people -Delivery quality water as soon as possible		

12.	What are the main sources of informationfor the stakeholders? [Hint: radio, TV, newspapers]	Radio, and Bhalmansa (the social leader in community they share information in society).		
13.	Is there is social institution/practice for community consultation on common issuesin the area?			Not a social institution but there are Bhalmansa in all community to solve common issues.
14.	Is there any social/religious/cultural institution or practices for local dispute settlements?			Bhalmansa committee is religious /cultural institution or practices for local dispute settlements.
15.	Are there any youth clubs, women groupsor NGOs active in the project area and in the district? If "Yes" please provide top five suchclubs/groups/	NGOs youth clubs, women groups and contact number 1.Jaceeys 2. Aama Samuha		
Contextual risk				
1.	Is there any history of community conflictin the sub-project area?		No	There is no history of community conflict in the sub-project area.
2.	Is there any history of protests against infrastructure projects in the area?	Yes		There is a history of protest against Hospital in project area.
3.	Provide a brief description about nature of crimes, if any, observed in the project areain last two years. [Hint: Source of information local policestation]	Stolen, Household debate,		
4.	Which political parties won the last localelection? [Municipal and the ward of the projectsite]			Both RM and Ward – Nagarik Unmukti Party
5.	Which political parties won the last last parliamentary election from the Constituency of the project site?			Nagarik Unmukti Party
6.	What are the major economic activities in the municipality? [Hint: Occupation, localexports, etc.]			Agriculture, vegetable, daily wages base labour, foreign employment

7.	Please name the major industries/institutions located in themunicipality.	Brick industry, Rice mill		
8.	Which are the major market centers in thesub-project area and how far are they?			Joshipur 4 km, Simiri 2 km
9.	Is there a board community support for thesub-project? [Hint: Community perception based onstakeholder consultation]			All the community not only support they are excited for purified drinking water.
10.	Is there support from the localmunicipality for the project?	Yes		Sub-Project is under Local Municipality- Joshipur Rural Municipality.

Checklist for ESS7 and particularly to FPIC

ESS7: Indigenous Peoples	**Yes**	**No**	**No Impact**	**Positive Impact**	**Negative Impact**	**Remarks**
Does the project footprints lie in areas where indigenous people is present including (area of influence)	Yes		No impact			Lokhari Sub-Project is located in Joshipur Rural Municipality ward no-06. The surrounding community is mixed with Tharu, Brahmin/Chhetri and other caste/ethnic groups.
Will the project lead to full or partial physical displacement of IPs (regardless of whether the IPs are recognized as IPs by the country's law)?		No	No Impact			The proposed site belongs to existing Joshipur Rural Municipality and there is no any claim of IPs on this land. Thus, there will be no any physical displacement of IPs.
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			Private land is not required for sub-project, hence there is no any economic displacement of IPs.
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		No	No Impact			Neither the sub-project will impact on IP's land nor lead to restriction access to land subject to traditional use or under customary use or

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)?						occupation.
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 site is already acquired by Lokhari WSS and ownership of Rural Municipality, which is vacant land with existing structure. So, there is no any vegetation in or surrounding and it does not impact on natural resources using by the IPs.
Will the project lead to the utilization or commercial development of natural resources on lands and territories claimed by IPs?		No	No Impact			There is no territories claimed by IPs and 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? *(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)*		No	No Impact			There is no any impact on tangible cultural heritage.
Will the project have significant impact on intangible cultural heritage that is material to the identity and/or cultural,		No	No impact			There is no any impact on intangible cultural heritage. Because there

ceremonial, or spiritual aspects of the affected community? *(Intangible cultural heritage may include practices, representations, expressions, knowledge, and skills, as well as associated instruments, objects, artifacts, cultural spaces that IP communities recognize as part of their heritage like traditional handicrafts such as Bamboo weaving, oral traditions, performing arts and so on)*						are no any cultural heritage surrounding the Lokhari WSS system and also the major infrastructures have already been constructed.

Annex II: Minute of meeting /Consultation Meeting

1. Public Consultation meeting with the Indeginous people

सार्वजनिक छलफल तथा अन्तरक्रिया

आदिवासि/जनजातिहरुसँग भएको छलफल

आज मिति २०८१/०८/१०गते आइतवारको दिन यस लोखरी खानेपानी उपभोक्ता तथा सरसफाई समितिको अध्यक्ष श्री राम स्वरुप डंगौरा ज्युको अध्यक्षतामा जोशीपुर गाँउपालिका वडा नं ६ स्थित लोखरी वस्तिमा भएको छलफल तथा अन्तरक्रिया कार्यक्रम गरी प्रस्तवित लोखरी खानेपानी आयोजनाको स्तरोन्ती गर्ने कार्यको विस्तृत परियोजना प्रतिवेदन र वातावरणीय एवं सामाजिक व्यवस्थापन योजना (ESMP) तयारीका क्रममा प्राविधिक वातावरणीय र सामाजिक एवं आर्थिक वस्तु स्थिति माथिको मूल्याङ्कन प्रवाभ र संम्भाभ्य उपायहरुको बारेमा MST खानेपानी समिति र स्थानियहरु विच विस्तृत छलफल तथा अन्तरक्रिया गर्ने कार्य सम्पन्न गरियो छलफलका क्रममा वातावरणीय तथा सामाजिक व्यवस्थापन ढाँचा (ESMF) को परिधि भित्र रहित पसिलामा उल्लेखित वुदाँहरु माथि उठेका मुद्धहरु (Issues) र तिनका समाधानका उपायहरुको बारेमा विस्तृत छलफल गरि निणर्य गरियो।

क्र.स	नाम	ठेगाना	हस्ताक्षर
१	राम स्वरुप डंगौरा		
२	दिलीप चौधरी	लोखरी	
३	लाहान चौधरी	पकोरिया	
४	सितालजानी देवी चौधारी	रतनपुर	
५	भिरवती देवी चौधारी	"	
६	पपुली देवी डंगौरा	रतनपुर	
७	न्यौभा महत	"	
८	पार्शिया देवी महत	"	
९	सितालजानी डंगौरा	"	
१०	माया बिक	"	
११	धानी थुहार	"	
१२	सपना थुहार	"	
१३	जील साँउद	"	
१४	[illegible]	"	
१५	हिरा नेपाली	"	
१६	चन्दा देवी कामी	"	
१७	भिरवती देवी चौधरी	"	
१८	लालमाती डंगौरा	"	
१९	लक्ष्मी कामी	"	
२०	रिमा देवी डंगौरा	"	

२१	रामली डंगौरा	रतनपुर	रामली
२२	कोकिला देवी विश्वकर्मा	"	कोकिला
२३	लोटन प्रसाद डंगौरा	"	लोटन
२३	दिल बहादुर डंगौरा	"	दिल बहादुर
२४	मानसारा देवी साउद	"	मनसरा
२५	बसमति डंगौरा	लोखरी	बसमती
२६	जगत बहादुर डंगौरा	"	जगत बहादुर
२७	मैकुराम डंगौरा / दास	"	[illegible]
२८	तेज बहादुर डंगौरा	"	तेजबहादुर
२९	कल्पना डंगौरा	"	कल्पना
३०	लक्ष्मी चौधरी	"	लक्ष्मी
३१	सिता डंगौरा	"	सिता
३२	पुष्पी डंगौरा	"	पुन्नी
३३	पर्वती डंगौरा	"	पर्वती
३४	सुनिता डंगौरा	"	[illegible]
३५	लक्ष्मण डंगौरा	"	[illegible]
३६	पाहुना डंगौरा	"	पाहुना
३७	बालाराम डंगौरा	"	[illegible]
३८	रामकुमारी डंगौरा	"	रामकुमारी
४० ३९	हिरन डंगौरा	"	हिरन
४०	सरु बस्नेत	EMS, MST Joshipur	[illegible]
४१	रोहिणी राज नेपाल	SDS, जोशीपुर	[illegible]
४२	रिमा कुमारी कठरिया	S.M जोशीपुर	[illegible]
४३	पद्म राज अवस्थी	FME जोशीपुर	[illegible]
४४			
४५	जनजाति दलित		
४६	१९ - पुरुष ८ - महिला		
४७	२० - महिला		
४८			
४९	५ - महिला } बाहुन, क्षेत्री		
५०	१ - पुरुष }		
५१			
५२			
५३			

निर्णयहरुः

१) यस जोशीपुर गाउँपालिका वडा नं ६ मा पर्ने प्रस्तावित लोखरी खानेपानी आयोजनाको स्तरोन्नति सम्बन्धमा सम्बन्धित सबै सरोकारवालाहरु जानकार रहेको र उक्त आयोजना यथाशिघ्र निर्माण र गुणस्तरीय हुनुपर्ने सम्बन्धमा विस्तृत छलफल गरियो। साथै निर्माण कार्य गर्दा अपनाइने विधि र प्रकृयाका बारेमा जानकारी दिने कार्य समेत गरियो।

२) आयोजना निर्माण गर्दा रोजगारीको पहिलो प्राथमिकता स्थानीय बासिन्दाहरुलाई दिनु पर्ने सम्वन्धमा विस्तृत छलफल गरियो।

३) हाल यस प्रस्तावित आयोजना क्षेत्र भित्र महिला हिंसा बाल श्रम लैङ्गिक विभेद र बालविवाह जस्ता घटनाहरु उल्लेख्य रुपमा घटेको देखिदैन। तथापी भविष्यमा यस्ता संवेदनशील घटनाहरु हुन नदिन र यदि कहि कतै भएमा अपनाउनुपर्ने सजगताको विषयमा जानकारी दिई छलफल गरियो।

४) यस प्रस्तावित आयोजना क्षेत्रमा घरेलु हिंसा तथा लैङ्गिक विभेद सम्बन्धि समस्या नदेखिए पनि बाहिरी कामदार र स्थानीय समुदाय बिच हुन सक्ने झैझगडा वा अवान्छित गतिविधिका सम्बन्धमा पालना गर्नुपर्ने आचार संहिताको बारेमा जानकारी दिई विस्तृत छलफल गरियो। साथै वातावरण सामाजिक व्यवस्थापन ढाँचा (ESMF) मा समेत उल्लेख गरिएका महिला हिंसा लैङ्गिक विभेद आदि विषयका वारेमा छलफल गरियो।

५) वातावरणीय एवं सामाजिक व्यवस्थापन योजना वारे यस गाउँपालिकाको कार्यालयमा सम्पर्क गरी जानकारी लिन सकिने लगायत आयोजना निर्माणका क्रममा आइपर्ने विविध वातावरणीय एवं सामाजिक समस्या र तिनका समाधानका उपायहरु माथि विस्तृत छलफल गरियो।

६) आयोजना निर्माणका क्रममा हुन सक्ने ध्वनी वायु प्रदुषण जस्ता समस्याका र त्यसको निराकरण सम्बन्धमा विस्तृत छलफल गरियो।

७) निर्माण व्यवसायीको क्याम्प र कामदारका लागि शिविर आयोजना क्षेत्र नजिकै वडा नं ६ को खाली स्थान उपयुक्त हुने सम्बन्धमा छलफल गरियो।

८) वातावरणीय एवं सामाजिक व्यवस्थापन योजना बारे यस गाँउपालिकाको कार्यालयमा सम्पर्क गरी जानकारी लिन सकिने लगायत निर्माणका क्रममा आइपर्ने विविध वातावरणीय एवं सामाजिक समस्या र तिनका समाधानका उपायहरु माथि विस्तृत छलफल गरियो।

2. Focus Group Discussion with00000
Dalit

सार्वजनिक छलफल तथा अन्तरक्रिया

दलितहरुसँग भएको छलफल

आज मिति २०८१/०८/१९गते आइतवारको दिन यस लोखरी खानेपानी उपभोक्ता तथा सरसफाई समितिको अध्यक्ष श्री राम स्वरुप डंगौरा ज्युको अध्यक्षतामा जोशीपुर गाँउपालिका वडा नं ६ स्थित लोखरी वस्तिमा भएको छलफल तथा अन्तरक्रिया कार्यक्रम गरी प्रस्तबित लोखरी खानेपानी आयोजनाको स्तरोन्ती गर्ने कार्यको विस्तृत परियोजना प्रतिवेदन र वातावरणीय एवं सामाजिक व्यवस्थापन योजना (ESMP) तयारीका क्रममा प्राविधिक वातावरणीय र सामाजिक एवं आर्थिक वस्तु स्थिति माथिको मूल्याङ्कन प्रवाभ र संम्भाभ्य उपायहरुको वारेमा MST खानेपानी समिति र स्थानियहरु विच विस्तृत छलफल तथा अन्तरक्रिया गर्ने कार्य सम्पन्न गरियो छलफलका क्रममा वातावरणीय तथा सामाजिक व्यवस्थापन ढाँचा (ESMF) को परिधि भित्र रहित पसिलामा उल्लेखित वुदाँहरु माथि उठेका मुद्धहरु (Issues) र तिनका समाधानका उपायहरुको वारेमा विस्तृत छलफल गरि निणर्य गरियो।

क्र.स	नाम	ठेगाना	हस्ताक्षर
१	राम स्वरुप डंगौरा	महादेवा	
२	मामा बि.क.	रतनपुर	
३	हिमानी सुनार	"	
४	सपना सुनार	"	
५	हिरा नेपाली	"	
६	चम्का देवी कामी	"	
७	लक्ष्मी कामी	"	
८	रोहिणी रोज नेपाल	SDS, MST जोशीपुर	
९	सरु बस्नेत	EMS, MST, Joshipur	
१०	मक राज अवस्थी	FME जोशीपुर	
११	रिमा कुमारी कठरिया	SM जोशीपुर	
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निर्णयहरुः

१) यस जोशीपुर गाउँपालिका वडा नं ६ मा पर्ने प्रस्तावित लोखरी खानेपानी आयोजनाको स्तरोन्नति सम्बन्धमा सम्बन्धित सबै सरोकारवालाहरु जानकार रहेको र उक्त आयोजना यथाशिघ्र निर्माण र गुणस्तरीय हुनुपर्ने सम्बन्धमा विस्तृत छलफल गरियो। साथै निर्माण कार्य गर्दा अपनाइने विधि र प्रकृयाका बारेमा जानकारी दिने कार्य समेत गरियो।

२) आयोजना निर्माण गर्दा रोजगारीको पहिलो प्राथमिकता स्थानीय बासिन्दाहरुलाई दिनु पर्ने सम्बन्धमा विस्तृत छलफल गरियो।

३) हाल यस प्रस्तावित आयोजना क्षेत्र भित्र महिला हिंसा बाल श्रम लैङ्गिक विभेद र बालविवाह जस्ता घटनाहरु उल्लेख्य रुपमा घटेको देखिदैन। तथापी भविष्यमा यस्ता संवेदनशील घटनाहरु हुन नदिन र यदि कहि कतै भएमा अपनाउनुपर्ने सजगताको विषयमा जानकारी दिई छलफल गरियो।

४) यस प्रस्तावित आयोजना क्षेत्रमा घरेलु हिंसा तथा लैङ्गिक विभेद सम्बन्धि समस्या नदेखिए पनि बाहिरी कामदार र स्थानीय समुदाय बिच हुन सक्ने झैझगडा वा अवान्छित गतिविधिका सम्बन्धमा पालना गर्नुपर्ने आचार संहिताको बारेमा जानकारी दिई विस्तृत छलफल गरियो। साथै वातावरण सामाजिक व्यवस्थापन ढाँचा (ESMF) मा समेत उल्लेख गरिएका महिला हिंसा लैङ्गिक विभेद आदि विषयका वारेमा छलफल गरियो।

५) वातावरणीय एवं सामाजिक व्यवस्थापन योजना वारे यस गाउँपालिकाको कार्यालयमा सम्पर्क गरी जानकारी लिन सकिने लगायत आयोजना निर्माणका क्रममा आइपर्ने विविध वातावरणीय एवं सामाजिक समस्या र तिनका समाधानका उपायहरु माथि विस्तृत छलफल गरियो।

६) आयोजना निर्माणका क्रममा हुन सक्ने ध्वनी वायु प्रदुषण जस्ता समस्याका र त्यसको निराकरण सम्बन्धमा विस्तृत छलफल गरियो।

७) निर्माण व्यवसायीको क्याम्प र कामदारका लागि शिविर आयोजना क्षेत्र नजिकै वडा नं ६ को खाली स्थान उपयुक्त हुने सम्बन्धमा छलफल गरियो।

८) वातावरणीय एवं सामाजिक व्यवस्थापन योजना बारे यस गाँउपालिकाको कार्यालयमा सम्पर्क गरी जानकारी लिन सकिने लगायत निर्माणका क्रममा आइपर्ने विविध वातावरणीय एवं सामाजिक समस्या र तिनका समाधानका उपायहरु माथि विस्तृत छलफल गरियो।

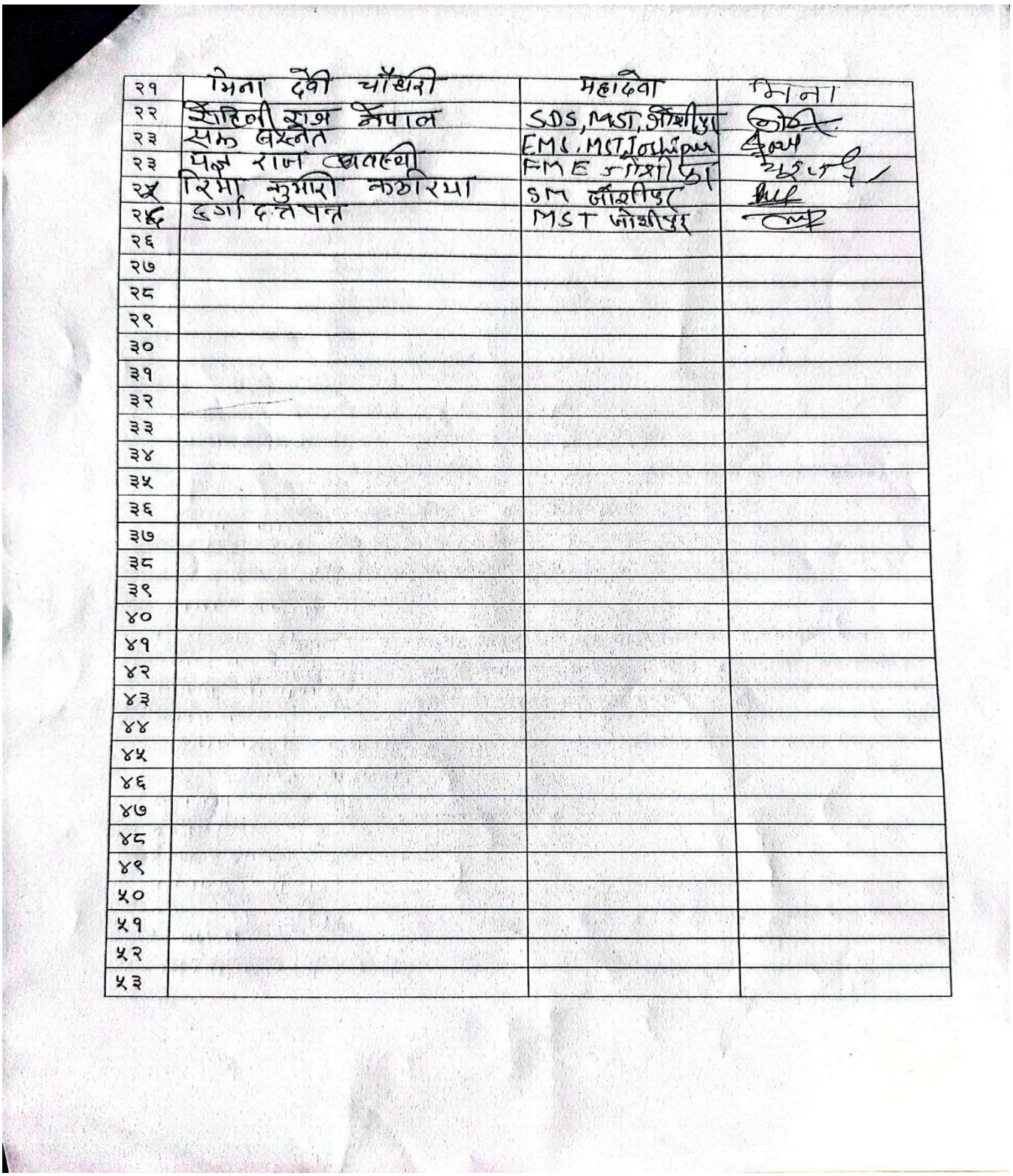
3. FGD with Women Groups

सार्वजनिक छलफल तथा अन्तरक्रिया

महिलाहरुसँग भएको छलफल

आज मिति २०८१/०८/१३ गते सोमबारको दिन यस लोखरी खानेपानी उपभोक्ता तथा सरसफाई समितिको अध्यक्ष श्री राम स्वरुप डंगौरा ज्युको अध्यक्षतामा जोशीपुर गाँउपालिका वडा नं ६ स्थित महादेवास्तिमा भएको छलफल तथा अन्तरक्रिया कार्यक्रम गरी प्रस्तवित लोखरी खानेपानी आयोजनाको स्तरोन्ती गर्ने कार्यको विस्तृत परियोजना प्रतिवेदन र वातावरणीय एवं सामाजिक व्यवस्थापन योजना (ESMP) तयारीका क्रममा प्राविधिक वातावरणीय र सामाजिक एवं आर्थिक वस्तु स्थिति माथिको मूल्याङ्कन प्रवाभ र संम्भाभ्य उपायहरुको वारेमा MST खानेपानी समिति र स्थानियहरु विच विस्तृत छलफल तथा अन्तरक्रिया गर्ने कार्य सम्पन्न गरियो छलफलका क्रममा वातावरणीय तथा सामाजिक व्यवस्थापन ढाँचा (ESMF) को परिधि भित्र रहित पसिलामा उल्लेखित वुदाँहरु माथि उठेका मुद्धहरु (Issues) र तिनका समाधानका उपायहरुको वारेमा विस्तृत छलफल गरि निणर्य गरियो।

क्र.स	नाम	ठेगाना	हस्ताक्षर
१	राम स्वरुप डंगौरा	महादेवा	
२	राम लाल डंगौरा	महादेवा	रामलाल
३	निर्मला डंगौरा	महादेवा	निर्मला
४	गिता थाक	〃	गीता
५	रेखा कुमारी डंगौरा	लोखरी	रेखा
६	मिना देवी चौधरी	〃	
७	माया देवी चौधरी	महादेवा	माया मिना देवी
८	हिरा चौधरी	〃	
९	सोलना डंगौरा	〃	
१०	जमुना चौधरी	〃	जमुना
११	सुहामता 〃	〃	
१२	श्यामलाली डंगौरा	〃	श्यामलाली
१३	फूलकुमारी चौधरी	〃	फूलकुमारी
१४	सुनिमता 〃	〃	सुनिमता
१५	दुखिया डंगौरा	〃	हुखिया
१६	हिरा देवी चौधरी	〃	हिरा देवी
१७	जानकि चौधरी	〃	जानकी
१८	प्रेम देवी डंगौरा	〃	प्रेम
१९	माता डंगौरा	〃	ममता
२०	निरमला चौधरी	〃	



२१	मिना देवी चौधरी	महादेवा	मिना
२२	झरिनी राज नेपाल	SDS, MST, जोशीपुर	
२३	सम्झ लेख्नेत	EMS, MST, Joshipur	
२३	पंकज राज चौतल्वी	FME जोशीपुर	
२५	रिमा कुमारी कठरिया	SM जोशीपुर	
२६	दुर्गा दत्तपन्त	MST जोशीपुर	
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निर्णयहरुः

१) यस जोशीपुर गाउँपालिका वडा नं ६ मा पर्ने प्रस्तावित लोखरी खानेपानी आयोजनाको स्तरोन्नति सम्बन्धमा सम्बन्धित सबै सरोकारवालाहरु जानकार रहेको र उक्त आयोजना यथाशिघ्र निर्माण र गुणस्तरीय हुनुपर्ने सम्बन्धमा विस्तृत छलफल गरियो। साथै निर्माण कार्य गर्दा अपनाइने विधि र प्रकृयाका बारेमा जानकारी दिने कार्य समेत गरियो।

२) आयोजना निर्माण गर्दा रोजगारीको पहिलो प्राथमिकता स्थानीय बासिन्दाहरुलाई दिनु पर्ने सम्वन्धमा विस्तृत छलफल गरियो।

३) हाल यस प्रस्तावित आयोजना क्षेत्र भित्र महिला हिंसा बाल श्रम लैङ्गिक विभेद र बालविवाह जस्ता घटनाहरु उल्लेख्य रुपमा घटेको देखिदैन। तथापी भविष्यमा यस्ता संवेदनशील घटनाहरु हुन नदिन र यदि कहि कतै भएमा अपनाउनुपर्ने सजगताको विषयमा जानकारी दिई छलफल गरियो।

४) यस प्रस्तावित आयोजना क्षेत्रमा घरेलु हिंसा तथा लैङ्गिक विभेद सम्बन्धि समस्या नदेखिए पनि बाहिरी कामदार र स्थानीय समुदाय बिच हुन सक्ने झैझगडा वा अवान्छित गतिविधिका सम्बन्धमा पालना गर्नुपर्ने आचार संहिताको बारेमा जानकारी दिई विस्तृत छलफल गरियो। साथै वातावरण सामाजिक व्यवस्थापन ढाँचा (ESMF) मा समेत उल्लेख गरिएका महिला हिंसा लैङ्गिक विभेद आदि विषयका वारेमा छलफल गरियो।

५) वातावरणीय एवं सामाजिक व्यवस्थापन योजना वारे यस गाउँपालिकाको कार्यालयमा सम्पर्क गरी जानकारी लिन सकिने लगायत आयोजना निर्माणका क्रममा आइपर्ने विविध वातावरणीय एवं सामाजिक समस्या र तिनका समाधानका उपायहरु माथि विस्तृत छलफल गरियो।

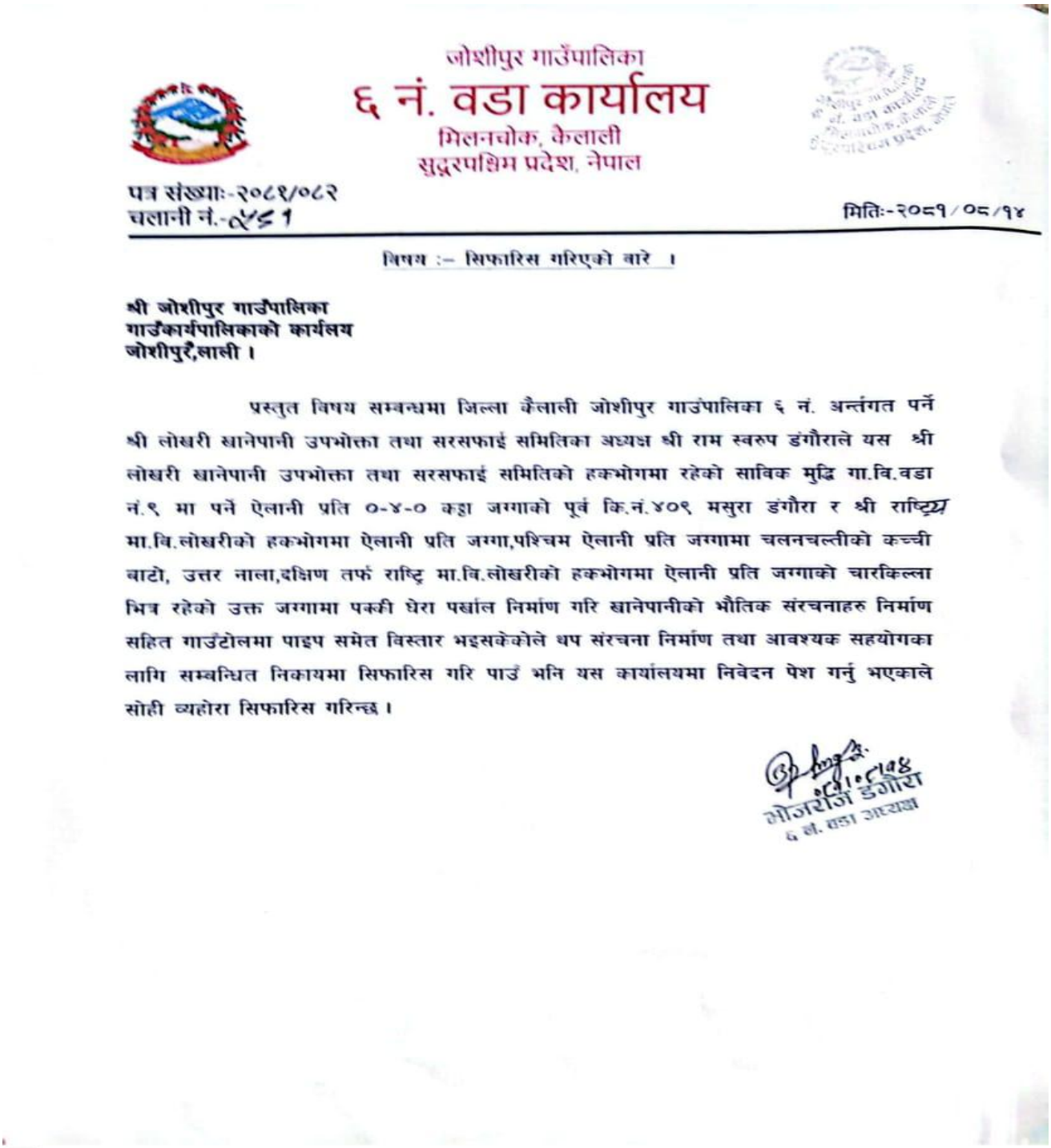
६) आयोजना निर्माणका क्रममा हुन सक्ने ध्वनी वायु प्रदुषण जस्ता समस्याका र त्यसको निराकरण सम्वन्धमा विस्तृत छलफल गरियो।

७) निर्माण व्यवसायीको क्याम्प र कामदारका लागि शिविर आयोजना क्षेत्र नजिकै वडा नं ६ को खाली स्थान उपयुक्त हुने सम्बन्धमा छलफल गरियो।

८) वातावरणीय एवं सामाजिक व्यवस्थापन योजना बारे यस गाँउपालिकाको कार्यालयमा सम्पर्क गरी जानकारी लिन सकिने लगायत निर्माणका क्रममा आइपर्ने विविध वातावरणीय एवं सामाजिक समस्या र तिनका समाधानका उपायहरु माथि विस्तृत छलफल गरियो।

Annex III: Consent letter from Joshipur RM-06

1. Land ownership certificate from Joshipur Rural Municipality Ward No-06 Office



जोशीपुर गाउँपालिका
६ नं. वडा कार्यालय
मिलनचोक, कैलाली
सुदूरपश्चिम प्रदेश, नेपाल

पत्र संख्याः-२०८१/०८२
चलानी नं.-८५९१

मितिः-२०८१/०८/१४

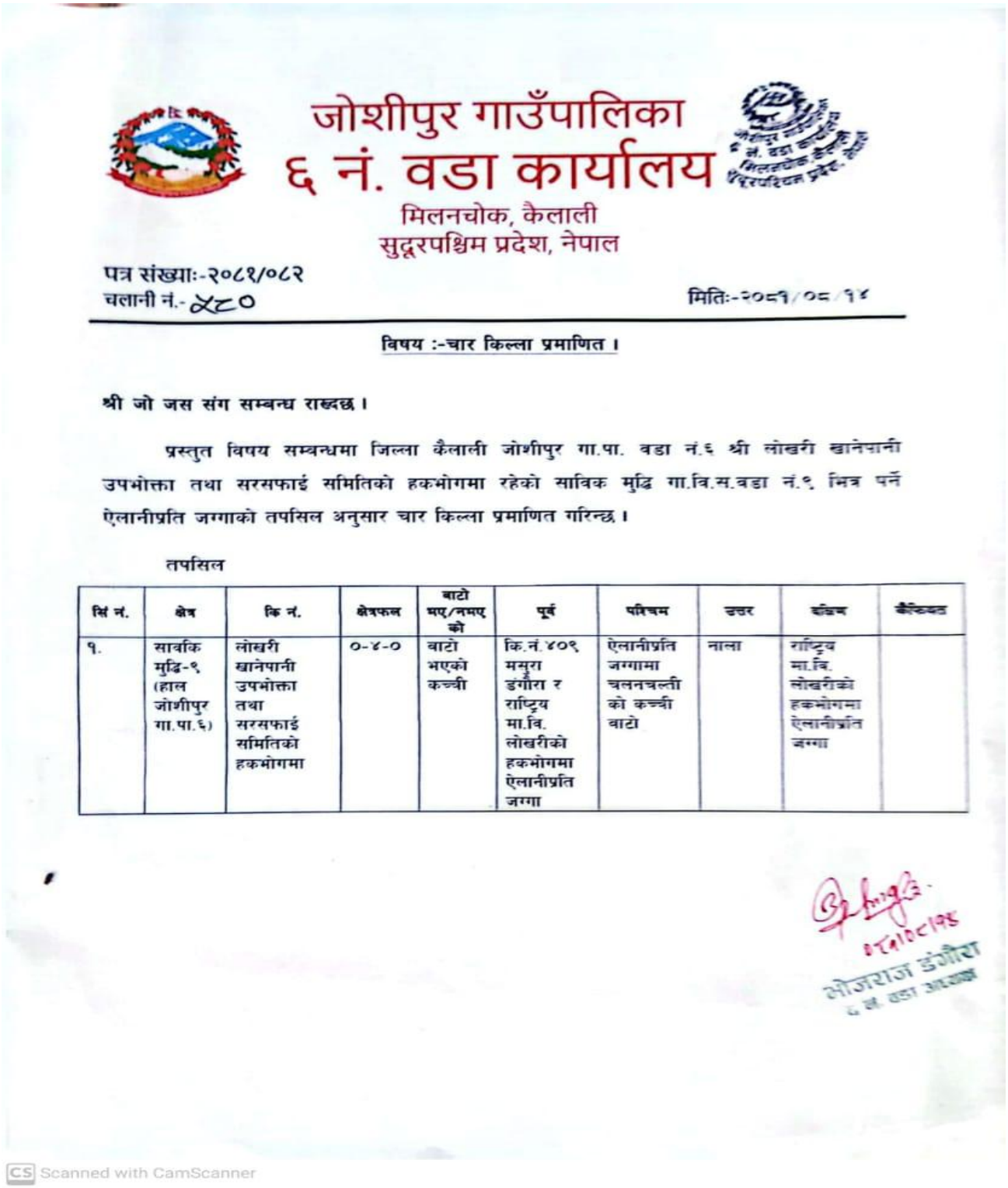
विषय :– सिफारिस गरिएको बारे ।

श्री जोशीपुर गाउँपालिका
गाउँकार्यपालिकाको कार्यलय
जोशीपुर,कैलाली ।

प्रस्तुत विषय सम्बन्धमा जिल्ला कैलाली जोशीपुर गाउँपालिका ६ नं. अन्तंगत पर्ने श्री लोखरी खानेपानी उपभोक्ता तथा सरसफाई समितिका अध्यक्ष श्री राम स्वरुप डंगौराले यस श्री लोखरी खानेपानी उपभोक्ता तथा सरसफाई समितिको हकभोगमा रहेको साबिक मुद्धि गा.वि.वडा नं.९ मा पर्ने ऐलानी प्रति ०-४-० कट्ठा जग्गाको पूर्व कि.नं.४०९ मसुरा डंगौरा र श्री राष्ट्रिय मा.वि.लोखरीको हकभोगमा ऐलानी प्रति जग्गा,पश्चिम ऐलानी प्रति जग्गामा चलनचल्तीको कच्ची बाटो, उत्तर नाला,दक्षिण तर्फ राष्ट्रि मा.वि.लोखरीको हकभोगमा ऐलानी प्रति जग्गाको चारकिल्ला भित्र रहेको उक्त जग्गामा पक्की घेरा पर्खाल निर्माण गरि खानेपानीको भौतिक संरचनाहरु निर्माण सहित गाउँटोलमा पाइप समेत विस्तार भइसकेकोले थप संरचना निर्माण तथा आवश्यक सहयोगका लागि सम्बन्धित निकायमा सिफारिस गरि पाउँ भनि यस कार्यालयमा निवेदन पेश गर्नु भएकाले सोही व्यहोरा सिफारिस गरिन्छ ।

भोजराज डंगौरा
६ नं. वडा अध्यक्ष

Annex IV: Four Forts Proved by Ward Office



जोशीपुर गाउँपालिका
६ नं. वडा कार्यालय
मिलनचोक, कैलाली
सुदूरपश्चिम प्रदेश, नेपाल

पत्र संख्याः-२०८१/०८२
चलानी नं.- ४८०

मितिः-२०८१/०८/१४

विषय :-चार किल्ला प्रमाणित ।

श्री जो जस संग सम्बन्ध राख्दछ ।

प्रस्तुत विषय सम्बन्धमा जिल्ला कैलाली जोशीपुर गा.पा. वडा नं.६ श्री लोखरी खानेपानी उपभोक्ता तथा सरसफाई समितिको हकभोगमा रहेको साविक मुढि गा.वि.स.वडा नं.९ मिल पर्ने ऐलानीप्रति जग्गाको तपसिल अनुसार चार किल्ला प्रमाणित गरिन्छ ।

तपसिल

सि नं.	क्षेत्र	कि नं.	क्षेत्रफल	बाटो भए/नभए को	पूर्व	पश्चिम	उत्तर	दक्षिण	कैफियत
१.	साबकि मुढि-९ (हाल जोशीपुर गा.पा.६)	लोखरी खानेपानी उपभोक्ता तथा सरसफाई समितिको हकभोगमा	०-४-०	बाटो भएको कच्ची	कि.नं.४०९ मसुरा डंगौरा र राष्ट्रिय मा.वि. लोखरीको हकभोगमा ऐलानीप्रति जग्गा	ऐलानीप्रति जग्गामा चलनचल्ती को कच्ची बाटो	नाला	राष्ट्रिय मा.वि. लोखरीको हकभोगमा ऐलानीप्रति जग्गा	

भोजराज डंगौरा

Annex V: Sketch of Land

Annex VI: Water Quality Test Reports

Government of Nepal
Ministry of Water Supply
Department of Water Supply and Sewerage Management
Federal Water Supply and Sewerage Management Project
Nepalgunj

WATER QUALITY TEST REPORT

Name of Client: Bhagatpur Dip Irrigation Project

Sampled By:- Himself

Date of Collection:- 2081-08-23

Source of Sample: Deep Boring

Date of Analysis:- 2081-08-23
Date of Completion:- 2081-08-26

Location : Joshipur Rural Municipality Ward no. 07 ,Kailali
GPS:-

S.No.	Category	Parameters	Observed Values	NDWQS, 2079 BS	Methods Used
1	Physical	pH	8.1	6.5 - 8.5 *	4500-H+ B. APHA, 21st EDITION
2		Temp. °C	18.6	-	2550 B. APHA, 21st EDITION
3		Turbidity (NTU)	<5	5	2130 B. APHA, 21st EDITION
4		Electrical Conductivity (µs/cm)	611	1500	2510 B. APHA, 21st EDITION
5	Chemical	Calcium Hardness (mg/L)	68	200	3500-Ca B. APHA, 21st EDITION
6		Total Hardness (mg/L as $CaCO_3$)	163	500	2340 C. APHA, 21st EDITION
7		Arsenic (mg/L)	<0.01	0.05	3114 C. APHA, 21st EDITION
8		Iron (mg/L)	0.18	0.3(3)	3111 B. APHA, 21st EDITION
9	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 & Waste Water*
** These values show lower and upper limits.*

Note: - (1)The entire test was conducted as per the National Drinking Water Quality Standard Guide Line, 2079 BS.
(2)The above results refer only to the submitted sample and test performed.
(3) This report can not be usedfor any publicity or advertisement without the written consent of this lab.
(4) Test report shall not be reproduced in full ,without written approval of the lab.

Analysed By :

Approved By:
केमिष्ट

Annex VII: Photographs

Existing structures at the LokhariWSS sub-project, OHT premises

During Public Consultation meeting at Lokhari ward no. 6

Focus Group Discussion with Women Groups at ward no .6

Consultation with Dalit people near sub-project

Annex VIII: Code of Conduct for WSS Project

कार्य सथलमा हुने यौनजन्य तथा महिला हिंसा सम्बन्धी आचार सहिता

व्यक्तिगत आचार सहिंता

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

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

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

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

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

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

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

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

८. कार्य गर्ने शिलशिलामा सम्मानजनक निर्देशनहरुको पालना गर्दछु ।(वातावरणीय र समाजिक)

९. मेरो जिम्मेवारी कुशलता र लगनशिलता पूर्वक पुरा गर्नेछु ।

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

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

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

१३. कार्य स्थलमा लैङ्गिक संवेदनशील भाषाको प्रयोग गर्दछु ।

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

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

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

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

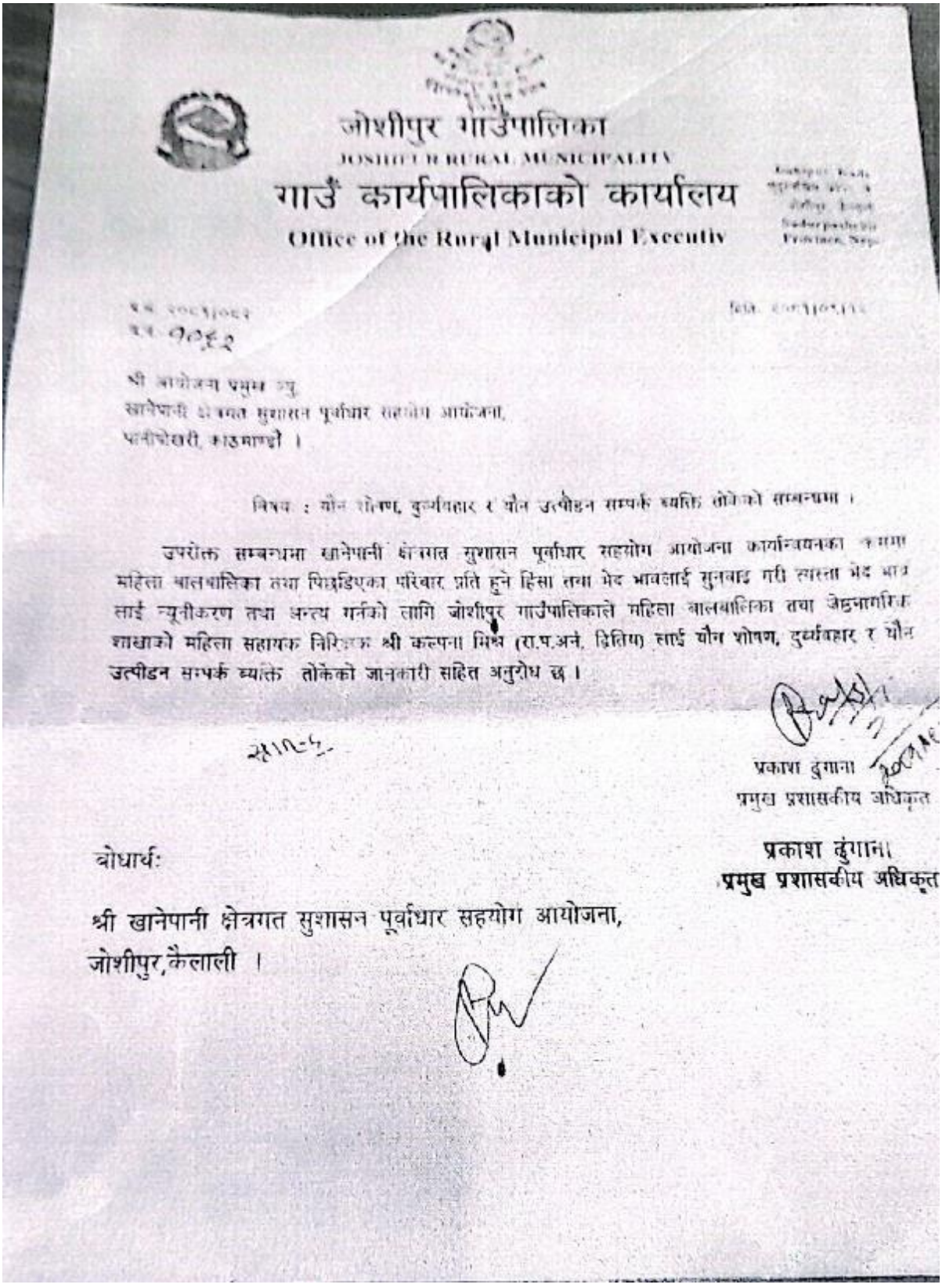
१८. कार्यस्थलमा कसैले यौनजन्य दुर्व्यवहार सम्बन्धि संकास्पद कार्य गरेमा तुरुन्त टोलि प्रमुख प्रबन्धकलाई जानकारी निवेदन दिनेछु ।

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

....

व्यवस्थापक टोली प्रमुख कर्मचारी कामदार

Annex IX: Letter from RM for SEA/SH and GBV Focal Person



जोशीपुर गाउँपालिका
JOSHIPUR RURAL MUNICIPALITY
गाउँ कार्यपालिकाको कार्यालय
Office of the Rural Municipal Executiv

श्री खानेपानी क्षेत्रगत सुशासन पूर्वाधार सहयोग आयोजना,
पनौतेश्वरी, काठमाण्डौं ।

विषय : यौन शोषण, दुर्व्यवहार र यौन उत्पीडन सम्पर्क व्यक्ति तोकेको सम्बन्धमा ।

उपरोक्त सम्बन्धमा खानेपानी क्षेत्रगत सुशासन पूर्वाधार सहयोग आयोजना कार्यान्वयनका क्रममा महिला बालबालिका तथा पिछडिएका परिवार प्रति हुने हिंसा तथा भेद भावलाई सुनवाइ गरी त्यस्ता भेद भाव हटाई न्यूनीकरण तथा अन्त्य गर्नको लागि जोशीपुर गाउँपालिकाले महिला बालबालिका तथा जेष्ठनागरिक शाखाको महिला सहायक निरिक्षक श्री कल्पना मिश्र (रा.प.अनं. द्वितिय) लाई यौन शोषण, दुर्व्यवहार र यौन उत्पीडन सम्पर्क व्यक्ति तोकेको जानकारी सहित अनुरोध छ ।

प्रकाश ढुंगाना
प्रमुख प्रशासकीय अधिकृत

बोधार्थः

श्री खानेपानी क्षेत्रगत सुशासन पूर्वाधार सहयोग आयोजना,
जोशीपुर,कैलाली ।