

**ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN**  
**KANAKASUNDARI-KHATYAD DISTRIBUTION LINE SUBPROJECT**  
**SUBSTATION (33/11 kV) AND DISTRIBUTION LINE (33 kV)**  
**BAJURA AND MUGU DISTRICT, SUDURPASHCHIM PROVINCE AND**  
**KARNALI PROVINCE**

**NEPAL ELECTRICITY AUTHORITY**  
**DISTRIBUTION AND CONSUMER**  
**SERVICE DIRECTORATE**  
**DISTRIBUTION SYSTEM UPGRADE AND**  
**EXPANSION PROJECT (DSUEP)**  
**DURBARG MARG KATHMANDU NEPAL**

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**ABBREVIATIONS**

ACSR	Aluminum Conductor Steel Reinforced
AIIB	Asian Infrastructure and Investment Bank
BES	Brief Environment Study
COVID-19	Corona Virus Disease
CDP	Community Development Program
CPA	Core Project Area
DCSD	Distribution and Consumer Services Directorate
DHM	Department of Hydrology and Meteorology
DL	Distribution Line
DSUEP	Distribution System Upgrade and Expansion Project
EHS	Environment, Health and Safety
EIA	Environmental Impact Assessment
EPA	Environment Protection Act
EPR	Environment Protection Regulation
EMF	Electromagnetic Field
ESP	Environmental and Social Policy
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESP	Environmental and Social Policy
ESSs	Environmental and Social Standards
GHG	Green House Gas
GIS	Geographic Information System
GoN	Government of Nepal
GRM	Grievance Redress Mechanism
IEE	Initial Environmental Examination
IP	Indigenous People
IUCN	International Union for Conservation of Nature
IUSGS	International Union of Geological Sciences
LPG	Liquid Petroleum Gas
MDB	Multilateral Development Bank
MoEWRI	Ministry of Energy, Water Resources and Irrigation
MHT	Main Himalayan Thrust

NEA	Nepal Electricity Authority
PPE	Personal Protective Equipment
RM	Rural Municipality
RoW	Right of Way
SPA	Surrounding Project Area
SPM	Suspended Particulate Matter
SWM	Solid Waste Management
US EPA	United States, Environment Protection Agency
USGS	United States Geological Survey
VC	Vulnerable Community

**Unit**

%	Percent/ Percentage
CO <sub>2</sub>	Carbon dioxide
dB	Decibel
g	Gram
ha	Hectare
HHs	Households
Kg	Kilogram
Km	Kilometer
kV	Kilovolt
kWh	Kilo Watt Hour
ltr	Liter
LV	Low Voltage
m	Meter
masl	Meter Above Sea Level
mm	Millimeter
MVA	Mega Volt Ampere
MW	Megawatt
NRs.	Nepalese Rupees
°C	Degree Centigrade
sq.m.	Square Meter

## EXECUTIVE SUMMARY

**Description of Project:** Nepal Electricity Authority (NEA) under Ministry of Energy, Water Resources and Irrigation is responsible for the implementation of the Distribution System Upgrade and Expansion Project (DSUEP). DSUEP will enhance the distribution system to improve reliability and quality of electric supply in the Karnali Province, Lumbini Province and Sudurpashchim Province. The proposed **Kanakasundari-Khatyad Distribution Line Subproject** is located within Budhinanda Municipality, Ward No.1, Himali Rural Municipality (RM), Ward No. 6 and 7 of Bajura District, Sudurpaschim Province and Khatyad RM, Ward No. 4, 6, 8, 9, and 11 of Mugu District, Karnali Province. The Subproject requires about 0.60 ha land for building the Ghodasaine substation. Land is government land and managed by Khatyad RM. The 33 kV distribution line of 29.154 km passes along the right of way (RoW) of the road, forest area and public land with installation of poles at the edge of the RoW of road. The proposed subproject is financed with a loan by Asian Infrastructure Investment Bank (AIIB).

### Description of Environment

**Physical Environment:** The Subproject (substation and distribution line) area lies in the higher Himalaya sequence of Subproject area lies geologically in a Nawakot Group (Chainage 0+000 to 4+500, 4+500 to 29+154) and Mid land Group (Chainage 4+500 to 5+500). The proposed Ghodasaine substation lies at Latitude 29°30'45.51"N, Longitude 81°54'10.80"E and elevation of 2,128 masl. The climate of the Subproject area is sub-tropical. The temperature at the project area varied from 4.0°C to 14.0°C with total annual rainfall being 250 mm. The air quality and noise level of the SPA was found within the range of the National Ambient Air Quality Standard and Noise Quality Standard, respectively. No water sources were recorded within the distribution line (33 kV) and nearby the substation area.

**Biological Environment:** The proposed Subproject (substation and distribution line alignment) does not lie in any protected area, although the project component intercepts a forest area and has the issues of tree loss. The surrounding environment of the Subproject area contains sparse vegetation with species common to the area. Wild animal recorded during the public consultation are Rhesus Monkey (*Macaca mulatta*), Common Leopard (*Panthera pardus*), Golden Jackel (*Canis aureus*), Himalayan Goral (*Naemorhedus goral*), Northern Red Muntjac (*Muntiacus vaginalis*), and Large-eared Pika (*Ochotona macrotis*). Altogether six species of birds were noted around the surrounding project area are House Crow (*Corvus splendens*), House Sparrow (*Passer domesticus*), Slaty-headed Parakeet (*Himalayapsitta himalayana*), Chukar Partridge (*Alectoris chukar*), and Cheer Pheasant (*Catreus wallichii*).

The proposed Kanakasundari-Khatyad 33 kV distribution line passes through the 4 different community forests and National forest (**Table 3-3**). A total of 6.48 ha of the forest land area will be occupied by RoW of proposed 33 kV distribution line and substation. There are no tree species in the core project area, the 33 kV line passes over the bare land and only few floral species of low height shrubs mainly Olive (*Olea glandulifera*) and Cactus are present. Thus no any trees need to be cleared but the land areas are under the jurisdiction of district forest office that need to be acquired by the project for the establishment of substation and the distribution line.



**Socio-Economic Environment:** The major ethnic compositions within the surrounding project area i.e., Ward No.1 of Budhinanda Municipality, Ward No. 6 and 7 of Himali Rural Municipality (RM) of Bajura District and Ward No. 4, 6, 8, 9, and 11 of Khatyad RM of Mugu District is Chhetri (53.87%), Dalit (12.63%), Brahman (10.64%) and Thakuri (7.43%) of the total population of 12,338. The implementation of the Subproject will increase the electricity beneficiaries to 3,729 HHs, 30 commercial purposes and 10 industries. Kolti, Dhulachaur and Majhchaur are the nearest business market nearby the Subproject area. The transportation facilities in this local level seem to be moderate. Tap/piped water is the main source of drinking water in the surrounding Subproject area. People of the Subproject have access to communication facilities mainly through mobile telephone services. The nearest and easily accessible health facility to the proposed Subproject is Majhchaur Sub-Health Post at a distance of 1 km from the Ghodasaine substation site. Agriculture is the main occupation of people in the Subproject area with nearly 38.3% contribution; small trade and business/enterprises and services are other occupation of people in the Subproject area.

**Potential Impacts and Mitigation Measures:** Civil works will be involved with temporary impacts on air, noise and water quality and occupational and community health and safety; particularly related to working with electricity and in the context of the COVID-19 pandemic. Long-term impacts, although insubstantial, during operation and maintenance include occupational and community health and safety risks related to the presence of electricity infrastructure. The potential environmental issues and mitigation measures identified in screening and the preparation of the ESMP report will be addressed during the compliance monitoring carried out by the safeguard team. There will be no issues of land requirements for the pole erection and for the distribution line people have suggested to install poles at the edge of farm-lands, without affecting any private structures along the distribution line. Land is government land and is owned by Khatyad RM, so there is no necessity of land acquisition and Resettlement Plan. The implementation of the proposed Subproject needs 6.48 ha of forest area with no loss of trees. The ESMP cost estimated for the Subproject is NRs 13,00,000.00 associated with mitigation measures and monitoring activities. NEA Project Implementation Unit has agreed on the estimated cost for the mitigation measures and monitoring activities.

**Environmental and Social Management Plan:** The ESMP serves as a guide to implement environmental and social mitigation measures and the responsibility of the concerned agencies during the construction and operations of the Subprojects. Monitoring and inspection of the environmental and social activities will be carried out by the Environment and Social Management Unit and the Project Supervision Consultant of PIU. ESMP will be an integral part of the contractor's Bidding document which will be updated by the contractor during the sub-project construction period.

**Institutional Arrangements:** To ensure the full compliance with the ESMP, an institutional arrangement for monitoring and reporting has been proposed. All the resources needed for the implementation of ESMP for the construction and operation phase will be provided by the PIU. Project Supervision Consultant's with Environmental and Social Safeguard Specialist will be responsible for compliance monitoring activities during the construction phase. The Environment and Social Management Unit of NEA will provide regular updates to the site offices regarding the implementation of ESMP. The contractor shall prepare an Environment,

Health, and Safety (EHS) plan approved by the PIU before field mobilization. The contractor should mobilize a safety officer at each work site during the construction period.

**Public consultation:** Public consultations have been conducted in the Subproject area. People in the Subproject area noted that electricity service is poor with frequent interruptions. People have suggested installing poles at the edge of farm-lands, and project components should not affect any houses and structures along the line. The impacts on the crops while stringing lines should be minimized. Prospective electricity consumers and people to be affected are supportive and have recommended quick implementation of the project.

**Grievance Redress Mechanism (GRM):** A three-tier Grievance Redress Mechanism (GRM) has been established to receive, evaluate, and facilitate the resolution of affected people's concerns, complaints, and grievances about the social and environmental issues at Subproject level. In each Subproject, two levels i.e., Tier-I and Tier-II of the Grievance Redress Mechanism have been established. During the ESMP study period, NEA has disseminated letters to the local level stakeholders regarding the formation of the GRM at the Subproject level.

**Conclusion:** The environmental impacts envisaged from the implementation of proposed Subproject are site-specific, short-term, temporary and reversible in nature. The Subproject will provide significant benefits to people and the economy by providing a reliable and improved electricity supply. The implementation of the proposed Subproject needs 6.48 ha of forest area with no loss of trees. The Subproject need to undertake Brief Environmental Study (BES) and will be approved from the Ministry of Energy, Water Resources and Irrigation as the Subproject intercept the forest area. This ESMP is considered sufficient to mitigate the environmental and social issues identified for the Subproject and will be updated during the Subproject construction stage.

## **1. INTRODUCTION**

### **1.1 Project Background**

The proposed Distribution System Upgrade and Expansion Project (DSUEP) will enhance the distribution system to improve the reliability and quality of electric supply in the Sudurpashchim Province, Lumbini Province and Karnali Province. The project aims improvement in voltage level and reduction in power loss which in turn will improve Nepal Electricity Authority's (NEA) financial health, improve electricity supply reliability, and reduce dependence on petroleum-fueled accessories. The government of Nepal (GoN) has envisaged DSUEP to extend the reach of 33 kV and 11 kV distribution lines "to achieve affordable electricity fulfilling the demands at the local levels for all the households by 2022". Asian Infrastructure Investment Bank (AIIB) is financing a loan to upgrade existing and build new distribution systems in Lumbini Province, Karnali Province and Sudurpashchim Province of Nepal. This ESMP is prepared for Kanakasundari-Khatyad distribution line Subproject of DSUEP.

This Subproject has three major components:

Component 1: construction, extension and augmentation of distribution lines and substations, especially 33 kV lines and 33/11 kV substations.

Component 2: construction of 11 kV lines, distribution transformers, and Low Voltage (LV) lines for new power distribution facilities.

Component 3: Capacity Building, Project Implementation Support, and Technical Assistance.

### **1.2 Scope of Study**

This study ensures that the project meets the requirements of Nepal Government's Environmental Regulations, and Environmental and Social Policy (ESP) & Environmental and Social Standards (ESSs) of AIIB. This report provides the measures for environmental and social management, monitoring, and reporting of the project.

### **1.3 Objective of ESMP**

The Environment and Social Management Plan aims to sets out the measures required to maximize the benefits of the project; and to avoid, minimize and mitigate any adverse environmental and social impacts caused by the project. The objectives of this ESMP are to:

- Describe the existing natural and socio-economical resources in and surrounding Subproject area;
- Based on existing environmental conditions, identify and assess potential significant impacts during project preconstruction, construction, and operation & maintenance stages;
- Identify and recommend mitigation measures to minimize any potential impacts caused by Subproject activities;
- Identify the local concerns on environmental and social issues and address them;

- Develop environmental management plan and monitoring plan including cost;
- Recommend institutional arrangement, including capacity building to ensure proper environmental and social safeguards implementation during construction and operation phases.

#### 1.4 Legal Provision for the ESMP

According to the E & S safeguard Screening report, safeguard risks/issues identified for this Subproject fall under Category III (ESMF), which triggers the preparation of ESMP to execute the Subproject. This Subproject has minimal or no adverse environmental and social impact; does not physically displace any family; and does not result in economic displacement of more than 10% of productive assets for any family.

Pertaining to Section 3 (1), the Environment Protection Act (EPA), 2019 describes completing Environmental Studies as per Schedule 1 or 2, or 3 under Environment Protection Regulation (EPR) 2020 (First Amendment in 2021/05/24 on Nepal Gazette), detailed environmental studies Brief Environmental Study (BES), or Initial Environmental Examination (IEE), or Environmental Impact Assessment (EIA) is required. For this Subproject, pertaining to Section 3(1), EPA (2019) describes to complete Environmental Studies as per Schedule 1(Cha) Energy, Water Resources and Irrigation Sector (1) under EPR (2020) state “use of forest area for the electricity distribution line project up to 66 kV”. The proposed Subproject will intercept 6.48 ha area of Community Forest (CF) and National Forest land area for the purpose of 33 kV distribution line extension and substation construction. Thus, as per EPR (2020), a BES is mandatory for the proposed Subproject.

#### 1.5 Methodology for the ESMP

The methodology that was followed while conducting the ESMP study is as follows:

- i. Literature Review: Published literature of government institutions and international organizations were reviewed to collect information on project surroundings. The Municipality/Rural Municipality and its Ward profiles are used to collect the socio-economic baseline information of the Subproject. National policies, legislative frameworks and Multilateral Development Bank (MDB) policies were reviewed to understand the priorities and any legally binding requirements were studied that should be complied with while implementing the project. The Legislative provisions relevant to the project are listed in **Annex 4**.
- ii. Field Survey and Investigation: Field surveys were conducted to generate information on the physical, biological and socio-economic environment of the project area. The physical environment; air quality data was monitored by Temtop Airing-1000 PM Detector, noise level by UNI-T UT 353 Mini Sound Meter (dB) and water quality by EXTECH ExStik II DO600. Field observation of the core project area and the surrounding vicinity of the project footprint area was applicable for the biological assessment. A total of 4 different circular quadrates of radius 12.5 m were used and trees were recorded to know the species diversity nearby the Subproject Footprint area. The proposed Subproject will intercept the area of 6.48 ha community forest and national forest but there will be no tree cutting issues. The Subproject need to

undertake Brief Environmental Study (BES) and will be approved from the Ministry of Energy, Water Resources and Irrigation as the Subproject intercept the forest area.

- iii. Data Analysis: All potential Subproject impacts on physical, biological, socio-economic and cultural resources were integrated and assessed using best practice of Multilateral Development Banks, and also complied with national requirements. The Geographic Information System and SW Maps were used for the field assessment and analysis of the CPA and SPS data and presentation of the maps in the ESMP report. The project foot print Ward and Municipality/Rural municipality are considered for the collection of socio-economic and baseline information.
- iv. Impact Evaluation: The significance of impacts was evaluated on the basis of reversibility, nature, magnitude, extent and duration of the impact. Identification of magnitude, extent and duration is as provided in the National EIA Guidelines, 1993 of Nepal. While evaluating the impacts and prescribing mitigation, maximum efforts were made to get expert opinion and input from the DSUEP's technical and safeguard consultant team.
- v. Public Consultation: As per the Government of Nepal EPA and the AIB Environmental and Social Policy (ESP), pre-notifications with the subject of consultation, venue, and time were given at Subproject foot-print area, local level and affected Ward office in presence of the concerned local stakeholders. Consultations were conducted in the Subproject area, at substations and the distribution line system settlement areas with local stakeholders.
- vi. Report Format: The ESMP report is prepared as per the Environmental and Social Policy (ESP) of the AIB, which contains an executive summary, a main report, and annexes as appropriate, including one on the nature and findings of consultations undertaken. All the comments and suggestions from the field consultation are mentioned in the ESMP report.

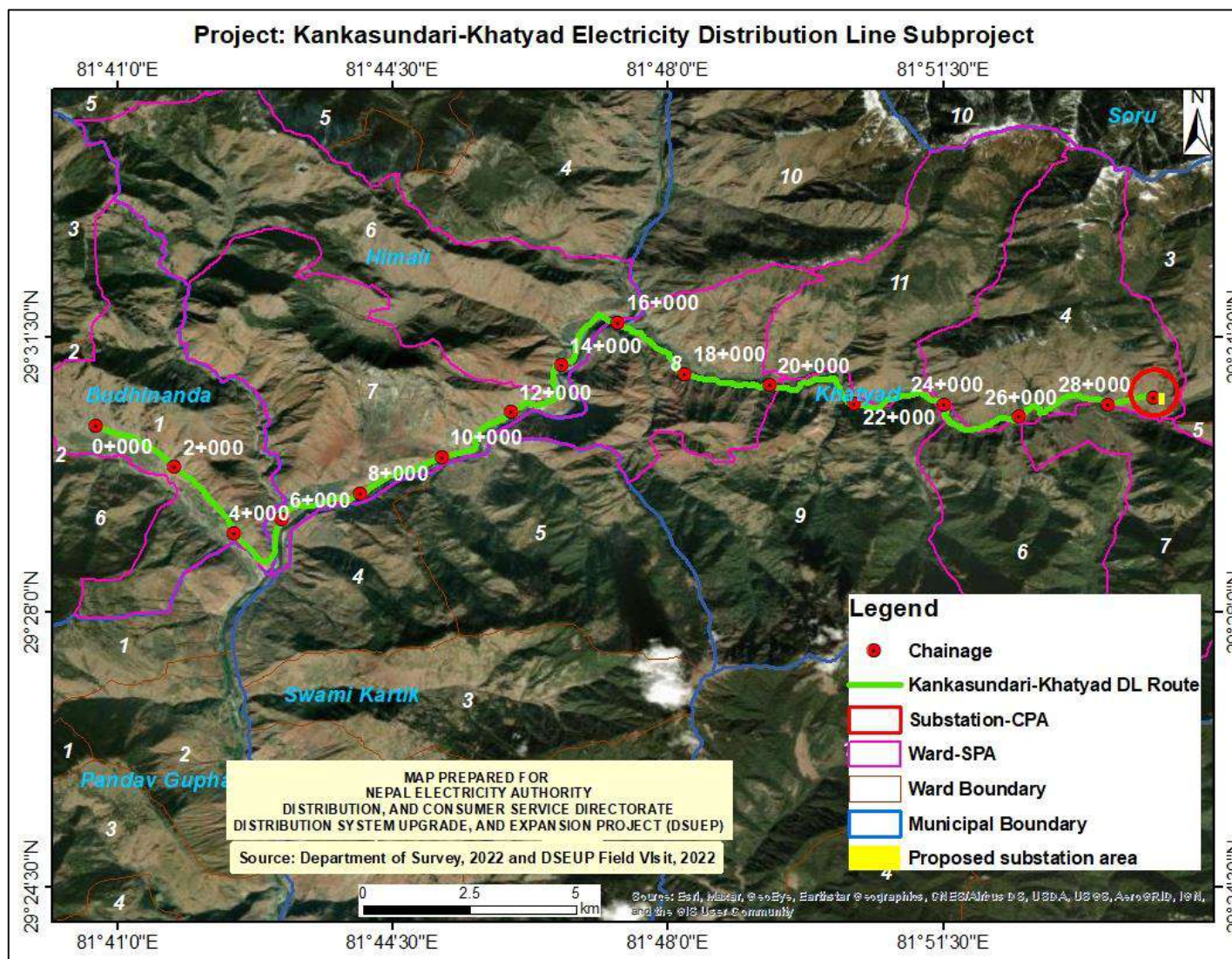
## 1.6 Classification of Impact Area

The National EIA Guidelines (GoN, 2050) have mentioned on the "Core Project Area", and "Surrounding Project Area" based on the proximity and magnitude of the impacts due to the construction and operation of the proposed project.

**Core Project Area (CPA)** refers to the temporary and permanent area for the proposed project construction and associated activities. It is the area where direct impacts can be seen. For the **Kanakasundari-Khatyad Distribution Line Subproject**, the proposed substation area with 0.60 ha and the 33 kV distribution line with 29.154 km length is considered as CPA. The Subproject components are located within the Ward No.1 of Budhinanda Municipality, Ward No. 6 and 7 of Himali Rural Municipality (RM) of Bajura District, Sudurpaschim Province and Ward No. 4, 6, 8, 9, and 11 of Khatyad RM of Mugu District, Karnali Province. The major settlements in the Subproject area are Rawatbada, Pipaldali, Matela, Badhu, Boldhik, Aam, Ratapani and Majhchaur. The distribution line stringing route passes along the road alignment (5+000 to 9+400, 14+000 to 15+000, 15+750 to 24+700, and 25+100 to 29+000), forest area (0+000 to 5+000, 9+400 to 14+000,

24+700 to 25+100, and 29+000 to 29+154), and barren land (government land) (15+000 to 15+500).

**Surrounding Project Area (SPA)** is the immediate vicinity of the footprint location of the proposed Subproject site. SPA is the moderate and indirect impact area. For this Subproject the 33 kV distribution line will be located within the Ward No.1 of Budhinanda Municipality, Ward No. 6 and 7 of Himali Rural Municipality (RM) and Ward No. 4, 6, 8, 9, and 11 of Khatyad RM and the adjoining Ward; Ward No. 7 of Khatyad RM being considered as SPA. The SPA will have impact on the beneficiary's area of 11 kV lines and Low Tension (LT) lines service. The impact area showing the CPA and SPA area is presented in the google map **Figure 1-1**.



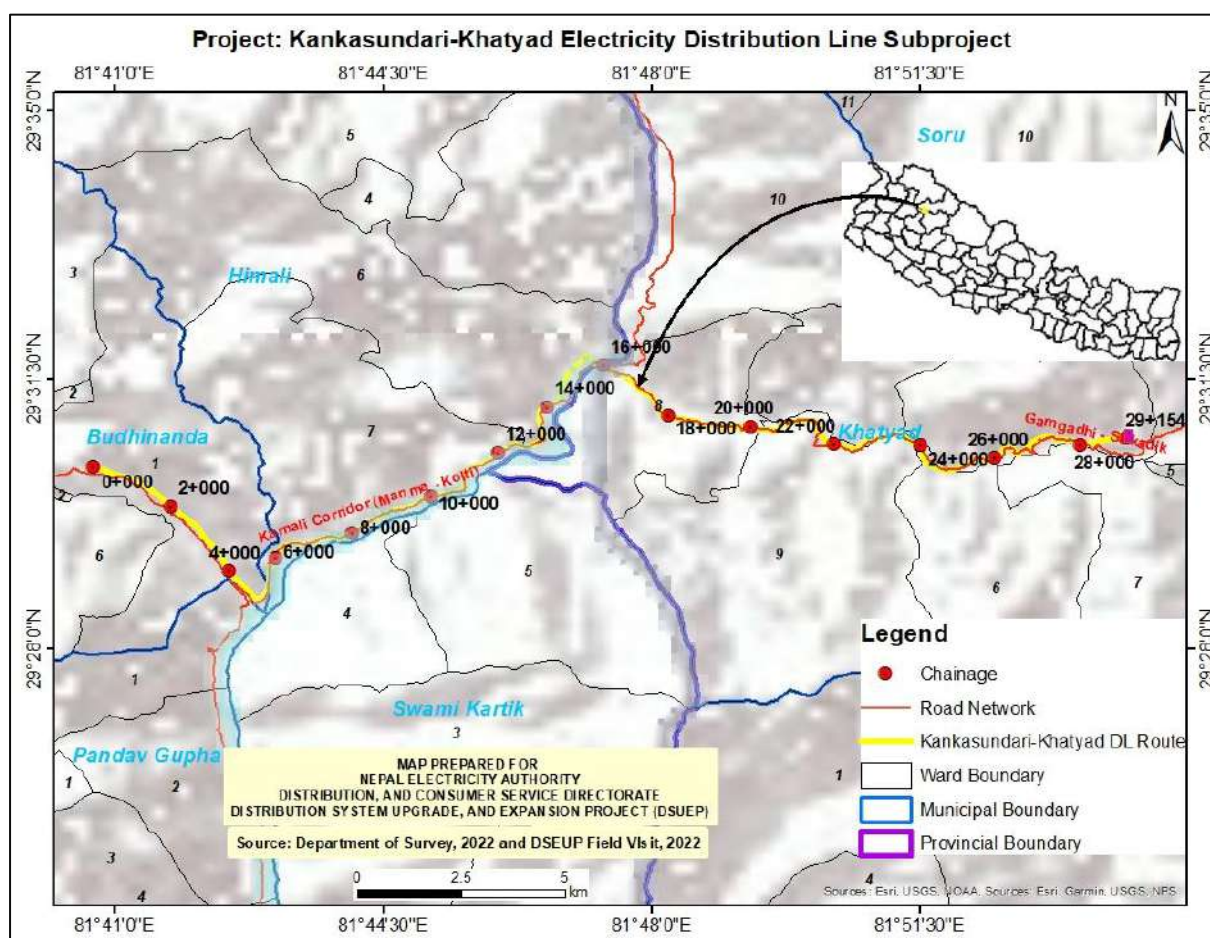
**Figure 1-1: Core Project Area (CPA) and the Surrounding Project Area (SPA) of the Kankasundari-Khatyad Subproject**



## 2. DESCRIPTION OF THE SUBPROJECT

### 2.1 Subproject Location and Accessibility

The proposed **Kanakasundari-Khatyad Distribution Line Subproject** is located within Ward No.1 of Budhinanda Municipality, Ward No. 6 and 7 of Himali Rural Municipality (RM) of Bajura District, Sudurpaschim Province and Ward No. 4, 6, 8, 9, and 11 of Khatyad RM of Mugu District, Karnali Province. The tapping point of 33 kV line lies in Mastamandu, Budhinanda-1, Bajura. The proposed distribution line (33 kV) is 29.154 km in length and run by the edge of RoW of road, forest area and barren land. There is the access to the road within the proposed Subproject Ward area. The Subproject location and the accessibility are presented in the map below **Figure 2-1**. The main features of the Subproject are presented in **Table 2-1**.



**Figure 2-1: Location and Accessibility Map of Kanakasundari-Khatyad Subproject<sup>1</sup>**

<sup>1</sup> Source: Department of Survey, 1995 and Field Study 2022



**Table 2-1:** Technical Description of the proposed Subproject

Proponent	Nepal Electricity Authority
Project	Environmental and Social Studies of Distribution System Upgrade and Expansion Project (DSUEP)
Sub Project	Kanakasundari-Khatyad distribution line and substation
Funding Agency	AIIB
Project Location	Budhinanda Municipality and Himali RM of Bajura District in Sudurpaschim Province and Khatyad RM of Mugu District in Karnali Province
<b>Distribution Line</b>	
33 kV Line Starting Point	Line Bay Extension at Mastamandu, Budhinanda Municipality-1, Bajura Co-ordinate: Lat 29°30'20.67"N, Long 81°40'43.86"E
33 kV Line End Point	Ghodasaine Substation (Proposed) at Khatyad-4, Mugu Co-ordinate: Lat 29°30'45.51"N, Long 81°54'10.80"E
Types of Land	Government
System Voltage	33 kV
Max, Min System Voltage	36, 30 kV
Climatic Condition	Wind Speed: As per IS 802-1-1 Maximum Ambient Temperature: 4 °C Altitude (Min, Max): 1103, 2128 amsl
Length of Line	29.154 km/729 poles
Right of way	6 m
Number of Circuit	1
Conductor	ACSR Dog
Line Capacity/Thermal Limit	13.4 MW (Dog) at 0.9 power factor
Type of Poles	Steel Tubular Pole, 13m
Pole Configurations	Single Pole Structures, H-Pole Structures, 4-Pole Structures etc. (With and without Stay Sets)
Diameter of a Single Pole	0.22m (As per IS 2713-3)
Planting Depth of Pole	2.2 m
Insulators	Porcelain Disc and Pin Insulator
<b>Substation</b>	
Location	Ghodasaine Substation (Proposed) at Khatyad-4, Mugu Co-ordinate: Lat 29°30'45.51"N, Long 81°54'10.80"E Elevation: 2,128 amsl
Types of Land	Government, Private
Voltage Level	33/11 kV
Substation Capacity	1 MVA
No./ Capacity of Transformer	1 no., 1 MVA
Type of Transformer	3 Phase, ONAN/ONAF, Mineral Oil
Type of Substation	AIS (33 kV) and Indoor (11 kV)
No. of 33 kV Line Bays	1
No. of 33 kV Transformer Bays	1
Number of 11kV Feeders	2
Substation Area	0.60 ha (Government)

## 2.2 Subproject Components

The major components of the Subproject are the 33/11 kV substation and 33 kV distribution line (DL). The 33 kV DL is tapped from an existing 33 kV network line and acts as a source feeding to the proposed 33/11 kV substation. 11 kV distribution feeders emerge from the substation, eventually supplying the electricity to the consumers. The structures of the Subproject are briefly described below.

### 2.2.1 33 kV Distribution Line (DL)

The 33 kV DL serves as the pathway for feeding electricity to the proposed substation. Aluminum Conductor Steel Reinforced (ACSR) type conductors are strung on Steel Tubular Pole from the starting point of the line. In general, the 33 kV lines comprises of the Steel Tubular Poles, Insulators, Conductors and Supporting Stays.

**Steel Tubular Poles:** Steel tubular poles will be installed in this Subproject. 11 m and 13 m long poles shall be used depending upon the location of the poles and the number of circuits used in the line. The poles to be erected will be supported by stays wherever necessary. Insulators will be installed at cross arms to support the conductor from the poles. The length of the proposed 33 kV of distribution line is 29.154 km and the total numbers of steel tubular poles to be erected are estimated as 729.

**Insulators:** The insulators provide insulation to the poles from the high voltage in the conductors. Pin-type insulators will be employed for suspension poles whereas disc types will be employed for tension poles. Porcelain-type insulators will be used owing to their dielectric strength, better compressive strength, higher resistance to degradation, suitability for extreme climate, and environment friendly characteristics over its counterparts.

**Conductor:** ACSR Conductor – Aluminum Conductors Steel Reinforced, conductors with stranded layers of aluminum and steel will be used for 33 kV lines. Aluminum strands carry the current whereas the steel in between provides the mechanical strength for the conductor. Typically, 100 sq. mm conductors are used in 33 kV line for this Subproject which is also known as ACSR DOG conductor.

**Stay/Guy Sets:** Stay Wires are used to support or provide the balancing tension to the poles. These are made up of steel materials and can be used in multiples for a single pole, depending upon the requirements.

### 2.2.2 Substation

The proposed substation 33/11 kV is of capacity 1 MVA. The substation plays the role of lowering the 33 kV voltage level to 11 kV, which will then be strung as a distribution feeder to supply the consumers. The major component of the substation is the power transformer, which is supported by the switchgear components and Civil Structures. The facility and components sample pictures are shown in **Annex 3**.

**Transformers:** Transformer is the major component of the distribution substation. It transforms power from higher voltage to lower voltage for distribution purpose. Power

Transformers are used for the 33/11 kV substations. These transformers are mineral oil based with ONAN/ONAF (Oil Natural Air Natural/Oil Natural Air Forced) cooling mechanisms. In existing practice, the transformers used for 33/11 kV substations in Nepal are typical of 1 MVA, 3 MVA, 8 MVA and 16 MVA depending upon the load supplied by the substation. This Subproject comprises of power transformer of 1 MVA ONAF type.

**Electrical Switchgear:** Electrical Equipment comprising of Circuit Breaker, Earth Switch, Current Transformer, Potential Transformers, etc. installed in the substation is called Electric Switchgear. They facilitate the objective of power conversion.

**Civil Structures:** A control building is essential for the operation of the substation. It houses the operating station, along with battery systems. Guard House and Staff Quarter are other essential buildings for the smooth operation of the substation.

**Switchyard, Boundary, Roads, Drainage and Essentials:** The outdoor civil structure in the proposed substation includes the boundary wall, main entrance gates and Switchyard. The power transformer and components of the power system are laid in the switchyard based on prudent engineering practice. Steel structures are used to support the components as per component-wise requirements. Roads are paved within the boundary as essential for the transport of power transformers and other components. The substation location also serves as a site store for the storage of distribution system components.

### 2.2.3 11 kV Lines and LT Lines

11 kV lines and LT lines take the access of electricity to the consumer households. It is why the construction of those lines is always encouraged by the local people. The line route, thus the installation of poles and lines, is envisaged to go through the edge of local roads. If any line route passes through any private lands, permission from the corresponding land owner will be taken before the construction of those lines.

The detailed line route survey for 11 kV and LT lines has not been done yet. A separate screening will be prepared for 11kV lines. The scope of detailed survey is in the scope of the construction Contractor. The construction Contractor will conduct Pre-Construction Survey (PCS) to finalize the line route of 11 kV lines and LT lines for the construction. PCS will prepare the detailed line route of those lines and submit it to PIU for approval. After the detailed line route is submitted by the Contractor and approved by PIU, the E&S team of the Project Supervision Consultant (PSC) will conduct an E&S study and submit the findings that

- Do the lines pose any adverse Environmental or Social issues?
- If there are any Environmental or Social issues, how can they be resolved? If the lines do not pose any adverse Environmental or Social issues, the lines will be cleared by PIU after seeking concurrence from AIIB.
- If the solution measures are not implementable in the field, PCS will suggest any other way to divert or reroute the lines. If yes, PCS will propose an alternative line route. The lines will be cleared by PIU after seeking concurrence from AIIB, given that the lines do not pose any adverse Environmental or Social issues.

## 2.3 Major Construction Activities in the Subproject

Activities in the Subproject area can be sub-divided into three categories viz, Pre-Construction Phase, Construction Phase and Operation Phase. The proposed Kanakasundari-Khatyad Line Subproject intercept forest area of 6.48 ha and no trees species have to cleared in the Right of Way of 33 kV lines and substation area for the construction work.

- I. **Preconstruction phase:** The activities to be carried out before the construction phase are:
  - Demarcation of land area for the proposed substation
  - Receive public opinion
  - Make clearance of the substation land area permanently
  - Distribution line route selection
- II. **Construction phase:** The activities to be carried out during the construction phase are:
  - Assign the land area for the temporary storage of construction materials
  - Transportation of construction materials
  - Leveling of land area for the proposed substation
  - Construction of substation structures
  - Pole erection work for 33 kV, 11 kV and low-tension distribution lines
  - Stringing of 33 kV, 11 kV and low-tension distribution line
- III. **Operation phase:** The activities to be carried out during the operation phase are:
  - Maintenance of the substation and 33 kV distribution line route

## 2.4 Energy to be used

During the construction period, diesel fuel will be used to power construction equipment and transport vehicles, which emit air pollutants and greenhouse gases in insignificant quantities. Use of firewood shall be restricted in the labor camp, whereas the workers shall be provided LPG for cooking.

## 2.5 Land Required

The Kanakasundari-Khatyad Subproject will require about 0.60 ha of land for building the proposed Ghodasaine substation. The land is government land. The 33 kV distribution line of 29.154 km passes along the edge of RoW of road, forest area and barren land. Poles shall be installed at the edge of RoW of road, which will not affect the usability and valuation of the lands.

## 2.6 Material Requirement and Sources

A 33/11 kV substation, 33 kV, 11 kV and low-tension distribution lines will be constructed for this Subproject. Minimal excavation at the pole locations will be done to erect steel tubular poles of 11 m and 13 m. The depth of burial for 11 m (approximately 256 kg) and 13 m (approximately 343 kg) poles are 1.8 m and 2.17 m respectively. The construction works for the substation will not produce a significant amount of spoils and thus it will not require a

spoil-dumping site. Similarly, excavation works carried out for digging pit holes for poles produces insignificant spoils which do not require the management of earthworks.

Civil construction works will involve the excavation for the foundation of substation, steel reinforcement, cement, coarse aggregates, and fine aggregates (sand). Materials will be procured from legally operating local markets. Following estimated volume of construction materials are required for the proposed 33 kV distribution line and the substation.

**Table 2-2:** Approximate Quantity of Material for 33 kV line

SN	Particular	Unit	Requirement
1	Amount of Steel	Ton/Km	5800
2	M15 concrete for Pole base	Cum/Km	12.5

Source: Design Report, DSUEP

**Table 2-3:** Approximate Quantity of Material for 33/11 kV Substation

SN	Particular	Unit	Support Structures, Road, Drainage	Control Building	Staff Quarter	Office Building	Guard House
1	M15 Concrete	Cum	100	25	224	120	5
2	M25 Concrete	Cum	300	170	125	75	27
3	Reinforcement bar	Ton	7	27	20	12	4

Source: Design Report, DSUEP

## 2.7 Major Equipment and Power Requirements

Major types of equipment used during the Project implementation are:

One Excavator, One Roller, One Drilling Machine, One Crane, one Grid Supply of 100 kVA Distribution Transformer, and two 50 kVA capacity diesel generators.

## 2.8 Workforce Requirement

Local people in the surrounding Subproject area will be encouraged for the employment. Based on the skills (skilled, semi-skilled and unskilled labor), local people will be used for the construction in such a way that both males and females will get an equal opportunities during construction. The number of human resources required depends upon the complexity of the project as well as the geographical location of the project. In case of construction of 33 kV lines and 33/11 kV substations, the workforce typically varies from terai to hilly to the mountain region. The expected number of manpower employed is enlisted hereunder.

**Table 2-4:** Human Resource Required for construction of 33 kV line and substation in a day of Construction

SN	Human Resource/Day	For Distribution Line	For Substation
1	Engineer (No.)	1	2
2	Supervisor (No.)	2	4
3	Foreman (No.)	3	5
4	Skilled (Lineman/Electrician) (No.)	8	10
5	Helper (No.)	5	15
6	Labour (No.)	20	30

Source: Design Report, DSUEP

## 2.9 Construction and Implementation Schedule

Implementation of the proposed Subproject comprises the construction of a new 33/11 kV substation, 33 kV lines, 11 kV lines, low tension lines, and installation of distribution transformers. It includes the construction and installation of components as mentioned in subsection 2.2. The estimated completion period is 24 Months.

**Table 2-5:** Construction Schedule of Project Implementation

SN	Activities/ Months	Months (After the completion of Detailed Survey Study)					
		1-3	4-6	7-10	11-15	16-20	20-24
1.	Invitation for tender, evaluation, and award						
2.	Implementation of Environmental and Social Safeguards						
3.	Erection of Poles						
4.	Stringing of conductor						
5.	Construction of substation						
6.	Charging and Testing						

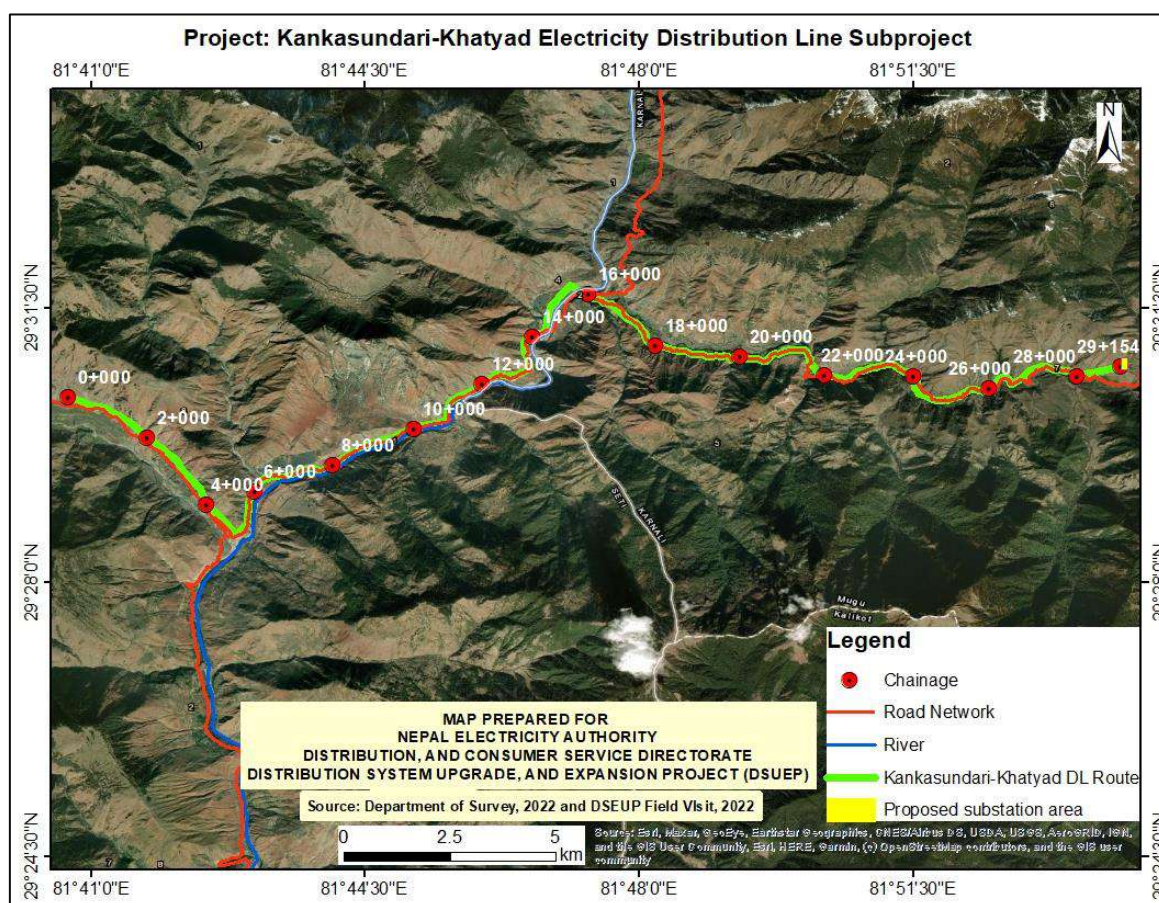
Source: Design Report, DSUEP

### 3. DESCRIPTION OF THE ENVIRONMENT

#### 3.1 Physical Environment

##### 3.1.1 Topography and Land Use

The Subproject area lies in Ward No.1 of Budhinanda Municipality, Ward No. 6 and 7 of Himali Rural Municipality (RM) of Bajura District, Sudurpaschim Province and Ward No. 4, 6, 8, 9, and 11 of Khatyad RM of Mugu District, Karnali Province. The proposed distribution line (33 kV) of 29.154 km passes along edge of RoW of road, forest area and barren land. The tapping point is situated at Latitude 29°30'20.67"N, Longitude 81°40'43.86"E, with an elevation of 1,390 masl (**Figure 3-1**). The proposed project area is situated in Mountain region and at the Midland zone of the Higher Himalayan, which passes through gentle–moderate, and moderate-moderate steep slope. The topography of the area is banks of Karnali River and Khatyad Khola with steep slope and few rockier in nature.



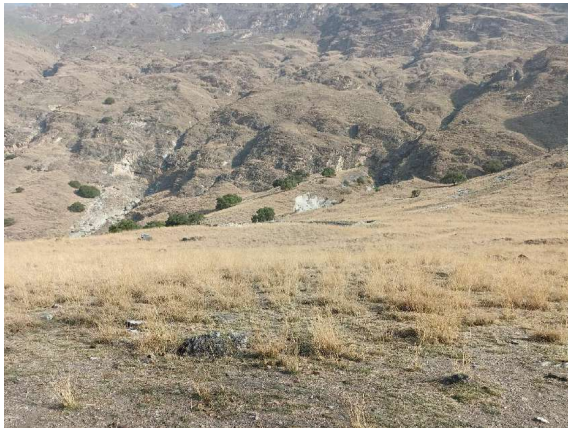
**Figure 3-1:** Location map and Land use details of the Subproject<sup>2</sup>

The proposed Ghodasaine substation lies at Latitude 29°30'45.51"N, Longitude 81°54'10.80"E and elevation of 2,128 masl. The proposed Ghodasaine substation boundary lies within a 0.60 ha area. None of the private and public entities will be affected due to the implementation of the proposed Subproject, as it will be installed within government land

<sup>2</sup> Source: Topographic Map, Department of Survey, 1995 and Field Study 2022



(barren land). The land use map details with the components of the Subproject are presented in **Annex 2**.



**Figure 3-2:** Tapping Point at Mastamandu, Budhinanda-1, Bajura



**Figure 3-3:** Proposed area for Substation at Ghodasaine, Khatyad Ga.Pa.-04

### 3.1.2 Geology

The proposed Subproject area lies geologically in a Nawakot Group (Chainage 0+000 to 4+500, 4+500 to 29+154) and Mid Land Group (Chainage 4+500 to 5+500). The rocks exposed in the Subproject site of Nawakot Group mainly consists of shallow marine sediments; lower part dominantly clastic (phyllites, sandstones, quartzites & calcareous sandstones). Stromatolitic limestones & black slates occur in the upper part. Basic sills & dykes present. Similarly, the rocks exposed in the Subproject site of the Mid Land Group with Dailekh Sub Group of a Ranimatta Formation mainly consists of grey greenish grey gritty phyllites grilstones with conglomerates & white massive quartzites in the upper parts. Whereas, Himal Group of Pre-Cambrian consists of garnet, biotite, gneisses, kyanite, garnetiferous, mica, schists, augen, quartzites & thin bands of marbles. No major geological hazard has been identified associated with the proposed Subproject.



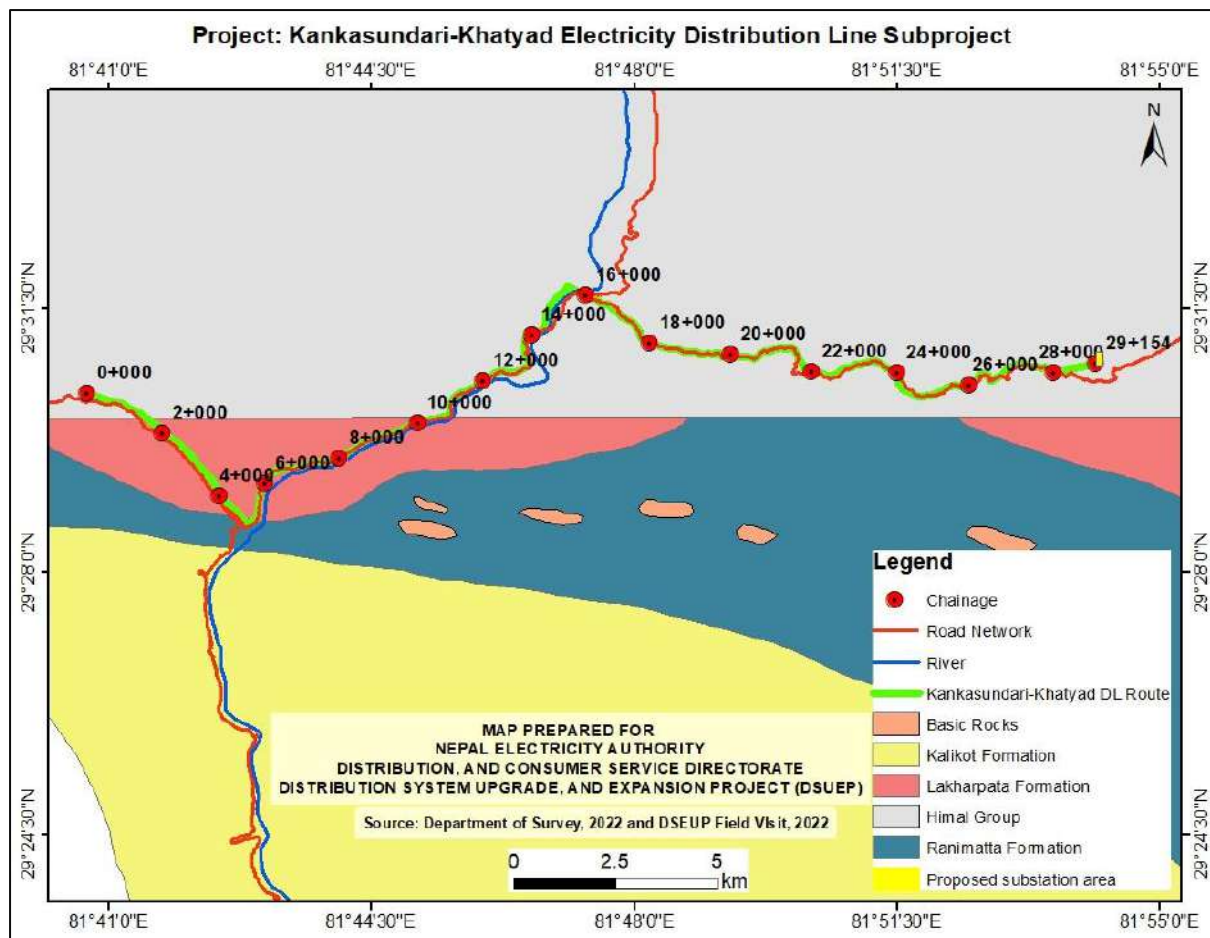


Figure 3-4: Geological Map of proposed Subproject Area<sup>3</sup>

### 3.1.3 Seismology

The entire country of Nepal is in a seismically active zone caused by the subduction of Indian tectonic plate under the Tibetan Plate. According to the National Seismological Center of Nepal several big earthquakes have been felt in Nepal, the earthquakes of magnitude 6 to 7 are mostly confined to the Main Himalayan Thrust (MHT) between the foot hills and the Higher Himalaya. Moreover, earthquake generation is confined to the crustal depth of 20 km. However, shallow earthquakes at depths down to 6 km are generated as a result of strike-slip faults. Therefore, the substations and distribution lines of this Subproject will be designed and operated per seismic design requirements and best engineering practice. The seismic activity in Nepal between 1964 and 2019 as in the IUSGS portal is shown in Figure 3-5.

<sup>3</sup> Source: Department of Mines and Geology (DMG), 2020

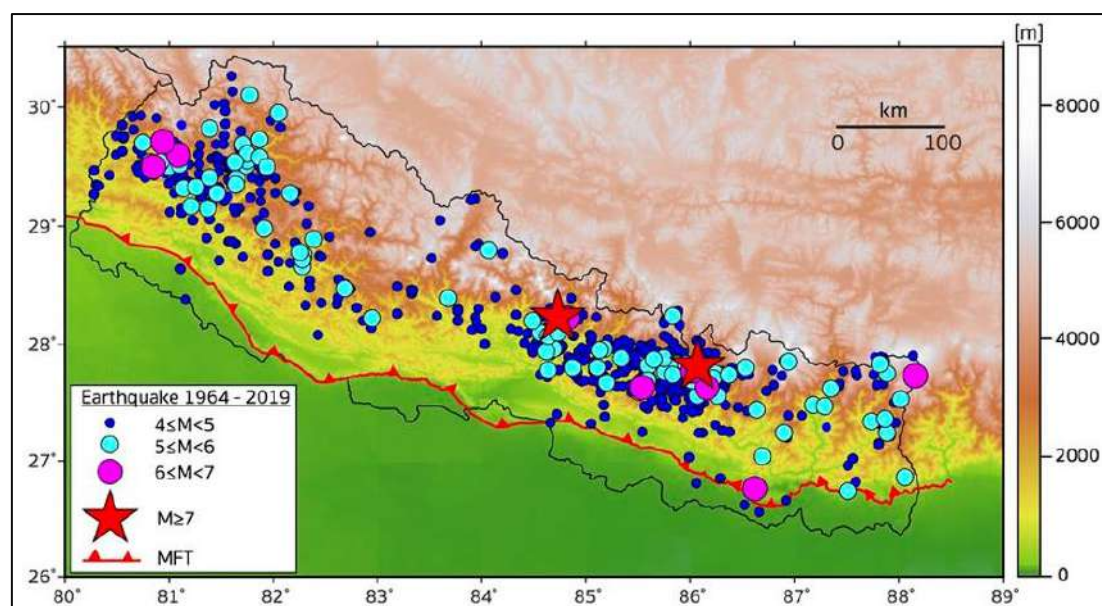


Figure 3-5: Seismicity map of Nepal from 1964 -2019<sup>4</sup>

### 3.1.4 Climate

The climate of the Subproject area is sub-tropical. According to DHM 2022, the climate of the Subproject area is sub-tropical. The temperature at the project area varied from 4.0°C to 14.0°C with total annual rainfall being 250 mm. Almost 80% of rainfall occurs during monsoons (June to September).

### 3.1.5 Air, Noise, Water Quality and Polluting Sources

The major air polluting sources recorded are only vehicular emission and dust problem from plying of vehicles and high wind velocity. Noise-polluting sources noted at the time of field study are similar to the air polluting sources. Unnecessary honking along the access road of the site is the source of noise generation. The following table shows the real-time quality of air and noise during a field study.

Table 3-1: Ambient Air and Noise Quality within the Proposed Subproject Site

SN	Location/ Chainage	Air Quality <sup>5</sup> - Temtop Airing-1000 PM Detector ( $\mu\text{g}/\text{m}^3$ )					Noise Level -UNI-T UT 353 Mini Sound Meter (dB)		
		PM <sub>2.5</sub>	Level	PM <sub>10</sub>	Level	Average Time of Measurement	Measured	Ref. <sup>6</sup>	Area
1.	Tapping Point (Mastamandu)	17.3	100	15.3	200	1-hour	27	50	Settlement area
2.	Substation (Ghodhasaine)	19.4		14.8			29		

Source: Field Visit, 2022

<sup>4</sup> Source: USGS catalogue, 2019

<sup>5</sup> National Indoor Air Quality Standard, 2009

<sup>6</sup> National Ambient Sound Quality Standard, 2012

The air quality and noise level of the SPA were found within the range of the National Ambient Air Quality Standard and Noise Quality Standard, respectively.

There are no any water sources within the Subproject footprint area for which no special issues have been recorded. The proposed 33 kV distribution route have the crossing of different river and streams namely: Karnali River, Badhu Khola and Khatyad Khola. The construction activities of the Subproject components will not have impact to the local streams and rivers.

### 3.1.6 Solid Waste Management

Wastes were found littered in front of HHs and along the side of the access road near the Subproject area. People in the nearby area were found managing organic wastes within the household premises. Recyclable waste (large quantities) was sold to scrap collector occasionally. The estimated quantity of solid waste generation from the labor camp is shown in **Table 3-2**.

**Table 3-2:** Estimated Daily Solid Waste Generation from Campsite

SN	Description	Calculation	Remarks
1.	Total Labors within the Campsite	= 20 Labors	
2.	Total Waste Generation to be Expected	= 20 * 123.62 g/capita/day = 2472.4 g/capita/day = 2.4724 kg/day	
3.	Organic Waste Composition Responsible for Foul Smell, and Rodents	= 1.26 kg/day	Assuming 51% organic waste

The rest of the other waste is recyclable, and non-decomposable which could be stored for long period and have less impact on the environment if properly managed. The amount of organic waste is manageable within the Subproject site as organic waste per day will be expected to be only 1.26 kg/day.

### 3.2 Biological Environment

The proposed Subproject's distribution line passes along RoW of access road, barren land, community forest and national forest. The proposed Subproject lies at an elevation in the range from 1,103 to 2,128 masl in the sub-tropical bioclimatic zone. The proposed Subproject development site does not lie within any protected area or conservation area.

The floral species recorded during the field visit in the surrounding project area are Chir Pine (*Pinus roxburghii*), Olive (*Olea glandulifera*), Cactus, and Jhinghet. Similarly, wild animal recorded during the public consultation are Rhesus Monkey (*Macaca mulatta*), Common Leopard (*Panthera pardus*), Golden Jackel (*Canis aureus*), Himalayan Goral (*Naemorhedus goral*), Northern Red Muntjac (*Muntiacus vaginalis*), and Large-eared Pika (*Ochotona macrotis*). Altogether five species of birds were noted around the surrounding project area are House Crow (*Corvus splendens*), House Sparrow (*Passer domesticus*), Slaty-headed Parakeet (*Himalayapsitta himalayana*), Chukar Partridge (*Alectoris chukar*), and Cheer Pheasant (*Catreus wallichii*).



The proposed Kanakasundari-Khatyad 33 kV distribution line and substation intercept the community forest and national forest as shown in **Table 3-3**. A total of 6.48 ha of the forest land area will be occupied by RoW of proposed 33 kV distribution line and substation. There are no tree species in the core project area, the 33 kV line passes over the bare land and only few floral species of low height shrubs mainly Olive (*Olea glandulifera*) and Cactus are present. Thus no any trees need to be cleared but the land areas are under the jurisdiction of district forest office that need to be acquired by the project for the establishment of substation and the distribution line.

**Table 3-3:** The community forest along the proposed 33 kV distribution line

SN	Name of Forest	Chainage	District	Municipality/RM	Ward
1	Mastamandu CF	0+000 to 1+000	Bajura	Budhinanda Municipality	01
2	Kalika CF	1+000 to 1+800	Bajura	Budhinanda Municipality	01
3	Badhimeli CF	1+800 to 2+800	Bajura	Budhinanda Municipality	01
4	Haudi Simaeli CF	6+600 to 12+000	Bajura	Himali RM	07
5	National Forest	12+000 to 13+600	Bajura	Himali RM	06
6	National Forest	29+154	Mugu	Khatyad RM	04

Source: Field Visit, 2022



**Figure 3-6:** Proposed 33 kV Distribution Line over Bare land at 28+000



**Figure 3-7:** Proposed 33 kV DL through Badhimeli Community Forest Land Area



**Figure 3-8:** Proposed Kankasundari-Khatyad DL over the bare land of Community Forest

### 3.3 Socio-economic Environment

**Demography and Ethnic Compositions:** The proposed Subproject area lies in Ward No.1 of Budhinanda Municipality, Ward No. 6 and 7 of Himali Rural Municipality (RM) of Bajura District and Ward No. 4, 6, 8, 9, and 11 of Khatyad RM of Mugu District. Kolti, Dhulachaur and Majhchaur are the nearest business markets nearby the Subproject area. The general demographic information of the affected Wards is presented in Table 3-4. The major ethnic compositions within the surrounding project area are Chhetri (53.87%), Dalit (12.63%), Brahman (10.64%) and Thakuri (7.43%) of the total population of 12,338. The majority of people follow the Hinduism and rest follow Buddhism and Christianity. The Core Project Area (CPA) of the Subproject will not affect any indigenous people.

**Table 3-4:** General Demographic Characteristic of Subproject Municipality

SN	Wards	HHs	Population		
			Male	Female	Total
Budhinanda Municipality					
1.	1	440	940	1,213	2,153
Himali RM					
2.	6	524	1,364	1,434	2,798
3.	7	169	374	405	779
Khatyad RM					
4.	4				
5.	6	196	572	594	1,166
6.	8	242	813	794	1,607
7.	9	301	1,016	1,017	2,023
8.	11	301	891	921	1,812

Source: (CBS, Rural Municipality-Municipality Profile of Bajura and Mugu Districts, 2017)

**Road Accessibility:** The proposed Subproject distribution line alignment passes through the Karnali Corridor (Pilichaur – Dhulachaur Road Section) connecting the project affected Wards of Budhinanda Municipality and Himali RM. The distribution line alignment follows the Khatyad-Rara Corridor (Aam-Majhchaur Road Section) connecting the Wards of Khatyad RM. The transportation facilities in this locality are moderate. It is 45 minutes' walk to reach Khatyad RM office from the proposed Ghodasaine substation area.

**Electricity Beneficiaries:** The implementation of the Subproject will increase the electricity beneficiaries to 3,729 HHs, 30 commercial purposes, and 10 industries. This will expand the electricity supply in the Subproject area with clean energy sources.

**Water and Sanitation:** Tap/piped water is the main source of drinking water in the surrounding Subproject area. Almost all the houses in the area have some sort of toilet facility.

**Health Facility:** The nearest and easily accessible health facility nearby the proposed Subproject area is Majhchaur Sub-Health Post at a distance of 1 km from the Ghodasaine substation site.

**Communication:** People of the Subproject have access to communication facilities mainly through mobile telephone services. In the Subproject area, people have access to local and national FM Radio networks and local newspaper facilities.

**Occupation:** Agriculture is the main occupation of people in the Subproject area with nearly 38.3% contribution; small trade and business/enterprises and services are other occupations of people in the Subproject area. Intermittent tripping and voltage drop of electricity were adversely affecting the irrigation of crops and daily household chores activities.

**COVID-19:** The coronavirus (COVID-19) pandemic has been defined as a global health crisis; the virus has spread in almost all parts of Nepal. Heedful of its vulnerabilities, the Government of Nepal enforced a nationwide lockdown in 2020/2021 and activated its federal, provincial and local level mechanisms to respond to the crisis. In case of any sudden surge or outbreak of COVID-19, quarantine facilities and immediate health supports should be provided to the workers and personnel involved in construction.

Other seasonal and minor diseases like dengue, fever, sneezing, cough, gastritis, diabetes and mental disorder have been reported within the Subproject area.

## 4. ANTICIPATED ENVIRONMENTAL AND SOCIAL IMPACTS AND MITIGATION MEASURES

The environmental and social impacts predicted during the construction of the proposed Subproject are discussed in this chapter. National Environmental Impact Assessment Guidelines (GoN, 2050) have been referred for the predicting magnitude, extent, and duration of the project-induced environmental impacts in the Subproject area. This chapter identifies the basic environmental and social impacts in the Subproject area that will arise during the construction. The detailed impacts of each domain of environmental and social safeguards have been addressed in this chapter.

### 4.1 Anticipated Beneficial Impacts

#### Construction Phase

##### 4.1.1 Local Employment

Local employment will be created during the construction phase. As mentioned in section 2.8 Workforce Requirement, the typical construction team will have 35 skilled manpower and 70 unskilled manpower for the period of 4-5 months for the erection of poles and stringing the distribution lines and 12-15 months for building the substation. Local people within the SPA will be encouraged for employment during construction phase. Both male and female will get equal opportunities during the construction. Based on the skill levels (skilled, semi-skilled and unskilled labor) local people will be used for the construction as far as possible. *The magnitude of impact is considered moderate, the extent is local, and the duration is short-term.*

#### Operation Phase

##### 4.1.2 Local Economy and Enhancement in Rural Electrification

The local economy will benefit through improved reliability of electricity supply, which is a necessary condition for economic growth. Different industries within/nearby the proposed Subproject area will be established. Intermittent tripping and voltage drop problems nearby the settlement area will be reduced. Upgrading and expansion of electricity distribution helps to way-out many electricity-related issues and promotes the use of new types of home appliances, the use of electric motors for irrigation, and the establishment of small and large industries. *The magnitude of impact is considered high, the extent is local, and the duration is long-term.*

##### 4.1.3 Greenhouse Gas Emission Balance

Net Green House Gas (GHG) emissions resulting from the Subproject area are expected to be low as the distribution lines will improve and expand the electricity supply from clean energy sources. It will reduce the emission of GHG from traditional source like firewood and timber along with commercial fuel Kerosene for cooking/lighting, heating, and diesel for water pumping. *The magnitude of impact is high, the extent is local, and the duration is long-term.*

## 4.2 Anticipated Adverse Impacts

### A. Physical Environment

#### Construction Phase

##### 4.2.1 Change in Land Use

The Subproject requires about 0.60 ha of land for building the Ghodasaine substation. Land is government land and is managed by Khatyad RM. The land will be managed by NEA and will be converted to the substation area surrounded by proper boundary wall. Distribution Line passes through edge of barren land, forest land and RoW of Karnali Corridor and Khatyad-Rara Corridor Road Section. The construction of the Subproject will bring change in land use permanently. Potential impacts caused by distribution lines will be limited to approximately 0.22 m of land for each pole, at the edge of roads and public lands. *The impacts due to the use of land will be moderate in magnitude, site-specific and long-term in duration.*

#### Mitigation Measures

- Steel Tubular Pole for distribution lines will be planted at the right way of the existing road without hampering traffic movement.

##### 4.2.2 Air Quality

The impact on air quality during the construction period is expected to be insignificant, as site clearance, excavation, stockpiling of construction materials, waste burning at camp sites and equipment installation are localized and short-term. Transportation of the materials and movement of construction crew and equipment will have a minor impact on air quality. *The impact on air quality will be minor in magnitude, site-specific in terms of extent, and of short duration.*

#### Mitigation Measures

- Contractors' vehicles and equipment should meet Nepali vehicle emissions standards.
- Dust emissions will be controlled using water sprays on earthen roads nearby settlements in the substation area.
- Open burning of wastes should be strictly prohibited.
- Construction workers should use face masks at all times.
- All dust-generating loads carried in open trucks should be covered.

##### 4.2.3 Noise

Noise is inevitable during construction. As noted in section 3.1.5, noise is less around the substation area as the area is rural and settlement is sparse. Construction-related noise will be limited to vehicular movement and inside-the-fence construction activities at substations sites; construction-related noise is not expected to exceed acceptable levels. *The impact on noise level will be minor in magnitude, site-specific in terms of extent, and of short duration.*

#### Mitigation Measures

- Contractors will be required to monitor noise during construction.



- For the substation site, boundary walls serve as a noise barrier, and they should be constructed as early as possible.

#### **4.2.4 Drainage and Water Quality**

Substation sites of 0.60 ha land for building the Ghodasaine substation will result in a slight alteration of drainage patterns, although the alterations in drainage will not be quantifiable. Interference with drainage patterns will be temporary during the construction phase only. The impact on water quality during the construction period is expected to be insignificant. Water will be used primarily as a cement additive for the construction of substation foundations and boundary walls, and to control dust. *The magnitude of impact is low, the extent is site-specific, and the duration is short-term.*

##### **Mitigation Measures**

- Storm water run-off from substation sites will be minimized and controlled with bundling temporary dikes (constructed boundary walls will also help contain run-off water).
- Proper management of ground drainage from camps as a preventive measure against the breeding places of mosquitoes, and other pests.

#### **4.2.5 Soil and Muck**

As the proposed substation land's ground level is low, filling of soil is necessary. The required filling materials shall be purchased from a nearby authorized crusher plant approved by the local government. For distribution lines the excavation activity will be insignificant. *The magnitude of impact is low, the extent is site-specific, and the duration is short-term.*

##### **Mitigation Measures**

- Soil required for filling shall be purchased from the nearby authorized crusher plant under local government.
- Soil shall be covered with a tarpaulin while transporting it from earth-borrowing areas.
- Simultaneous water sprinkling and compaction of spoil shall be done using the roller.

#### **4.2.6 Solid Wastes**

The wastes generated during construction within the Subproject area are cement bags, iron bars, and other leftover construction materials, and waste generated by the labor camp. It might cause an adverse impact if not properly managed. Organic wastes generated from labor camps may give a foul smell and attract rodents if not managed properly. Inorganic wastes generated during implementation shall be managed through source segregation. *The magnitude of impact is low, the extent is site-specific, and the duration is short-term.*

##### **Mitigation Measures**

- Source segregation of organic and inorganic wastes in different storage areas or facilities in the designated location.
- The organic waste generated from the campsite shall be managed within the substation premises, through composting in the bin or by constructing a ground pit and covered by a thick layer of soil on daily basis.

- Reusable waste like debris, broken brick pieces, sand, stone, waste cement, and sand mix shall be used as refills for ground leveling.
- Packing materials used for casing components should be recyclable.
- Recyclable wastes like left out/non-usable reinforcement bars and packing materials shall be sent or sold to scrap vendors.
- Chemical waste generated from the transformer shall be collected in leakage-proof, corrosion-free, specially designed containers and sealed carefully.
- Effective coordination shall be done with the local level government for proper waste management during the construction period.

## Operation Phase

### 4.2.7 Electric and Fire Hazard

Employees performing servicing or maintenance of substations may be exposed to electric shock, burns and injuries from the unexpected energization or release of stored energy in the equipment. *The magnitude of impact is considered moderate, the extent is site-specific, and the duration is long-term.*

#### **Mitigation Measures**

For this, the following mitigation measures will be practiced:

- Use of insulation, guarding, grounding, electrical protective devices, and safe work practices are advised.
- Boundary walls and security fences around the substation are recommended to prevent unauthorized access.
- Only trained and authorized personnel shall be allowed for electrical work.
- Warning signs shall be installed.

## B. Biological Environment

The Subproject avoids most of the trees along the forest land and other sensitive biodiversity areas. The construction of the Subproject is likely to pose significant impact to biological environment of the Subproject area.

## Construction Phase

### 4.2.8 Loss of Habitat

As the proposed substation area is a barren land, whereas the 33 kV distribution line passes through the edges of road alignments, barren lands and forest areas. The total area of the forest area that will be occupied within RoW of the proposed 33 kV distribution line and substation is 6.48 ha. There are no tree species in the core project area, the 33 kV line passes over the bare land and only few floral species of low height shrubs mainly Olive (*Olea glandulifera*) and Cactus are present. The possible use of firewood from the surrounding project area should be restricted during the construction activities. *The magnitude of impact is moderate, the extent is site-specific, and the duration is long-term.*

**Table 4-1:** Detail of impacted forest area and trees loss

Area (ha)			Name of species	No. of trees	
33 kV line	Substation	Total		33 kV line	Substation
5.88	0.60	6.48	No tree species to be cleared from the Core Project Area		

**Mitigation Measures**

- Compensatory measure shall be done as per Forest Regulation (2022).
- Workers and staffs should be restricted to use firewood for cooking.
- Providing LPG based stoves in Labor camp.
- Labors and staff shall be made aware to avoid illegal activities in adjoining forest.

**Operation Phase****4.2.9 Bird electrocution and collision**

The Subproject area is located in rural setting and there is no presence of critical habitat of avian fauna. Electrocution is a risk to bird species that perch on power line infrastructures (substation and distribution line). List of birds presented in section 3.2, may collide to distribution lines and substation. Minimizing bird collision and electrocution risk is therefore a win-win for biodiversity and the power sector. *The magnitude of impact is low, the extent is site-specific, and the duration is long-term.*

**Mitigation Measures**

- Bird guards should be installed above the poles and white spirals in the conductors to improve visibility electrical structures.

**C. Socio-Economic and Cultural Environment**

The anticipated impacts regarding the socio-economic and cultural environment associated with Subproject are discussed below:

**Construction Phase****4.2.10 Land Requirement**

The land required for the proposed substation area is 0.60 ha land for building the Ghodasaine substation. Land is government land and managed by Khatyad RM. So, there will be no land acquisition, which will be incorporated in the resettlement impacts. For the construction of distribution lines, the alignment will follow the RoW of the existing road. *The impacts will be low in magnitude, site-specific, and long-term in duration.*

**Mitigation Measures**

- A distribution pole of diameter 0.22 m should be installed on the edge of RoW of the existing Road.

**4.2.11 Public Health**

Construction activities will be of small scale, causing no significant adverse impact to existing quality of air, water and sound. Local people except the workers do not involve in construction activities. Considering the COVID-19 pandemic as an example, workers will

be advised to avoid unnecessary contact with local people. *The magnitude of impact is low, the extent is site-specific, and the duration is short-term.*

#### **Mitigation Measures**

- Contractors shall implement health and safety plans.
- Awareness of HIV/AIDS and other sexually transmitted disease should be provided to the labors.
- Awareness of basic sanitation and waste management should be provided to the labors.
- For coronavirus (COVID-19) pandemic situation, contractor needs to handle the situation in case of any sudden surge and standardize the quarantine facilities with health aid to the labors.

#### **4.2.12 Occupational Hazards and Safety of Workers**

Occupational health hazard and the safety of workers is the major issue during the construction period. Working without adopting safety measures during excavation work, spoil management work, mechanical and electrical equipment handling activities, chemical handling, etc. during construction may call the risk of accident. The primary victims are the workers involved in the construction. *So, the envisaged direct impact is high in magnitude, site-specific in extent, short-term in duration.*

#### **Mitigation Measures**

- The contractor shall prepare the Environmental, Health and Safety plan and take approval from the Client (NEA/PIU). The contractor shall employ Safety officer during the construction period.
- All employees shall be provided with the necessary training, and safety equipment as required for their responsibilities and duties. The Contractor will adhere to labor Act 2074 and Labor Rules 2075.
- The basic facilities of drinking water, sanitation & clean resting place, canteen, and first aid are required for the campsite.
- All the workers shall have health insurance throughout construction.
- Installation of warning signs (High Voltage, Fire Safety Signs, and Emergency Signs) as shown in **ANNEX 7**.
- NEA will be responsible to supervise the EHS performance of the construction Contractor, and workers' health and safety.

#### **4.2.13 Child Labor, and Gender Issues**

During the construction period, people employed on daily wages for excavation, transportation of construction materials, and other construction-related works should avoid the involvement children and should avoid gender discrimination. Gender discrimination may occur as the Contractor may not be sensitive towards gender equity. Contractors should equally pay men and women workers. Construction area should be gender friendly with required facilities. *The envisaged impact is high in magnitude, site-specific in extent, and short-term in duration.*

#### **Mitigation Measures**

The Subproject will ensure to:

- Provide equal wage to male and female for similar nature of work.
- Prohibit the use of child labor i.e., below 16 years of age (which is as per government and ILO guidelines).
- Provide female friendly construction environment with separate cabins and toilet for women in the camp.
- Prepare suitable work categorization for women.

#### **4.2.14 Socially Undesirable Activities**

The workers may use alcohol and other forms of intoxication, gamble and quarrel with locals, disrespect local culture and religion, and may promote socially undesirable activities in and around the project area. *So, the envisaged impact is low in magnitude, local in extent, and short-term in duration.*

#### **Mitigation Measures**

- Restrict movement of workers out of camp after dinner time at the night.
- Prohibit the use of alcohol and gambling in the camp.
- Supply water supply, daily consumable items, and communication facility in the camp so as not to create additional pressure on the local services.
- Orient workers to show respect for local tradition and culture.
- Prepare a code of conduct for all project staff, orient them and monitor that these are effectively followed by all.
- Assign a public relation officer to keep close and regular consultation and coordination with local communities.
- Regular monitoring of workers' behavior and taking appropriate measure on rule violators.

### **Operation Phase**

#### **4.2.15 Hazards and Safety**

Occupational health hazard and the safety of staff are the major issues during the operation phase of the substation. The possible electric shock and fire hazard might cause injury or death to working staff thus protection measures should be taken all the time. *The envisaged direct impact is high in magnitude, site-specific in extent, and long-term in duration.*

#### **Mitigation Measures**

- There will be the use of insulation, guarding, grounding, electrical protective devices, and safe work practices.
- Boundary walls and / or security fences around substations to prevent unauthorized access.
- Only trained and authorized personnel will be allowed for the electrical works.
- No electric wire shall be stringed above the house.
- Security fences around the substation.
- Establishment of warning signs
- Shutdown shall be taken during work on the DL route

#### 4.2.16 Electric and Magnetic Field Effect

Electric power distribution lines create electric and magnetic fields together, referred to as electromagnetic fields (EMF). Electrical flux density declines in inverse proportion to the square of the distance and magnetic fields decline in inverse proportion to the cube of the distance; so, there will be no impact outside of the substation boundaries.<sup>7</sup> Research on the long-term effects of EMF associated with distribution lines is inconclusive for health risks. As noted in the World Bank EHS guidelines for transmission and distribution systems, there is no empirical data demonstrating adverse health effects from exposure to typical EMF levels from power transmission lines and equipment.

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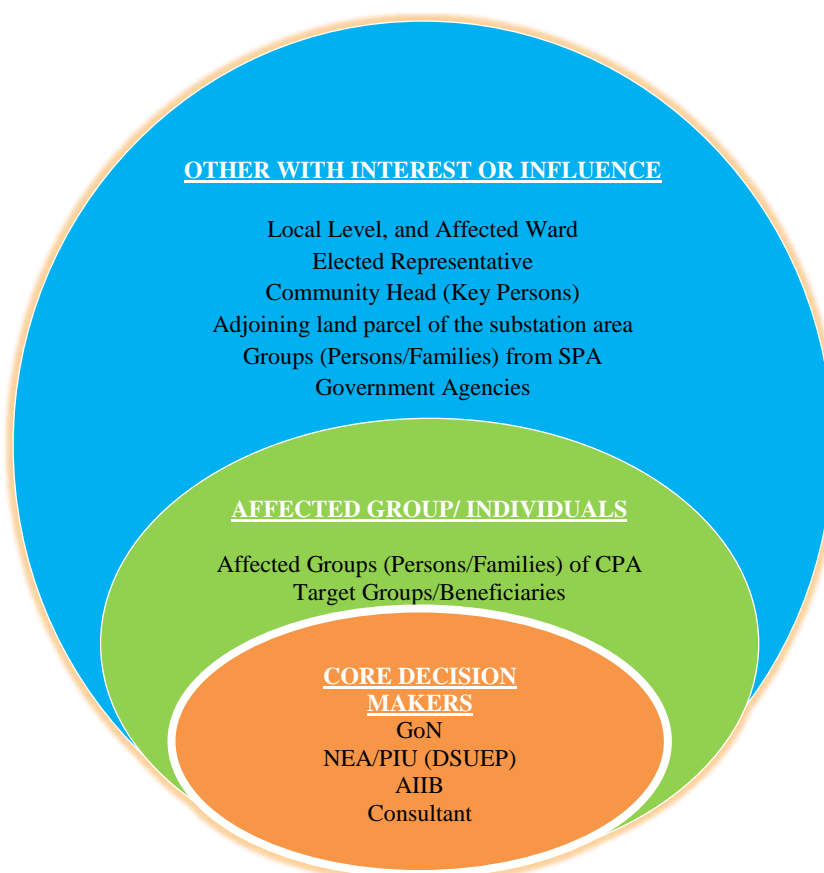
<sup>7</sup> E.g., at a distance of 10 meters from a single distribution line or conductor, electrical flux density drops to 1% of the field strength at a distance of 1 meter from the conductor:  $1/(10 \times 10) = 1\%$ . Likewise, the magnetic field drops to 0.1% of the field strength at the conductor:  $1/(10 \times 10 \times 10) = 0.1\%$ .

## 5. INFORMATION DISCLOSURE, CONSULTATION, AND PARTICIPATION

### 5.1 Methodology in Information Disclosure, Consultation and Participation

The following methodologies were followed for information disclosure, consultation and participation:

- i. Identification of the stakeholders is important to understand how the Subproject activities will relate different institutions/groups/individuals. Stakeholders are the groups that might be affected by the Subproject or might influence Subproject outcomes. The identified stakeholders are considered into three groups (**Figure 5-1**).



**Figure 5-1:** Identified Stakeholder in the Subproject<sup>8</sup>

- ii. The notices with the subject of consultation, venue, and time were pasted at the Subproject footprint area, local level and affected Ward office in presence of concerned local stakeholders. People were explained about the notices and their views were noted and agreed upon as Minutes.
- iii. Study team members visited all the local government offices within the Subproject influence area. Representatives from each local body were also consulted. All local governments were given request letters for their active support in project implementation. Municipalities were requested to provide written suggestions. The

<sup>8</sup> Referenced Meaningful stakeholder engagement: a joint publication of the MFI working group on environmental and social standards / Reidar Kvam, PP-19, 2019.

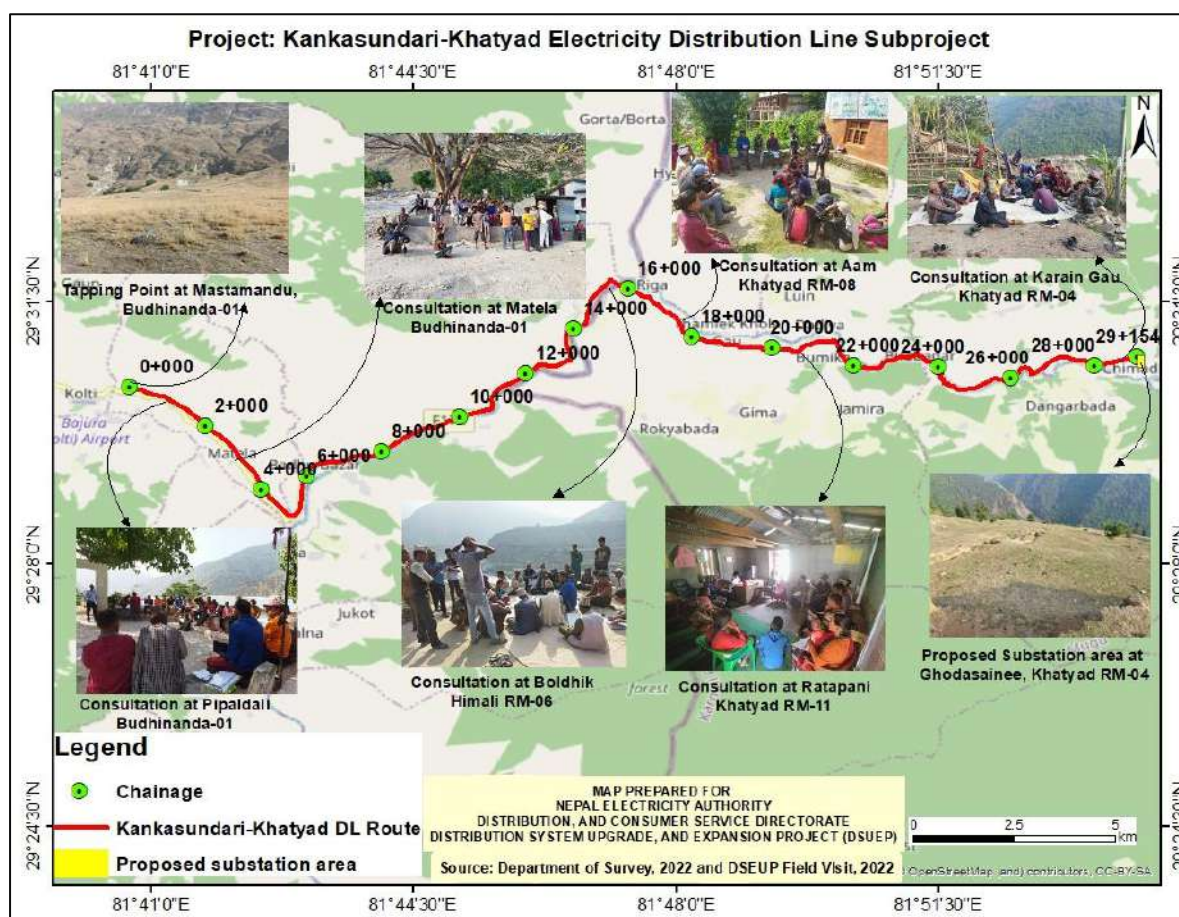


deed of inquiry (Muchulkas) and Letter of Declaration from the stakeholders are presented in **Annex 6 and Annex 7**.

- iv. Local communities nearby the substation area and along the distribution line routes were consulted and were briefed about the Subproject activities and likely benefits with their suggestions (included in the Minutes).
- v. During the Subproject construction phase, booklets informing about the Subproject activities, likely impacts, and mitigation measures together with the complaints handling mechanisms will be developed and distributed in the Subproject area.

## 5.2 Consultation and Information Disclosure

The consultation aims to encourage the participation of stakeholders and communities of the Subproject area in the identification of issues, comments, and suggestions. The Subproject affected groups (persons/families) were given more emphasis during the field consultations. Public consultations were conducted at Budhinanda Municipality-01, Rawatbada on 29<sup>th</sup> April (2022), Matela on 1<sup>st</sup> June (2022), Pipaldali on 2<sup>nd</sup> June (2022), Himal RM-07, Badhu on 3<sup>rd</sup> June (2022), Himal RM-06, Boldhik on 4<sup>th</sup> June (2022), Khatyad RM-08, Aam on 5<sup>th</sup> June (2022), Khatyad RM-11, Ratapani on 9<sup>th</sup> June (2022) and Khatyad RM-04, Karain Gau on 6<sup>th</sup> June (2022), (**Figure 5-2**). The concerns expressed and issues/raised during the consultation were documented as in the form of minutes (**Annex 5**).



**Figure 5-2: Consultation with the stakeholders and communities in the Subproject Area.**<sup>9</sup>

<sup>9</sup> Field Study, 2022. Used SW Map and GIS

Major benefits expected from the implementation of the Subproject through the perspective of local people were identified from public interaction, and that included improvement in the rural electrification facilities ensuring uninterrupted electricity in the households and better functioning of industries in the locality. The issues, comments and suggestions received in the consultation are presented in **Table 5-1**.

### 5.3 Comments and Suggestion Received

**Table 5-1:** Summary of issues, comments and suggestions received in Consultations

Date	Location	Issues, comments and suggestions received	Participants
1 <sup>st</sup> June 2022	Budhinanda Municipality-01, Rawatbada	<ul style="list-style-type: none"> <li>➤ The expert team shared the detail information about the proposed sub-project.</li> <li>➤ The distribution line shall pass through the side of road and government land.</li> </ul>	21,07F-14M
1 <sup>st</sup> June 2022	Budhinanda Municipality-01, Matela	<ul style="list-style-type: none"> <li>➤ The distribution line should be installed away from the settlement area and private land. In case if it has to be passed through the private land, the pole should be installed at the edge (the up and down the side of the land).</li> </ul>	27,02F-25M
2 <sup>nd</sup> June 2022	Budhinanda Municipality-01, Pipaldali	<ul style="list-style-type: none"> <li>➤ During the construction phase of the project, locals shall be prioritized for the work related to the project according to their skills, capacity and intelligence.</li> </ul>	33,04F-29M
3 <sup>rd</sup> June 2022	Himal RM-07, Badhu	<ul style="list-style-type: none"> <li>➤ It is committed for timely implementation of sub project through coordination with absent people in meeting to the passing area of pole and distribution line.</li> </ul>	24,08F-16M
4 <sup>th</sup> June 2022	Himal RM-06, Boldhik	<ul style="list-style-type: none"> <li>➤ The sub-project during its construction shall not have negative impacts on archaeological, religious momentous, or to any structures of public importance. If negative impact occurs project will compensate.</li> </ul>	46,11F-35M
5 <sup>th</sup> June 2022	Khatyad RM-08, Aam	<ul style="list-style-type: none"> <li>➤ It is informed that there are no residences of indigenous people within the direct project affected area.</li> <li>➤ It is requested to start the subproject as soon as possible to solve the problem of electricity.</li> <li>➤ There is no any settlement, religious</li> </ul>	24,13F-09M

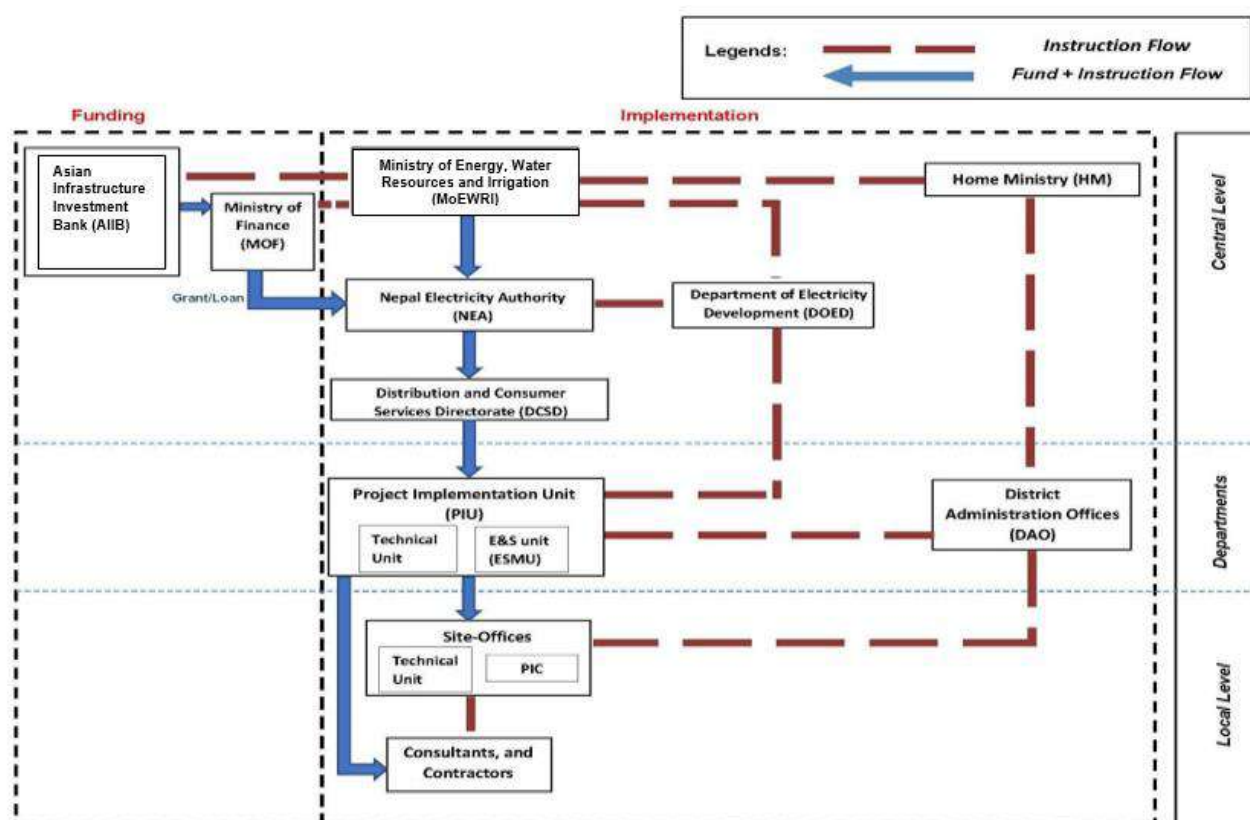
Date	Location	Issues, comments and suggestions received	Participants
9 <sup>th</sup> June 2022	Khatyad Ratapani RM-11,	monuments and archaeological sites in proposed substation area. ➤ The local people and stakeholder shall provide their full support and cooperation during the construction of this proposed sub-project.	24,6F-18M
6 <sup>th</sup> June 2022	Khatyad Karain Gau RM-04,	➤ It is requested to give the service for the people of Municipality/RM area according to law of Nepal government by completing the subproject as soon as possible.	24,5F-19M

Source: Field Visit, 2022

## 6. INSTITUTIONAL ARRANGEMENT AND GRIEVANCE REDRESS MECHANISM

### 6.1 Institutional Arrangement

The Ministry of Energy, Water Resources and Irrigation (MEWRI) is responsible for the overall planning and execution of the plans for the overall development of the water and energy sector in Nepal. Nepal Electricity Authority (NEA) under MEWRI is the responsible agency for the implementation of the DSUEP. The project comes under the Distribution and Consumer Services Directorate (DCSD) of NEA. Project Implementation Unit (PIU) under DSUEP is the implementing unit of the project. The Environment and Social Management Unit will be within PIU. All the resources needed for the EMP implementation for the construction and operation phase will be provided by the PIU. The site offices under PIU will have a supervision consultant with an environmental and social safeguard specialist, who will be responsible for compliance monitoring activities during the construction phase. He will also provide technical support in preparing the monitoring report.



Source: ESMF-DSUEP

**Figure 6-1:** Institutional Arrangement for Environmental and Social Management

The contractor shall have the main responsibility to ensure compliance. The Contractor shall prepare an Environment, Health and Safety (EHS) report that would be approved by DSUEP/PIU before field mobilization. They need to strictly follow the EHS plan requirements. The contractor shall urgently comply with corrective actions for any noncompliance as instructed by PIU. The ESMU of PIU shall provide safeguard

compliance orientation to all environment monitors and safeguard team of the contractor, one month before the construction works start.

## **6.2 Grievance Redress Mechanism**

The Grievance Redress Mechanism (GRM) has been established to receive, evaluate, and facilitate the resolution of affected people's concerns, complaints, and grievances about the social and environmental related issues at the Subproject level. The GRM is designed to be simple, transparent and responsive. GRM shall address only the concerns arising due to the project implementation activities, mainly during construction stage. Social Comment Addressed -In each Subproject, three levels Grievance Redress Mechanism will be established. During the ESMP study period NEA has disseminated letters to the local level stakeholders regarding the formation of the GRM at the Subproject level. Till date NEA has established Tier-I and Tier-II GRM has been established at local Wards level and Municipality/RM level. Tier-II will be established before construction work starts.

GRM process entails the concerned party submitting a grievance either in-person, via phone, letter, or email to the Site-Engineer or the concerned Municipality Chief or the concerned Ward Chair. The Site-Engineer will record the complaint. In cases where Ward Chair has received such a grievance, he/she should forward the grievance to the field office Engineer. The Site-Engineer shall notify the committee members of Tier-I and arrange a meeting to resolve the received grievances. If not resolved such grievances will be carried to Tier II and Tier III. The three levels of GRM will be based on time-bound schedules as mentioned in **Table 6-1**. The Subproject will carry the regular meeting for Tier-I, once a month to follow up if any grievances are received or not and to resolve the grievances received and update its status to PIU. **Figure 6-2** describes the Workflow Diagram of GRM for the Subprojects.

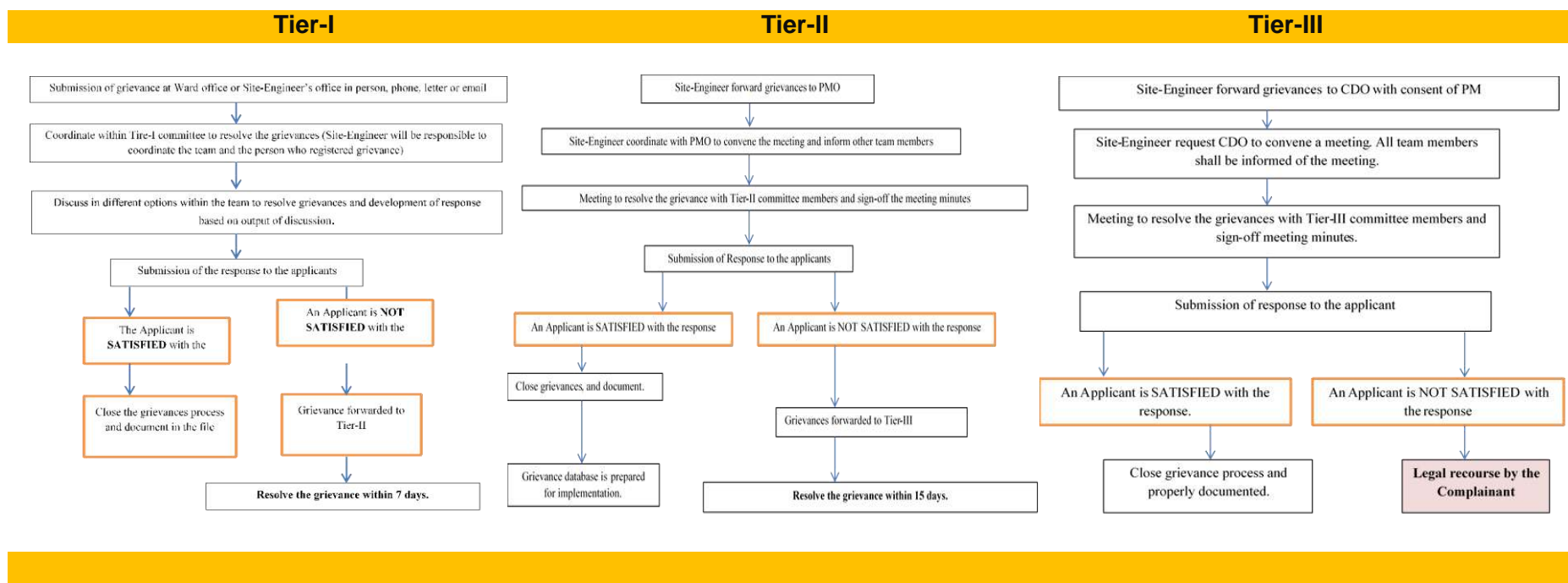
**Table 6-1:** Levels of Grievance Redress Mechanism Based on Time Bound

Provisions	Levels of Grievance Redress Mechanism					
	First Level (Tier-I)		Second Level (Tier-II)		Third Level (Tier-III)	
<b>Level</b>	Local Level		Project Manager Office (PMO) headed by the Project Manager (PM) at Project Implementation Unit (PIU)		District Level	
<b>Supervisory</b>	NEA Site-Engineer		PMO		Chief District Officer (CDO)	
<b>Assistance</b>	Chief/Mayor of Concerned Local Level and Chairperson/ Representative of Ward, Construction Contractor's (CC) Representative and Project Supervision Consultant's (PSC) Safeguards Officer		NEA Site-Engineer and PSC's Social Expert, and Construction Contractor		PMO, affected persons, representative from Rural Municipality/Municipality, Site-Engineer, PSC's Social Expert. <i>If deemed necessary, representative from Forest Office, representative from Land Revenue Office, and representative from Land Survey Office are invited.</i>	
<b>Days for Resolving Complain</b>	7 days of receipt of a complaints/ grievance		15 days of complaints forwarded by Site-Engineer		15 days	
<b>Committee Members</b>	<b>Committee Member</b>	<b>Designation</b>	<b>Committee Member</b>	<b>Designation</b>	<b>Committee Member</b>	<b>Designation</b>
	Municipality Chief	Coordinator	Project Manager	Coordinator	Chief District Officer (CDO)	Chair
	Site-Engineer-NEA	Member secretary	Site-Engineer	Member Secretary	Project Manager	Coordinator
	Safeguards Expert from Consultant	Member	Municipality Chief	Member	Site-Engineer	Member Secretary
	Contractor Engineer	Member	Safeguards Expert from Consultant	Member	Municipality Chief/Ward Chair	Member
	Ward Chair	Member	Contractor Engineer	Member	Safeguards expert from consultant	Member
					Contractor Engineer	Member
					Representative from affected people	Member

**Table 6-2:** Environmental and Social Management Plan (ESMP)

*(The provision of environment and social management cost should be included in the project cost making each items visible in BOQ of bidding document for the safeguard compliance by the construction contractor)*



**Figure 6-2:** Workflow Diagram for GRM from NEA<sup>10</sup>

\* Affected People (AP) have the right to refer the grievances to appropriate courts of law if not satisfied with the redress at any stage of the process i.e., the AP will have the choice to approach country's judicial system.

<sup>10</sup> Grievance Redress Mechanism (GRM) Prepared for the sub-projects financed by Asian Infrastructure Investment Bank (AIIB) under Distribution System Upgrade and Expansion Project (DSUEP), Nepal Electricity Authority (NEA), May 2021.



## **7. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN**

### **7.1 Environmental and Social Management Plan and Mitigation Measures**

The overall Environmental and Social Management Plan of the Subproject is presented in **Table 7-1**. The ESMP will be implemented in three stages: (i) pre-construction (ii) construction, and (iii) operations and maintenance. This ESMP is a living document and will be updated and modified under the supervision of ESMU of PIU.

**Table 7-1: Environmental and Social Management Plan (ESMP)**

Project Activity	Environmental and Social Issues	Management/Mitigation Measures	Mitigation Cost	Responsibility	
				Planning and Implementation	Supervision and Monitoring
Pre-construction Phase					
Approvals, permits and clearances	Installation of poles along the edge of RoW of road and public lands	<ul style="list-style-type: none"><li>Site office and the contractor must inform the community prior to the installation of poles and stringing of the line along DL route</li></ul>		Site Office/ Contractor/	DSUEP (PIU)/NEA
Construction Phase					
Construction work in substation area and distribution line alignment	<ul style="list-style-type: none"><li>Inadequate/unsafe working conditions</li></ul>	<ul style="list-style-type: none"><li>Appropriate contract clauses to ensure satisfactory implementation of contractual environmental, health, and safety measures.</li></ul>		Site Office/Contractor	PIU/NEA
	<ul style="list-style-type: none"><li>Accident may arise if the pit hole (depth-2m and diameter-0.22 m) prepared for steel tubular poles remains open for long time</li></ul>	<ul style="list-style-type: none"><li>Pit holes for the steel tubular pole shall not be left open and should be filled instantly by erecting poles and concrete-cement around the base, should be used to strengthen the pole erection</li><li>Contractors should follow the guideline provided by the PIU</li></ul>	Project Cost	Contractor/ Office Site	PIU/ESMU/ PIU
	<ul style="list-style-type: none"><li>Dust emission -transportation of materials and movement of construction crews and equipment will cause minor impact</li></ul>	<ul style="list-style-type: none"><li>Water sprays to be used for dust control as necessary in the earthen roads of the settlements nearby the substation area and proper storage of the construction materials (sand, cements, aggregates and spoil) to be stored in substation area.</li><li>Steel poles firstly stocked in the substation area and secondly in the open barren area in coordination with Rural Municipality and</li></ul>	Air Quality Monitoring-1,50,000.00 (NRs.)  Sprinkling water (Dust Management) 2,00,000.00 (NRs.)	Contractor/ Office Site	PIU/ESMU

		Municipalities. No social and environmental issues for the stockpiling of the steel poles and stringing wires			
	<ul style="list-style-type: none"> <li>Noise emission- Construction related noise will be limited to vehicular movement and inside-the-fence construction activities at substations sites</li> </ul>	<ul style="list-style-type: none"> <li>Boundary walls serves as a noise barrier, and these shall be constructed as early as possible.</li> <li>Construction equipment to meet national emissions and noise control standards.</li> </ul>	Noise Level Monitoring- 50,000.00 (NRs.)  Provision of PPE in Project Cost	Contractor/ Office      Site	PIU/ESMU
	<ul style="list-style-type: none"> <li>Interference with drainage patterns will be temporary at substation during construction phase</li> </ul>	<ul style="list-style-type: none"> <li>A proper drainage system should be managed within the substation area.</li> <li>Storm water run-off need to be minimized and controlled with bundling temporary dikes</li> <li>Drainage management as a preventive measure against breeding of mosquitoes and other pests</li> </ul>	Project Cost	Contractor/ Site Office	PIU/ESMU
	<ul style="list-style-type: none"> <li>Construction associated wastes generated within substation area and campsite location</li> </ul>	<ul style="list-style-type: none"> <li>Organic waste generated from the campsite shall be managed within the substation premises, through composting in the bin or by constructing a ground pit, and covered, by a thick layer of soil</li> <li>Reusable waste like debris, broken brick pieces, sand, stone, waste cement, and the sand mix should be used as refills for ground leveling.</li> <li>Recyclable wastes like left out/non-usable reinforcement bars and packing materials to be sent or sold to scrap vendors.</li> <li>Effective coordination with the local level government for the proper waste management</li> </ul>	Solid wastes management – 1,00,000.00 (NRs.)	Contractor/ Site Office	PIU/ESMU

	<ul style="list-style-type: none"> <li>Illegal bird hunting by the labors</li> </ul>	<ul style="list-style-type: none"> <li>Discouraged by supplying adequate food item (poultry) requirement within the camp.</li> <li>Awareness of legal provisions upon illegal hunting of biodiversity need to be disseminated</li> </ul>	Project Cost	Contractor/ Office      Site	PIU/ESMU
	<ul style="list-style-type: none"> <li>Use of firewood from nearby forests</li> </ul>	<ul style="list-style-type: none"> <li>Workers and staffs should be restricted to use firewood for cooking.</li> <li>Providing LPG-based stoves in Labor camp.</li> </ul>	Project Cost	Contractor/ Office      Site	PIU/ESMU
	<ul style="list-style-type: none"> <li>About 6.48 ha of forest area occurs within RoW of the proposed distribution line and substation area.</li> <li>No trees need to be cleared from the Core Project Area of the proposed DL alignment and substation.</li> </ul>	<ul style="list-style-type: none"> <li>Compensatory measures shall be done as per Forest Regulation (2022) .</li> </ul>	Mitigation cost will be incorporated in the Brief Environmental Study (BES) report	Contractor/ Office      Site	PIU/ESMU
	<ul style="list-style-type: none"> <li>Loss of standing crops at pole installation locations (depth-2m and diameter-0.22 m)</li> </ul>	<ul style="list-style-type: none"> <li>Poles to be installed at the edge of cultivated land making no loss of standing crops.</li> <li>Need to make prior consultation with landowners before installation of the poles.</li> <li>If there is loss of crops, appropriate compensation shall be provided.</li> </ul>	Project Cost	Contractor/Site Office	PIU/ESMU
Environment, Health and Safety	<ul style="list-style-type: none"> <li>Injury and sicknesses workers and members of the public</li> <li>Potential fecal coliform contamination in drinking water</li> </ul>	<ul style="list-style-type: none"> <li>Contractor shall prepare the Environmental, Health and Safety plan and take approval from the client. Provision of safety officer in the work team shall be made during construction period.</li> <li>All employees shall be provided with the necessary training, and safety equipment as required for their responsibilities and duties.</li> <li>Basic facilities of drinking water, sanitation &amp; clean resting place, canteen, and first aid shall be made available for the campsite.</li> <li>Provision of health insurance to employees.</li> <li>Security fences around the substation.</li> <li>Installation of warning signs (High Voltage, Fire</li> </ul>	Establishment of Labor Camp with basic facilities – In Project Cost	Contractor/Site Office	PIU/ESMU

		Safety Signs, and Emergency Signs). <ul style="list-style-type: none"> <li>• Awareness on HIV/AIDS and other sexually transmitted disease.</li> <li>• Awareness on providing basic sanitation facilities and waste management control to the labors.</li> <li>• For coronavirus (COVID-19) pandemic situation, Contractors should arrange for quarantine and health services for infected workers.</li> </ul>	EHS Awareness Trainings - 1,50,000.00 (NRs.)  COVID-19 measures 2,00,000.00 (NRs.)		
Management of electric equipment, toxic materials of chemical wastes	<ul style="list-style-type: none"> <li>• Possible spills resulting in contamination of soil, water, and air</li> </ul>	<ul style="list-style-type: none"> <li>• Chemical waste generated from transformer shall be collected in leakage-proof, corrosion-free, specially designed containers, and sealed carefully</li> </ul>	1,00,000.00 (NRs.)	Contractor/ Office	Site PIU/ESMU
<b>Operation and Maintenance Phase</b>					
Electric shock and fire hazard	<ul style="list-style-type: none"> <li>• Injury or death to the workers and public</li> </ul>	<ul style="list-style-type: none"> <li>• Use of insulation, guarding, grounding, electrical protective devices, and safe work practices.</li> <li>• Boundary walls and / or security fences around substations to prevent unauthorized access.</li> <li>• Only trained and authorized personnel shall be allowed for the electrical works.</li> <li>• No electric wire is to be strung above the house.</li> <li>• Installation of warning signs.</li> </ul>	Project Cost	NEA	NEA
Routine operations and maintenance	<ul style="list-style-type: none"> <li>• Potential disturbance to other utility functions and vehicular traffic.</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain warning / advisory signs in the good and visible condition</li> <li>• Visual and technical inspection</li> </ul>	Project Cost	NEA	NEA

Oil spillage	<ul style="list-style-type: none"> <li>Contamination of land/nearby water bodies</li> </ul>	<ul style="list-style-type: none"> <li>Substation transformers should be stored within secure and impervious bundled areas with a storage capacity of at least 110% of the capacity of oil in transformers and associated reserve tanks.</li> </ul>	Project Cost	NEA	NEA
Bird electrocution and collision	Electrocution can cause a risk to bird species that perch on power line infrastructures	Provision of bird guards above the poles and white spirals on the conductors to improve visibility	Project Cost	NEA	NEA

*(The provision of an environment and social management cost should be included in the project cost making each items visible in BOQ of bidding document for the safeguard compliance by the construction contract)*

## 7.2 Proposed Monitoring Plan

The monitoring proposed in **Table 6-2** will be of value primarily for establishing baseline conditions in the Subproject area, and then for ambient quality monitoring.

**Table 7-2:** Minimum Provisions for Environmental Monitoring

Parameters to be Monitored	Location	Measurements	Frequency	Responsibility
<b>Construction Stage</b>				
Clearing of construction site	Substation boundaries	<ul style="list-style-type: none"> <li>Field inspection of Subproject Sites and ensuring that appropriate safety measures are implemented</li> </ul>	Clearing and restoration: Weekly	Contractors to implement corporate EHS plan, drainage management and solid waste control in the substation area.
Use of forest area	33 kV DL alignment and substation area	<ul style="list-style-type: none"> <li>Field inspection of Subproject sites and ensure the compensatory measures</li> <li>Related approval document for forest land use</li> </ul>	Prior to the construction work	Contractor responsibility under the supervision of PIU/DFO
Air: SPM, Noise: dB(A)	Substation boundaries and nearest receptor to substation	<ul style="list-style-type: none"> <li>Spot check for noise and dust using a portable monitoring device</li> </ul>	Air, and noise: quarterly during construction period	Contractors need to conduct air and noise monitoring during the construction period at the substation location



Construction wastes: on-site inspection	Visual inspection of active construction areas, including equipment staging areas and camps	<ul style="list-style-type: none"> <li>Spot check / visual inspection of solid waste (spoil, muck etc.) generation and disposal.</li> <li>Analysis of transformer oils to determine if polychlorinated biphenyls are present.</li> </ul>	Monthly spot checks for construction waste management	PIU safeguard officers to provide oversight via regular field inspections, and submit monitoring reports to the Bank
<b>Construction and Operation Stage</b>				
Occupational health and safety	Substation boundaries	<ul style="list-style-type: none"> <li>No. of Toolbox talk and safety orientation to the workers</li> <li>No. of workplace accidents</li> <li>Use of PPE by workers</li> </ul>	<p>Daily Inspection during construction</p> <p>Monthly Inspection during the operation phase</p>	Inspection of the construction site by the safety officer and PIU safeguard officer
Child involvement in construction work (needs to be prohibited)	Substation work	<ul style="list-style-type: none"> <li>Spot inspection at construction sites</li> </ul>	Monthly Inspection during construction	Site Office

### 7.3 Environmental and Social Mitigation and Monitoring Cost

Preliminary cost estimates for the ESMP implementation are shown in **Table 7-3**. These estimates cover the basic monitoring activities and the mitigation measures to be complied from the contractor's side. The ESMP cost estimated for the **Kanakasundari-Khatyad Distribution Line** is NRs 13,00,000.00. NEA has agreed for the effective implementation of the mitigation and monitoring cost items as mentioned in table below. NEA has agreed to be effective implementation of the mitigation and monitoring cost items as mentioned in table below.

**Table 7-3:** Mitigation Measures and Monitoring Activities Cost Estimates

SN	Budget Items	Unit	Rate (NRs.)	Total Amount (NRs)
1	Air Quality Monitoring (at substation)	6 (Times)	25,000.00	150,000.00
2	Noise Level Monitoring (at substation)	6 (Times)	8,334.00	50,000.00
3	Sprinkling of water to be used for dust control necessary in the earthen roads of the settlements nearby the substation area and proper storage of the construction materials (sand, cements, aggregates and spoil)	200 (Times) During Excavation and Civil works	1000.00	2,00,000.00
4	Management of electric equipment's, toxic materials of chemical wastes	-	L.S.	1,00,000.00
5	Segregation and management of solid wastes	-	L.S.	1,00,000.00
6	COVID-19 measures (considering pandemic situation) standardize the quarantine facilities with health aid to the labors	-	L.S.	200,000.00
7	EHS Awareness raising training to the labors	10 (Events)	15,000.00	1,50,000.00
8	Meeting of Safeguard Desk and Grievance Redress Committee at Field Level	24 (Months)	14,583.00	3,50,000.00
<b>Total</b>				<b>13,00,000.00</b>

## 8. CONCLUSION

Potential environmental impacts of this Subproject are not diverse and are all site-specific i.e., confined to the Core Project Area. Civil works will have minimal temporary impacts on air, noise and water quality. Erection of poles during construction shall follow the RoW of existing roads and the edge of public land. The PIU should give prior information before installation of the poles. In the ESMP consultations conducted in the settlement area, people have agreed for the implementation of the Subproject and have suggested installing poles on the edge of farm-lands, without affecting any private structures along the distribution line. If there is a loss of crops, appropriate compensation shall be provided. The implementation of the proposed Subproject needs 6.48 ha of forest area with no loss of trees. The Subproject need to undertake Brief Environmental Study (BES) and will be approved from the Ministry of Energy, Water Resources and Irrigation as the Subproject intercept the forest area. Mitigation measures are suggested in this ESMP to avoid any possible environmental and social impacts. The total ESMP cost for this Subproject is NRs. 13,00,000.00. NEA Project Implementation Unit has agreed to implement the estimated cost for the mitigation measures and monitoring activities.

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## **ANNEXES**

# Annex 1: SAMPLE NOTICE FOR PUBLIC CONSULTATION AND GRM FORMATION LETTER TO STAKEHOLDERS



## नेपाल विद्युत प्राधिकरण

(नेपाल सरकारको स्वामित्व)

वितरण तथा ग्राहक सेवा निर्देशनालय

नेपाल वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना

फ्याक्स: ०१-४१५३१४४

फोन नं.: ०१-४१५३१४५

दरबारमार्ग, काठमाडौं।



### नेपाल वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजनाको वातावरणीय तथा सामाजिक अध्ययन प्रतिवेदन तयारी सम्बन्धि सूचना

सूचना प्रकाशन मिति: .....

..... प्रदेश ..... जिल्ला  
.....(नगरपालिका/गाउँपालिका/महानगरपालिका/उपमहानगरपालिका)  
मा एसियन इन्फ्रास्ट्रक्चर इन्भेस्टमेन्ट बैंकको ऋण सहयोग भएको नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय, वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना प्रस्तावक रही कार्यान्वयन गर्न लागिएको ..... आयोजना कार्यान्वयन हुनुभन्दा अघि सो आयोजनाले त्यस क्षेत्रको वातावरण तथा सामाजिक पक्षहरूमा के-कस्तो प्रभाव पार्दछ भनि स्थानीय सरोकारवालाहरू सँग छलफल गर्न आयोजना क्षेत्रका सम्पूर्ण सबै सरोकारवालाहरूको निम्न स्थान तथा समय उपस्थितिका लागि यो सूचना प्रकाशित गरिएको छ।

#### सार्वजनिक छलफल हुने स्थान, मिति र समय:

स्थान:

मिति:

समय:



## नेपाल विद्युत प्राधिकरण

(नेपाल सरकारको स्वायत्त)।

वितरण तथा ग्राहक सेवा निर्देशनालय

नेपाल वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना

(ए.आई.आई.बि.)

फ्याक्स: ०१-४१५३१४४

फोन नं: ०१-४१५३१४५

दरबारमार्ग, काठमाण्डौ।

प.सं. ०७८/७९:२३१

मिति: २०७९/०२/१२

श्री .....

### विषय: गुनासो समाधान संयन्त्र गठन भएको सम्बन्धमा।

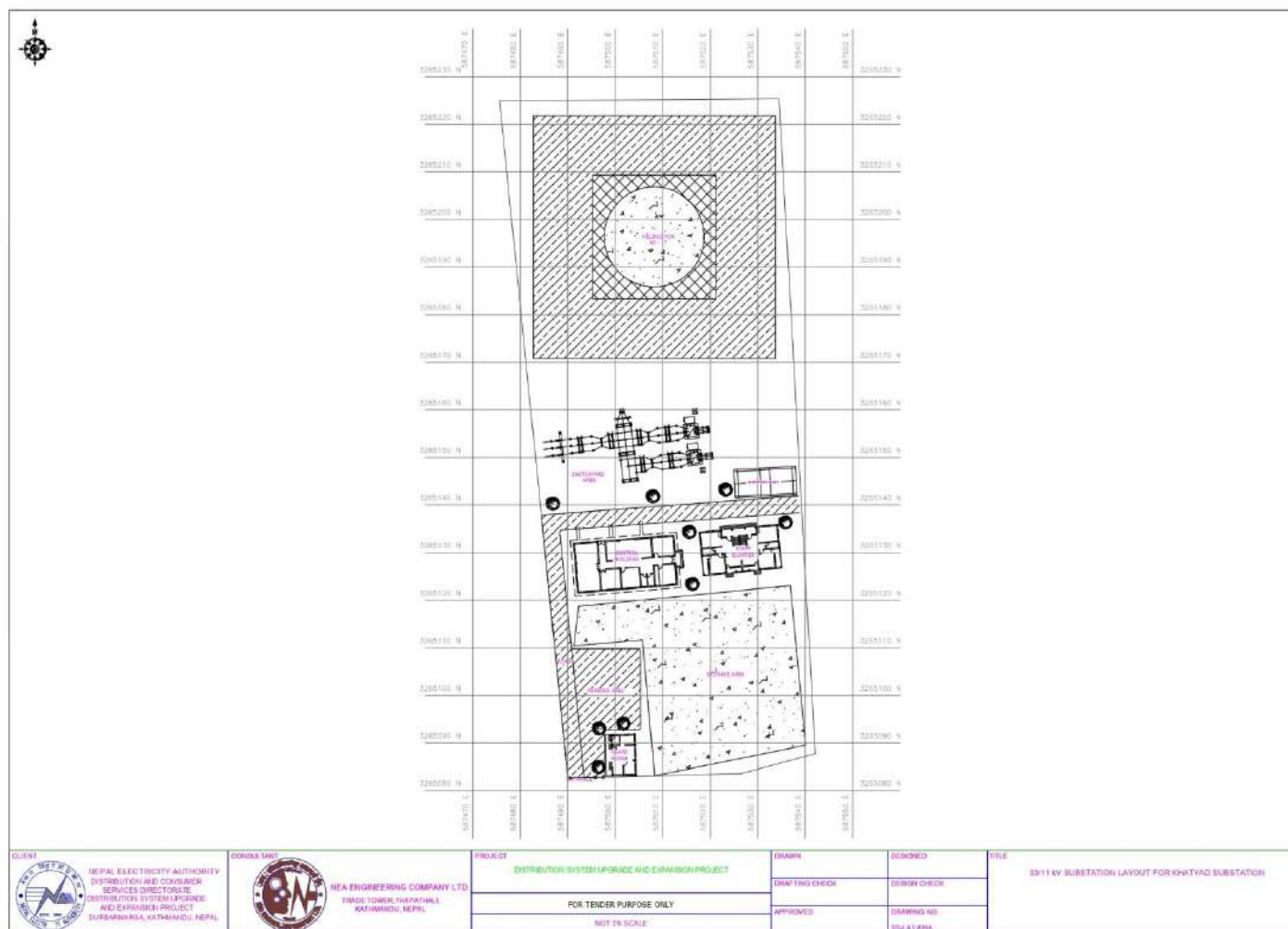
उपरोक्त विषयमा एसियन इन्फ्रास्ट्रक्चर इन्वेस्टमेन्ट बैंक (ए.आई.आई.बि.) को ऋण-सहयोगमा नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय, नेपाल वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना (ई.आई.बि.) प्रस्तावक रही कार्यान्वयन गर्न लागिएको ..... आयोजना अन्तर्गत नेपाल सरकारको पूर्ण-विद्युतीकरण गर्ने लक्ष्य बमोजिम तहाँ वडा/गाउँपालिका/नगरपालिका/उप-महानगरपालिकामा ३३/११ के.भी. सब-स्टेशन, ३३ के.भी. लाईन, ११ के.भी. लाईन, ४०० वी. लाईन, आदि निर्माण कार्यहरु हुने भएकोले सो कार्यहरु गर्दा स्थानीय सरोकारवालाहरुको कुनै गुनासो भए सो गुनासोको समाधान गर्न गुनासो समाधान संयन्त्र निर्माण गरिएको छ। अतः संलग्न गुनासो समाधान संयन्त्र दस्तावेज बमोजिम आफ्ना गुनासोहरु दर्ता गर्न र सोही दस्तावेजमा भनिए बमोजिम गुनासोको समाधान हुने व्यहोरा सम्पूर्ण सरोकारवालाहरुलाई जानकारी गराइन्छ।

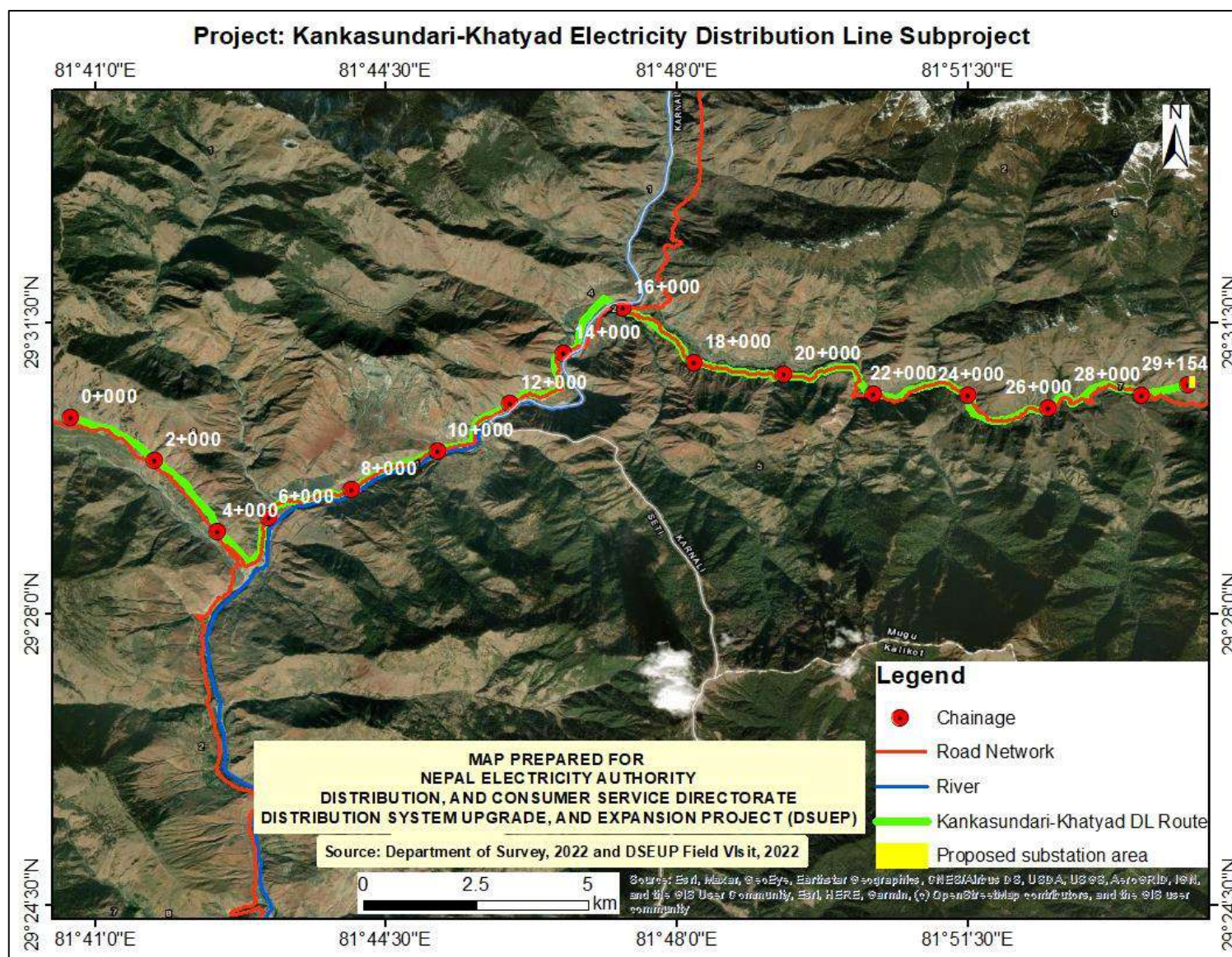
भवदीय,

(केशव श्रेष्ठ)

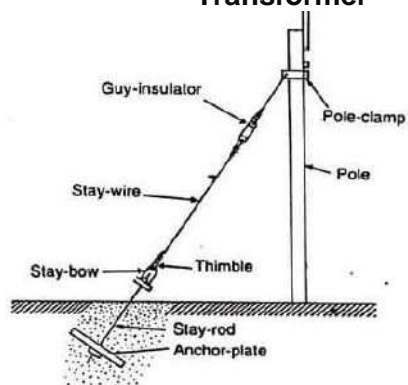
आयोजना प्रमुख



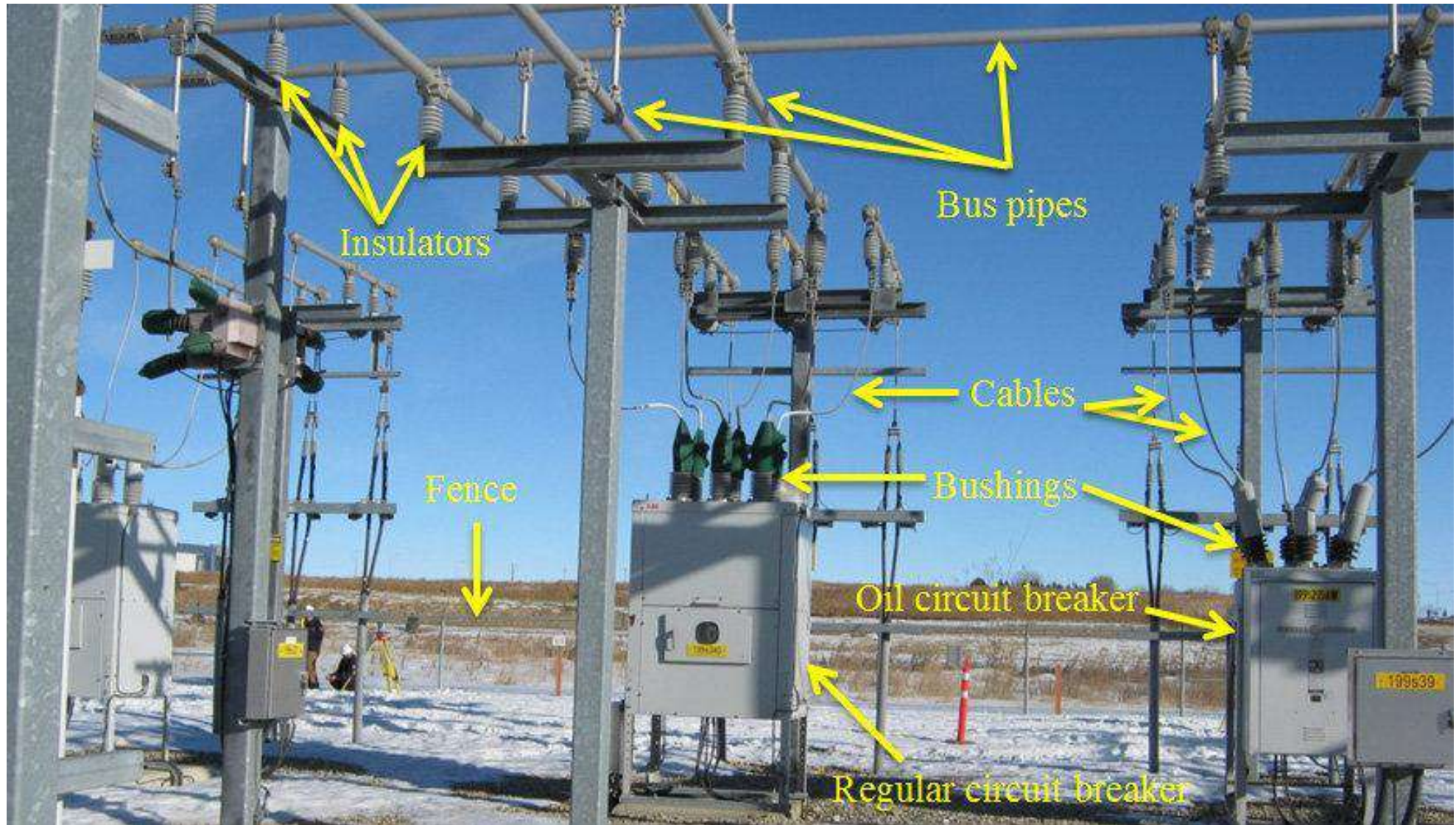
**Annex 2: LAYOUT MAPS OF SUBSTATION AND DISTRIBUTION LINE ALIGNMENT**





**Annex 3: FACILITY AND COMPONENTS****Transformer****Switch Yard****Stay/Guy Sets****Steel Tubular Pole****Insulator****Civil-Structures Supporting Electrical Components****Conductor**





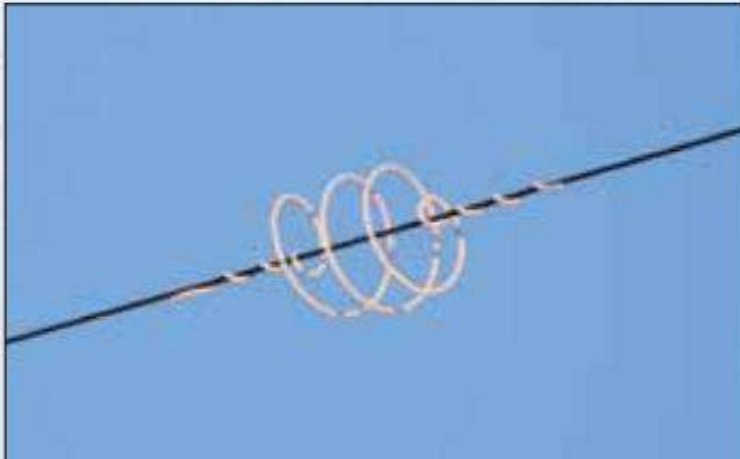
Possible components within 33 kV/11 kV Substation



**Bird Diverting Reflector**



**Wishbone Prevents Bird Landing on Wire**



**White Spiral in Wire Improves Visibility of Wire**



**Construction of Nest at Poles also divert Bird not sitting at Wires**



**Annex 4: LEGISLATIVE PROVISIONS**

<b>S N</b>	<b>Legal Provisions</b>	<b>Description</b>	<b>Relevancy concerning Project</b>
1.	<b>Constitution of Nepal</b>	<ul style="list-style-type: none"> <li>• The Constitution of Nepal is the main legal document, which emphasizes the right to a clean environment of the people, natural resources protection, preservation, and its prudent use. Rights regarding the clean environment, under article 30:</li> <li>• It includes making multi-purpose development of water resources, while according priority to domestic investment based on public participation to ensure a reliable supply of energy affordably, and easily, and make proper use of energy for the fulfillment of the basic needs of citizens, by generating, and developing renewable energy in article 51 (g).</li> </ul>	DSUEP helps to fulfill the rights of people to live in a clean environment along with fulfilling the basic needs by providing access to sufficient energy.
2.	<b>Environment Protection Act 2076 (2019 AD)</b>	<ul style="list-style-type: none"> <li>• Section 3 of the Act requires the proponent to conduct environmental studies concerning the prescribed proposals of any developmental works. Subsection 2 of this act provides the framework for the environmental study report prepared according to sub-section (1) shall, in fulfillment of the process as prescribed, be submitted to the relevant bodies of the Government of Nepal for approval.</li> </ul>	Environmental Studies, and approval of the report from the authorized body before construction of any project is mandatory to minimize the negative impacts in Nepal which is addressed in EPA, 2019.
3.	<b>Environmental Protection Rule, 2077 (2020 AD) [First Amendment on 2078 (2021)]</b>	<ul style="list-style-type: none"> <li>• Under the Environmental Protection Rules (2020) first amendment (2021), rule (3) as mentioned in annex (1), Section (F) (Energy, Water Resources, and Irrigation Sector) sub-section (1), a proponent shall be required to carry out the Brief Environmental Studies for construction of transmission line project less than 66 kV in forest land for another purpose.</li> </ul>	This rule provides the overall guidance to what type of environmental studies is required according to the project by the Government of Nepal.
4.	<b>Nepal Environmental Policy, and Action Plan, 2050(1993)</b>	<p>The aims of NEPAP are:</p> <ul style="list-style-type: none"> <li>• To manage natural, and physical resources efficiently, and sustainably</li> <li>• To balance the development efforts, and environmental conservation for sustainable fulfillment of basic needs</li> <li>• To preserve endemic, and endangered species, and their habitats; the promotion of private, and public institutions for biological resources inventory, and conservation</li> </ul>	DSUEP should follow the aims of NEPAP to protect, and conserve the physical, biological, and social environment during the

		<ul style="list-style-type: none"> <li>• To safeguard national heritage</li> <li>• To mitigate the adverse environmental impact of development projects, and human actions</li> <li>• To integrate environment, and development through appropriate institutions, adequate legislation, and economic incentives, and sufficient public resources</li> </ul>	construction of a 33 kV distribution line along with a substation.
5.	<b>Forest Act 2076 (2019)</b>	<ul style="list-style-type: none"> <li>• Pertaining to the chapter 12, Section 42(1), if there is no other alternative to the using of forest area for the operation of a national priority project, plan of which investment is approved by the Investment Board, project of national pride and it appears from the environment examination referred to in the prevailing law that the operation of such plan does not result in significant adverse effects on the environment, the Government of Nepal may give approval, as prescribed, to use any part of the national forest for the purpose of operating such plan,</li> <li>• Similarly, in providing the forest area for the operation of a plan pursuant to sub-section (1), to the extent possible, a land that is adjoining to the national forest area near the project site and situated in the same geographical and ecological belt and has such landscape where forest can be developed shall be provided for the purpose of planting trees at least in the area equal to the forest area that has to be used.</li> </ul>	<ul style="list-style-type: none"> <li>• About 6.48 ha of forest area occurs within RoW of the proposed 33 kV distribution line and substation area.</li> <li>• No need to be cleared from the Core Project Area of the proposed DL alignment and substation.</li> </ul>
6.	<b>Forest Regulations, 2079 (2022)</b>	<ul style="list-style-type: none"> <li>• Pertaining to Rule 87 (2) in case of the development project related to the use of forest land, the coordination has to be done with the concerned division forest office during the feasibility study and environmental study.</li> <li>• Rule 88, Application need to be submitted in case of use of national forest land from the feasibility study and application need to submitted to the Ministry of Forests and Environment through the subjective ministry</li> <li>• Rule 89, following the Rule 88, the Ministry of Forests and Environment direct Division Forest Office through its respective department for the detail field information and the that information should also be submitted to provincial ministry.</li> <li>• Rule 90, following the Rule 89, Division Forest Office should submit the information with field monitoring (if necessary) to the Ministry of Forests and Environment. The ministry will ensure the use of forest land if the applicable information and letters are received, and give permission to the respective project by binding in the rules states in the Forest Regulations.</li> <li>• Rule 91, following the Rule 90, after the decision made by the government of Nepal for the</li> </ul>	<ul style="list-style-type: none"> <li>• About 6.48 ha of forest area occurs within RoW of the proposed 33 kV distribution line and substation area.</li> <li>• No need to be cleared from the Core Project Area of the proposed DL alignment and substation.</li> </ul>

		<p>permission to use the forest land, development project should made the availability of the applicable land for the forest development as per the Forest Act (2076), Section 42 (2).</p> <ul style="list-style-type: none"> <li>• Rule 92, following the Rule 91, in case of failure in the availability of the applicable land, it has to go through the Land Acquisition Facilitation Committee in the district level.</li> <li>• Rule 93, following the Rule 92, in case failure of the land acquisition through the Committee respective department should give permission to the project for the Collection of amount in the government fund as per the land purchases for development project specified in Shedule-51.</li> </ul> <p>Rule 93 (5), the amount should base on the cost of the trees in the ratio of 1:10 and Rule 93 (5), the amount must include bi-annual production or purchase of trees, trees transportation, afforestation of 1600 trees per hectare, fencing and boundary for the protection of trees and require number of people for look after.</p>	
7.	<b>Electricity Act 1992</b>	<ul style="list-style-type: none"> <li>• No person shall be entitled to conduct survey, generation, transmission, or distribution of electricity without obtaining a license under this act.</li> <li>• The Electricity Act of 1992 has the provision of land procurement for the development of Subprojects that involve electricity generation, transmission, or distribution. The Act states that the licensee may apply to GoN to purchase the land or house of any person if it is required for the generation, transmission, or distribution of electricity. Upon the receipt of such an application, GoN may make the land or house, so requisitioned, available to any corporate body under the prevailing laws.</li> </ul>	The main goal of this project is to distribute a sufficient amount of electricity by constructing a 33 kV line, and substation by surveying to minimize the impacts.
8.	<b>Rural Energy Policy, 2006</b>	The rationale of formulating, and implementing this policy is to create a conducive environment that will self-motivate, and mobilize local institutions, rural energy user groups, non-government organizations, cooperatives, and private sector organizations for the development, and expansion of rural energy resources. The government will facilitate, and promote to involve private development, and expansion of new technologies. It has also envisioned subsidy provision for the promotion of such renewable energy technologies.	This project helps to improve the distribution, and motivate use the of electricity in rural areas of western Nepal.
9.	<b>Labor Act, 2074 (2017 AD)</b>	This labor Act was made under the management of parliament under sub-clause 1 of clause 296 of the Constitution of Nepal. Sub-section 3 of Section 2 states that the employees should not be compelled to other work other than they are assigned for. In addition, Sub-section 5 of Section 2 states about the prohibition of child labor in any organization,	The construction of a project is only possible when the rights of labor are secure. In this project, the Contractor should



		and sub-section 6 of Section 2 states that there should not be any kind of discrimination among the employee's regard of religion, ethnicity, gender, origin, language, or intelligence or other kinds of characters.	follow this act strictly.
10.	<b>Child Labor (Prohibition, and Regulation) Act, 2056 (2000 AD)</b>	As per section 3 of this act, no child has not attained the age of 14 years shall be engaged in works as a laborer.	Child labor is strictly prohibited in this project, and Contractors should follow this act.
11.	<b>Solid Waste Management Act, 2068 (2011 AD)</b>	This act has been formulated to minimize solid waste products from the target area by setting rules, and regulations on solid waste management (SWM) in the country to develop a better environment for the systematic, and effective management of solid waste, and to involve all the concerned stakeholders in SWM practice. The main features of this act are the discussion of the 3R principle (Reduce, Reuse, and Recycle). 3R principle seems to be very beneficial as it not only increases the life of landfill site but also saves the money which could be used for other infrastructure development. Section 4 of the act assigns the local body to manage or use the solid waste discharged or dumped in the collection center, transfer station, or treatment plant or collected during cleaning.	These acts provide the overall framework to manage the solid waste generated from households to the project level. Also, the proponent should manage the waste generated during construction.
12.	<b>Solid Waste Management Rules, 2070 (2013 AD)</b>	The solid waste management rule was formulated as per the provision made in article 50 of the Solid Waste Management Act, 2068. This regulation has emphasized the segregation of waste at source, and mentioned that the responsibility of proper disposal, and management of source belongs to the producers themselves. Section 3 of the rule describes the segregation, and management of solid waste. It has been mentioned that it is essential to segregate degradable, and non-degradable solid waste at the source.	These rules provide the overall framework for how to reduce the volume of waste disposed of at the source during the construction of the substation.
13.	<b>Fifteenth Plan</b>	The vision of the 15th plan is to contribute to the prosperity of the nation through sustainable, and reliable development of hydropower by setting the goal which is to ensure energy security through intensifying hydropower generation. In addition, one of the strategies of the government of Nepal in the 15th plan is to make the distribution system effective, and reliable to increase energy efficiency, and increase power consumption by expanding access to electricity by formulating the required policies:	This 5-year interim plan sets the goal about the generation, and distribution of hydroelectricity in Nepal which is directly related to this project.
14.	<b>United Nations</b>	UNFCCC, Signatories: 165. Parties: 195. (1), Article	The goal of this

	<b>Framework Convention on Climate Change (UNFCCC), 1992</b>	(4), commitment (f) states climate change considerations into account, to the extent feasible, in their relevant social, economic, and environmental policies, and actions, and employ appropriate methods, for example, impact assessments, formulated, and determined nationally, to minimize adverse effects on the economy, on public health, and the quality of the environment, of Subprojects or measures undertaken by them to mitigate or adapt to climate change. After it entered into force on 21 March 1994, it mandates the individual state for prioritization of resource conservation with development.	project is to replace the traditional form of energy with clean energy i.e., electricity which ultimately reduces air pollution, and smoke.
15.	<b>ILO 169</b>	<p>The main objective of this convention is to secure the rights of indigenous, and tribal people along with the gender equality, and non-discrimination of workers during work. Article 1 on the First Part of this convention mainly focused on the following points:</p> <p>(a) the social, cultural, and economic conditions of tribal peoples in independent countries differentiate from other parts of the national community, and their status is managed fully or partially by their customs or traditions or by special laws or regulations;</p> <p>(b) peoples in independent countries who are regarded as indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonization or the establishment of present state boundaries, and who, irrespective of their legal status, retain some or all of their own social, economic, cultural, and political institutions.</p> <ul style="list-style-type: none"> <li>• Self-identification as indigenous or tribal shall be regarded as a fundamental criterion for determining the groups to which the provisions of this Convention apply.</li> <li>• The use of the term people in this Convention shall not be construed as having any implications as regards the rights which may attach to the term under international law.</li> </ul>	Nepal is the part of ILO convention that's why ILO 169 should strictly follow during construction, and implementation of any types
16.	<b>Environment and Social Management Framework</b>	<ul style="list-style-type: none"> <li>• ESMF is to guide DSUEP sub-projects in the area of E&amp;S management using appropriate instruments, methodologies, procedure and responsibilities during the project cycle. NEA and the project partners shall apply during design and development of the sub-projects in order to comply with the Government of Nepal E&amp;S regulations and the Financiers' standards on E&amp;S assessment and management, Involuntary Resettlement, Indigenous People, Gender, etc.).</li> </ul>	Main guiding document for E&S study to identify issues and recommending appropriate practical augmentation/mitigation

			measures
17.	<b>Environmental and Social Policy (ESP)</b>	<ul style="list-style-type: none"> <li>• This policy speaks for the mandatory E&amp;S requirements for each Project like, screening, DDR, E&amp;S Assessment, ESMP, ESMF, Information Disclosure, Consultation and Monitoring and Evaluation.</li> </ul>	Mandatory requirement for ESMP study
18.	<b>Environmental and Social Standards of AIIB</b> <sup>11</sup>	<ul style="list-style-type: none"> <li>• Three associated mandatory environmental and social standards (ESSs) set out more detailed environmental and social requirements relating to the ESMP</li> </ul>	ESMP requirement

<sup>11</sup> <https://www.aiib.org/en/policiesstrategies/download/environmentframework/20160226043633542.pdf>

## Annex 5: CONSULATATION MEETING MINUTES

अज गिति २०७३/०२/१८ मा बाजुरा जिल्ला बुद्धिबद्धा  
क्यापलिङा वडा नं. १ राखतवाडामा नेपाल विद्युत प्राधिकरण  
वितरण प्रणाली स्तरीकरण तथा विस्तार आयोजना (DSUEP)  
अन्तर्गत निर्माण हुने गर्दैछो क्तवासुन्दरी खत्यद उप-आयोजना  
को वितरण लाइन निर्माणको शिलशिलामा भौतिक, जैविक र  
सामाजिक, आर्थिक तथा सांस्कृतिक बानावणमा पर्ने सम्भावित  
रूपको वडा वडा अध्यक्ष श्री मान बहादुर कार्की जुनै अध्यक्षतामा  
हामी निम्न सुरेखाबाला बस्तीहरूको उपस्थितिमा देहाय बमोजिम  
दलपल तथा निर्णय गरेका छौं।

उपस्थिति

क्र.सं.	नाम	हेगना	पिन	हस्ताक्षर
१.	मान बहादुर कार्की (वडाअध्यक्ष)	व.न.पा.१	३८४०५१३५५५	मेहेन्द्र
२.	हेडावरण गिरी स्वामि	"	३८५११८९१३३	मेहेन्द्र
३.	बस्ती गिरी	"	"	मेहेन्द्र
४.	स्वर्गेन्द्र गिरी	"	१९८४५४४७७३	मेहेन्द्र
५.	शर्मेन्द्र गिरी	"	१९८५५५५५५५	मेहेन्द्र
६.	हेडावरण गिरी	"	१९६८१११७९	मेहेन्द्र
७.	स्वर्गेन्द्र गिरी	"	१९६८१११७९	मेहेन्द्र
८.	अजित प्रसाद उपाध्याय	"	१९६८१११७९	मेहेन्द्र
९.	जोगा गिरी (काउन्सिलर)	"	"	मेहेन्द्र
१०.	पुर्णकुमार गिरी	"	"	मेहेन्द्र
११.	पर्व नेपाली	"	"	मेहेन्द्र
१२.	सुरेन्द्र गिरी	"	"	मेहेन्द्र
१३.	बस्ती गिरी	"	"	मेहेन्द्र
१४.	अजित गिरी	"	"	मेहेन्द्र
१५.	अजित गिरी	"	"	मेहेन्द्र
१६.	मुगा गिरी	"	"	मेहेन्द्र
१७.	महेन्द्र गिरी	"	"	मेहेन्द्र
१८.	सुरेन्द्र गिरी (अध्यक्ष, राज्य विभाग)	"	३८४०५१३५५५	मेहेन्द्र
१९.	पिलावा अधिकारी	NEAEC, Environmentalist	"	मेहेन्द्र
२०.	तेजेन्द्र रेग्मी	"	"	मेहेन्द्र
२१.	राम रेग्मी	"	Sociologist	मेहेन्द्र

निर्णयहरू

१. आयोजनाको आउनु भएका विस्तारहरूको आयोजनाको बारेमा जानकारी प्राप्त भयो।
२. यस क्षेत्रमा वितरण लाइन स्थापनाको जग्गा तथा पडनु भएका भूमा जग्गा जानकारी गरियो।
३. यस उप-आयोजनाको वितरण लाइन विस्तार गर्दा बस्ति भन्दा बाहिर बाट बस्तीजान् पर्ने हुँदा निम्न जग्गाहरू भूमा जग्गा पर्ने भन्दा जग्गाको दूरी देखाइ आली भए त्यसो पर्ने।
४. यस उप-आयोजनाको निर्माण गर्दा सिप र दक्षताको आधारमा स्थानिय बासीलाई रोजगारीमा प्रोत्साहन दिनु पर्नेछ।
५. दलपलमा अनुपस्थित रहेको भन्दा लाइन तथा फोल्डको क्षेत्रमा सुरेखाबालाहरूलाई उप-आयोजना निर्माणको क्रममा बाट बाटोको समन्वय गरिदिने व्यहोरा जानकारी गरियो।
६. यस उप-आयोजनाको निर्माण गर्दा यस क्षेत्रमा रहेको धार्मिक तथा प्रातात्मिक महत्त्वका स्थल तथा स्थापनाको स्थापनाको क्रममा जग्गाको नक्सात्मक असर नहुने गरी निर्माण गरिनु पर्ने तथा नक्सात्मक असर हुने अवस्था आएमा यस उप-आयोजनाको अर्को व्यवस्थापन गर्नु पर्नेछ।
७. यस उप-आयोजनाको प्रत्यक्ष प्रभावित क्षेत्रमा आदिवासी जनजाती तथा भौतिक पूर्ण परिवार वा समुदाय नरहेको व्यहोरा जानकारी गरियो।
८. यस क्षेत्रमा विद्युत आपूर्तिमा समस्या भएताले उप-आयोजना यथासक्य द्रिष्टो हुने गरी विद्युत विद्युतिय सेवा संचालन गर्नु पर्नेछ।
९. यस उप-आयोजना निर्माणको स्थानिय तह तथा सुरेखाबालाहरूको सहयोग र समर्थन रहनेछ।
१०. यस उप-आयोजना यथासक्य निर्माण गरि नेपाल सरकारको नियत रेल तथा निम्न बमोजिम बुद्धिबद्धा वि.पा. भित्र विद्युतिय सेवा प्रदान गर्नु पर्नेछ।



अज मिति २०७३/०२/१८ मा वजुरा जिल्ला बुद्धिन्दा नगरपालिका वडा नं. १ मटेनामा नेपाल विद्युत प्राधिकरण वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण हुन गइरहेको कन्डासुन्दरी-खत्याद विद्युत वितरण लाइन निर्माणको शिलशिलामा भौतिक, अर्थिक र सामाजिक आर्थिक तथा सांस्कृतिक बानानामा यान्त्रिक प्रभाव बारे हामी निम्न सरोकारवाला व्यक्तित्वको तथ्यांकको आधारमा विस्तार देहाय बमोजिम छनफल र निष्कर्ष गरिरहेका छौं।

उपनिर्वात

क्र.सं.	नाम	हेगाना	फोन	हस्ताक्षर
१.	बैरवहाल ठाउँ	बु.न.प.-१	९८६५०९२३५	
२.	धोले ढाकी	"	९८६५८६५८३९	
३.	राणबहाल ढाकी	"	९८६८७९४०९	
४.	खड्क ढाकी	"	९८५९०५१०८०	
५.	रंगबाल ढाकी	"	९८६८८४२०६३	
६.	बिर्छे ढाकी	"	९८६८८४२०६३	
७.	अनन्त ढाकी	"	"	
८.	कुमान ढाकी	"	"	
९.	दिलिप ढाकी	"	९८५१८९७३२	
१०.	ताराजन ढाकी	"	९८६०९५६८०	
११.	बम बहाल ढाकी	"	९८६०९५६८०	
१२.	गुञ्जबहाल ढाकी	"	"	
१३.	कुपुम बहाल ढाकी	"	"	
१४.	कुविराम ढाकी	"	९८५५३५३७५७	
१५.	मात्राधिद तिकुन	"	"	
१६.	पदम बहाल ढाकी	"	"	
१७.	अनन्त ढाकी 'B'	"	"	
१८.	धनमान मडावी	"	९८४९६२३२०६	
१९.	नरमान मडावी	"	"	
२०.	मिम बहाल मडावी	"	९८६४९२९६९	
२१.	मरिचक ढाकी	"	"	
२२.	मोचिक ढाकी	"	"	
२३.	दिन बहाल मडावी	"	"	
२४.	धनमान पाण्डे	"	९८८८४४४४	

उप. नाम हेगाना फोन हस्ताक्षर

२५.	दिवस अधिकारी	NEAEC वातावरणविद		
२६.	लेखक रेग्मी	"		
२७.	बम लाल रेग्मी	"		

निर्णयहरू

१. आयोजनाबाट आउनु भएका विज्ञहरूबाट आयोजनाको बारेमा जानकारी प्राप्त भयो।
२. यस क्षेत्रमा वितरण लाइन सांस्कृतिक जग्गा तथा लुप्त कितार भएर जाने (जानकारी) गरिएको।
३. यस उप-आयोजनाले वितरण लाइन निर्माण गर्दा बर्तमानमा बाहिर बाटोमा पर्नेछ।
४. यस उप-आयोजना निर्माण गर्दा सिप र लुप्तताको आधारमा स्थानियवासीलाई रोजगारीमा आधारितता दिनु पर्नेछ।
५. यस उप-आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा सांस्कृतिक महत्वपूर्ण संरचनाहरूमा कुनै प्रभाव नपार्ने गरी निर्माण गर्नु पर्नेछ तथा कुनै नकारात्मक असर हुने अवस्था आएमा यस उप-आयोजनाले शनियत व्यवस्थापन गर्नुपर्नेछ।
६. यस उप-आयोजनाको प्रत्यक्ष प्रभावित क्षेत्रभित्र अदिवासी जनजाती तथा जैविकमयुक्त परिवारहरूको बसोबास नरहेको जानकारी गरिएको।
७. यस क्षेत्रमा विद्युत आपूर्तिमा समस्या बढेकोले उप-आयोजना पश्चात्कालमा बाटो गरि भएपछि विद्युत सेवा संचालन गर्नुपर्नेछ।
८. यस उप-आयोजना निर्माणमा हामी सरोकारवालाहरूको पुर्ण सहयोग र समर्थन रहेकोछ।



अन्य मिति २०७९/०८/१९ मा काठमाडौं जिल्ला बुद्धिमान  
नगरपालिका वडा नं. १ पिपलडाँडा गाउँमा नेपाल विद्युत  
प्रधिकरण वितरण प्रणाली स्वतन्त्रता तथा विस्तार आयोजना  
(DSUEP) अन्तर्गत निर्माण हुने गरिबको कल्याणकारी-सम्पूर्ण  
विद्युत वितरण लाइन उप-आयोजनाको वितरण लाइन निर्माणको  
शिलशिलामा भौतिक, जैविक र सामाजिक तथा सांस्कृतिक  
वातावरणमा पर्ने सम्बन्ध प्रभावकारी मद्दत वाडा वडाध्यक्ष  
की मान वहादुर कार्की ज्यूको अध्यक्षतामा हामी निम्न सरोकारवाला  
हरूको उपस्थितिमा देहाय बमोजिम छलफल तथा निर्णय  
गरियो हो।

क्र.सं.	नाम	हेगना	फोन	हस्ताक्षर
१.	मान वहादुर कार्की, वडा अध्यक्ष	व. १. १. १	९८४०५५५४५	१८/११
२.	धननारायण कार्की, स्थानिय	"	९८६९०३५२९५	१८/११
३.	केसव के. बस्ती	"	९८६६४५८०९२	१८/११
४.	सुखान्त प्रिया प्रतडा	"	९८४८०३९३३०	१८/११
५.	विश्वनाथ खड्का	"	"	१८/११
६.	सुभाष विष्ट (आयोजना)	"	९८६८५९९९०५	१८/११
७.	अध्यापक बस्ती स्थानिय	"	९८५६८९३६०५	१८/११
८.	रुमी लामा	"	"	१८/११
९.	अध्यापक बस्ती	"	९८५९०५०८१८	१८/११
१०.	सुभाष कार्की	"	९८६४६९९९९	१८/११
११.	सुभाष कार्की	"	९८६२७०५७८२	१८/११
१२.	सुभाष कार्की	"	९८४२२३३८४४	१८/११
१३.	जोत व. कार्की	"	९८६८९८०८८	१८/११
१४.	जोत व. कार्की	"	९८६५५९९९९९	१८/११
१५.	पुर्ण व. विष्ट	"	९८४६६८२५००	१८/११
१६.	सुभाष व. कार्की	"	"	१८/११
१७.	सुभाष व. कार्की	"	९८४२२३३८४४	१८/११
१८.	सुभाष व. कार्की	"	९८४२२३३८४४	१८/११
१९.	सुभाष व. कार्की	"	९८४२२३३८४४	१८/११
२०.	सुभाष व. कार्की	"	९८४२२३३८४४	१८/११

क्र.सं.	नाम	हेगना	फोन	हस्ताक्षर
१९.	सुभाष कार्की	व. १. १. १	"	१८/११
२०.	सुभाष कार्की	"	"	१८/११
२१.	सुभाष कार्की	"	"	१८/११
२२.	सुभाष कार्की	"	"	१८/११
२३.	सुभाष कार्की	"	"	१८/११
२४.	सुभाष कार्की	"	"	१८/११
२५.	सुभाष कार्की	"	"	१८/११
२६.	सुभाष कार्की	"	"	१८/११
२७.	सुभाष कार्की	"	"	१८/११
२८.	सुभाष कार्की	"	"	१८/११
२९.	सुभाष कार्की	"	"	१८/११
३०.	सुभाष कार्की	"	"	१८/११
३१.	सुभाष कार्की	"	"	१८/११
३२.	सुभाष कार्की	"	"	१८/११
३३.	सुभाष कार्की	"	"	१८/११

निर्णयहरू

- आयोजनाबाट आउने भएका निम्नलिखित आयोजनाको बारेमा जानकारी प्राप्त भयो।
- यस क्षेत्रको वितरण लाइन सार्वजनिक सडक तथा सडक किनार भएर जाने जानकारी गरियो।
- यस उप-आयोजनाको वितरण लाइन निर्माण गर्दा कालो भन्दा बाहिर बाट लेजपु पर्नेछ।
- यस उप-आयोजना निर्माण गर्दा सिप र दक्षताको आधारमा स्थानीयवासीलाई रोजगारीमा प्राथमिकता दिनु पर्नेछ।
- यस उप-आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा सांस्कृतिक मूल्यहरू सुरक्षित रहनेमा कुनै प्रकारको नकारात्मक असर नपर्ने गरी निर्माण गर्नु पर्नेछ तथा कुनै नकारात्मक असर हुने अवस्था आएमा यस उप-आयोजनाको उचित व्यवस्थापन गर्नुपर्नेछ।
- यस उप-आयोजनाको प्रत्यक्ष प्रभावित क्षेत्रमा रहेका स्थानीय जनता तथा सरोकारवालाको सोलाहनु नसक्ने गरी जानकारी गरियो। तर यस क्षेत्रको जसोकास रहेको जानकारी गरियो।

6. दलकृष्णमा अनुपाथित रहनुभएता कडाइ तथा पीनमात्रा  
सिंहमा सुरेन्द्रबहाल/हनुमान् कडा कार्यलयले समन्वय गरिदिने  
छहेता भएतापी गराउनेछे।
7. यस उप-आयोजना यथाविष्ट निर्माण गरि नेपाल  
सङ्घान्त निष्पत्त ऐन तथा नियम बमोजिम बुझिनेका  
न.पा. भित्र बिधितय सेवा प्रदान गरिनेछे।
8. यस उप-आयोजना निर्माणमा स्थानिय तह तथा सुरेन्द्रबहाल-  
हनुमान् पुर्ण सहयोग र सहर्षण रहनेछे।

*(Signatures)*

आज मिति २०७९/०२/२० मा वलुवा जिल्ला हिमाली गाउँपालिका  
का नं. ७ वलुवा गाउँपालिका निम्नतः प्राथमिकता नितरण प्रणाली  
सुरेन्द्रबहाल तथा निम्नतः आयोजना (DSUEP) अन्तर्गत निर्माण  
हुन गइरहेको कलामावरी-खलामा निम्नतः निम्नतः नितरणलाई  
उप-आयोजनाको नितरण लाइन निर्माणको शिलशिलामा भएतापि,  
जसले २ सामाजिक तथा सांस्कृतिक नाताबन्धमा पर्ने एकै  
प्रभावकारि यस कडाको कडा अधिका तर्फको कुरा/माझी मुद्दा  
अध्यक्षतामा हामी निम्न सुरेन्द्रबहाल/हनुमान् उर्जितानि मा  
दिएका बमोजिम दलकृष्ण तथा निर्माण गरिनेछे।

क्र.सं.	नाम	हेगावा	फोन	हस्ताक्षर
१.	नरैन्द्रकुमार/काँडा/बडाबहाल/हिमाली/७ वलुवा	९८४१६७५५०	९८४१६७५५०	सुरेन्द्र
२.	दलकृष्ण अधिकारी	"	"	दलकृष्ण
३.	शरमा अधिकारी	"	"	तिमल
४.	निर्मला काँडा	"	"	कल्पना
५.	कल्पना अधिकारी	"	"	विष्णु
६.	बैष्णव अधिकारी	"	"	कल्याण
७.	कमला धामी	"	"	विष्णु
८.	सिता रोकाया	"	"	विष्णु
९.	धर्मिक अधिकारी	"	"	विष्णु
१०.	धर्मसिंह धामी	"	"	विष्णु
११.	विष्णु लोहा	"	"	विष्णु
१२.	विष्णु पाउड	"	"	विष्णु
१३.	विष्णु धापा	"	"	विष्णु
१४.	जीतबहाल	"	"	विष्णु
१५.	धनबहाल	"	"	विष्णु
१६.	नरदेवि नेपाली	"	"	विष्णु
१७.	नरदेवि कामी	"	"	विष्णु
१८.	विष्णु महता	"	"	विष्णु
१९.	रामेन्द्र/काँडा/धामी	"	"	विष्णु
२०.	जय पृथ्वी काँडा	"	"	विष्णु
२१.	मोहन जय काँडा	"	"	विष्णु



- क्र.सं. नाम ठेगाना फोन हस्ताक्षर
२२. विनया अग्रवाल NEAEC, Environmentalist
२३. रेजिस्ट्रार " "
२४. यम शर्मा " Sociologist
- निर्माणकर्ता
१. आयोजनाकार अर्जुनभद्रा विस्मृत्वा आयोजनाको बारेमा जानकारी प्राप्त गर्नु।
  २. यस क्षेत्रमा वितरण लाइन सडक बिना गए जाने व्यहोरा जानकारी गराउनु।
  ३. यस उप-आयोजनाले वितरण लाइन बिहान गर्दा गर्त भन्दा बाहिर तार लैजानु पर्नेछ।
  ४. यस उप-आयोजना निर्माण गर्दा लिए रक्षकको आधारमा स्थानियवासीलाई रोजगारीको अवसर उपलब्ध गराउनु पर्नेछ।
  ५. यस उप-आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा सांस्कृतिक महत्वका स्थानहरूमा कुनै पनि प्रकारको नकारात्मक असर पर्ने गरि गर्नु पर्नेछ साथै कुनै नकारात्मक असर पर्ने अवस्था आएमा यस उप-आयोजनाले उचित व्यवस्थापन गर्नुपर्नेछ।
  ६. यस उप-आयोजनाको प्रत्यक्ष प्रभावित क्षेत्रभित्र आदिवासी जनजाती तथा जीविकोपार्जन परिवारहरूको बसोबास नहुने व्यहोरा जानकारी गराउनु। तर यस क्षेत्रमा आदिवासी जनजातिहरूको बसोबास रहेको जानकारी गराउनु।
  ७. दलदलमा अनुपलब्ध रहेको भन्दा वितरण लाइन तथा पोल जाने क्षेत्रका सुरक्षाकर्मीहरूलाई कडा कामलेखन सम्मन्वय गरि दिने व्यहोरा जानकारी गराउनु।
  ८. यस उप-आयोजना यथासम्भव सडक गरि शुभस्थिति विद्युत सेवाको लागि आयोजना समक्ष अनुरोध गर्नुपर्नेछ।
  ९. यस उप-आयोजना निर्माणमा स्थानिय तह तथा सुरक्षाकर्मीहरूको कुनै सहयोग र समर्थन रहनेछ।

अज मिनि २०७९/०२/२९ मा बाजुरा जिल्ला हिमाली गा.पा. वडा नं. ६ लोकलिट गठेमा नेपाल विद्युत प्राधिकरण वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण हुन गइरहेको कलाशुक्ली रक्तगाउँ बिधुत वितरण लाइन उप-आयोजनाको वितरण लाइन निर्माणको बिनाशिलतामा भौतिक, जैविक र सामाजिक तथा सांस्कृतिक वातावरणमा पर्ने सम्बन्ध प्रभाव बारे यस वडाका वडा अध्यक्ष श्री प्रेमलाल भण्डारी ज्यूको अध्यक्षता तथा गाउँपालिका उपाध्यक्ष श्री राजकुमार साँके ज्यूको निशेध उपस्थितिसहित हामी विन्न सुरक्षाकर्मीहरूको उपस्थितिमा देहाय बमोजिम छलफल तथा निर्णय गरेका छौं।

#### उपस्थिति

क्र.सं.	नाम	ठेगाना	फोन	हस्ताक्षर
१.	प्रेम लाल भण्डारी हिमाली-६ लोकलिट	९८४४८२२६४		प्रा.म.स.
२.	राजकुमार साँके गा.पा. उपाध्यक्ष	" "	९८६५८९४१४	प्रा.म.स.
३.	धर्मरक्षि पाण्डे स्थानिय	" "	"	का.स.स.
४.	धर्मदत्त पाण्डे	" "	"	का.स.स.
५.	अमरी प्रसाद पाण्डे	" "	"	का.स.स.
६.	दाहीचन्द्र पाण्डे	" "	"	का.स.स.
७.	विष्णु दत्त पाण्डे	" "	"	का.स.स.
८.	नारीदेवि पाण्डे	" "	"	का.स.स.
९.	मनदेवि पाण्डे	" "	"	का.स.स.
१०.	वैद्यनाथ पाण्डे	" "	"	का.स.स.
११.	जयदेवि पाण्डे	" "	"	का.स.स.
१२.	नरद प्रसाद पाण्डे	" "	"	का.स.स.
१३.	मोहन लाल पाण्डे	" "	"	का.स.स.
१४.	पिपल राज पाण्डे	" "	"	का.स.स.
१५.	महानन्द पाण्डे	" "	"	का.स.स.
१६.	महेष् पाण्डे	" "	"	का.स.स.
१७.	गौरी प्र. पाण्डे	" "	"	का.स.स.
१८.	देव पाण्डे	" "	"	का.स.स.
१९.	लक्ष्मी पाण्डे	" "	"	का.स.स.
२०.	इन्द्रा पाण्डे	" "	"	का.स.स.



क्र.सं.	नाम	हेतु	पौन	हस्ताक्षर
२१.	नरजित राठी	हिमाली-५ नॉर्थ		
२२.	आनंदी उपाध्याय-स्थानिक	" " "		जाति
२३.	नंदकुमार पांडे	" " "		नरस
२४.	नरस पांडे	" " "		जाति
२५.	पद्मराज पांडे	" " "		विजय
२६.	विनायक पांडे	" " "		जाति
२७.	अंगराज पांडे	" " "	१९५२६५११५	जाति
२८.	इन्दुलाल पांडे	" " "	१९६७६९६३११	जाति
२९.	नर पद पांडे	" " "	१९६८५०१६१	जाति
३०.	अमरी अमरनाथ पांडे	" " "	१९५९९९९०१८	जाति
३१.	कुलकर्णी उपाध्याय	" " "		जाति
३२.	विजय पांडे	" " "		विजय
३३.	काली पांडे	" " "		जाति
३४.	अमर राज पांडे	" " "		जाति
३५.	मन पद पांडे	" " "		जाति
३६.	रमण पांडे	" " "		जाति
३७.	दादा पांडे	" " "		जाति
३८.	विजय पांडे	" " "		जाति
३९.	विजय पांडे	" " "	१९५२५५२५२५	जाति
४०.	अमर पांडे	" " "		जाति
४१.	मन पद पांडे	" " "		जाति
४२.	धन राज साहू	" " "	१९५९५९५९५९	जाति
४३.	चंद्र पद पांडे	" " "	१९५९५९५९५९	जाति
४४.	दिव्या अधिकारी	NEAC, Environmentalist		जाति
४५.	वैजय रंजी	" " "		जाति
४६.	यम डे.सी.	Sociologist		जाति
निर्णय				
१. आयोगना बाट आउनुभएता विज्ञानज्ञान आयोगना नैमा				
आनकारी प्राप्त भयो ।				
२. यस क्षेत्रमा प्रस्तावित उप-आयोगना अन्तर्गत वितरण				
लाइन तथा पोलहरू बाड्न दिनार भएर जाने व्यहोरा				
आनकारी गरिनेछ ।				

३. यस उप-आयोगना वितरण लाइन वितरण गर्दा कति	भन्दा बाहिर बाट लाग्नेछ ।
४. यस उप-आयोगना निर्माण गर्दा सिप र दक्षताको आधारमा	स्थानिकतालाई सम्मानित गरी प्राथमिकता दिनु पर्नेछ ।
५. यस उप-आयोगना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक	तथा सांस्कृतिक महत्त्वका संरचनाहरूमा कुनै प्रकारको नकारात्मक
असर पर्ने गरि गर्नु पर्नेछ साथै कुनै प्रकारको नकारात्मक	असर पर्ने अवस्था आएमा यस उप-आयोगनाले उचित
व्यवस्थापन गर्नु पर्नेछ ।	
६. यस उप-आयोगनाको प्रत्यक्ष प्रभावित क्षेत्रभित्र आदिवासी	जनजाति तथा अल्पसंख्यक परिवारहरूको बसोबास नरहेको व्यहोरा
आनकारी गरिनेछ । तर यस क्षेत्रमा आदिवासी जनजातिहरूको	बसोबास रहेको - आनकारी गरिनेछ ।
७. वनफलमा अनुपलब्ध वितरण लाइन तथा पोल जमिन क्षेत्रमा	सरकारको नियन्त्रणमा रहेको क्षेत्रमा निर्माण गरिने व्यहोरा
आनकारी गरिनेछ ।	
८. यस क्षेत्रमा विद्युतिय सेवा नभएको उप-आयोगना यथासम्भव	हाइड्रोविज्युलिक निकाय स्थापना गर्नुपर्नेछ ।
९. यस उप-आयोगना निर्माणमा स्थानिक तह तथा सरकारी तहमा	हुने पूर्ण सहयोग र समर्थन रहनेछ ।



शान २०७५/०२/२२ मा मुगु जिल्ला रसुवा गाउँपालिका वडा नं. ८ आमा गाउँमा नेपाल विद्युत प्राधिकरण वितरण प्रणाली सुदुरोन्नति तथा वित्तीय आयोजना (DSUEP) अन्तर्गत निर्माण हुन गईरहेको कानकासुन्दरी-खत्याद विद्युत वितरण लाइन उप-आयोजनाको वितरण लाइन निर्माणको थालिमिलायमा भौतिक, जैविक र सामाजिक तथा संस्कृतिक वातावरणमा पर्ने असर प्रभाव बारे यस वडाका वडा अध्यक्ष श्री खिलाल गिरी जुनै आयोजनामा हामी निम्न सरोकारवालाहरूको उपस्थितिमा दृष्टि समोजिम छलफल तथा निर्णय गरिदा हो ।

उपस्थिति

क्र.सं.	नाम	पेशा	फोन	हस्ताक्षर
१.	खिलाल गिरी वडाअध्यक्ष खत्याद-८, मुगु			
२.	राम बहादुर रावल नि.वडाअध्यक्ष	"	"	९८४८३६५४३३
३.	डा.डी. डा.डी. रमणिय	"	"	९८५४८५७११३
४.	जय बहादुर डा.डी	"	"	९८५५५५५५३५
५.	भवन खत्री	"	"	
६.	पुनमा डा.डी	"	"	
७.	शर्मिला खत्री	"	"	९७५२२५८९२०
८.	लालपुरा डा.डी	"	"	९७५५५५५५४७
९.	शर्मिला खत्री वि.ड.	"	"	
१०.	नानी खत्री	"	"	९८५४७४४८५३
११.	बान्ना खत्री	"	"	
१२.	माया वि.ड.	"	"	
१३.	मन बहादुर लुवार	"	"	९८५४७४४८५३
१४.	सुमन कला लुवार	"	"	
१५.	जिवन काकी	"	"	९७५११२५५५
१६.	परिता लुवार	"	"	९८५४७४४८५३
१७.	रुप लुवार	"	"	
१८.	नाली	"	"	
१९.	पुनमा लुवार	"	"	
२०.	असकरी लुवार	"	"	
२१.	रात लुवार	"	"	
२२.	विष्णु ब्राह्मण	"	"	
२३.	विष्णु रसम	"	"	

कानकासुन्दरी-खत्याद (NEAEC) उप-आयोजना  
 २४. ९८४९०७७५८६

२४. शान के.पी. रसम (NEAEC) उप-आयोजना  
 निर्माण

१. आयोजनाका आयोजना अधिकृतको आयोजनाको बारेमा जानकारी प्राप्त भयो ।

२. यस क्षेत्रमा प्रभावित उप-आयोजना अन्तर्गतको वितरण लाइन तथा पोल्सहरू सबै डिग्री भएर जानै गएको जानकारी गरियो ।

३. यस उप-आयोजनाको वितरण लाइन वितरण गर्दा वस्ति भन्दा बाहिर गएर जानु पर्नेछ ।

४. यस उप-आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा सांस्कृतिक महत्त्वका संरचनाहरूमा कुनै प्रकारको नकारात्मक असर पर्ने गरि गर्नु पर्नेछ साथै कुनै प्रकारको नकारात्मक असर पर्ने अवस्था आएमा यस उप-आयोजनाले उचित रूपले व्यवस्थापन गर्नुपर्नेछ ।

५. यस उप-आयोजना निर्माण गर्दा सिप र दक्षताको आधारमा स्थानीयवासीलाई रोजगारीमा प्राथमिकता दिनु पर्नेछ ।

६. यस उप-आयोजनाको प्रत्यक्ष प्रभावित क्षेत्रभित्र आदिवासी जनजातिहरूको वसोवास नरहेको गरी जानकारी गरियो ।

७. छलफलमा अनुपस्थित लाइन तथा पोल्स जानै गएको सरोकारवालाहरूलाई वडा कार्यालयले सम्भव गरी दिने गरी जानकारी गरियो ।

८. यस क्षेत्रमा भाषाको विकृति र वस्तीको उप-आयोजना यथासम्भव हटाउनु पर्ने गरी जानकारी गरियो ।

९. यस उप-आयोजना निर्माणमा स्थानीय तह तथा सरोकारवालाहरूको पूर्ण सहयोग र सहकार्य रहनेछ ।



असुन मिति २०७९/०३/१३ मा मुगु जिल्ला स्वच्छता गठानमिका वडा नं. ४ कैरे गाउँमा नेपाल विद्युत प्राधिकरण वितरण प्रणाली स्तरोन्नति तथा विनाश आयोगको (DSUEP) अन्तर्गत निर्माण हुन गरीरहेको बुढाबुढी-खत्याड विद्युत वितरण लाइन उप-आयोगको वितरण लाइन तथा संरक्षण निर्माणको शिल-शिलामा भौतिक, जैविक र सामाजिक तथा सांस्कृतिक क्षतिको सम्भावनाको बारेमा अध्ययन गरी उनीहरूको रचनात्मक सहयोगको लागि निम्न परामर्शहरूको उपस्थितिमा सहयोगी समितिहरूको रूपमा निर्माण गरिएको।

**उपस्थिति**

क्र.सं.	नाम	हेगडा	फोन	हस्ताक्षर
१.	जम्बु रावल, वडा अध्यक्ष	खत्याड-४, मुगु	९८४६६९०३४४	
२.	बालु बिरथापा (समिति सचिव)	"	९८४६६२०९०	
३.	मनु थापा	"	९८४६६९०३९०९	
४.	मनसु थापा	"	९८४६६६४२०४	
५.	उपेन्द्र थापा	"	"	
६.	शारदा थापा	"	"	
७.	शरद बहादुर थापा	"	"	
८.	तकडु थापा	"	"	
९.	पदु थापा	"	"	
१०.	मनोज थापा	"	"	
११.	पुष्प थापा	"	९८४६६९०३३	
१२.	धन बहादुर थापा	"	"	
१३.	सुर्ज थापा	"	"	
१४.	सुपसिंह थापा	"	"	
१५.	नरदुस थापा	"	"	
१६.	कुल बहादुर थापा	"	९८४६६९०३३	
१७.	अक्षरा थापा	"	"	
१८.	पुनी थापा	"	"	
१९.	अवधुत थापा	"	"	
२०.	मदन रोकाया	"	९८४६६९०३३	
२१.	अमर बहादुर थापा	"	९८४६६९०३३	

क्र.सं. नाम हेगडा फोन फोन नं.

२२. दिवस अधिकारी NEAEC, Enayamada, ९८८०१८४००

२३. विवेक शर्मा " " ९८४३०७७९०७

२४. गगन शर्मा " " ९८४३०७७९०७

**निर्णयहरू**

१. आयोगको उप-आयोगको निम्नलिखित आयोगको निर्माण गर्नका लागि प्राप्त भयो।
२. यो क्षेत्रमा प्रस्तावित उप-आयोगको अन्तर्गतको वितरण लाइन स्तरोन्नति गर्न र सडक किनार भएर जाने तथा संरक्षण नेपाल सरकारको स्वामित्वमा रहेको क्षेत्रमा निर्माण गरिने व्यहोरा जानकारी गराउने।
३. यो उप-आयोगको वितरण लाइन तथा संरक्षण निर्माण गर्दा जोखिमपूर्ण कार्यहरू गर्ने भएताले पनि।
४. यो उप-आयोगको निर्माण गर्दा यो क्षेत्रमा रहेको धार्मिक तथा सांस्कृतिक महत्त्वका संरचनाहरूमा कुनै प्रकारको नकारात्मक असर पर्ने गरि गर्नु पर्ने र कुनै प्रकारको नकारात्मक असर पर्ने अवस्था आएमा यो उप-आयोगको अनिवार्य रूपमा सम्पन्न गर्ने पर्ने।
५. यो उप-आयोगको निर्माण गर्दा विपरीत रूढताको आधारमा स्थानीयवासीलाई रोजगारीमा प्राथमिकता दिनु पर्ने।
६. यो उप-आयोगको प्रत्यक्ष प्रभावित क्षेत्रमा आवासीय भवनहरूको नक्सा नरहेको व्यहोरा जानकारी गराउने।
७. स्थानीयमा अनुपस्थित लाइन गर्ने तथा संरक्षण गर्ने क्षेत्रमा सुरक्षाकर्मीहरूलाई वडा कार्यालयले समर्थन गरिने व्यहोरा जानकारी गराउने।
८. यो क्षेत्रमा भएको विगतिय सेवा नभएकोले उप-आयोगको प्रभावकारी रूपमा गर्नु पर्ने व्यहोरा जानकारी गराउने।
९. प्रस्तावित उप-आयोगको निर्माण क्षेत्रमा बलि, गोश्वरा, सांस्कृतिक सम्पदा, संस्कार स्थल नभएको साथै धार्मिक तथा पुरातत्विक महत्त्वका संरचनाहरू नरहेको व्यहोरा जानकारी गराउने।
१०. यो उप-आयोगको निर्माणमा स्थानीय तह तथा संलग्नताहरूको पूर्ण सहयोग र समर्थन रहेको।




प्रमाणित				
क्र.सं.	नाम	देगावा	जोत	इस्तफा
१.	रामकृष्ण काडी	वडाअध्यक्ष	रत्नपट्ट ११, मुगु ३८४९९९६२८४	११/११/११
२.	दोबिन दावी	रक्षीप	" " ५८६५११०६०६	११/११/११
३.	लाक्ष्मी काडी	"	" " ९८६२३२३०६	११/११/११
४.	अमर वहाणु रोडया	"	" " ११११११११११	११/११/११
५.	समिला काडी	"	" " ११११११११११	११/११/११
६.	राम वहाणु काडी	"	" " ११११११११११	११/११/११
७.	विष्णु वहाणु काडी	"	" " ११११११११११	११/११/११
८.	सुज्जा रावत (काडी)	"	" " ११११११११११	११/११/११
९.	कल वहाणु काडी	"	" " ११११११११११	११/११/११
१०.	अंग वहाणु काडी	"	" " ११११११११११	११/११/११
११.	मान वहाणु काडी	"	" " ११११११११११	११/११/११
१२.	काडी काडी	"	" " ११११११११११	११/११/११
१३.	राज वहाणु रोडया	"	" " ११११११११११	११/११/११
१४.	अंग वहाणु काडी	"	" " ११११११११११	११/११/११
१५.	रूपकांडा रावत	"	" " ११११११११११	११/११/११
१६.	वर्णराज काडी	"	" " ११११११११११	११/११/११
१७.	साउनी काडी	"	" " ११११११११११	११/११/११
१८.	वर्ण वहाणु काडी	"	" " ११११११११११	११/११/११
१९.	कल वहाणु काडी	"	" " ११११११११११	११/११/११
२०.	कल्पना वि. ड.	"	" " ११११११११११	११/११/११
२१.	रत्न वहाणु वि. ड.	"	" " ११११११११११	११/११/११

क्र.सं.      नाम      ठेकाना      फोन      दस्तावेज  
 29. दिग्गज अधिकाारी NEAEC, Environmentallist, 9855018300 दिग्गज  
 23. तेजेंद्र रेग्मी " " 9843077987 दिग्गज  
 28. यमकुंजी " Sociologist, 9801372467 दिग्गज  
 निर्णयहट्ट  
 1. आयोगावाट आउन भएर विज्ञहट्टाट आयोगावाट वारि  
 विलुप्त जानकारी प्राप्त भयो।  
 2. यस क्षेत्रमा प्रस्तावित उप-आयोजना अन्तर्गत कितल  
 लाखन रुपैयाँ डिनार भएर जानि व्यहोरा जानकारी गरउंछौं।  
 3. यस उप-आयोजनाले कितल लाखन विलुप्त गर्दा यस क्षेत्रमा  
 रहेको धार्मिक तथा सांस्कृतिक महत्त्वको संरक्षणमा कुनै  
 प्रकारको नकारात्मक प्रभाव पर्ने गरि गर्नु पर्नेछ साथै कुनै  
 प्रकारको नकारात्मक प्रभाव पर्ने अवस्था आएमा यस उप-आयोजनाले  
 श्वित व्यवस्थापन गर्नु पर्नेछ।  
 4. यस उप-आयोजना निर्माण गर्दा स्थि रक्षकताको आधारमा  
 प्रभावितकारीलाई रोजगारीमा प्राथमिकता दिनु पर्नेछ।  
 5. यस उप-आयोजनाको प्रथम प्रभावित क्षेत्रभित्र आदिवासी  
 जनप्रतिहट्टाको बसोबास नरहेको व्यहोरा जानकारी गरउंछौं।  
 6. छलफलमा अनुपस्थित कितल लाखन जानि क्षेत्रको सुरा-  
 कावालाहललाई नडा कार्यालयले समन्वय गरिदिने व्यहोरा  
 जानकारी गरउंछौं।  
 7. यस क्षेत्रमा विकासिय सेवा नभएकाले यस आयोजना यथास्थि  
 शुरू गर्न पर्ने व्यहोरा जानकारी गरउंछौं।  
 8. यस उप-आयोजना निर्माणमा स्थानीय तह तथा सुरा-  
 कावालाहलको पूर्ण सहयोग र समर्थन रहेनेछ।  
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 दिग्गज

श्री नेपाल विद्युत प्राधिकरण  
विखरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना,  
दरबारमार्ग, काठमाण्डौ, नेपाल ।

उपरोक्त सम्बन्धमा त्यस कम्पनीको मिति २०७९/०२/१९ को प्राप्त पत्रानुसार  
 स.स.स. प्रदेस, काठमाडौं जिल्ला,  
 वडा नं. १, बडामा नेपाल विद्युत प्राधिकरण द्वारा  
 प्रस्तावित "विद्युत प्रणाली स्तरोन्नति तथा विस्तार आयोजना" को वातावरणीय तथा सामाजिक  
 व्यवस्थापन योजना (Environment and Social Management Plan) प्रतिवेदन तयारी सम्बन्धि  
 सार्वजनिक सूचना यस स.स.स. प्रदेस, काठमाडौं जिल्ला,  
 वडा नं. १, मा अवस्थित यस स.स.स. वडा नं. १, मा पालिका वडा नं. १, मा पालिका वडा नं. १, मा  
 सूचना पालिका २०७९/०२/१९, गते टाँस गरिएको ब्यहोरा जानकारीका लागि अनुरोध छ।

हस्ताक्षर:   
नाम: रमेश खत्री  
पद: कार्यक्षेत्र कर्मचारी



कार्यालय/संस्थाको छाप

वितरण प्रणाली स्तराव्यति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरूको वातावरणीय तथा सामाजिक ब्यवस्थापन योजना (Environmental and Social Management Plan) प्रतिवेदन तयारी सम्बन्धी सार्वजनिक सूचना ढाँसोको मूचुल्का

सदस्य प्रतिभाम प्रवेश, ता. ०६/०८/८०, जिल्ला, कैलाली, मा. १  
 वडामा नेपाल बिचुत प्राधिकरण द्वारा प्रस्तावित "बितरण प्रणाली स्तर उन्नति तथा विस्तार आयोजना" को बातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environment and Social Management Plan) प्रतिवेदन तयारी सम्बन्धि सार्वजनिक सूचना यस  
 कैलाली, गाउँपालिका प्रहरी वार्ड नं. १, राउतकाँडा, मा  
 आज २०७९/०८/०६, गते हापी तपसिलका व्यक्तिको रोहबरमा टाँस गरिएको प्रमाणित नदो यो मुचुक्ता  
 गरियो।

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१.	बिजु गिरी	कुसुमा	कृषी	९८६८१७१७९	<i>[Signature]</i>
१.	रविगुप्त राज गिरी	"	"	९८९९५८८७१३	<i>[Signature]</i>
३.	उज्ज्वल राज गिरी	"	विद्यार्थी	९८९३५९२५९८	<i>[Signature]</i>

वितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उप-आयोजनाहरूको  
वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environmental and Social  
Management Plan) प्रतिवेदन तयारी सम्बन्धी  
सार्वजनिक सूचना टाँस को मुचुल्का

सुदूरपश्चिम प्रदेश, कैलाली जिल्ला, तडिगढा गाउँपालिका  
वडा नं. ०५ नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित "वितरण प्रणाली स्तरउन्नति  
तथा विस्तार आयोजना" को वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environment and Social  
Management Plan) प्रतिवेदन तयारी सम्बन्धि सार्वजनिक सूचना यस कैलाली जिल्ला  
तडिगढा गाउँपालिका वार्ड नं. ०५, तडिगढा मा  
आज २०७९.०२.१८ गते हामी तपसिलका व्यक्तिहरूको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का  
गरिदियो।

तपसिल				
क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर हस्ताक्षर
१	के.रा. वं.रा.की. वं.रा.प.रा.१	तडिगढा	सुदूरपश्चिम	९८९८४३८०९३
२	च.रा. १९९८ (का.रा. १)	"	"	९८९९०३८२९९
३	म.रा. वि.रा. १	"	"	९८९८५२२२९५
४	म.रा. वि.रा. १	"	"	९८९८५२२२९५
५	प.रा. वि.रा. १	"	"	९८९८५२२२९५

वितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उप-आयोजनाहरूको  
वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environmental and Social  
Management Plan) प्रतिवेदन तयारी सम्बन्धी  
सार्वजनिक सूचना टाँस को मुचुल्का

सुदूरपश्चिम प्रदेश, कैलाली जिल्ला, हिमाली गाउँपालिका  
वडा नं. ०५ नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित "वितरण प्रणाली स्तरउन्नति  
तथा विस्तार आयोजना" को वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environment and Social  
Management Plan) प्रतिवेदन तयारी सम्बन्धि सार्वजनिक सूचना यस हिमाली जिल्ला  
मन्डौनगर पालिका वार्ड नं. ०५, मन्डौनगर मा  
आज २०७९.०२.१८ गते हामी तपसिलका व्यक्तिहरूको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का  
गरिदियो।

तपसिल				
क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर हस्ताक्षर
१	मन्डौनगर पाण्डे	हिमाली गा.पा. ६	बि.रा.प. १	९८९८५२२२९५
२	मन्डौनगर पाण्डे	"	क.रा. १	९८९८५२२२९५
३	मन्डौनगर पाण्डे	"	क.रा. १	९८९८५२२२९५



वितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उप-आयोजनाहरूको  
वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environmental and Social  
Management Plan) प्रतिवेदन तयारी सम्बन्धी  
सार्वजनिक सूचना टाँस को मुचुल्का

सूचना प्रसारण प्रदेश, कैलाली जिल्ला, दैलेखी  
०८० बडामा नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित "वितरण प्रणाली स्तरउन्नति  
तथा विस्तार आयोजना" को वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environment and Social  
Management Plan) प्रतिवेदन तयारी सम्बन्धी सार्वजनिक सूचना यस दैलेखी जिल्ला  
मा दैलेखी गाउँपालिका वार्ड नं ०८, कोडा मा  
आज २०७९/०२/०९ गते हामी तपसिलका व्यक्तिहरूको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का  
गरिदियो।

## तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१.	डा. विष्णु शर्मा	सुदूरपश्चिम प्रदेश	डा. विष्णु शर्मा	९८५२३२३०६०	
२.	डा. विष्णु शर्मा	सुदूरपश्चिम प्रदेश	डा. विष्णु शर्मा	९८५२३२३०६०	
३.	डा. विष्णु शर्मा	सुदूरपश्चिम प्रदेश	डा. विष्णु शर्मा	९८५२३२३०६०	

वितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उप-आयोजनाहरूको  
वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environmental and Social  
Management Plan) प्रतिवेदन तयारी सम्बन्धी  
सार्वजनिक सूचना टाँस को मुचुल्का

सूचना प्रसारण प्रदेश, कैलाली जिल्ला, दैलेखी  
०८० बडामा नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित "वितरण प्रणाली स्तरउन्नति  
तथा विस्तार आयोजना" को वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environment and Social  
Management Plan) प्रतिवेदन तयारी सम्बन्धी सार्वजनिक सूचना यस दैलेखी जिल्ला  
मा दैलेखी गाउँपालिका वार्ड नं ०८, कोडा मा  
आज २०७९/०२/०९ गते हामी तपसिलका व्यक्तिहरूको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का  
गरिदियो।

## तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१.	डा. विष्णु शर्मा	सुदूरपश्चिम प्रदेश	डा. विष्णु शर्मा	९८५२३२३०६०	
२.	डा. विष्णु शर्मा	सुदूरपश्चिम प्रदेश	डा. विष्णु शर्मा	९८५२३२३०६०	
३.	डा. विष्णु शर्मा	सुदूरपश्चिम प्रदेश	डा. विष्णु शर्मा	९८५२३२३०६०	

वितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरूको  
वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environmental and Social  
Management Plan) प्रतिवेदन तयारी सम्बन्धी  
सार्वजनिक सूचना टाँस को मुचुल्का

कठमाडौं प्रदेश, सुनसरी जिल्ला, खत्याड गापा/नपा  
४ तें वडामा नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित "वितरण प्रणाली स्तरउन्नति  
तथा विस्तार आयोजना" को वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environment and Social  
Management Plan) प्रतिवेदन तयारी सम्बन्धि सार्वजनिक सूचना यस सुनसरी जिल्ला  
खत्याड गाउँनगर पालिका वार्ड नं ४ मा  
आज २०७९/११.११.१९ गते हामी तपसिलका व्यक्तिहरूको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का  
गरिदियो।

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१.	सुनसरी धाम खत्याड-४, सुनसरी	समाजसेवी	९६४६४२०९०	सुनसरी	
२.	सुन धामा	"	"	९६४६४२०९०	सुनसरी
३.	शान्ति धामा	"	"	"	शान्ति धामा

वितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरूको  
वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environmental and Social  
Management Plan) प्रतिवेदन तयारी सम्बन्धी  
सार्वजनिक सूचना टाँस को मुचुल्का

कठमाडौं प्रदेश, सुनसरी जिल्ला, खत्याड गापा/नपा  
८ तें वडामा नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित "वितरण प्रणाली स्तरउन्नति  
तथा विस्तार आयोजना" को वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environment and Social  
Management Plan) प्रतिवेदन तयारी सम्बन्धि सार्वजनिक सूचना यस सुनसरी जिल्ला  
खत्याड गाउँनगर पालिका वार्ड नं ८ मा  
आज २०७९/०२.११.१९ गते हामी तपसिलका व्यक्तिहरूको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का  
गरिदियो।

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१.	राम बहादुर खत्री	खत्याड-८	कजी	९६४६४२०९२४	राम बहादुर खत्री
२.	हरेक कल्लो खत्री	"	कजी	"	हरेक कल्लो खत्री
३.	राम बहादुर खत्री	"	समाजसेवी	९६४६४२०९२४	राम बहादुर खत्री





## बुढीनन्दा नगरपालिका



प.सं.: ०६८/०७९  
च.नं.:

...१२...नं. वडा कार्यालय  
सि.प.त.ड.प.ली, बाजुरा  
सुदूरपश्चिम प्रदेश, नेपाल

मिति: २०७६/०२/१८

विषय: लिफ्टर्स सम्बन्धमा

श्री: नेपाल विद्युत प्राधिकरण  
वितरण तथा ग्राहक सेवा निर्देशनालय  
नेपाल वितरण प्रणाली स्तरोन्नति तथा विस्तार अभियान  
दरबारमार्ग, काठमाडौं ।

प्रस्तुत विषयमा नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय, नेपाल वितरण प्रणाली स्तरोन्नति तथा विस्तार अभियान, दरबारमार्ग, काठमाडौं को -च.नं. २३१ को मिति २०७५-०२-१९ को प्राप्त पत्र अनुसार यस बुढीनन्दा न.पा. वडा नं. १ मा निर्माण हुन गइरहेको कन्कासुंदरी-खल्पा विद्युत वितरण लाइन अन्तर्गत वितरण लाइन पने प्रत्यक्ष प्रभावित क्षेत्रमा आदिवासी जनजाती तथा भोक्तीसमुह परिवारहरुको नसोवास नरहेको कम्प्लेन जातकारीका साथ अनुरोध छ।

सि.प.त.ड.प.ली  
मानि बहादुर कार्की  
वडा अध्यक्ष



## हिमाली गाउँपालिका

प.सं.: ०६८/०७९  
च.नं.: २६५

...१२...नं. वडा कार्यालय  
...तो.३५...वि.पा.ली...बाजुरा  
सुदूरपश्चिम प्रदेश, नेपाल

मिति: २०७५/०२/१०

विषय: लिफ्टर्स सम्बन्धमा

श्री: नेपाल विद्युत प्राधिकरण  
वितरण तथा ग्राहक सेवा निर्देशनालय  
नेपाल वितरण प्रणाली स्तरोन्नति तथा विस्तार अभियान  
दरबारमार्ग, काठमाडौं ।

प्रस्तुत विषयमा नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय, दरबारमार्ग काठमाडौंको -च.नं. २३१ को मिति २०७५-०२-१९ को प्राप्त पत्रअनुसार यस हिमाली गाउँपालिका वडा नं. ७ मा निर्माण हुन गइरहेको कन्कासुंदरी-खल्पा विद्युत वितरण लाइन को प्रत्यक्ष प्रभावित क्षेत्रमा यस वडामा रहेको आदिवासी जनजाति तथा भोक्तीसमुह परिवारहरुको नसोवास नरहेको जानकारी छ।

सि.प.त.ड.प.ली

मानि बहादुर कार्की  
वडा अध्यक्ष



## हिमाली गाउँपालिका

.....नं. वडा कार्यालय

प.सं.: ०६९१००

च.नं.: ४८२

.....नं. वडा कार्यालय

सुदूरपश्चिम प्रदेश नेपाल

मिति: २०७३/०२/२९

विषय: सिफारिस सम्बन्धमा

श्री: नेपाल विद्युत प्राधिकरण

वितरण तथा ग्राहक सेवा निर्देशनालय

नेपाल विद्युत प्राधिकरण स्तरोन्नति तथा विस्तार आयोजना  
दरबारमार्ग काठमाडौं ।

उपरोक्त विषय सम्बन्धमा नेपाल विद्युत प्राधिकरण  
वितरण तथा विस्तार आयोजना दरबारमार्ग काठमाडौंको च. ३. २३१  
को मिति २०७३-०२-१२को आप्त पत्रानुसार यस हिमाली गाउँपालिका  
का नं. ६ मा निर्माण हुने गडरौँको कन्क्रिट सुन्दरी - खत्याड विद्युत वितरण  
लाइनको सम्पन्न प्रकृति धेरैमा यस कामा रहेको आदिवासी समुदाय  
तथा जोगविम्वुल परिवारको बसोबास गरेको व्यहोरा सिफारिस गरिएको।

सिफारिस  
ममलाल मण्डारी  
वडा अध्यक्ष  
नेपाल विद्युत प्राधिकरण  
वडा अध्यक्ष



खत्याड गाउँपालिका

## ६ नं वडा कार्यालय

प.सं.: २०७८/०७९

चलानी नं.: २७८

कर्णाली प्रदेश नेपाल

मिति: २०७९/०२/२९

विषय: सिफारिस सम्बन्धमा

श्री: नेपाल विद्युत प्राधिकरण

वितरण तथा ग्राहक सेवा निर्देशनालय

नेपाल विद्युत प्राधिकरण स्तरोन्नति तथा विस्तार आयोजना  
दरबारमार्ग, काठमाडौं ।

प्रस्तुत विषयमा नेपाल विद्युत प्राधिकरण, वितरण तथा विस्तार आयोजना, दरबारमार्ग  
काठमाडौंको च. ३. २३१को मिति २०७३/०२/१२को आप्त पत्रानुसार यस खत्याड  
गाउँपालिका वडा नं. ६ मा निर्माण हुने गडरौँको कन्क्रिट सुन्दरी - खत्याड विद्युत -  
वितरण लाइनको सम्पन्न प्रकृति धेरैमा आदिवासी समुदाय तथा जोगविम्वुल  
समुदायको बसोबास गरेको व्यहोरा सिफारिस गरिएको।

सिफारिस  
ममलाल मण्डारी  
वडा अध्यक्ष  
नेपाल विद्युत प्राधिकरण  
वडा अध्यक्ष



खत्याड गाउँपालिका  
९ नं. वडा कार्यालय  
नखर्जि मुगु

प.स. २०७८/२०७९  
चलानि नं.:

कर्णाली प्रदेश, नेपाल  
मिति २०७९/०२/१३

विषय : सिफरिस सम्बन्धमा ।

श्री नेपाल विद्युत प्राधिकरण  
वितरण तथा ग्राहक सेवा निर्देशनालय  
नेपाल वितरण प्रणालि स्तरोन्नति तथा विस्तार आयोजना  
दरबार मार्ग काठमाडौं ।

प्रस्तुत विषयमा नेपाल विद्युत प्राधिकरण वितरण प्रणालि स्तरोन्नति तथा विस्तार आयोजना दरबार मार्ग काठमाडौं को च.नं. २३१ को मिति २०७९/०२/१२ को प्राप्त पत्रअनुसार यस खत्याड गाउँपालिका वडा नं. ९ मा निर्माण हुनगर्दै रहेको कनकासुन्दरी - खत्याड विद्युत वितरण लाईन आयोजनाको वितरण लाईन खण्डमा प्रत्यक्ष प्रभावित क्षेत्र भित्र आदिवासि जनजाति तथा जोखिम युक्त परिवारहरूको बसोबास नरहेको व्यहोरा जानकारी साथ अनुरोध छ ।

  
लोकेन्द्र भण्डारी  
वडा अध्यक्ष



खत्याड गाउँपालिका  
११ नं. वडा कार्यालय

प.स. २०७९/०८/०  
च.नं. ४२४

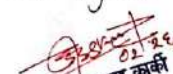


कर्णाली प्रदेश, नेपाल  
मिति : २०७९/०२/२६

श्री नेपाल विद्युत प्राधिकरण  
वितरण तथा ग्राहक सेवा निर्देशनालय  
नेपाल वितरण प्रणालि स्तरोन्नति तथा विस्तार आयोजना  
दरबार मार्ग, काठमाडौं

विषय : सिफरिस सम्बन्धमा ।

उपरोक्त विषय सम्बन्धमा नेपाल विद्युत प्राधिकरण  
वितरण तथा विस्तार आयोजना, दरबार मार्ग, काठमाडौंको  
च.नं. २३१ को मिति २०७९/०२/१२ को प्राप्त पत्रअनुसार यस  
खत्याड गाउँपालिका वडा नं. ११ मा निर्माण हुन गइरहेको  
कनकासुन्दरी - खत्याड विद्युत वितरण लाईनको प्रत्यक्ष  
प्रभावित क्षेत्रमा आदिवासी तथा जोखिम युक्त परिवारको  
बसोबास नरहेको व्यहोरा जानकारी साथ अनुरोध छ ।

  
रामकृष्ण कार्की  
वडा अध्यक्ष





खत्याड गाउँपालिका  
४ नं. वडा कार्यालय  
खत्याड, मugu ।

पत्र संख्या : २०७५/०७९  
चलानी नं. ४४९

कर्णाली प्रदेश नेपाल  
मिति : २०७५/०२/२४

विषय : दिफारिस् सम्बन्धमा

श्री : नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय  
नेपाल वितरण प्रणाली स्तरीयता तथा विस्तार आयोजना  
दस्तावेजमा रहेको ।

प्रस्तुत विषयमा नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय, नेपाल वितरण प्रणाली स्तरीयता तथा विस्तार आयोजना दस्तावेजमा रहेको माफत निर्माण हुन गइरहेको खत्याड-खत्याड विद्युत वितरण लाइन अन्तर्गतको खत्याड निर्माण हुने क्षेत्रमा बल्लि, गौचरण, सांस्कृतिक सम्पदा, संरक्षण स्थल नभएको साथै धार्मिक तथा सांस्कृतिक महत्त्वको खत्याड नभएको सार्वजनिक सम्पत्तिहरूको नभएको जानकारी छ ।

२०७५/०२/२४  
जय बहादुर रावल  
उप प्रमुख



खत्याड गाउँपालिका  
४ नं. वडा कार्यालय  
खत्याड, मugu ।

पत्र संख्या : २०७५/०७९  
चलानी नं. ४४९

कर्णाली प्रदेश नेपाल  
मिति : २०७५/०२/२४

विषय : दिफारिस् सम्बन्धमा ।

श्री : नेपाल विद्युत प्राधिकरण  
वितरण तथा ग्राहक सेवा निर्देशनालय  
नेपाल वितरण प्रणाली स्तरीयता तथा विस्तार आयोजना  
दस्तावेजमा रहेको ।

प्रस्तुत विषयमा नेपाल विद्युत प्राधिकरण वितरण प्रणाली स्तरीयता तथा विस्तार आयोजना, दस्तावेजमा रहेको माफत निर्माण हुन गइरहेको खत्याड-खत्याड विद्युत वितरण लाइन अन्तर्गतको खत्याड निर्माण हुने क्षेत्रमा बल्लि, गौचरण, सांस्कृतिक सम्पदा, संरक्षण स्थल नभएको साथै धार्मिक तथा सांस्कृतिक महत्त्वको खत्याड नभएको सार्वजनिक सम्पत्तिहरूको नभएको जानकारी छ ।

२०७५/०२/२४  
जय बहादुर रावल  
उप प्रमुख



## खत्याड गाउँपालिका नं. वडा कार्यालय

पत्र संख्या : ०६८/०६९  
चलानी नम्बर : ४५५



कर्णाली प्रदेश, नेपाल  
मिति २०६९/०१/११

श्री नेपाल विद्युत प्राधिकरण  
वितरण तथा सेवा विभाग  
नेपाल विद्युत प्राधिकरण स्तरीय तथा वितरण क्षेत्रमा  
दरबारमार्ग, काठमाडौं ।

**विषय :-** सिफारीश सम्बन्धमा ।

उपरोक्त विषय सम्बन्धमा नेपाल विद्युत प्राधिकरण  
वितरण तथा वितरण क्षेत्रमा, दरबारमार्ग, काठमाडौंको चं. सं. २३१  
को मिति २०६९/०१/११ को प्राप्त पत्रानुसार यस खत्याड गाउँपालिका  
वडा नं. ८ मा निर्माण हुने जडरको कन्क्रीटलाई - खत्याड  
विद्युत वितरण लाईनको प्रत्यक्ष प्रभावित क्षेत्रमा आवधिकी-  
जनजाति तथा जोखिमपूर्ण परिवारको बसोबास गरिएको क्षेत्र  
जानकारीका साथ अनुरोध छ ।

  
शिवनाथ गिरी  
वडा अध्यक्ष

फोन नं.

ईमेल :

**Annex 7: SAFETY RELATED SIGNS AND WASTE MANAGEMENT PRACTICES****SIGNAL NOTICE**

First Aid  
प्राथमिक उपचार



Emergency Meeting Point  
आकस्मिक भेला हुने ठाउँ



Fire Extinguisher  
अग्नी निवन्धन उपकरण



Fire hose  
अग्नी निवन्धन पाइप

**DANGER SIGNS**

Keep Out  
निर्माण क्षेत्र- टाढै रहनुहोस्



Danger  
खतरा - खुला खान्दा



Danger of open trench  
खतरा - खुला ट्रेन्च



No operation without safety guards  
सुरक्षाका साधनविना यो उपकरण संचालन गर्ने  
नियत

**INSTRUCTION SIGNS**

Do Not Touch  
छुन नपाउनुहोस्



Food and Drink Prohibited  
खाद्य र पेय निषिद्ध



Slow Sign for Traffic Control  
विलम्बारे आन्दोलन



Directional Exit Sign  
बाहिर जाने दिशा

**SAFETY AND SAFETY INSTRUCTION SIGNS**

Safety Gloves Required  
सुरक्षी चल्नको आवश्यक



Safety Vests Required  
सुरक्षी वेस्टको आवश्यक



Safety Glasses Required  
सुरक्षी चल्न आवश्यक

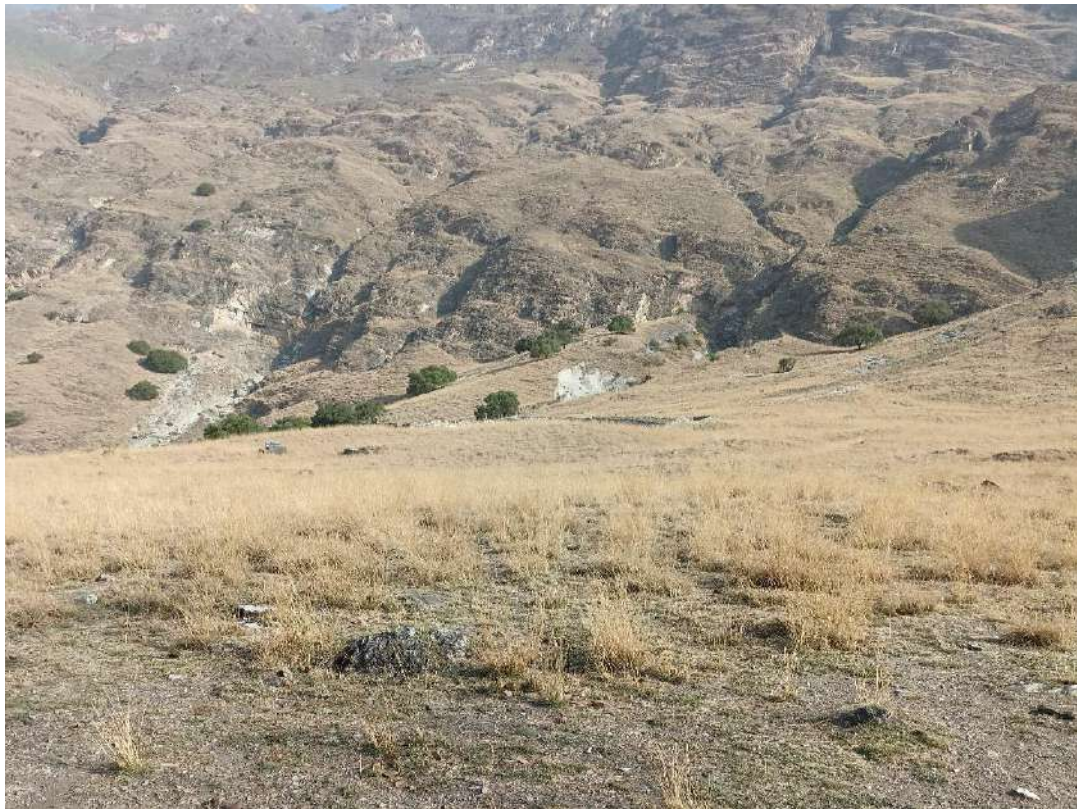


Safety Shoes Required  
सुरक्षी जूता आवश्यक





## Annex 8: PHOTOGRAPHS



Tapping Point at Mastamandu, Budhinanda-1, Bajura



Proposed distribution line alignment along RoW of Martadi-Kolti Section in Budhinanda Municipality-01





Proposed distribution line alignment along RoW of Karnali Corridor Section in Himali RM-07



Proposed distribution line alignment crossing of Karnali River at Chainage 15+000



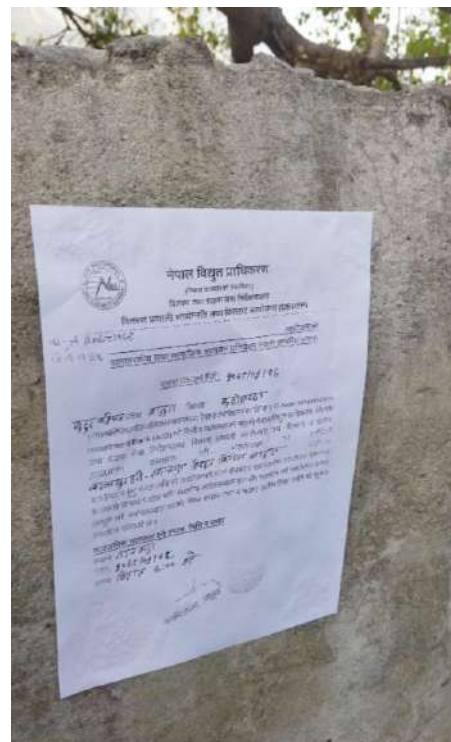


Proposed distribution line alignment in Khatyad-Rara Corridor Section of Khatyad RM-08



Proposed distribution line alignment in Khatyad-Rara Corridor Section of Khatyad RM-04





Public Notice pasted for Public Consultation at Rawatbada, Budhinanda-01



Consultation meeting at Matela, Budhinanda Municipality-01





Consultation meeting at Rawatbada, Budhinanda Municipality-01



Consultation meeting at Pipaldali, Budhinanda Municipality-01





Consultation meeting at Badhu, Himali RM-07



Consultation meeting at Boldhik, Himali RM-06





Consultation meeting at Aam, Khatyad RM-08

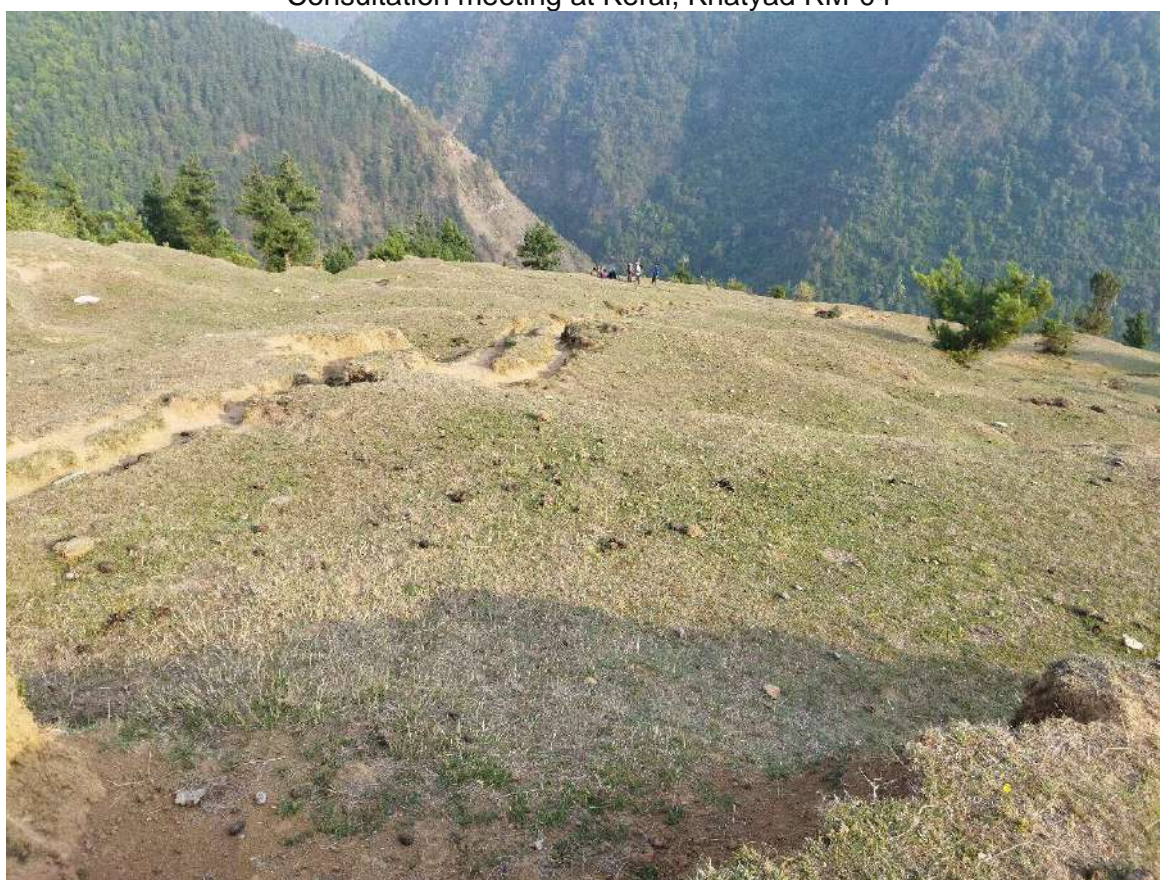


Consultation meeting at Ratapani, Khatyad RM-11





Consultation meeting at Kerai, Khatyad RM-04



Proposed land for the Substation at Ghodasaine, Khatyad RM-04



## Annex 9: ENVIRONMENTAL AND SOCIAL SCREENING AND RAPID ASSESSMENT GUIDANCE FOR DISTRIBUTION LINE

### 9.1 Screening Guidance – to be filled up per subproject (11kV line)

Province:
District/Municipality:
Subproject Name:
Subproject Location: name of locations of distribution line (start from/ward/municipality .....end to..... (ward/municipality),
Total length of distribution line:.....km/m

Environmental and Social Screening Criteria	Project Requirement
<b>Environmental Impact Assessment Requirement</b> EIA/IEE. As per national requirement (as per Environmental Protection Act 2019) does the subproject require assessment of BES/IEE or EIA, Please tick the requirement.	
1.	If “Yes”, the subproject needs to prepare ESMP as per AIB requirement.
<b>Natural Habitat</b> Defined as the type of natural environment in which a particular species of organism lives. It is characterized by both physical and biological features and that human activity has not essentially changed the main ecological functions of the area	
4. Is the subproject located in a legally protected area based on Forestry Map?	If “Yes”, please indicate what type of permission it will requires
5. Does distribution line route/poles close to any touristic view points, wetlands, and sites of cultural / religious / archeological / historic significance?	If “Yes” please indicate what impact it will entail.
6. Will the subproject significantly make impact of degradation or change of the natural known habitat/migration movement route of protected rare and endangered species and/or forest in the protected area, proposed protected area or area considered with special ecology?	If “Yes”, please indicate what impact it will entails including cutting down trees etc.
7. Does the distribution line/ route and locations of poles are falling in any landslide & erosion prone/ risk spot where geological avoidance is not feasible	If “Yes” please indicate what impact it will entail.
<b>Indigenous Peoples (IPs)</b> Identification of the existence IPs is aimed to guarantee that IPs would be treated as well as other community members and given opportunity to participate and get access to the benefit of the project with ways that would not threat their exclusive culture and welfare. The project has to give correct and detail information of the objective and plan (design, schedule etc) of the subproject with consultation with the IPs before any construction activity in the area started. The term IPs is used generally for an ethnic individual or group that: (i) are considered by	

national or local laws or policies as well as anthropological researches/studies as belonging to ethnic minorities or Indigenous Peoples defined by Nepal Federation of Indigenous Nationalities (NEFIN); (ii) identify as being part of a distinct social and cultural group; (iii) self-identify as being part of a distinct social and cultural group; (iv) maintain collective attachments to distinct habitats or ancestral territories and/or to the natural resources in these habitats and territories; (v) maintain cultural, economic, social, and political institutions distinct from the dominant society and culture; (vi) speak a distinct language or dialect; (vii) have been historically, socially, and economically marginalized, disempowered, excluded, and/or discriminated against; (viii) represented as “Indigenous Peoples” or as “ethnic minorities” in any formal decision-making bodies at the national or local levels.	
<p>7. Is the subproject area affected community:</p> <p>(i) Are considered by national or local laws or policies as well as anthropological researches/studies as belonging to ethnic minorities or Indigenous Peoples defined by Nepal Federation of Indigenous Nationalities (NEFIN)?</p> <p>(ii) Identify as being part of a distinct social and cultural group?</p> <p>(iii) Self-identify as being part of a distinct social and cultural group?</p> <p>(iv) Maintain collective attachments to distinct habitats or ancestral territories and/or to the natural resources in these habitats and territories</p> <p>(v) Maintain cultural, economic, social, and political institutions distinct from the dominant society and culture?</p> <p>(vi) Speak a distinct language or dialect?</p> <p>(vii) Have been historically, socially, and economically marginalized, disempowered, excluded, and/or discriminated against?</p> <p>(viii) Represented as “Indigenous Peoples” or as “ethnic minorities” in any formal decision-making bodies at the national or local levels?</p>	<p>If “Yes” in any of the question no 7, consultation should be conducted as described above. This should be documented as followed: (i) proof of dissemination of the notice for consultation; (ii) notes on when is the consultation being held, who attend the consultation, what is the result, and documentation of every consultation, with list of attendance segregated by gender. The form of attendance list and notes of meeting is attached in Appendix 11</p>
8. Is there any adverse impact on any groups identified (by answering “Yes”) on the point 5?	If “Yes”, the subproject is not qualified to be included. Realign.
<p><b>Cultural Resources</b></p> <p>Cultural resources include tangible culture (such as buildings, monuments, landscapes, books, works of art, and artifacts), intangible culture (such as folklore, traditions, language, and knowledge), and natural heritage (including culturally significant landscapes, and biodiversity)</p>	
9. Is the subproject temporary or permanently causing relocation or any other negative impacts to cultural heritage that has important significance for local, regional or national based on provincial or national list, proposed provincial or national list, and/or just has been identified when the	If “Yes”, the subproject is not qualified to be included

public consultation with project affected people was held?	
10. Is there any cultural heritage especially with important value for local community (eg. ancestral tomb) being negatively affected by the subproject?	If “Yes”, the subproject is not qualified to be included
<b>Land Use</b> The development of or erection of distribution poles will require use of land. The land requirement would be optimized by using government owned land. For Right of Way, private land might be affected if there is no existing Right of Way available, and/or necessary to connect to private customers. Consent of landowners for use of their land and people whose non-land assets impacted by the project would be secured using written documentary evidences as in Appendix 11. During the construction phase, there would be land to be used temporary for construction activities. The contractor on behalf of NEA should maximise the usage of public land like roadside, and will rent private land with budget taken from the construction contract if public land is not available.	
11. Is there any land owned by individual or organisation to be affected because of the subproject?	If “Yes”, the consent form has to be filled and collected. Keep all written letter request and filled consent documentation in hard copies
12. Is there any subproject activity that would restrict or close access to the community usual activities, facilities and services, productive assets and natural resources permanently or temporarily?	If “Yes”, explain briefly why there would be restriction and/or closure and what would be the arrangement with the landowners and land users.  Keep all written filled consent documentation in hard copies
13. Is there any crops and/or trees (fruit, timber or herb) or fixed assets, loss of business or enterprises owned by individual or organisation to be affected because of the subproject?	If “Yes”, explain briefly what would be the impacts of the trees and crops, loss of business or enterprises and the arrangement with the landowners, business owners and land users. Keep all written filled consent documentation in hard copies include reference/basis for compensation.
14. Is there any adverse impact on social and economic activities arising from change in land use	If “Yes”, explain briefly what would be the adverse impacts on social and economic activities arising from change in land use
15. Is there restrictions on land and resources owned communally or by the Government	If “Yes”, explain briefly what would be the impacts of the restrictions on land and resources owned communally or by the Government
16. Is there any private land to be used temporary during the construction phase for any construction activities?	If “Yes”, explain briefly: - location(s) of private land to be used - evidence(s) that the land would be rented under contractor’s contract
<b>Safety Distance</b> <b>As per Electricity Regulation 2050 (1993)</b>	
17. Schedule 12 (Distance which ought to be from wire to the ground)	If “Yes”, for any of the question, the subproject has to redirect the distribution lines plan to follow the safety distance
18. Schedule 13 (Minimum distance which	Note:

ought to be from the wire to the house of tree) a.	Keep all plan documented in print-out, any change has to be noted in the resource documents
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## 9.2 Mitigation measures if the impact entails:

	Particulars	Mitigation measures	Responsibility	Remarks
E1.	If route passes through forest area and tree cutting is required.			
E2.	If the distribution line/ route and locations of poles are falling in any landslide & erosion prone/ risk spot where geological avoidance is not feasible.			
E3.	To maintain minimum clearance as per government/NEA standard.			
E4.	If existing transformers are replaced with new one. How to manage to those replaced one			
E5.	Occupational health and safety measures of the works during the erection/installation of poles/cables			
E6.	Issues related to influx of labor/labor camp and sanitation			
E7.	Other if any			

*Note: Kindly response mitigation measures with example if any alternative option has been selected/proposed during the survey and design of route. Mitigations measures stated shall be implemented during construction and operation phase.*

*Each package of the proposal (distribution line) will be subject to environmental screening and environmental compliance monitoring.*

### 9.3 Supporting Form

1	Subproject		
2	Type of Activity ( <i>choose in accordance with the activity</i> )	<input type="checkbox"/> Extension of 11 kV distribution lines <input type="checkbox"/> Expansion of distribution lines on existing right of way <input type="checkbox"/> :	
3	Project Description ( <i>describe briefly about the project activities from preparation to operation</i> )		
4	Project Location ( <i>describe the location of the project in detail, name of sub-village, village district, regency/city and province</i> )		
	Alternatives Considered and Hierarchy of Mitigation Measures applied (for private land and/or land belonging to IPs)		
5	Work Capacity ( <i>describe the capacity of the work</i> )		
6	Protected Area ( <i>checking whether the project location is in protected location below</i> )		
	a. Protected Area as defined By the Department of National Parks and Wildlife and conservation and Forest Act 2076	<input type="checkbox"/> Protected forest/Types of Forest <input type="checkbox"/> Wetland <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> National Park and Wildlife	<input type="checkbox"/>
		1.	
	c. List of protected species/animals based on the International Union for Conservation of Nature (IUCN) List		
7	Land Use – provide explanation for items 12-16 if applicable		
8	IPs Area ( <i>checking whether the project location is in IP location or there are presence of IP groups or ethnic minorities in the community</i> )		

\* might cross (X) more than one options

**Form on Consent of Private Land Owner(s)****Statement Letter**

The person signing below,

Name :

.....

:

.....

Address :

.....

Phone Number :

.....

In relation with the request for electricity distribution upgrade and expansion of NEA with the following details:

Power :

.....

Location :

.....

Geo-tagging (coordinates):

.....

Like to inform that we give permission for the electricity installation to the above location from all parties that whose land and non-land assets (like plants and crops) could be affected by the development for installing the poles, transformer and right of way. The parties on the list below agree for the usage of the land and any necessary clearance needed (e.g. trimming of branches, cutting of trees).

List of Name

No	Name	Address	Signature
1			
2			
3			
4			

....., ....., .....202..



Witnesses	Applicant
Ward Chair or Ward Member ..... (other authority)	(Legal stamp)
(Name and signature)	(Name and signature)

Attachment:

### **Map of Distribution Network Plan Drawing**

For any complaints or request for information, NEA can be contacted via **123**.

Notes and List of Attendance of Community Consultations

### **Notes of Community Consultations**

Date, time :

:

Name of the Village /Municipality and Ward:

:

Name of the Province :

:

Note of the Community Consultation:

- 1.
- 2.
- 3.

Name of the notes : taker:		Signature:
Agreed by : Position	1.	Signature:
Position :	2.	Signature:

**List of Attendance of Community Consultations**

Date, time :

:

Name of the Village/Municipality and Ward:

:

Name of the Province :

:

No	Name	Gender		Address or Mobile Phone	Signature
		Male (M)	Female (F)		
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

**Google map of 11kV distribution line**

Consent letter of Community Forest User Groups (If route alignment passes through forest)

E & S Screening completed by:

Name:

Designation:

Date:

E & S Screening verified/reviewed by:

Name:

Designation:

Date: