Draft Report

Cumulative Impact Assessment (CIA)
of
Marsyangdi Corridor (Manang-Udipur and Udipur-New Bharatpur) 220kV Transmission Line Project

Submitted to:
Marsyangdi Corridor 220kV Transmission Line Project
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September, 2022

ABBREVIATIONS AND ACRONYMS

ACA	:	Annapurna Conservation Area
CHAL	:	Chitwan Annapurna Landscape
CIA	:	Cumulative Impact Assessment
DoED	:	Department of Electricity Authority
DoR	:	Department of Roads
EIA	:	Environmental Impact Assessment
ESSD	:	Environment and Social Studies Department
HEP	:	Hydroelectric Project
IEE	:	Initial Environmental Examination
IPPs	:	Independent Power Producers
MCTLP	:	Marsyangdi Corridor 220kV Transmission Line Project
NEA	:	Nepal Electricity Authority
RM	:	Rural Municipality
TAL	:	Terai Arc Landscape
TL	:	Transmission Line
VECs	:	Valued Environmental Components

Units

kV	:	Kilo Volt
m	:	Meter
MW	:	Megawatt

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1 INTRODUCTION

1.1 Project Description

The proposed Marsyangdi Corridor 220kV Transmission Line project (MCTLP) is located Gandaki and Bagmati Provinces of Nepal. The MCTLP passes through Manang, Lamjung, Tanahu and Gorkha Districts of Gandaki Province and Chitwan district of Bagamati Province. The total length of the project is about 109.70km and is divided into two main sections (45.25km Manang-Udipur Section and 64.45km Udipur-New Bharatpur Section). Altogether 5 Rural Municipalities (Nasong RM of Manang; Marsyangdi RM and Dordi RM of Lamjung; Anbukharieni RM of Tanahu; and Ichchyakamana RM of Chitwan) and 6 Municipality (Besishahar Municipality, Sundarbazar Municipality and Rainas Municipality of Lamjung; Gorkha Municipality and Palungtar Municipality of Gorkha District; and Bharatpur Metropolitan City (MC) of Chitwan District) are to be affected by the project.

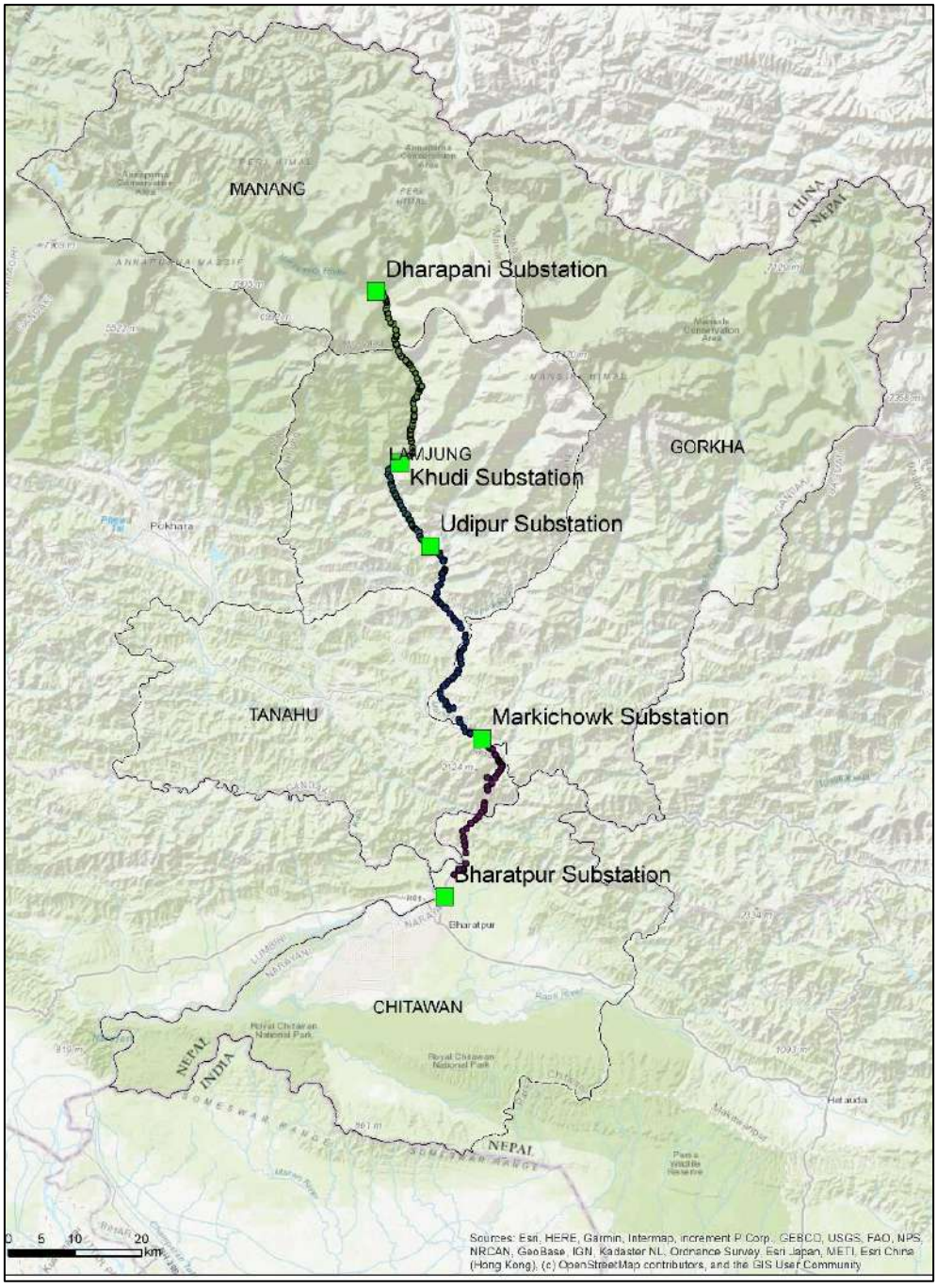

Figure 1-1: Project Location Map

The voltage level of the project will be 220kV. The proposed TL will be double circuit and the standard tower base dimensions will be 20m x 20m (for 220kV) of each tower leg foundation/ footing. The right of way (RoW) of the proposed TL is 15m on each side from the centerline from 220kV as per the Electricity Regulation, 2050 (1993).

The Marsyagdi Corridor TL project area also covers some part of Annapurna Conservation Area. Out of the total length of 109.07km, about 27.034km of the TL lies within the Annapurna Conservation Area (ACA) which is the first Conservation Area and largest Protected Area in Nepal. The Environmental Impact Assessment (EIA) of the Manang-Udipur section of the Marsyangdi Corridor TL project was approved by the Ministry of Forests and Environment in 2018. Similarly, the Initial Environmental Examination (IEE) of the Udipur-New Bharatpur Section of the TL was approved by the Ministry of Energy, Water Resources and Irrigation in 2017.

1.2 Salient Features

The total length of the proposed TL is about approximately 109.7 km (Khudi-Manang section=29.623km, Khudi-Udipur section 15.627km, Udipur-New Bharatpur=64.45km). The voltage level is 220kV. The proposed TL is of double circuit comprising with two separate aluminum conductor steel reinforced (ACSR) per phase. The vertical double circuit configuration tower will have an average height of 40m and the standard tower base dimensions will be 20m x 20m (for 220kV) of each tower leg foundation/ footing. Steel tower leg and body extensions will be utilized to reduce foundation excavation on slopes and provide greater tower foundation structural security. The ruling span between tower structures is 300m to 350m. The right of way (RoW) of the MCTLP is 15m on each side from the centerline. The project description and components listed in table confirms with the survey, design and technical reports. The TL design features are given in the table given below.

Table 1-1: Salient Features of the Project

Features	**Description**		
General			
Project	Marsyangdi Corridor (Manang-Udipur and Udipur-New Bharatpur) 220kV Transmission Line		
Impact Area	**Province**	**District**	**Local Level**
	Gandaki	Manang,	Nashong Rural Municipality (RM)
		Lamjung	Marsyangdi RM and Dordi RM, Besishahar Municipality, Sundarbazar Municipality and Rainas Municipality
		Tanahu,	Anbukharieni RM
		Gorkha	Gorkha Municipality and Palungtar Municipality
	Bagmati	Chitwan	Ichchyakamana RM and Bharatpur MC
No. of major river crossing	41 (25 times by Manang-Udipur section and 16 times by Udipur-New Bharatpur section)		
132kV crossing	Four (Two times by Manang-Udipur section and Two times by Udipur-New Bharatpur section)		
33kV crossing	28 times (27 times by Manang-Udipur and a single time by Udipur-New Bharatpur section)		
11kV crossing	Four times		
Suspension Bridge	Once (Udipur-New Bharatpur)		
Design Features			

Features	**Description**		
Line length	109.7 km (Khudi-Manang section=29.623km, Khudi-Udipur section 15.627km, Udipur-New Bharatpur=64.45km)		
Nominal operating voltage	220kV		
Max. operating voltage	235kV		
Capacity	1600MW		
Nominal Span	350m		
Conductor Properties			
Type and size of conductor	HTLS conductor and maximum 28.62mm diameter		
Configuration	Double circuit with double earth wire in vertical configuration		
Bundling	2 bundle in each sub conductor with 450mm spacing horizontally		
Tower Type	Type	Deviation Angle	Typical Use
	DA	0 to 2 degree	To be used as tangent/ suspension tower with suspension insulator string
	DB	2 to 15 degree	a. Angle towers with tension insulator string. b. To be used for uplift force resulting from an uplift span up to 360m under broken wire conditions c. Also to be used for Anti Cascading Condition.
	DB	0 degree	To be used as section tower
	DC	15 to 30 degree	a. Angle towers with tension insulator string. b. To be used for uplift force resulting from an uplift span up to 360m under broken wire conditions c. Also to be used for Anti Cascading Condition.
	DC	0 degree	To be used as section tower
	DD	30 to 60 degree	a. Angle towers with tension insulator string. b. To be used for uplift force resulting from an uplift span up to 600m under broken wire conditions c. Dead end with 0 degree to 15 degree deviation. Both on line side and substation side (slack span)
	DDE	0 degree	a. Complete dead end. b. For river crossing anchoring with longer wind span and 0 degree deviation on crossing span side and 0 degree to 30 degree deviation on other side.
No. of Angle Tower	194 (59 AP of Khudi-Manang Section and 34 AP of 101 AP of Khudi-Udipur Section)		
Tower Height	40m (vary from 36m to 64m depending on ground condition)		
Area for each tower	20mx20m (400m^2)		
Ground clearance	Minimum 8.84m at the maximum sag condition		
Right of Way (RoW)	30m (15m on either side)		
Design safety consideration- tower, power cable and substation	For electrical equipment, the factor of safety of 1.25 will be considered. For mechanical equipment and steels, factor of safety of ground wire and steel wire is considered as the ratio of ultimate tensile strength and impressed load. Considered factor of safety for tower will be 2, 1.5 for concrete and 1.15 for steel. The overload factor for open type foundation shall be 1.1.		

Features	Description
	Each tower will be provided with earthing having earth resistance less than 10 ohms to avoid increase of touch potential above safety level. For substation, earth resistance of below 1 is required. The substation will be provided with shield wire and earthing mesh/mat to maintain step potential and touch potential within safety level. Adequate lightening safety protection will be provided. Power cable can be overloaded up to 110% of normal operating current.
Substation	3 (2 proposed substations at Dharapani substation at Nashong RM of Manang, Khudi substation at Marsyangdi RM of Lamjung and Aaptari substation at Bharatpur Chitwan)
Access Road	0.462ha land will be required for access road of length 840m from Bagarchhap settlement to the Dharapani Substation

1.3 Scope of the Work

The Cumulative impact assessment (CIA) was carried out as EIA/IEE addendum of MCTLP so as to meet the EIB standards (particularly 'Standard 1 on Assessment and Management of Environmental and Social Impacts and Risks') and guidance as provided in 'Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions' European Commission 1999.

The major objective of this study was to develop a standalone Cumulative Impact Assessment (CIA) for the Marsyangdi Corridor (Manang-Udipur and Udipur–New Bharatpur) 220kV TL project. Cumulative impacts for the MCTLP are only those that result from the successive, incremental, and/or combined effects of an actions and activities of the MCTL Project when added to other existing, planned, and/or reasonably anticipated future ones. In other words, only impacts that have been identified in the MCTLP EIA/IEE as resulting from the MCTLP implementation, will be assessed for potential cumulative impacts.

For practical reasons, the identification and management of cumulative impacts are limited to those effects generally recognized as important on the basis of scientific concerns and/or concerns of affected communities. There are multiple projects in the study area. Only the highly prioritized projects are considered for CIA of the MCTLP.

2 APPROACH AND METHODOLOGY

2.1 Literature Review

The study team reviewed the existing EIA/ESIA and other relevant project documentation available (including EIA of Manang-Udipur section and IEE of Udipur-New Bharatpur section of Marsyangdi Corridor 220kV TL Project, EIB Environmental and Social Standards, guidelines for the assessment of indirect and cumulative impacts and impacts interaction of European commission 1999).

2.2 Desk Study

The study team has undertaken and documented in the CIA a desk review of available documents which assist in identification of cumulative impacts. This included EIAs/IEEs of past, present or reasonable foreseeable projects (transmission lines, hydro-projects and roads) in the vicinity of MCTLP. Further, the strategic, regional and resource planning documents, reports from NGOs, scientific community or other interested actors were studied. The ESIA (EIA/IEE) of the following projects, prioritized for CIA, were currently available and reviewed accordingly.

Table 2-1: Reviewed ESIA Document of Prioritized Project

S.N.	Name of Project	ESIA Document	Remarks
1.	Marsyangdi Corridor (Manang-Udipur) 220kV TLP	Approved EIA, 2018	NEA-ESSD
2.	Marsyangdi Corridor (Udipur-New Bharatpur) 220kV TLP	Approved IEE, 2017	NEA
3.	Dordi Corridor 132kV TLP	Approved IEE, 2017	NEA-ESSD
4.	Bhulbhule-Middle Marsyangdi 132kV TLP	Approved IEE, 2015	NEA-ESSD
5.	Marsyangdi-Kathmandu 220kV TLP	Approved IEE, 2014	NEA-ESSD
6.	Dumre-Damauli 132kV TLP	Approved IEE, 2010	NEA-ESSD
7.	Upper Seti (Damauli)-Bharatpur 220kV TLP	Approved IEE, 2010	NEA-ESSD
8.	Hetauda-Bardghat 220kV TLP	Approved EIA, 2007	NEA-ESSD
9.	Kerabari-New Marsyangdi (Daraudi Corridor) 132kV TLP	Approved IEE, 2021	RPGC
10.	Electricity Transmission Project (Lapsiphedi-Ratmate-New Hetauda, Ratmate-New Damauli-New Butwal-Nepal India Border 400kV TL and 44kV Substations)	Approved EIA, 2021	MCA-Nepal
11.	Upgrading of Dumre-Besisahar Road (42.408km)	Approved IEE, 2020	Department of Roads (DoR)
12.	Nyadi-Phidi HEP (21.4MW)	Approved IEE, 2018	Independent Power Producer (IPP)
13.	132kV TLP of Nyadi HEP	Supplementary EIA (draft), 2021	IPP
14.	Upgrading of Narayanghat-Mugling Road	EIA (draft), 2012	DoR
15.	Upgrading of Kathmandu (Nagdhunga)-Naubise-Mugling Road and Bridges	EIA (draft), 2019	DoR
16.	Upper Marsyangdi 2 HEP (327MW)	S-EIA (draft), 2021	IPP
17.	Tallo Manang Marsyangdi HEP (139.2MW)	S-EIA (draft), 2021	IPP
18.	Dudh Khola HEP (65MW)	EIA (draft), 2020	IPP
19.	Chino Khola HEP (7.9MW)	EIA (draft), 2019	IPP
20.	Himchuli-Dordi HEP (57MW)	EIA (draft), 2019	IPP
21.	Super Dordi Kha HEP (54MW)	EIA (draft), 2019	IPP
22.	Nyadi HEP (30MW)	EIA (draft), 2011	IPP

2.3 Setting Spatial and Temporal Boundary for CIA

2.3.1 Spatial Boundary

The spatial boundary of the CIA study has been defined on the basis of the Project Affected Area (PAA) of approved environmental studies report (EIA/IEE) of the MCTLP with some modification. It define PAA as the local level (RM/Municipality/Metropolitan city) on which the MCTLP has the direct impact. In other word, the local levels in which the alignment of MCTLP line is being constructed are referred as PAA.

The alignment of the MCTLP runs along the Marsyangdi River all the way from Manang to the Chitwan. The line is intended to evacuate all the power generated in the Marsyangdi Basin. Considering river basin as an integrated unit, Marsyangdi River basin has been considered as the spatial boundary for the CIA study.

The Marsyangdi River is one of the tributary of the Gandaki River. The basin is limited to the confluence of Marsyangdi and Trishuli River at the Mugling of Chitwan district. So, some section of the MCTLP is beyond the Marsyangdi basin. In this regard, the spatial boundary of CIA study has been defined to include all the Marsyangdi River basin and the PAA as defined in the environmental studies (EIA/IEE) report as presented in Figure 2-1.

2.3.2 Temporal Boundary

The CIA study has considered all the completed projects, under construction projects and the planned projects. All the projects (hydropower, transmission lines and roads) in that basin which are in operation are considered in this study. Those energy-projects (hydropower, transmission lines) that has obtained survey license or construction license are considered in this CIA. The temporal boundary considered for this CIA is of 50 years. This is also because the expected life of civil structures is of 50 years.

2.3.3 Past, Present and Reasonably Foreseeable Future Actions

The following criteria has been used for inclusion of reasonably foreseeable projects in the list for analysis of cumulative impacts;

i) A hydropower project with construction license and EIA/IEE document
(Hydropower projects are non-linear projects. For those projects which are already commissioned and being operated, there is very low possibility of accumulation of impacts with the proposed MCTLP. Therefore, these operating hydro-projects are less considered for CIA).

ii) Hydropower Project with financial closures or Power Purchase Agreement (PPA)
(Two projects with construction licenses have completed power purchase agreements with NEA. However, the financial closure is yet to be done. Nevertheless, the probability of construction of these projects in the immediate future and some level of interaction with MCTLP prescribe these projects for consideration in CIA. The remaining two projects with construction licenses have neither concluded PPA nor the financial closure and therefore are much unlikely to be constructed in the immediate future. Thus, these projects are not considered for CIA.

Similarly, much detail is not available on the planned/other projects. Further, financial closure and power purchasing agreement (PPA) are not completed for these projects. This increases the uncertainty of commissioning of these projects in the immediate future. Therefore, the level of interaction of these projects on the proposed MCTLP is considered as low and thus not considered for CIA.)

iii) Transmission line project with construction license and EIA/IEE document.
(Based on the interaction with the MCTLP, the transmission lines in the project area are prioritized. Only, the highly prioritized Transmission Line projects are considered for CIA of the MCTLP)

iv) National Highway construction or expansion projects
(Roads and highways are linear projects. There are different types of roads in the project area. Only those who interact with MCTLP are prioritized)

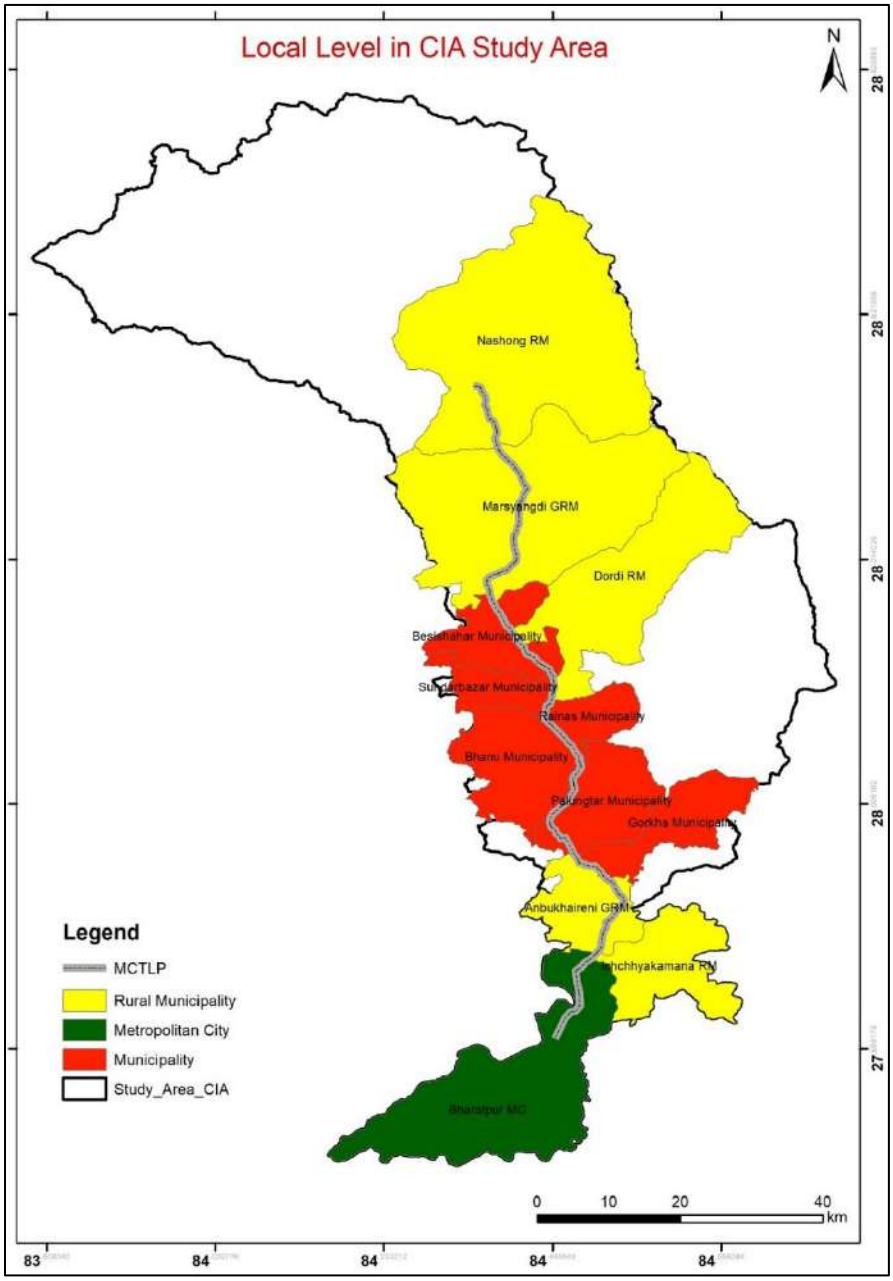

Figure 2-1: MCTLP affected Local Levels within CIA Study Area

2.4 Field Study

2.4.1 Stakeholder Engagement and Consultation

Engagement with stakeholder is being carried out from the start of the CIA and will continue throughout the CIA process. The study team consulted with the following stakeholders and documented accordingly in the CIA consultation outcomes.

- Relevant stakeholders;
- Project affected people and local communities;
- Local authorities; and
- Competent authorities that are responsible for approving past, present or reasonably foreseeable projects in the vicinity of the Project.

Stakeholder engagement was designed and implemented in order to:

- clarify stakeholder roles and responsibilities in the CIA process, and to
- Establish and maintain a constructive relationship with government/project proponent and other stakeholders.

2.4.2 Data Collection

The study team reviewed the available guidelines, before deciding the appropriate methodology. There are a number of factors which will influence the approach adopted for the assessment of indirect and cumulative impacts and impact interactions for a particular project. The study team supplemented the existing data with further survey fieldwork and documented in the CIA. The supplemented data mainly refers to field level data on flora and fauna of the project area. In addition, group discussions were also carried out during the field study in September, 2021 to collect the relevant information. The second phase consultation meetings were carried out in March, 2022. The detail of the participants is provided in the following table;

Table 2-2: Participants in Stakeholders Consultation/Group Meeting

SN	Date	Venue of Public Consultation		No. of Participant		
		District	Municipality/RM/Ward/Settlement	Local	ESSD/Project Staff	Total
1.	2078/05/30	Chitwan	Bharatpur-2	3	3	6
2.	2078/06/02		Bharatpur, Kabilash-29	5	4	9
3.	2078/06/02		Bharatpur-1	4	1	5
4.	2078/06/03		Bharatpur-29	9	3	12
5.	2078/06/03		Bharatpur-1, Ramnagar	8	3	11
6.	2078/12/01		Icchakamana-6, Jalbire	5	2	7
7.	2078/11/30	Manang	Nashong RM-4, Ghalanchowk	12	3	15
8.	2078/12/01		Nashong RM-4, Odaar	10	1	11
9.	2078/11/27	Lamjung	Sundarbazar-6, Municipality office	10	5	15
10.	2078/11/28		Dordi RM-4, Sera	10	2	12
11.	2078/11/28		Sundarbazar-7, Paudi Bazar	19	5	24
12.	2078/11/28		Rainash-6, Dhamilikuwa	11	5	16
13.	2078/11/28		Beshisahar-11, Ramchowkbesi	20	1	21
14.	2078/11/28		Marsyangdi RM-8, Simalchaur	7	3	10
15.	2078/11/29		Rainash Municipality-9, Tinpiple	7	4	11
16.	2078/11/29		Marsyangdi- RM-8, Battisemul	9	1	10
17.	2078/12/01		Marsyangdi-4, Jagat	10	2	12

SN	Date	Venue of Public Consultation		No. of Participant		
		District	Municipality/RM/Ward/Settlement	Local	ESSD/Project Staff	Total
18.	2078/11/28	Gorkha	Palungtar Municipality-7, Biruwatar	8	4	12
19.	2078/11/30		Gorkha-14, Yangkot	9	2	11
20.	2078/11/30		Gorkha Municipality	3	0	3
21.	2078/12/02		Palungtar-4, Ward Office	9	3	12
22.	2078/11/29	Tanahun	Aabhukaraini RM Office			
23.	2078/11/29		Bhanu Municipality-9, Baishanghar	13	4	17
24.	2078/11/30		Bhanu Municipality-1, Bhansar	5	2	7
25.	2078/12/02		Aabunkharini-4, Dhakaltar	4	2	6
			Total	**210**	**-**	**-**

During the consultations/group meetings, the participants were requested to express their views, concerns/issues regarding the running project, proposed project and under construction project as well as they were informed regarding the study and its activities and aims. Information such as study/research purpose, type, area, likely of study and potential opportunities due to project implementation were provided to the people during the consultation. During the field survey, emphasis was given on consultation with affected communities and people living in adjoining areas, to inform them about the proposed research and give them an opportunity to express their views. The minutes of the meeting of such consultation is presented in Appendix B.

2.4.3 Scoping and Impact Identification

The main objective of the scoping is to identify and agree on Valued Environmental Components (VECs) in consultation with the stakeholders. VECs are environmental and social attributes that are considered to be important in assessing risks. While VECs may be directly or indirectly affected by a specific development, they often are also affected by the cumulative effects of several developments (IFC, 2014).

In particular the scoping exercise was carried out to ensure that it covers:

- The identification of environmental and social receptors (or VECs);
- The spatial boundaries of the CIA;
- The temporal extent of the CIA;
- Identify other existing and reasonably predictable transmission line/hydropower and road projects that do/would affect the environmental and social receptors to be included in the CIA. No other human activities and natural environmental drivers will be considered for CIA.

Further any environmental and social sensitive receptors that have been considered insignificant in the EIA/IEE are not be included in the CIA. Also, in the case when the number of receptors is too large to conduct an analysis of all, then priority for analysis was given to those for which there is existing regional concern, as reflected in the regional baseline information.

2.4.4 Data Collection of Environmental and Social Baseline Status

The baseline assessment included:

- Collection of available information on the impacts of the other prioritized projects on the condition of the environmental and social receptors. The impact of other anthropogenic activities and natural drivers was not be considered for this CIA.
- Collection of available information on trends in environmental and social receptor condition.
- Collection of available information on regional thresholds for environmental and social receptors condition.

2.5 Assess Cumulative Impacts on Environmental and Social Receptors

The study team attempted to:

- Establish indicators for expression of environmental and social receptor condition.
- Estimate the "future baseline" for condition of the environmental and social receptors—i.e., the condition of environmental and social receptors as affected by other selected/prioritized projects. The natural drivers, human activities and other types of projects will not be considered.
- Estimate the MCTLP impact on environmental and social receptor condition.
- Estimate the cumulative impact of all prioritized projects on environmental and social receptors.
- Develop, prioritize and rank the list of indicators regarding impact on VECs. The final score was calculated by combining all the indicators' value. A threshold level was defined and their significance was assessed based on threshold.

The following table depicts the potential VECs or Environmental and social receptors relevant to the MCTLP considered for CIA.

Table 2-3: VECs/Environmental and Social Receptors considered for CIA

S. N.	Valued Environmental Component (VEC)	Information required/available	Potential (cumulative) impacts to be considered
1.	Annapurna Conservation Area (ACA)	Route of transmission lines and substations within ACA	• Impact on biodiversity due to project footprint • Illegal Extraction of resources (including NTFPs, timber); • poaching • Loss of forest area (in hectares)
2.	Terrestrial Habitat/Forest	• Types of habitats (forest type; grassland; wetlands, etc.) • Forest dependency of locals	• Loss of habitats (in ha) • Changes in NTFPs collection, trade and use
3.	Avi-fauna	• Types of birds; • Birds flying route (if any); • Migratory birds (if any) • TL length in bird flying zone; • Mitigation measures adopted by other existing/completed TL project	• Bird collision • Electrocution • Change in migration/flying route • Changes in birds' availability /frequency after completion of TL projects

S. N.	Valued Environmental Component (VEC)	Information required/available	Potential (cumulative) impacts to be considered
4.	Wildlife (mammals, reptiles)	• Types of wildlife • Wildlife habitats in project area • Human-wildlife conflict • Hunting/poaching • Illegal trade	• Changes in wildlife occurrence after construction/completion of TL projects • Changes in pattern of human-wildlife conflicts • Changes in status of poaching and illegal trade
5.	Endemic/protected flora and fauna	Status (types, availability, etc.)	Changes in status
6.	Land	• Land use • Land type • Land holding • Loss of private land/structure	• Changes in landuse • Cumulative impacts on land
7	Livelihoods	• Forest based livelihoods • Agriculture based livelihood	• Cumulative land and livelihood loss
8	Cultural and Religious sites	• Mapping of specific cultural and religious sites	• Cumulative impacts

Assess Significance and Magnitude of Cumulative Impacts

The study assessed the significance of the foreseen cumulative impacts on the environmental and social receptors (VECs). When the cumulative impact on environmental and social receptor condition approached, be near to, or exceed a threshold, the impact was considered as significant.

Cumulative Impacts – Design and Implementation

The study identified, as required, additional project mitigation (beyond that identified in the project EIA/IEE) to reduce an estimated unacceptable cumulative impact on environmental and social receptors. This represented effective application of the mitigation hierarchy in environmental and social management of the specific TL project contributions to the expected cumulative impacts. The study documented the following in the CIA report:

- list each of the measures to be introduced;
- explain how the measures will avoid the adverse impacts on the environmental and social receptor;
- explain how the measures will reduce the adverse impacts on the environmental and social receptor.

Then, for each of the listed mitigation measures:

- provide evidence of how they will be secured and implemented and by whom;
- provide a timescale, relative to the project or plan, when they will be implemented;
- provide evidence of how the measures will be monitored, and, should mitigation failure be identified, how that failure will be rectified.

2.6 Study Team

The CIA team adopted a participatory approach with maximum involvement of different stakeholders of the project at the local and district levels to generate relevant information for the CIA. A team of following members was involved in the field study for preparation of the CIA.

Table 2-4: List of Persons Involved in CIA

S.N.	Name	Designation	Field of Specialization	Remarks
Experts from ESSD				
1	Rabindra Prasad Chaudhary	Coordinator	Zoology	NEA-ESSD
2	Prakash Gaudel	Team Leader	Environment, Water Resources Management	
3	Binod Pyakurel	Team Member	Environment	
4	Shailaza Gyawali	Team Member	Sociology	
5	Achut Dawadi	Team Member	Economics	
6	Ganesh Kumar Uprety	Team Member	Sociology	
7	Krishna Prasad Joshi	Team Member	Data Analysis	
Outsourced Experts				
8	Mitra Pandey	Bird Expert	Ornithology	
9	Krishna Bhusal	Bird Expert	Ornithology	
10	Jeevan Rai	Wildlife Expert	Wildlife	
11	Bidhan Adhikary	Wildlife Research Assistant	Wildlife	
12	Narayan Ghimire	Terrestrial Ecologist	Botany	

2.7 Public Consultation and Information Disclosure

Study Team visited the office of local bodies (Municipality and Rural Municipality) in the MCTLP area and informed local representative about the CIA study and its requirement. A request was made for arranging a meeting with intellectuals and locals, and for necessary coordination.

A total of 25 consultation meetings were carried out during the process of carrying out CIA. The public consultation helped the public to receive information about the different development projects within the study area that are being operated, under-construction or planned. Further, the consultation helped the CIA team in assessing the people's perception on different development activities. The CIA report will be made public through the NEA website.

2.8 Limitations of the Study

Most of the data and information required for this CIA has been obtained from the environmental studies (ESIA) of the different development projects. Environmental reports of some of the projects that have already been accomplished and operating since 80s and 90s could not be collected. This is because there was no any legal provision nor any practice of carrying out environmental assessment prior to 1990s.

For some projects, feasibility studies are being done, and the environmental study report of those projects are yet to be prepared. Unavailability of the ESIA report of the development projects in the study area is the main limitation of this CIA. Other limitations of the CIA are as follows:

- A separate environmental studies report is prepared for each project. The predicted impacts of the development project are not found to be consistent across past year's reports and recent reports. So, not all the required and consistent data/information are obtained from older EISA report.
- Some of the transmission lines and roads considered for this study are not only limited to the study area boundary. It is hard to quantify the impact of such linear projects within the

study area boundary. In such cases, ArcMap analysis/Google Earth Image analysis were done to generate the required information.

- Environmental studies report of the district roads and village roads considered for this study are not available.
- Information of the project being planned and developed, mainly by the private sector couldn't be collected.

The external stressors such as climate change impacts are not included in this CIA. Further, the impact of other anthropogenic activities and natural drivers were not considered for this CIA.

3 REVIEW OF POLICY AND LEGAL PROVISIONS

The prevailing Acts, Policies, Regulations and Guidelines, which are required or applicable for the construction and operation of energy projects and other related developmental projects in Nepal, have been reviewed.

Table 3-1: Applicable Policies and Legislations

Policy and Legal Regime	Applicable
The Constitution of Nepal	In the Article 30 of Part 3 of the Constitution of Nepal states about the Right to Clean Environment: According to this Section all citizens shall have the right to live in clean environment, and in case if there is injury caused from environmental pollution or degradation, the victim has the right to obtain compensation. In the same way, Section 51(g) explains Policies relating to Protection, Promotion and use of Natural resources
A. Policy	
Fifteenth Periodic Plan (2076/77-80/81)	It recommends mandatory requirement of EIA and EMP for all infrastructure projects.
National Environment Policy, 2019 (2076)	Major objectives of the policy include pollution control, solid waste management and greenery enhancement in order to secure the right to live in clean and healthy environment. Other related policies are environmental justice, public participation, sustainable development, research and capacity development. Similarly, other aspects of this policy include institutional organization, role of federal, provincial and local level in implementing the policy, financial and legal aspect, monitoring and evaluation.
National Climate Change Policy, 2019 (2076)	The aim of this policy is to develop climate progressive society and national socio-economic development.
National Forest Policy, 2019 (2075)	The policy aims to manage forest resources sustainably, manage biodiversity, increase productivity of forest area/sector, and increase overall production from forests. The policy further highlights the equal sharing and distribution of environmental services gained from conservation. It also aims to reduce and mitigate the adverse impacts of climate related hazards and enhance climate change adaptation measures and resilience in Nepal.
National Land Policy, 2019 (2075)	One of the objectives of the policy, aims to create favorable environment for land acquisition for development projects and to ensure that land acquisition would not increase cost of development project.
Land Acquisition, Resettlement and Rehabilitation Policy for Infrastructure development Policy, 2015	The Policy has the following guiding principles: • "Appropriate and adequate compensation for the loss of assets or income is a fundamental right of all project affected persons. Physically displaced people must be relocated with basic amenities such as school, health posts and other facilities. • All affected persons should be assisted to restore at least their pre-project income and livelihood sources. • The absence of legal title to land should not be a bar for compensation, resettlement and rehabilitation assistance. • Vulnerable groups such as *Janajati/Adivasi*, Dalits, landless, women, especially women-headed households, differently-abled, poverty groups and senior citizens are entitled to special benefit and assistance packages in addition to compensation and resettlement."
National Energy Crisis Reduction and Development Decades, 2015 Concept paper	The then Ministry of Energy issued a Concept Paper on Elimination of Energy Emergency and Electricity Development Decade, 2015 "Concept Paper" on February 18, 2016, with the objective to substantially end the power outage within one year, completely end power outage (even in the dry season) within the next two years, and to ensure energy security within the next decade. The concept paper also contains the provision that hydropower

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	projects with a capacity of more than 10MW should be awarded only through competitive bidding. The proposed law is expected to facilitate the implementation of the 10-year National Energy Emergency Decade.
Landuse Policy, 2015	Landuse Policy, 2015 is a policy document relating to limits and protection of Land and Land Resources, optimum use and effective management thereto. Legal and institutional management for Lands and Land Resources, and protection, use and management thereon are done under this Policy. This Policy aims to bring about benefits of using Lands and Land Resources (LLRs) by creating a situation of distributing lands in a just manner. The objectives of the Policy, 2015 includes; • To categorize/classify entire lands of the country into various Land Use Zones; • To devise of level wise (Federal, Provincial and Local) Land Use Plans; • To ensure of the use of Land and Land Resources on the basis of land use plans for protection of agricultural land, hygienic, beautiful, well-facilitated settlement and sustainable urbanization, and for forests areas including natural heritages, biodiversity and historical, cultural and religious, archaeological and areas of strategic importance; • To mitigate natural and human created-disastrous hazards; • To assess and apply minimum property valuation and progressive tax system on lands on the basis of specific use after getting prepared of plot-based records.
Hydropower Development Policy, 2001	The major objectives of the policy include producing clean energy through the development of hydroelectric projects and to help conserve the environment. It is stipulated that one of the policies is to extend the use of electricity for achieving a reduction in the utilization of fuel wood and to render necessary assistance in the conservation of forest and environment.
B. Act	
Forest Act, 2019 (2076)	Section 42 of the Act empowers the government to permit the use of any part of the national forest for national pride projects, the implementation of a plan or project of national priority, and projects approved by the Investment Board Nepal, if there is no other alternative to forest land and if the environmental assessment conducted as per prevailing Act shows that the use of such forest would not lead to significant adverse impact on the environment. As per Section 42(2), the project needs to make available the equivalent amount of land to the government for forest development. Such lands should be in similar ecological and geographical areas and near the impacted national forest as far as possible. If the project is not able to buy lands, it could deposit the money needed to buy such land in the Forest Development Fund established as per Section 45 of the Act. Section 42 (5) requires the project developers to pay the expenses needed to reforest and maintain reforested area for five years. As per this act, the ministry in consultation with province ministry can declare some parts of national forest as forest conservation area in those forest areas which has environmental, ecological, cultural and scientific importance. It emphasizes the development and implementation of an approved work plan for different categories of forest, i.e. Community Forests, Leasehold Forests, Private Forests, Collaborative Forest and Religious Forests. The Act requires decision-makers to take account of all forest values, including environmental services and bio-diversity

Policy and Legal Regime	Applicable
Environment Protection Act, 2019 (2076)	Section 3 of the Act requires proponent to conduct Environmental Study: Brief Environmental Study (BES), Initial Environmental Examination (IEE) or Environmental Impact Assessment (EIA) for all development projects. Section 4 highlights the detailed need of alternative analysis. Section 5 and 6 relates to scoping and TOR as well as its quality. Section 8 and 9 highlights the provision related to approval of environmental study reports and prohibition of implementation of the project without approval of the reports. Strategic environmental assessment, Environmental Management Plan and Supplementary Environmental Impact assessment are focused in section 9-11. In terms of pollution control, section 15-20 highlights the provisions related to pollution control, import and management of hazardous chemicals, establishment of laboratory, sample collection, pollution control certification.
Land Use Act, 2019 (2076)	As per the Act, land has been classified into 10 categories: agricultural; residential; commercial; industrial; mining and mineral; forest; river, stream, pond and wetland; public use; cultural and archaeological; and others. The land classification is based on the composition and use of the land. The classification has not clearly pinpointed guthi land, which is religious land in the name of temples or shrines, from the revenue of which the religious ceremonies or festivals associated with the temples or shrines are celebrated and the repairs and maintenance of the temples or shrines are carried out. The main aim of the act is to ensure that land is properly used and managed and that land set aside for one purpose is not used for other. The act has assigned the responsibility for implementing the act to not only the federal government but also to the provincial and local governments. As per the act, three tiers of the government should constitute councils to bring provisions of the act into implementation. The federal government should draft maps of all the local levels and ensure that all the local governments are abiding by provisions of the act. The local governments, on their part, should ensure that the people are adhering to provisions of the act. The land use plans should clearly show the location of industrial corridors, special economic zones, national projects, inter-provincial projects, heritage sites, religious and cultural sites, academic institutions, security areas, disaster-prone zones, biodiversity-protection zones, roads, health institutions, irrigation canals and other areas as designated by the government. The act has provided for a land bank, which is itself a new concept in the country. Under the concept, land belonging to various people will be pooled together and leased out to those who are willing to invest in agriculture. The investors can even embark upon collective farming, which will give a shot-in-the-arm to agricultural production and productivity.
An Act to Regulate and Control of International Trade of Endangered Wild Fauna and Flora, 2017	The main objective of this Act is to implement CITES through protection of endangered species and controlling and regulating the wildlife trade. The Act has strictly prohibited the trade, use, farming, breeding or transport (export or import) of endangered species of fauna or flora or their samples.
Labour Act, 2017	The Act clearly mentions that the appointment letter should be issued for all the employees which include their working hours, working time, wages and other benefits. Section 4 prohibited to engage Non-Nepalese citizen at work in any of the posts. Section 6 prohibits for discrimination on the ground of religion, colour, sex, caste, tribe, origin,

Policy and Legal Regime	Applicable
	language, ideological conviction or any other similar ground. Similarly, Section 74 of the Act has the provision to constitute a Safety and Health Committee of employee if there are 20 or more.
Local Government Operation Act, 2017	The act has stipulated several arrangements related to authorities, duties and responsibilities of local government.
Disaster Risks Reduction and Management Act, 2017	The Act aims to protect human lives and properties of the public, private and individual, to preserve natural and cultural heritage, and to keep physical infrastructures safe from natural and non-natural disasters by effectively coordinating and managing all activities on reduction of disaster risk and management. Section 3 of the Act mentions about the establishment of a National Council for Disaster Risk Reduction and Management, headed by the Prime Minister, to operate disaster related functions effectively. Further the Act also envisages the establishment of a National Disaster Risk Reduction and Management Authority under the Ministry of Home Affairs to effectively carryout and manage disaster management activities (Section 10).
Intergovernmental Fiscal Arrangement Act, 2017	As per the provisions in the Act, Schedule-4, 50 % of the total royalty obtained from hydropower will be allocated to the Government of Nepal, 25% to the concerned state and 25% to the concerned local level.
Solid Waste Management Act, 2011	Section 4 rests the responsibility of the solid waste management under the prescribed standards with the persons or institution that has generated the waste whereas Section 5 mandates reduction of the waste at source. Section 9 make the institution responsible to transport the solid waste to the waste disposal facility. The local body is made responsible for the monitoring of solid waste management by Section 21. Section 38 stipulates discharge of solid waste without the consent of the local body as an offence and Section 39 provisions for the punishment /penalty in case of offense.
Water Resources Act, 1992	The objectives of the Act, 1992 is to make legal arrangements for determining beneficial uses of water resources, preventing environmental and other hazardous effects thereof and also for keeping water resources free from pollution. The Act strives to minimize environmental damage to water bodies, especially lakes and rivers through environmental impact assessment studies and the proponents who wish to use water resources for various purposes should prepare EIA report before a license can be granted. The Act stipulates that soil erosion, flooding, landslides or any significant impact on the environment should be avoided in all uses of a water resource. The provisions made in Water Resources Act, (1992) is mandatory in case of the implementation of the proposed project. As per the provision, the environmental impact mitigation and enhancement measures have been proposed in view of environment conservation.
Electricity Act, 1992	Electricity Act, 1992 is related to survey, generation, transmission and distribution of electricity. Electricity includes electric power generated from water, mineral oil, coal, gas, solar energy, wind energy, etc. Under Section 3 of the Act, it is stated that survey, generation, transmission or distribution of electricity without obtaining a license is prohibited. The Electricity Act, 2049 also contain provisions to minimize soil erosion, flood, air pollution and damage on environment while producing electricity and transmission of the power (Article 24). NEA is responsible for electricity transmission and distribution.

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Soil and Watershed Conservation Act, 1982	Under Section 10 of the Act, power is extended to the Watershed Conservation Officer to grant permission to construct dams, drainage ditches and canals, cut privately owned trees, excavate sand, boulders and soil, discharge solid waste and establish industry or residential areas within any protected watersheds.
Land Acquisition Act, 1977	Section 3 of the Act empowers Government of Nepal (GoN) to acquire any land at any place for any public purpose, subject to compensation under this Act. As per Section 4, the GoN may also decide to acquire land for other institutions to implement projects in the interest of general public. The institution requesting for land acquisition is required to pay all costs associated with such acquisition. Section 5 had made provision for appointing Officer for Preliminary Action. Section 6 outlines procedures for preliminary action relating to acquisition of land, and Section 7 has made provision for compensation of losses incurred during preliminary action. Section 9 of the Act relates to notification of land acquisition. Section 13 makes a provision for compensation rate. The compensation would be paid in cash as per this Act; there is no provision for land-for-land compensation. Section 18 of this Act requires Chief District Officer (CDO) to prepare a list of persons to compensation and issue a notice accordingly for the information of the concerned persons. This Section has also made provision for lodging complaints by unsatisfied persons and grievance redress mechanism. As per Section 27 of the Act, land could also be acquired through negotiation.
National Parks and Wildlife Conservation Act, 1973	The Act was enacted to make arrangement for the management of national parks, conservation of wildlife and their habitat and regulation of hunting. Section 4 of the act restrict the entry into the National Park. Section 5 listed the prohibited acts within National Park and Reserve. Schedule 1 related to Section 10 of the act listed the protected species of fauna. As per the Act, 26 mammal species, 9 bird species and 3 reptile species of Nepal have been enlisted into the protected categories.
Public Road Act, 2031	As per Section 3A of the Act, construction of permanent structures (building) is prohibited within the right of way of road. If it is required to acquire any land for the development, expansion or improvement of public road, the project can acquire the land in accordance with the law relation to the acquisition of land adopting compensatory measures (Section 14 and 15). Section 16 has the provision to maintain greenery along the road side. Section 16 has the provision for the extraction of construction material required for development of road with adoption of compensation measure.
C. Rules/Regulations	
Environmental Protection Rules, 2020	Rule 3 to Rule 13 of the EPR related with the provisions of Environmental studies of any developmental project as per the project listed in Schedule 1, 2 and 3 of the same. Schedules 1, 2 and 3 provide a list of proposals that require Brief Environmental Study (BES), IEE and EIA studies respectively. Schedule 4 and 5 has the public notice format and reporting format for the Scoping document. Schedule 6, 7 and 8 related with the Terms of Reference report format of Environmental Studies. Schedule 9 gives the public notice format for the environmental studies. Similarly, Schedule 10, 11 and 12 gives the Environmental studies report format.

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Disaster Risk Reduction and Management Rules, 2019	The Government of Nepal framed the Rules, 2076 as per the powers conferred by Section 47 of the Disaster Risk Reduction and Management Act, 2074. Rule 3 describes the Function, Duties and Powers of the Executive Committee whereas Rule 5 specifies the Functions, duties and power of the National Disaster Risk Reduction and Management Authority.
Regulation on International Trade in Endangered Species of Wild Flora and Fauna, (2076)	The Government of Nepal has made the regulations using the powers given by Article 37 of the International Trade in Endangered Species of Wild Fauna and Flora Act, 2073 BS. The regulation has made the provision of license, arrangement for species registration, transfer and transfer of ownership. The regulation also defines the duties of management body, scientific body and others.
Labor Rules, 2018 (2075)	Rule 3 of the Labor Rules has set out the criteria for determining if any dispute arises on whether or not an employment is regular employment. It has also specified the additional matters to be covered under the employment contract. Rule 4 of the Labor Rules requires the employment contract to cover (a) nature of employment, (b) primary work of the employee and his/her position, (c) statement that the employees' service rule will be integral part, (d) date, time, place of contract and its effective date, (e) Other important terms and conditions related to the work or service of the employee.
Solid Waste Management Rules, 2013 (2070)	• The Local Body shall, while fixing segregation at least of organic and non-organic solid waste at its source under Section 6, have to make management and segregation of harmful or chemical waste separately. If it is prescribed as above, the individual, organization or agency generating such solid waste, shall have to make segregation as prescribed. • The Local Body shall conduct programs for increasing people's awareness in relation to applying appropriate technology for making segregation through reduction of generation of solid waste at its source and management under Sub-Rule (1). • No one shall discharge solid waste by mixing harmful, chemical, organic or inorganic waste with other waste. The arrangement for final discharge should only be made after processing of harmful, chemical, organic or inorganic waste into a general waste.
Electricity Rules, 1993	The Electricity Rules, 1993 emphasize environmental analysis, which should include environmental mitigation measures to minimize adverse impacts likely to occur while developing hydro-electricity (Rule 12 and 13). Rule 12(F) and (G) are related to the EIA/IEE process which emphasize that the EIA report should include measures to be taken to minimize the adverse effects of the project on social, biological and physical environment and should also elaborate utilization of local labour, source of materials, benefits to the local people after the completion of the project, training to local people in relation to construction, maintenance and operation, facilities required for construction site and safety arrangements.
Water Resources Rules, 1993	It is mandatory under Rule 17(e) of the regulation that any person or corporate body, who desires to obtain a license for utilization of water resources must state in his application that appropriate measures will be taken to lessen the adverse effects due to the project on the overall environment. Rule 19 stipulates that the water resources committee shall publish a notice giving detail information about the project to the people.

Policy and Legal Regime	Applicable
Conservation Area Management Rules, 1996	The Rules, 2053 was promulgated by the GoN in pursuant to Section 33 of National Parks and Wildlife Conservation Act, 2029. The Rules provides institutional framework, systems, mechanisms and processes (management modality) for the management of the Conservation Area. The DNPWC is designated to establish to establish headquarters for the management and the development of the conservation area (Rule 4), divide the area into different sub-areas (Ilakas) as per the need, and establish Unit Conservation Officers and other staff as necessary.
National Parks and Wildlife Conservation Rules, 1974	Chapter 2, Section 3 of this Rule focused on publishing a notice at least 35 days of time period to submit the shield tender in the major newspapers for operating any services from any bodies of the Government of Nepal inside national parks and reserves. To operate any services or facilities related to construction work within the national park or reserve, the person shall take the approval of the Government of Nepal. Except the Government employees deputed for the duty, other person shall not be allowed to enter into the preserved national reserve without receiving the written permission from the chief. The permission shall be provided only for scientific research.
D. Strategy, Plan, Directives, Working Procedure, Guidelines	
National Water Plan, 2005	The National Water Plan (NWP) was prepared to implement the Water Sector Strategy of Nepal. The Plan targets an increase in Nepal's hydropower generation from 600MW in 2007 to 4,000MW by 2027. The NWP emphasizes the need for Strategic Environmental Assessment. Section 7 of the NWP highlights the Environment Management Plan (EMP) as a strategic document for the implementation, monitoring and auditing of environmental protection programs.
Water Resources Strategy, 2002	To contribute to the national goal of improving the living conditions of the Nepali people in a sustainable manner, the WRS has formulated short-term (five year), medium-term (15 year) and long-term (25 year) strategies for the water resources sector. This strategy focuses on the interdependencies between water resource development and environment conservation, and has adopted environment principles related, inter alia, to the integration of ecological aspects at every level of hydropower development process, conserve biodiversity, watersheds and adopt ecosystem approach. The activities are also related to ensure compliance with environmental regulations, promote community participation for the sustainable management of watersheds and aquatic ecosystems.
Forest Products, Collection, Sale and Distribution Directives, 2073	The directives have specified various procedures and formats for getting approval for vegetation clearance, delineation of lands for vegetation clearance, evaluation of wood volume, etc. and government offices and officials responsible for the approval, delineation and evaluation. These provisions have a direct relevance to the development of the project and need compliance to these provisions
Working Policy for Physical and Infrastructure Construction and Operation within Protected Area, 2065	This policy intends to avoid adverse impact on biodiversity and natural environment while implementing development projects in the protected areas and therefore describes the terms and conditions required for implementing projects inside the National parks or reserves. This policy states that no land will be made available for construction of any development work except of national priority within the protected area. Compensatory plantation to be done at the ration of 1:25. The Policy has provisions for riparian releases for any water diversion projects proposed within the protected areas. It states that for the hydropower utilizing the water flowing from inside the National Park (NP) or Reserve along the boundary of the NP or reserve, all the hydropower components should be constructed outside the NP or Reserve

Policy and Legal Regime	Applicable
	and at least **10% of monthly discharge** and the discharge quantified by the EIA report should be released, both during construction and operation of HEP. Similarly, for any water diversion project within the national park or reserves, a minimum of 50% of the monthly discharge should be released. Only in the case when there is no alternative of utilizing the PA. For the hydropower utilizing the water flowing from outside but entering inside the NP, reserve, conservation area or buffer zone, all the hydropower components should be constructed outside the NP, reserve and at least 10% of monthly discharge and the discharge quantified by the EIA report should be released, both during construction and operation of HEP. Further no projects shall be constructed within national park and reserve with all its components inside. However, for the off-grid project below 1MW and for local use, permission can be granted. For such project a minimum of 50% of the monthly discharge should be released.
Community Forest Resource Inventory Guidelines, 2061	With the aim to assist Community Forest Users Group for sustainable forest management, community forest resource inventory guideline was prepared. The inventory guideline has six chapters. Second chapter of the guideline include forest resource inventory methodologies, tools, sample size and intensity, resource requirement etc. Chapter three contains data collection methodologies, sample design techniques and forest stock estimation techniques including forest diversity. There is data analysis techniques and utilization of information obtained from data analysis in chapter four and five.
Community Forest Guidelines, 2001	Through this guideline, persons involved in the development and management of community forest like facilitators, user groups, forester and managers etc. will get help to understand about the process and stages of development of community forest. Forest Users Group, forest officials, NGOs and INGOs are getting benefit by the guidelines.
Forest Production, Collection and Sales Distribution Guidelines, 1998	Clauses 3 to 10 of the Guidelines have specified various procedure and formats for getting approval for vegetation clearance, delineation of lands for vegetation clearance, evaluation of wood volume etc. and government offices and officials responsible for the approval, delineation and evaluation.
EIA Guidelines for Forestry Sector, 1995	The guideline emphasized the need of carrying out an EIA/IEE of development projects and programs proposed for implementation in forest areas.
National EIA Guidelines, 1993	Following the guidelines, the environmental impact prediction and evaluation of the proposed project are to be done on physical, biological and socio-economic and cultural environment of the project area. The guidelines is used for analysis of significant issues. The schedules attached to the Guidelines include: Schedule 1 : Projects requiring IEE Report Schedule 2 : Projects requiring EIA Schedule 3 : EIA based on project sites Schedule 4 : Format for Terms of Reference Schedule 5 : EIA Report Format Schedule 6 : Format of EIA Report Annexes
E. Strategy and Action Plan	

Policy and Legal Regime	Applicable
Chitwan-Annapurna Landscape (CHAL) Strategy and Action Plan, 2016-2025	The CHAL Strategy and Action plan, 2016-2025 endorsed by the Government of Nepal, adopts a river basin approach to promote persistence of biodiversity and sustainable management of natural resources.
Terai Arc Landscape (TAL) Strategy and Action Plan, 2015-2025	The TAL Strategy and Action plan, 2015-2025 was endorsed by the Government of Nepal to address the persisting and emerging threats to socio-ecological integrity. The 'infrastructure development' has been identified as one of the cross-cutting themes for the TAL. The Strategy and Plan thus intends to achieve that the infrastructure in the TAM and upstream from it is made climate smart and 'greened' to minimize the environmental and ecological impacts. The Strategy has emphasized the promoting of conservation friendly and climate smart infrastructure within the following strategic actions; • Avoid new large and linear infrastructures (highways, railway lines, power lines, irrigation canals, dams, industrial zones, settlements) in protected areas and critical corridors • Ensure that any infrastructures in protected areas, buffer zones, and corridors are conservation friendly in design and operation: e.g. ensure ecofriendly engineering designs to prevent disruption of ecological processes, such as viaduct structures (underpass and overpass) to allow safe movement of long ranging species such as tiger, elephant, rhino etc. • Strictly regulate and monitor gravel and boulder extraction from river systems to avoid adverse environmental impacts • Ensure EIAs and IEEs are of good quality, and ensure investment for EIA and IEE identified mitigation measures; once strategic environmental assessment (SEA) provisions are in place, ensure SEAs for large-scale and complex developments • Ensure infrastructure design and operation takes changing climate conditions into account.
F. Province Level Laws and Policies (Gandaki Province)	
Province Environment Protection Act, 2076	This Act is applicable for the projects within the jurisdiction of Gandaki Province. For projects requiring IEE or BES, Section 3A of the Act mandates the project proponent to submit such reports to the concerned provincial ministry. Whereas for projects under the jurisdiction of Gandaki Province or local level of Province and requiring EIA, Section 3 of the Act mandates the proponent to submit such EIA to Ministry of Industry, tourism, Forest and Environment of Gandaki Province.
Working Procedure for Excavation, Collection, Crushing and Sale of Stone, Aggregate and Sand as well as for Managing Establishment	This working procedure requires the local bodies to prepare a work plan on annual basis to designate the areas for excavation and collection of construction materials including sand and aggregates. The local bodies are further required to carry out the environmental assessment (IEE or EIA) as per existing laws prior to collection of construction materials. For any excavation and collection of construction materials from the protected areas (National parks, wildlife reserve, conservation areas), the concerned protected area office needs to prepare the annual plan and carry out

Policy and Legal Regime	Applicable
and Operation of Crusher Industry, 2075	environmental assessment. Further this working procedure has also restricted the collection of construction materials from June 15 to August 31 (Asar 1 to Bhadra 15). Similarly, in the remaining time period of the year, the excavation and collection are restricted in the night time. Similarly, for national or province priority projects and other community construction works, the local bodies can provide the required construction materials from their administrative boundaries by charging tax or royalty based upon the existing rates.
G. International Conventions and EIB Standards	
Convention on Biological Diversity, 1992	The convention contains a series of far-reaching obligations related to the conservation of biological diversity and sustainable uses of its components. One of these obligations is the requirement for environmental study. Nepal is a party to the CBD and in accordance to the Article 14 of the Convention, adequate attention should be given to minimize and or avoid the impacts on biodiversity.
UNFCCC, 1992	Nepal is a signatory nation to the United Nations Framework Convention on Climate Change (UNFCCC), 1997. Article 4 (f) urges to take climate change considerations into account, to the extent feasible, in the relevant social, economic and environmental policies and actions, and employ appropriate methods, for example impact assessments, formulated and determined nationally, with a view to minimizing adverse effects on the economy, on public health and on the quality of the environment, of projects or measures undertaken by them to mitigate or adapt to climate change.
Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), 1973	Aims to control the trade of certain wildlife species to prevent further endangered species of their survival. CITES classified species according to the following criteria: • Species threatened with extinction, • Species which could become endangered, • Species that are protected. As Nepal is party to the convention (on June 18, 1975) related to species conservation, attention should be given to evaluate the impacts of the project activities on meeting their obligation. It is relevant to EIA that species protection list could also be used to evaluate the significance of the identified and predicted impacts. Plant and wild animal species under legal protection provides a basis to purpose EMPs for their conservation and for least damaging them during project implementation.
ILO Convention of Indigenous and Tribal Peoples (No.169)	Article-1 of the convention provides definition of the tribal indigenous people. Article-6 deals the consultation of the people concerned through appropriate procedure in particular through their representative institutions. In Article 15, the rights of the people concerned to the natural resources pertaining to their lands shall cover the total environments of the areas which the people concerned occupy or use. Article 16 (2) clearly mention that where the relocation of these peoples is considered necessary as an exceptional measure such as relocation shall take place only with their free and inform consent. Article 16 (3) mention that whenever possible these peoples shall have the right to return their traditional land as soon as the grounds for relocation cease to exist. Article 16 (5) elaborated the persons thus relocated shall be fully

Policy and Legal Regime	Applicable
	compensated for any resulting loss or injury. The ILO Convention on Indigenous and Tribal Peoples, 1989 (No.169) is relevant for the proposed project as there are indigenous and tribal families in the project affected area. Article-15 states that the rights of the people concerned to the natural resources pertaining to their lands shall be specifically safeguarded. Provision includes the people to participate in the use, management and conservation of these resources. Project share distribution and employment priority to these people will somehow reduce the possible conflict. The provision made in the ILO Convention on Indigenous and Tribal Peoples, 1989 (No.169) is not line fully with the prevailing acts and rules regarding environmental study of the proposed project.
EIB Statement of Environmental and Social Principles	**Standard (6): Involuntary Resettlement** People whose livelihoods are negatively affected by a project should have their livelihoods improved or at minimum restored and/or adequately compensated for any losses incurred. As such, where physical or economic displacement is unavoidable, the Bank requires the promoter to develop an acceptable Resettlement Action Plan. The plan should incorporate and follow the right to due process, and to meaningful and culturally appropriate consultation and participation, including that of host communities. All affected persons shall be paid fair compensation in good time for expropriated assets. The promoter is required to offer to the affected persons an informed choice of either compensation in kind (land-for-land; land plot and house to replace affected land plot and house) or monetary compensation at the outset. The promoter is expected to comply with the choice stated by the affected persons. Whenever replacement land is offered, affected households should be provided with land for which a combination of productive potential, locational advantages, and other factors is at least equivalent to the advantages of the land taken. In exceptional cases when this is not possible, adequate compensation must be provided. Monetary compensation shall take into account full replacement cost based on market value, productive potential, or equivalent residential quality, including any administrative charges, title fees, or other legal transaction costs. EIB standard No.6 on involuntary Resettlement as its objective has the following: • Avoid or, at least minimize, project induced resettlement whenever feasible by exploring alternative project designs; • Avoid and/or prevent forced evictions and provide effective remedy to minimize their negative impacts should prevention fail; • Ensure that any eviction which may be exceptionally required is carried out lawfully, respects the rights to life, dignity, liberty and security of those affected who must have access to an effective remedy against arbitrary evictions; • Respect individuals', groups and communities' right to adequate housing and to an adequate standard of living, as well as other rights that may be impacted by resettlement; • Respect right to property of all affected people and communities and mitigate any adverse impacts arising from their loss of assets or access to assets and/or restrictions of land use, whether temporary or permanent, direct or indirect, partial or in their totality.

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	• Assist all displaced persons to improve, or at least restore, their former livelihoods and living standards and adequately compensate for incurred losses, regardless of the character of existing land tenure arrangements (including title holders and those without the title) or income earning and subsistence strategies; • Uphold the right to adequate housing, promoting security of tenure at resettlement sites; • Ensure that resettlement measures are designed and implemented through the informed and meaningful consultation and participation of the project affected people throughout the resettlement process; Give particular attention to vulnerable groups, including women and minorities, who may require special assistance and whose participation should be vigilantly promoted.
	Standard (7): Rights and Interests of Vulnerable Groups All policies, practices, program and activities developed and implemented by the promoter should pay special attention to the rights of vulnerable groups. Such groups may include indigenous people, ethnic minorities, women, migrants, the very young and the very old. The livelihoods of vulnerable groups are especially sensitive to changes in the socio-economic context and are dependent on access to essential services and participation in decision-making. Free, prior and informed consent (FPIC) is a specific right originally acknowledged in the case of indigenous peoples, as recognized in the United Nations Declaration on the Rights of Indigenous Peoples. It is triggered by any impacts on to land and natural resources, relocation, and critical cultural heritage. The FPIC process should produce a clear endorsement or rejection by the indigenous peoples concerned of the proposed intervention and a statement of all accompanying mitigating and remedial measures and benefit-sharing agreements. As such, it is the main instrument ensuring that at the project level the indigenous peoples' priorities for economic, social and cultural development and environmental protection are promoted, as duly informed by their traditional cultures, knowledge and practices. The promoter will take the necessary measures to appropriately manage the risks and adverse impacts of the EIB operation on vulnerable individuals and groups, including on women and girls, minorities and indigenous peoples. In so doing, the promoter will seek to avoid, minimize, or otherwise mitigate or remedy the exposure of vulnerable populations to project-related risks and adverse impacts. As a means to foster those project outcomes, the promoter will properly address discriminatory practices, inequalities and other factors which contribute to vulnerability and will, as appropriate, strengthen the adaptive capacity of vulnerable individuals or groups by promoting inclusive development and benefit sharing.
	Standard 8: Labour Standards Safe and healthy working environment is one that is supported by the realization of ILO Core Labour Standards. Harmful or hazardous child labour is concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour as work that deprives children of their childhood, their potential and their dignity, and that jeopardizes their physical, mental or moral well-being either because of its nature or because of the conditions in which it is carried out. This Standard applies in full to all workers directly engaged by the promoter throughout the project life cycle. With regard to workers engaged through third parties, such as first-tier suppliers and primary contractors, to perform core work related to the project for a substantial duration (contract workers) and

Policy and Legal Regime	Applicable
	workers related to the promoter's primary suppliers (supply chain workers), the promoter will determine that such third parties are legitimate, reputable and that their workers are protected consistently with these standards. Additional due diligence may be required further down the supply chain in case of concerns. The promoter will report to the EIB the presence of persons under the age of 18 and the nature of work they perform. Minors shall not be employed informally, even when this is socially or culturally acceptable practice in the sector, country or region. The promoter will ensure that all work of persons under the age of 18 will be subject to an appropriate risk assessment and regular monitoring of health, working conditions and hours of work. Any work which is likely to jeopardize children's physical, mental or moral health, safety or morals should not be done by anyone under the age of 18. Where significant labour-associated risks are identified, the promoter should make available for the EIB's review a set of more comprehensive information to perform a labour assessment as part of the EIB's due diligence process. At minimum, the labour assessment should cover the promoter's human resources policies and management capacity to implement and monitor these, including for primary contractors and first-tier suppliers; as well as the relevant management systems and procedures. If further information is required, the EIB may consult relevant stakeholders such as workers' organizations, government agencies, local government officials, and civil society organizations among others, to ensure the appropriate local support for the project. Appropriate mitigation measures to address perceived inadequacies should be identified, as well as indicators for measuring and reporting on improvements (e.g. improved working conditions, support for vulnerable groups, provisions for worker welfare, representation). Special attention may need to be given to the ways that first-tier suppliers treat their labour force.
	Standard 9: Occupational and Public Health, Safety and Security The promoter shall ensure that health and safety risks falling under this domain are duly identified and adequately mitigated, supported by satisfactory occupational and public health and safety management plans and systems. Whilst recognizing the difficult challenges associated with enforcing these standards along supply chains, the EIB nonetheless expects promoters to demonstrate satisfactory practices in this respect by appropriate due diligence in the selection of the contractors and suppliers. Accordingly, the promoter will identify and evaluate occupational and public health and safety risks and potential adverse impacts arising directly or indirectly from the project as early as possible, on a continuous basis throughout the entire project life cycle and along its supply chain51. The promoter will promptly develop and implement appropriate and adequate measures aiming at avoiding or preventing, or as a last resort, minimizing or reducing, the identified risks and potential adverse impacts. The promoter shall document robust justification for choosing to minimize or reduce impacts rather than avoiding or preventing them. The promoter will provide project workers with adequate, timely and regularly updated training and information material on health and safety issues and procedures. The promoter will not request unqualified workers to operate equipment that may require safety training. The promoter will, if appropriate, organize demonstrations in wearing of personal protective equipment. Personal protective

Policy and Legal Regime	Applicable
	equipment must be used in accordance with instructions and only for the purposes specified, except in specific and exceptional circumstances. Such instructions must be understandable to all workers. The promoter will ensure that all project workers have access to adequate, safe and hygienic basic facilities, if living on-site and that qualified first-aid can be provided at all times. The promoter shall provide basic services including water, sanitation, and, in certain cases when the scale or the nature of the activity being carried out so requires, availability of medical care, based on the principles of nondiscrimination and equal opportunity, and will organize awareness-raising sessions on health and safety as required. Workers' accommodation quarters must meet minimum size and hygiene standards (including adequate ventilation; water supply for drinking, cooking, bathing, and laundry purposes; toilet facilities; sewage and waste disposal facilities) and respect basic living needs. Access to cooking/meal facilities should also be provided. When the promoter is responsible for providing the food, it shall ensure that food handling facilities comply with food hygiene regulations. Policies on the quality and management of the labour camps (including accommodation, sanitary facilities, kitchens and dining halls) will be put in place and implemented.
	Standard (10): Stakeholder Engagement As a public institution, the EIB actively promotes the right to access to information, as well as public consultation and participation; the right to access to remedy, including through grievance resolution, is equally acknowledged and actively promoted by the EIB. Standard 10 affirms the EIB's expectation that promoters uphold an open, transparent and accountable dialogue with all relevant stakeholders *at the local level* targeted by its EIB operations. These Standard stresses the value of public participation in the decision-making process throughout the preparation, implementation and monitoring phases of a project. Specific objectives arising for the promoter are to: • Establish and maintain a constructive dialogue between the promoter, the affected communities and other interested parties throughout the project life cycle; • Ensure that all stakeholders are properly identified and engaged; • Engage stakeholders in the disclosure process, engagement and consultations in an appropriate and effective manner throughout the project lifecycle, in line with the principles of public participation, non-discrimination and transparency; • Ensure that the relevant stakeholders, including commonly marginalized groups on account of gender, poverty, educational profile and other elements of social vulnerability, are given equal opportunity and possibility to voice their opinions and concerns, and that these are accounted for in the project decision-making; and, Duly verify and assess that the quality and process of engagement undertaken by third parties on the project conform to the provisions included in the present standard.

4 CIA STUDY AREA AND INFRASTRUCTURE DEVELOPMENT CONTEXT

4.1 Study Area

Marsyangdi is a mountain river in Nepal with a length of approximately 150km. Annapurna Himalaya ranges and the Manaslu Himalaya ranges are the significant sources of water for this river. Passing through Manang, Lamjung, Gorkha and Tanahu, it is one of the major tributaries of the Narayani River in the Central Nepal (Figure 4-1).

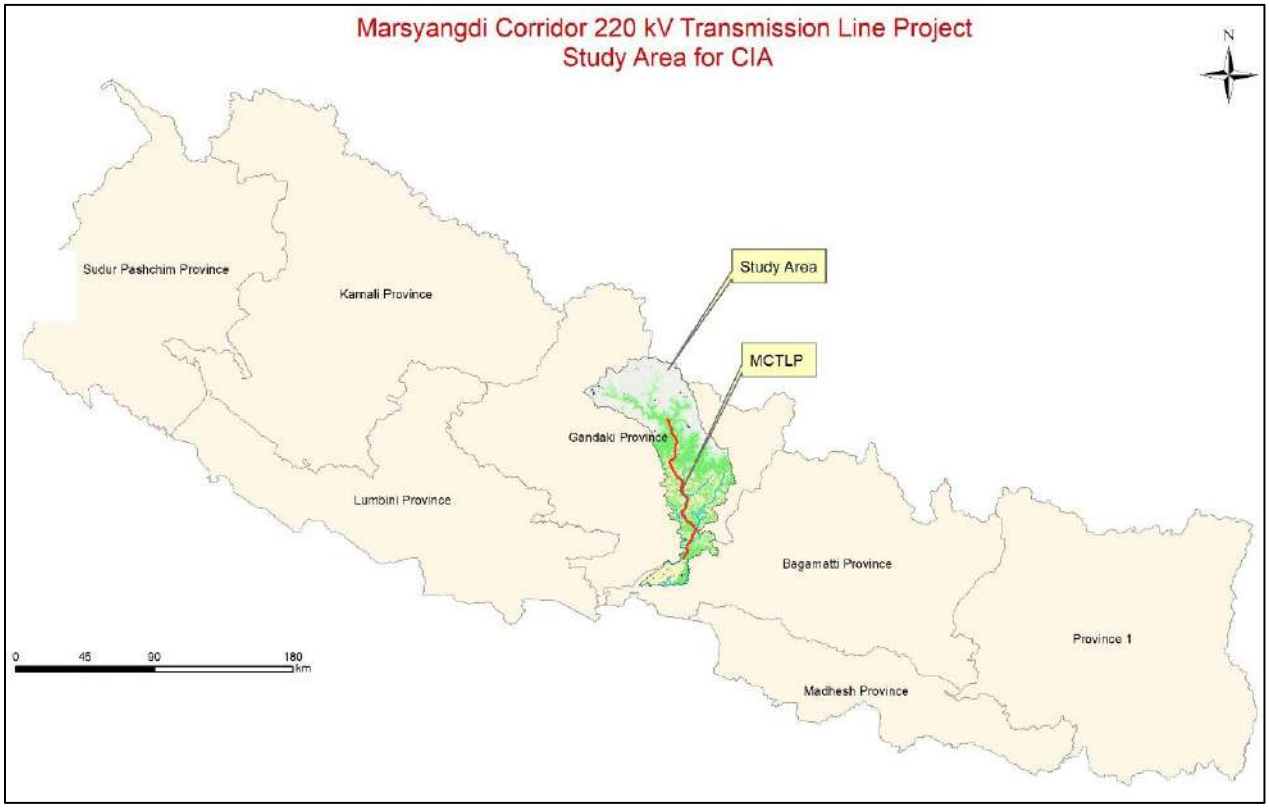

Figure 4-1: Location Map of Study Area for CIA

4.2 Landuse

As defined by the spatial boundary (section 2.3.1), the study area for CIA occupies 545595.70ha. The major part of this area is covered by Vegetation (forest, bush, grass and orchard) followed by bare land (barren, rock outcrop, cutting, cliff) and cultivated area. The detail of the landuse of the study area is presented in Table 4-1 and depicted in Figure 4-2.

Table 4-1: Landuse of the Study Area

S.N.	LAND TYPE	Area (ha)	Percentage (%)
1.	Forest	146,558.60	26.86
2.	Bush	37,402.01	6.86
3.	Grass	53,913.34	9.88
4.	Orchard	69.99	0.01
5.	Cultivation	113,823.32	20.86
6.	Barren Land	160,651.61	29.45
7.	Rock outcrop	17.52	0.00
8.	Cutting, cliff	1,065.30	0.20
9.	Glacier	16,819.40	3.08
10.	Snow	7,777.46	1.43
11.	Water body	1,958.99	0.36
12.	Pond or lake	650.73	0.12
13.	Sand	4,692.27	0.86
14.	Swamp	0.98	0.00
15.	Airport	25.36	0.00
16.	Built up	168.83	0.03
	Total	**545,595.7**	

Source: GIS Analysis

4.3 Infrastructure Development Projects

There are multiple projects in the Marsyangdi Basin. These projects are categorized as linear projects and non-linear projects. The linear development projects considered for CIA includes high voltage transmission lines and strategic roads within the study area boundary. Whereas hydropower and airports are considered as non-linear projects. This categorization is made as the impacts of linear projects differ from non-linear projects.

4.3.1 Linear Projects

4.3.1.1 High Voltage Transmission Lines

A total of 31 high voltage transmission line projects has been identified within the study area. These high voltage transmission lines ranges from 33kV single circuit line to 400kV double circuit lines. Out of these projects, 10 are in operation, 10 projects are in construction phase whereas remaining 11 projects are planned (Table-4-2). This CIA has prioritized these projects based on their interaction with the MCTLP. The highly prioritized Transmission Line projects are considered for CIA of the MCTLP.

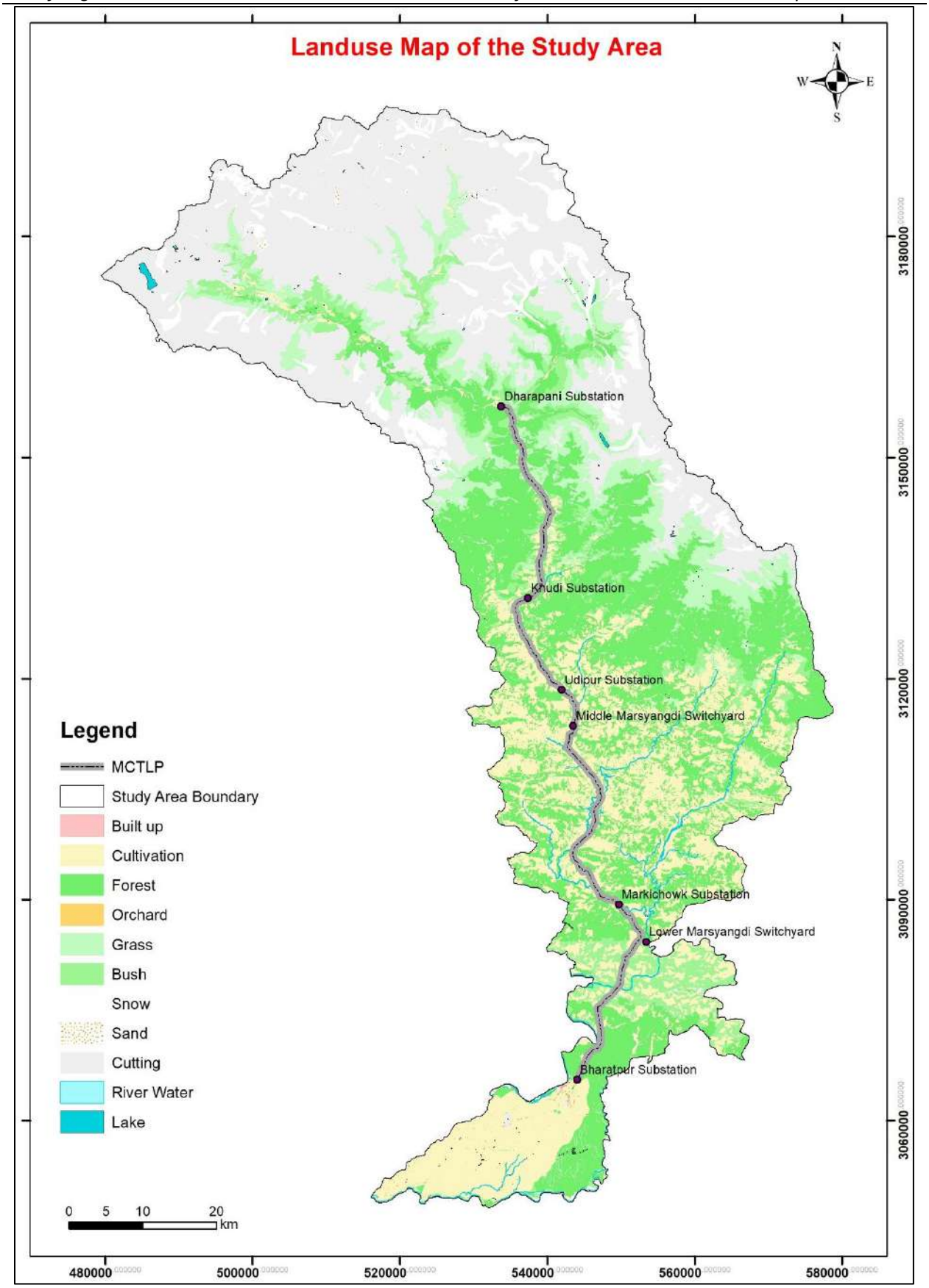

Figure 4-2: Landuse Map of Study Area

Table 4-2: Transmission Lines in the Project Area (other than MCTLP)

S. N.	Name of TL Project	Length (km)	Circuit	Carrying Capacity (MW)	Starting to Ending Point	Proponent	Interaction with MCTLP	Remarks
Existing TL Projects								
1.	Bhulbhule-Middle Marsyangdi 132kV TLP	22.00	Single	100.00	Switchyard of Upper Marsyangdi A HEP to Middle Marsyangdi	NEA	runs N-S almost parallel to MCTLP	***considered for CIA*** (IEE available)
2.	Middle Marsyangdi- Lower Marsyangdi 132kV TLP	80.00	Double			NEA	runs N-S almost parallel to MCTLP	***considered for CIA***
3.	Lower Masyangdi-Suichatar- Kathmandu 132kV TLP	84.00	Single			NEA	Low to medium	***considered for CIA***
4.	Lower Masyangdi-Bharatpur 132kV TLP	25.00	Single			NEA	Runs parallel to MCTLP in some sections	***considered for CIA***
5.	Dumre-Damauli 132kV TLP	18.00	Double	50.00		NEA	Low to medium	***considered for CIA*** (IEE available)
6.	(Pokhara-) Damauli-Bharatpur 132kV TLP	43.00	Single			NEA	Runs parallel to MCTLP in some sections	***considered for CIA***
7.	East-West 132kV TLP					NEA	Low to medium	***considered for CIA***
8.	Siuri Khola HEP 33kV TLP	7.50		5.00	Siuri SS, Bhulbhule to Khudi SS, Thakanbesi	Nyadi Group Pvt. Ltd.	Low	***EA report not available***
9.	Daraudi A 33kV TLP	17.00		6.00	Switchyard at Chanaute to Gorkha SS	Daraudi Kalika Hydropower Pvt.Ltd.	Low	***EA report not available***
10.	Upper Chhyangdi HEP 33kV TLP	2.35		4.00	Switchyard of Upper Chhyangdi HEP to switch-yard of Chhyangdi HEP	Shree Chhyangdi Hydropower Ltd.	***Low***	***EA report not available***
Under Construction TL Projects								
11.	Marsyangdi-Kathmandu 220kV TLP	85.00	Double	550.00	Markichowk SS to Matatirtha SS	NEA	Intersects/ Crosses MCTLP	***considered for CIA*** (IEE available)

S. N.	Name of TL Project	Length (km)	Circuit	Carrying Capacity (MW)	Starting to Ending Point	Proponent	Interaction with MCTLP	Remarks
12.	Dordi Corridor 132kV TLP	10.167	Double	160.00	Kirtipur SS to Udipur SS	NEA	Connects to Udipur SS of MCTLP	***considered for CIA*** (IEE available)
13.	Upper Seti (Damauli)-Bharatpur 220kV TLP	38.42	Double	967.30		NEA	Low to medium	***considered for CIA*** (IEE available)
14.	Hetauda-Bharatpur-Bardghat 220kV TLP	143.33	Double	122.00		NEA	Connects to New Bharatpur SS	***considered for CIA*** (EIA available)
15.	Super Dordi HPP 132kV TLP	5.60		54.00	Project switchyard to Kirtipur SS	Shree People's Hydropower Co. Pvt. Ltd.	Low	(Construction License issued)
16.	Dordi-1 HEP 132kV TLP	3.50	Single	12.00	Switchyard of the project to Kirtipur SS	Dordi Khola Jalbidhyut Co. Ltd.	Low	(Construction License issued)
17.	Dordi Khola HEP 132kV TLP	3.00		27	Switchyard of project to Udipur SS, NEA	Himalayan Power Partner Ltd.	Connects to Udipur SS of MCTLP	***EA report not available***
18.	Nyadi 132kV TLP	9.408		30.00	Bahundada PH to Middle Marsyangdi switchyard	Nyadi Hydropower Limited	Low to medium	***EA report not available***
19.	Upper Sayange Khola HEP 33kV TLP	12.00		2.40	Switchyard of project to Khudi SS of NEA	Upper Syange Hydropower Ltd.	Low	Construction License issued
20.	Chepe Khola Small HEP 33kV TLP	20.59		8.63	Switchyard of the project to Kirtipur SS, NEA	Aashutosh Energy Pvt.Ltd.	Low	Construction License issued
Planned TL Projects								
21.	Kerabari-New Marsyangdi (Daraudi Corridor) 132kV TLP	32.00	Double	120.00	From Kerabari SS of Gorkha to New Marsyangdi (Markichowk) SS of Tanahun	Rastriya Prasaran Grid Company Ltd. (Survey license Issued; application for construction license)	Connects with Markichowk substation of MCTLP	***considered for CIA*** (IEE available)
22.	Electricity Transmission Line Project (400kV) MCC	312.00		3920.00	Planned		Intersects with MCTLP	***considered for CIA*** (EIA available)

S. N.	Name of TL Project	Length (km)	Circuit	Carrying Capacity (MW)	Starting to Ending Point	Proponent	Interaction with MCTLP	Remarks
23.	Radhi Small Hydropower 33kV TLP	14.00		4.40	From switchyard of project to Khudi (Tarikuna) NEA substation of Lamjung	Radhi Bidhyut Company Limited	Low	Survey license Issued
24.	Chepe Khola Small HEP 33kV TLP	20.59		8.63	From switchyard of HEP to Kirtipur SS of NEA	Aashutosh Energy Pvt. Ltd.	Low	"
25.	Nyadi Phidi HEP 132kV TLP	18.00		21.40	From switchyard of project to Khudi (Tadikuna) SS of NEA	North Summit Hydro Pvt. Ltd.	Low	"
26.	Upper Khudi HEP 132kV TLP	5.00		26.00	Switchyard of project to Khudi (Tarikuna) SS of NEA	Super Khudi Hydropower Pvt. Ltd.	Low	"
27.	Radhi small Hydropower 33kV TLP	4.4		14.00	Switchyard of project to Khudi (Tarikuna) SS of NEA	Radhi Bidhyut Company Limited	Low	"
28.	Super Nyadi 132kV TLP	5.5		40.27	Switchyard of Super Nyadi HEP to switchyard of Nyadi HEP	Siuri Nyadi Power Ltd	Low	"
29.	Madhya Super Daraudi 33kV TLP	17.5		10.00	Switchyard of the project to NEA Ghyampesal SS, Gorkha	Barpak Daraudi Hydropower Pvt. Ltd.	Low	"
30.	Chepe A 33kV TLP	12.0		7.00	Switchyard of the project to Palungtar SS, NEA	Champawati Hydropower Pvt. Ltd.	Low	"
31.	Doodhpokhari Chepe & Super Chepe HEP Joint 33kV TLP	24.0		17.886	Switchyard of the project to Kirtipur SS, NEA	Doodhpokhari Chepe Hydropower Pvt. Ltd.	Low	"

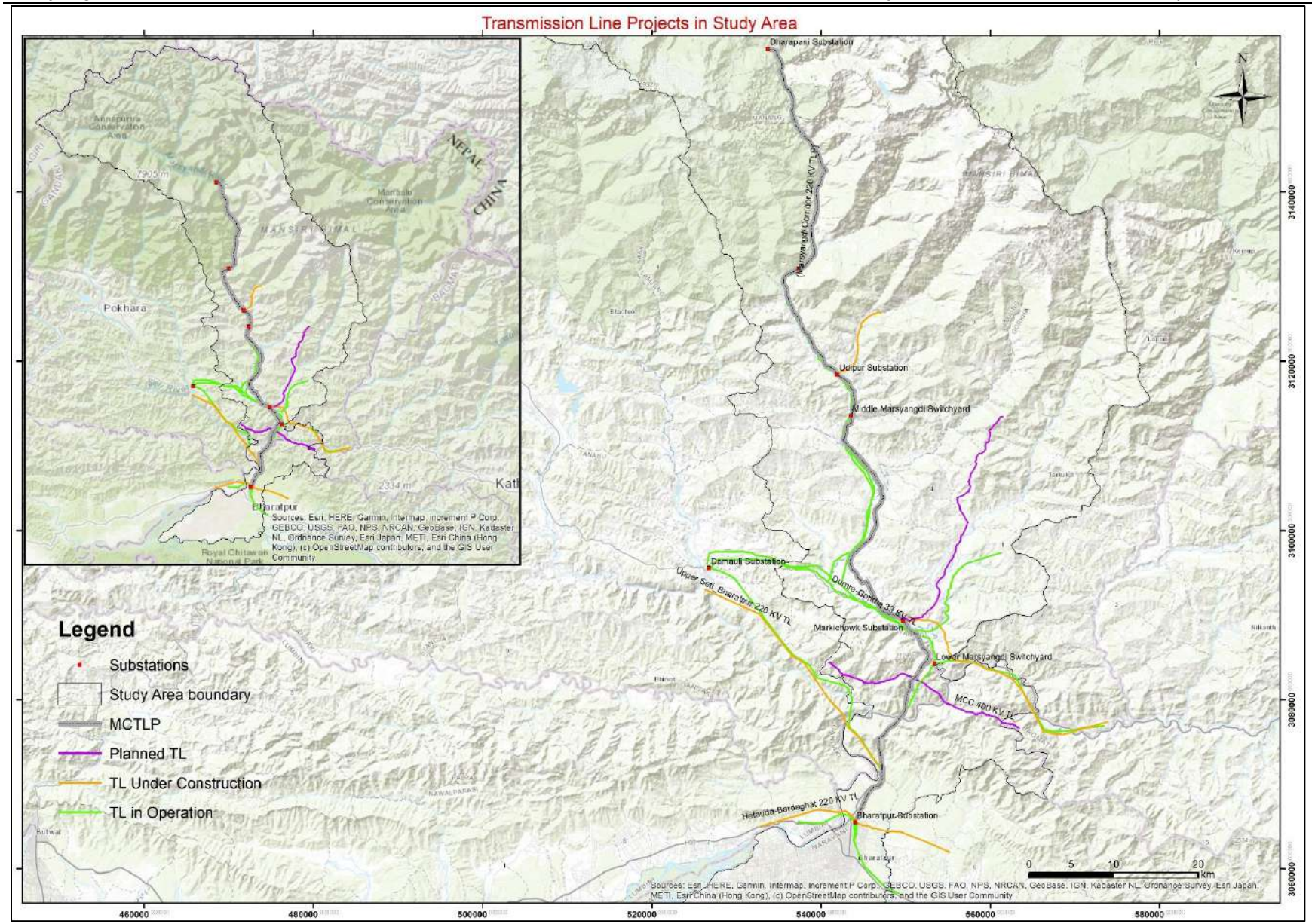

Figure 4-3: MCTLP and Other Prioritized TL Projects for CIA

4.3.1.2 Highways and Roads

A total of 26 roads have been identified in the study area and listed for the screening purpose for CIA (Table 4-3). Out of these, five are strategic road network (SRN) and remaining others are district core road network (DCRN) and village core road network (VCRN). For the CIA purpose, only the SRN are considered and presented in Figure 4-4.

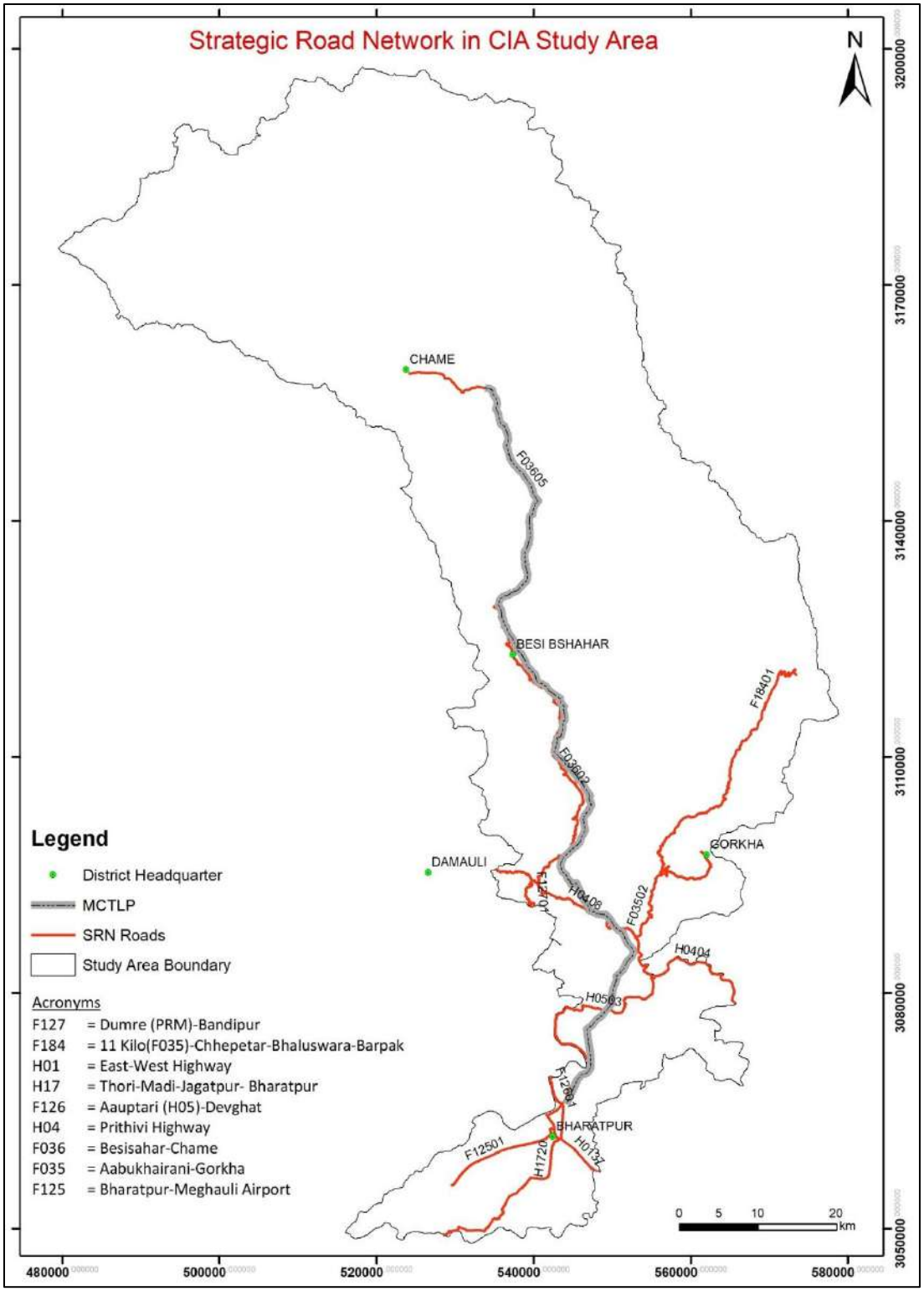

Figure 4-4: Road Network in Study Area

Table 4-3: Roads in the Project Area of MCTLP

S. N.	Road code	Road Name	Description	Road Length	Road Type	Interaction with MCTLP	Level of Interaction	Remarks
1.	F03605	Dumre-Besisahar-Chame Road	Proposed TLP is on the left bank of the Marsyangdi river and the road is on the opposite bank of the river within 200m. The road runs along the Marsyangdi river parallel to MCTLP. The TL crosses the road at many locations.		Earthen/ Gravelled	MCTLP crosses the road alignment many times. This road is also key to provide accessibility to the proposed TL construction site.	Medium	***Considered for CIA***
2.	H0503	Mugling-Narayanghat Highway	TL crosses the Road. The highway expansion project has been recently completed.		Blacktop	MCTLP crosses the road alignment	Medium	***Considered for CIA***
3.	H0407	Prithivi Highway	TL crossing the road. The highway expansion project is on-going.		Blacktop	MCTLP crosses the road alignment	Medium	***Considered for CIA***
4.	F035	Aabukhairani-Gorkha	This road connects Prithvi Highway with district headquarter of Gorkha		Blacktop	TL crosses the feeder road		***Considered for CIA***
5.	F126	Aauptari (H05)-Devghat			Blacktop			***Considered for CIA***
6.	37DR001	Taghring (Rambazar)-Chhapadanda Road	TL crossing the road in Syange area.	1.22km	Earthen	MCTLP crosses the road alignment	Low	Not considered
7.	37DR002	Thakanbesi-Shitaldanda-Bahundanda-Ghermuphant Road	The road is on the left bank of the Marsyangdi River and MCTLP is on right Bank. The Road starts for F03605 and crosses the river through motorable bridge.		Earthen	No any interaction	Low	Not Considered
8.	Village Roads		In Khudi Bazar, the TL crosses 3 village roads.		Earthen	MCTLP crosses the road alignment	Low	Not considered

S. N.	Road code	Road Name	Description	Road Length	Road Type	Interaction with MCTLP	Level of Interaction	Remarks
9.	37DR005	Khudi-Segle (Simpani VDC) Road)	The TL on the left side and the road on right side of the Marsyangdi river.	5.79km	Earthen	No any interaction	Low	Not Considered
10.	37DR006	Besishahar-Chandisthan Road		5.48km	Earthen	No any interaction	Low	Not Considered
11.	37DR011	Banjhakhet-Hile-Karki danda-Chiti Tilahar Road	The TL crosses the Road in Besisahar.	11.38km	Earthen	MCTLP crosses the road alignment	Low	Not considered
12.	37DR023	Rithebagar-Tiwaridanda-Tinpiple-Tilahar-Hilebesi-Faleni Road	The TL crosses the road in Chiti area.	21.27km	Earthen	MCTLP crosses the road alignment	Low	Not Considered
13.	Village Roads		There are five village road crossing in the area.		Earthen	MCTLP crosses the road alignment	Low	Not considered
14.	37DR024	Udipur-Ramchokbesi-Nauthar Sera-Kirtipur Road	The proposed TL crosses the road.	16.42km	Earthen	MCTLP crosses the road alignment	Low	Not Considered
15.	37DR026	Belghari-Archalbot-Lamabagar-Serabazar-Jitaure-Pachok Road	TL crosses the road in Bhoteodar area.	10.98km	Earthen	MCTLP crosses the road alignment	Low	Not considered
16.	37DR029	Bhoteodar-Belghari-Bharte-Gaunda Road	TL crosses the road in Bhoteodar area.	17.45km	Earthen	MCTLP crosses the road alignment	Low	Not Considered
17.	37DR036	Paundidhik-Harrabot-Kuwapani (Mohoriyakot)-Pyarjung-Gaunda-Ilampokhari-Bichaur-Dudhpokhari (Kunaghat) Road	TL crosses the road in Bhoteodar area.	52.7km	Earthen	MCTLP crosses the road alignment	Low	Not considered
18.	37DR041	Harrabot-Bhaisekhola Road ()	TL crosses the road in Dhamilikuwa area.	2.38km	Earthen	MCTLP crosses the road alignment	Low	Not Considered
19.	37DR042	Tarkughat-Dhamilikuwa-Chakratirtha-Sahilitar-Borangkhola Road	TL crosses the road in Dhamilikuwa area.	22.06km	Earthen	MCTLP crosses the road alignment	Low	Not considered
20.	Village road		There are five village road crossing in the area.		Earthen	MCTLP crosses the road alignment	Low	Not Considered
21.	36DR002	Chhepetar-Thantipokhari-Turture	TL crossing the road in Palungtar area	13.85km	Earthen	MCTLP crosses the road alignment	Low	Not considered

S. N.	Road code	Road Name	Description	Road Length	Road Type	Interaction with MCTLP	Level of Interaction	Remarks
22.	36DR005	Abuwa-Birdi-Pauwatar-Kalamata-Airport	TL crossing the road in Palungtar area	20.58km	Earthen	MCTLP crosses the road alignment	Low	Not considered
23.	36DR006	Nayapul-Birwatar-Pauwatar	TL crossing the road in Gaikhure area	4.98 km	Earthen	MCTLP crosses the road alignment	Low	Not Considered
24.	36DR007	RubberUdhyog-Deurali-Dhuwakot-Aamdanda-Tilarambhanjyang-Nayapul	TL crossing the road in Gaikhure area	10.75km	Earthen	MCTLP crosses the road alignment	Low	Not considered
25.	38DR023	District road of Tanahu district	TL crosses the Road		Earthen	MCTLP crosses the road alignment	Low	Not Considered
26.	35DR005	District road of Chitwan district	TL crosses the Road		Earthen	MCTLP crosses the road alignment	Low	Not considered

4.3.2 Non-Linear Projects

4.3.2.1 Hydropower

Hydropower projects are non-linear projects. For those projects which are already commissioned and being operated, there is low possibility of accumulation of impacts with the proposed MCTLP. However, the residual impacts or long-term impacts came accumulate. Similarly, two projects with construction licenses have completed power purchase agreements with NEA. However, the financial closure is yet to be done. Nevertheless, the probability of construction of these projects in the immediate future and some level of interaction with MCTLP prescribe these projects for consideration in CIA. The remaining two projects with construction licenses have neither concluded PPA nor the financial closure and therefore are much unlikely to be constructed in the immediate future. Much detail is not available on the planned/other projects. Further, financial closure and power purchasing agreement (PPA) are not completed for these projects. This increases the uncertainty of commissioning of these projects in the immediate future. The following sub-section discusses the hydropower development scenario in the main-stem Marsyangdi River and its tributaries in the study area.

Marsyangdi River: Main-Stem

With three hydropower projects already in operation (the 69MW Marsyangdi HEP**,** the 70MW Middle Marsyangdi HEP**,** and the 50MW Upper Marsyangdi A HEP), seven more hydro projects are in various phases of the project development on the main stem of the river. Altogether 10 hydro-projects have been identified in the mainstream of the river with the installed capacity 1495 MW (Table 4-4). To evacuate the power generated in the basin, Bhulbhule-Middle Marsyangdi 132kV TL, Marsyangdi-Kathmandu 132kV TL and Lower Marsyangdi-Bharatpur 132kV TL are in operation. In addition, Marsyangdi-Kathmandu 220kV TL and MCTLP are under construction.

Table 4-4: Hydro Projects in Main stem of Marsyangdi River

S.N	Hydropower Projects	Capacity (MW)
1.	Marsyangdi HEP	69
2.	Marsyangdi 3 HEP	42
3.	Middle Marsyangdi HEP	70
4.	Marsyangdi Besi HEP	50
5.	Upper Marsyangdi A HEP	50
6.	Upper Marsyangdi 1 HEP	138
7.	Upper Marsyangdi 2 HEP	600
8.	Lower Manang Marsyangdi	140
9.	Manang Marsyangdi HEP	282
10.	Marsyangdi 7 HEP	54
	Sub Total	**1495**

Daraudi Khola Basin

Daraudi (Khola) River is one of the tributaries of the Marsyangdi River. There are six hydropower projects at different stages of development in the Daraudi River basin. The total installed capacity of these HEPs is 53.32MW (Table 4-5). Among six hydropower projects, Daraudi A HEP is in operation and other projects are under construction. To evacuate the power generated in the basin, Kerabari-New Marsyangdi 132 kV TL is proposed.

Chepe Khola Basin

Similarly, there are six hydro-projects of capacity 50.88MW in Chepe Khola basin. Chepe Khola is another tributary of Marsyangdi River and its basin area extends between the basin area of Dordi Khola and Daraudi Khola (Table 4-5). Three hydro-projects in the basin are under construction and three hydro projects are in feasibility study phase. Proposed Kerabari-New Marsyangdi 132 kV TL also serves to evacuate the energy generated from Chepe Khola.

Table 4-5: Hydro Projects in Daraudi River Basin and Chepe Khola Basin

S. N.	HEP in Daraudi Basin	Capacity (MW)	HEP in Chepe Khola Basin	Capacity (MW)
1.	Daraudi 1 HEP	10.00	Langdi Khola Small HEP	3.26
2.	Daraudi A HEP	6.00	Chepe Khola Small HEP	8.63
3.	Upper Daraudi HEP	9.20	Lower Nyadi Khola HEP	12.60
4.	Madhya Super Daraudi HEP	10.00	Super Chepe HEP	9.05
5.	Upper Daraudi B Small HEP	8.30	Lower Chepe Khola HEP	8.74
6.	Upper Daraudi C HEP	9.82	Chepe Khola HEP	8.60
	Sub Total	**53.32**		**50.88**

Dordi Khola Basin

There are 12 hydro-projects with a total capacity of 241.5MW in Dordi Khola basin (Table 4-6). Two of them are in operation, five are under construction and five projects are in feasibility study phase. To evacuate the power generated in the basin, Nepal Electricity Authority is constructing Dordi Corridor 132 kV TL. The TL connects to Udipur Substation of MCTLP.

Table 4-6: Hydro Projects in Dordi Khola Basin

S.N	Name of HEP	Capacity (MW)
1.	Dordi Khola HEP	27.00
2.	Kisedi Khola Small HPP	4.10
3.	Dordi - 1 HEP	12.00
4.	Chhangdi Khola HEP	2.00
5.	Upper Chhangdi Khola HEP	4.00
6.	Upper Dordi A HEP	25.00
7.	Super Dordi Khola HEP	49.60
8.	Himchuli Dordi HEP	57.00
9.	Nyadi Khola HEP	30.00
10.	Dordi Dudh Khola HEP	20.80
11.	Dudh Khola Small HEP	5.00
12.	Dudh Khola Dordi HEP	5.00
	Sub Total	**241.50**

Khudi Khola Basin

There are three HEPs in the Khudi Khola Basin (Table 4-7). Of which, Kiche Khola HEP of 1.2 MW is in operation, Upper Khudi Khola HEP (26.00MW) is under construction and Khudi Khola HEP (4.00MW) is in feasibility study phase.

Table 4-7: Hydro Projects in Dordi River Basin

S.N	Name of HEP	Capacity (MW)
1.	Upper Khudi HEP	26.00
2.	Khudi Khola HEP	4.00
3.	Kiche Khola HEP	1.20
	Sub Total	**31.20**

Nyadi Khola Basin

There are four hydro-projects of capacity 53.58MW in the Nyadi Khola Basin (Table 4-8). Out of these, Siuri Khola HEP (5.00MW) is in operation, Lodo Khola Sana HEP (1.6MW) is in feasibility study phase and other two are under construction.

Table 4-8: Hydro Projects in Nyadi Khola Basin

S.N	Name of HEP	Capacity (MW)
1.	Super Nyadi HEP	40.70
2.	Hidi Khola HEP	6.28
3.	Siuri Khola HEP	5.00
4.	Lodo Khola Sana HEP	1.60
	Sub Total	**53.58**

Dudh Khola and Dana Khola Basin

Four hydro-projects in the Dudh Khola basin are in feasibility study phase (Table 4-9). The total capacity of these HEPs is 148.04MW. Any information on the transmission lines for the evacuation of power generated in the basin could not be obtained.

Table 4-9: Hydro Projects in Dudh Khola and Dana Khola Basin

S.N.	Name of Hydro	Capacity (MW)
1.	Dudh Khola HEP	65.00
2.	Upper Dudh Khola HEP	30.04
3.	Suti Khola HEP	21.00
4.	Bhindang Khola HEP	32.00
5.	Dana Khola HEP	34.80
6.	Mathilo Dana Khola HEP	7.40
	Sub-Total	**190.24**

Nar Khola Basin

Two hydro-projects of capacity 81.77MW are in the Nar Khola basin are in feasibility study phase (Table4-9). Any information on the transmission lines for the evacuation of power generated in the basin has not been available.

Table 4-10: Hydro Projects in Nar Khola Basin

S.N.	Name of Hydro	Capacity (MW)
13	Nar Khola HEP	50.00
14	Upper Nar Khola HEP	31.77
	Sub Total	**81.77**

Hydro Projects in other tributaries of the Marsyangdi River

There are seven hydro-projects of installed capacity 74.60MW in the small sub-basin within the Marsyangdi River Basin (Table4-11). Radhi Small HEP (4.4 MW) are in operation and other projects are at various stages of development. These hydro-projects are in vicinity of the mainstream of Marsyangdi River.

Table 4-11: Hydro Projects in Dordi River Basin

S.N	Name of Hydro	Capacity (MW)
1.	Rigdi Khola HEP	3.70
2.	Upper Syange Khola HEP	2.40
3.	Radhi Small HEP	4.40
4.	Chini Khola HEP	7.90
5.	Syalque Khola Small HEP	4.80
6.	Nyadi Phidi HEP	21.40
7.	Myardi Khola HEP	30.00
	Sub Total 9	**74.60**

Table 4-12: Hydroelectric Project in the Project Area of MCTLP

SN	Name of HEP	Installed Capacity (MW)	Proponent	Status of the HEP	Location of the project	Level of interaction with MCTLP	Remarks
A	**Marsyangdi River main stem projects**						
Operating HEP*							
1	Marsyangdi HEP	69.00	NEA	Operating since 2046-7-20	27^{0}52'25"-27^{0}56'53"N 84^{0}25'40"-84^{0}32'42"E	Medium to low	Not considered
2	Middle Marsyangdi	70.00	NEA	Operating since 2065-07-16	28^{0}08'20"-28^{0}11'50"N 84^{0}24'18"-84^{0}26'51"E	Medium to low	Not considered
3	Upper Marsyangdi A	50.00	Sinohydro-Sagarmatha Power Co. P. Ltd.	Operating since 2073-7-30	28^{0}17'07"-28^{0}19'28"N 84^{0}21'55"-84^{0}24'10"E	Medium to low	Not considered
	Sub-Total	**189.00**					
Project with Construction License							
4	Marsyangdi Besi HEP	50.00	Divyajyoti Hydropower P. Ltd.	Construction license issued	28^{0}12'00"-28^{0}16'00"N 84^{0}21'15"-84^{0}24'40"E	Medium (PPA concluded on 2075-05-13; no financial closure done, RCOD: 2079-06-06)	Not considered
5	Manang Marsyangdi HEP	282.00	Manang Marsyangdi Hydropower Company P. Ltd.	Construction license issued	28^{0}31'27"-28^{0}33'37"N 84^{0}15'38"-84^{0}20'00"E	Medium (PPA concluded on 2077-12-09; no financial closure;	Not considered
6	Tallo Manang Marsyangdi HEP	140.00	Butwal Power Company	Construction license issued	28029'35"-28032'30"N 84^{0}20'00"-84^{0}21'55"E	Low	***Considered for CIA***
7	Upper Marsyangdi 1 HEP	138.00	Upper Marsyangdi Hydropower Co. P. Ltd.	Construction license issued	28^{0}19'28"-28^{0}22'25"N 84^{0}23'51"-84^{0}25'00"E	Medium to low	Not considered
	Sub-Total	**610.00**					
Planned Projects							
8	Upper Marsyangdi-2 HEP	600.00/ 327.00	Himtal Hydropower Company P. Ltd.	Planned project, application for construction license (in IBN)	28^{0}22'04"-28^{0}30'00"N 84^{0}21'30"-84^{0}25'03"E	Low	***Considered for CIA***
9	Marsyangdi 7 HEP	54.00	Himal Energy Venture Pvt. Ltd.	Planned project, Survey License issued		Low	*Not considered*
10	Marsyangdi 3 HEP	42.00	GoN/DOED	under study project	28^{o}05'27" - 28^{o}08'09"N 84^{o}25'39"-84^{o}27'30"E	Low	
11	Lower Marsyangdi HEP	5.00	Ujyali Energy Solution P. Ltd.	Planned project, Application for survey license	28^{0}32'33"-28^{0}36'21"N 84^{0}10'26"-84^{0}15'38"E	Low	
	Sub-Total	**701.00**					

SN	Name of HEP	Installed Capacity (MW)	Proponent	Status of the HEP	Location of the project	Level of interaction with MCTLP	Remarks
B.	**Projects in Tributaries of Marsyangdi River**						
Operating Projects							
12	Syange Khola HEP	0.183	Syange Vidyut Co. Ltd.	Operating since 2058-10-10	Lamjung	Low	*Not Considered*
13	Khudi Khola HEP	4.00	Khudi Hydropower Limited	Operating since 2063-9-15	28^{0}16'30"-28^{0}18'30"N 84^{0}19'30"-84^{0}21'30"E Lamjung	Low	*Not Considered*
14	Siuri Khola HEP	5.00	Nyadi Group P. Ltd.	Operating since 2069-06-30	28^{0}20'24"-28^{0}21'00"N 84^{0}27'41"-84^{0}29'23"E Lamjung	Low	*Not Considered*
15	Radhi Small HEP	4.40	Radhi Bidhyut Co. Ltd.	Operating since 2071-02-31	28^{0}23'48"-28^{0}24'30"N 84^{0}24'34"-84^{0}25'45"E Lamjung	Low	*Not Considered*
16	Chhandi Khola HEP	2.00	Chhyandi Hydropower Co. P. Ltd.	Operating since 2072-12-13	28^{0}15'12"-28^{0}16'04"N 84^{0}28'08"-84^{0}29'20"E Lamjung	Low	*Not Considered*
17	Daraundi A HEP	6.00	Daraundi Kalika Hydro	Operation since 2073-08-12	28^{o}06'29"-28^{o}08'13"N 84^{o}39'43"-84^{o}41'33"E Gorkha	Low	*Not Considered*
18	Upper Chhandi Khola HEP	4.00	Chhyandi Hydropower ltd.	Operating since 2078-04-24	28^{0}16'05"-28^{0}17'46"N 84^{0}28'38"-84^{0}29'57"E Lamjung	Low	*Not Considered*
	Sub-Total	**25.583**					
Projects with Construction License							
19	Dordi Khola HEP	27.00	Himalaya Power Partner P. Ltd.	Construction license issued	Lamjung 28^{0}10'00"-28^{0}13'32"N 84^{0}26'00"-84^{0}28'30"E	Medium to low	*Not Considered*
20	Dordi-1 HEP	12.00	Dordi Khola Jalvidyut Co. Ltd.	Construction license issued	Lamjung 28^{0}13'33"-28^{0}15'11"N 84^{0}26'55"-84^{0}28'45"E	Medium to low	*Not Considered*
21	Upper Dordi A HEP	25.00	Liberty Energy Hydropower P. Ltd.	Construction license issued	Lamjung 28^{0}15'00"-28^{0}16'20"N 84^{0}28'46"-84^{0}31'59"E	Medium to low	*Not Considered*
22	Super Dordi Kha HEP	49.60	Peoples Hydropower Co. Pvt. Ltd.	Construction license issued	Lamjung 28^{0}16'20"-28^{0}18'43"N 84^{0}31'00"-84^{0}34'10"E	Medium to low	***Considered for CIA***
23	Nyadi Khola HEP	30.00	Nyadi Hydropower Ltd.	Construction license issued	28^{0}19'20"-28^{0}21'07"N 84^{0}35'00"-84^{0}37'00"E	Medium to low	***Considered for CIA***

SN	Name of HEP	Installed Capacity (MW)	Proponent	Status of the HEP	Location of the project	Level of interaction with MCTLP	Remarks
24	Nyadi-Phidi HEP	21.40	North Summit Hydro P. Ltd.	Construction License issued, IEE approved	28^{0}24'27"-28^{0}26'12"N 84^{0}25'25"-84^{0}28'00"E	Medium	***Considered for CIA***
25	Super Nyadi HEP	40.27	Siuri Nyadi Power Ltd.	Construction license issued	28^{0}21'09"-28^{0}24'23"N 84^{0}26'57"-84^{0}30'18"E	Medium to low	*Not Considered*
26	Upper Syange Khola HEP	2.40	Upper Syange Hydropower P. Ltd.	Construction license issued	28^{0}23'05"-28^{0}23'37"N 84^{0}22'48"-84^{0}23'54"E	Medium to low	*Not Considered*
27	Upper Khudi HEP	26.00	Super Khudi Hydropower Co. Pvt. Ltd.	Construction license issued	28^{0}18'22"-28^{0}21'50"N 84^{0}18'32"-84^{0}20'44"E	Medium to low	*Not Considered*
28	Langdi Khola Small HEP	3.26	Ujyalo Nepal Hydro P. Ltd.	Construction license issued	28^{0}10'05"-28^{0}11'54"N 84^{0}35'00"-84^{0}37'00"E	Medium to low	*Not Considered*
29	Hidi Khola HEP	6.28	White Lotus Power P. Ltd.	Construction license issued	28^{0}22'22"-28^{0}23'04"N 84^{0}29'12"-84^{0}31'05"E	Medium to low	*Not Considered*
30	Chepe Khola Small HEP	8.63	Aashutosh Investment P. Ltd.	Construction license issued	28^{0}10'39"-28^{0}12'55"N 84^{0}37'26"-84^{0}39'05"E	Medium to low	*Not Considered*
31	Super Chepe HEP	9.05	Ridge Line Energy Pvt. Ltd.	Construction license issued	28^{0}13'00"-28^{0}15'00"N 84^{0}37'55"-84^{0}39'08"E	Medium to low	*Not Considered*
32	Daraundi 1 HEP	10.00	Diamond Hydropower Pvt. Ltd.	Construction license issued	28^{o}03'09"-28^{o}06'10"N 84^{o}38'52"-84^{o}40'00"E	Medium to low	*Not Considered*
33	Madhya Super Daraundi HEP	10.00	Barpak Daraundi Hydropower Company Pvt. Ltd.	Construction license issued	28^{o}11'18"-28^{o}13'22"N 84^{o}42'57"-84^{o}44'07"E	Medium to low	*Not Considered*
34	Upper Daraundi HEP	9.20	Green Gorkha Energy Limited	Construction license issued	28^{o}08' 36"-28^{o}11' 18"N 84^{o}41'52"-84^o 43' 23"E	Medium to low	*Not Considered*
35	Upper Daraundi B Small HEP	8.30	Kalika Construction Pvt. Ltd.	Construction license issued	28^{o}13'24"-28^o 15'00"N 84^{o}43'45"-84^o 44'30"E	Medium to low	*Not Considered*
36	Upper Daraundi-C HEP	9.82	Kalika Construction Pvt. Ltd.	Construction license issued	28^{o}15'01"-28^o 16'30"N 84^{o}43'00"-84^o 44'30"E	Medium to low	*Not Considered*
	Sub-total	**308.21**					
Planned Projects							
37	Himchuli Dordi HEP	57.00	People's Hydropower Co. Pvt. Ltd.	Applied for construction license	Lamjung 28^{0}18'45"-28^{0}20'40"N 84^{0}33'40"-84^{0}35'50"E	Low	***Considered for CIA*** (EIA available)
38	Dudh Khola HEP	65.00	Sita Hydropower Co. Pvt. Ltd.	Applied for construction license	Manang 28^{0}31'27"-28^{0}33'17"N 84^{0}21'20"-84^{0}23'55"E	Lies within the Marsyangdi Basin	***Considered for CIA*** (EIA available)

SN	Name of HEP	Installed Capacity (MW)	Proponent	Status of the HEP	Location of the project	Level of interaction with MCTLP	Remarks
39	Dordi Dhud Khola Small HEP	20.80	Goma Ganesh Hydropower Pvt. Ltd.	Applied for construction license	Lamjung 28^{0}20'32"-28^{0}22'00"N 84^{0}35'20"-84^{0}36'45"E	Low	*Not Considered*
40	Upper Dudh Khola HEP	30.40	Carbonless Energy Fund Pvt. Ltd.	Survey License issued	Manang 28^{0}33'17"-28^{0}35'30"N 84^{0}23'19"-84^{0}25'30"E	Low	*Not Considered*
41	Chino Khola HEP	7.90	Butwal Power Company	Applied for construction license	Manang 28^{0}32'00"-28^{0}33'15"N 84^{0}19'21"-84^{0}20'22"E	Low	*Not Considered*
42	Kisedi Khola Small HEP	4.10	Ana Multipurpose Company Pvt. Ltd.	Survey License issued	Lamjung 28^{0}11'23"-28^{0}12'15"N 84^{0}27'30"-84^{0}30'36"E	Low	*Not Considered*
43	Chyandi Khola HEP	4.20	Chyandi Khola Hydropower Co. P. Ltd.	Survey License issued	Lamjung 28^{0}12'56"-28^{0}14'35"N 84^{0}37'00"-84^{0}38'24"E	Low	*Not Considered*
44	Lower Nyadi HEP	12.60	Hub Power Pvt. Ltd.	Survey License issued	Lamjung 28^{0}18'30"-28^{0}19'45"N 84^{0}24'10"-84^{0}25'25"E	Low	*Not Considered*
45.	Lodo Khola Sana HEP	1.60	Liberty Energy Co. Ltd.	Survey License issued	Lamjung 28^{0}15'42"-28^{0}16'42"N 84^{0}31'42"-84^{0}32'49"E	Low	*Not Considered*
46.	Nar Khola HEP	50.00	Nar Khola Hydro Energy P. Ltd.	Survey License issued	Manang 28^{0}33'08"-28^{0}38'00"N 84^{0}12'52"-84^{0}16'22"E	Low	*Not Considered*
47.	Syalque Khola Small HEP	4.80	Alliance Energy Solutions Pvt. Ltd.	Survey License issued	Manang 28^{0}30'55"-28^{0}31'53"N 84^{0}18'14"-84^{0}19'18"E	Low	*Not Considered*
48.	Suti Khola HEP	21.00	Nilganga Hydropower Company P. Ltd.	Survey License issued	Manang 28^{0}35'31"-28^{0}37'40"N 84^{0}21'39"-84^{0}23'42"E	Low	*Not Considered*
49.	Dana Khola HEP	34.80	Lalupate Hydropower Co. Pvt. Ltd.	Survey License issued	Manang 28^{0}30'15"-28^{0}31'15"N 84^{0}21'39"-84^{0}23'42"E	Low	*Not Considered*
.50	Mathillo Dana Khola HEP	7.40	Road Nepal Pvt. Ltd.	Survey License issued	Manang 28^{0}30'55"-28^{0}32'00"N 84^{0}24'20"-84^{0}25'50"E	Low	*Not Considered*
51.	Lower Chepe Khola HEP	8.74	GoN/DoED	GoN Studied Project/ GoN Project Bank	28^{o}08'11"-28^{o}10'30"N 84^o 34' 30"-84^{o}37'19"E	Low	*Not Considered*

SN	Name of HEP	Installed Capacity (MW)	Proponent	Status of the HEP	Location of the project	Level of interaction with MCTLP	Remarks
52.	Bhimdang Khola HEP	32.00	GoN/DoED	GoN Project Bank/ License Cancelled Project	28°33'17"-28°38'00"N 84°25'45"-84°28'00"E (Manang)	Low	*Not Considered*
53.	Chepe Khola HEP	8.60	GoN/DoED	GoN Project Bank/ License Cancelled Project	28°03'43"-28°05'26"N 84°29'00"-84°31'05"E (Gorkha)	Low	*Not Considered*
54.	Chhahare Khola HEP	17..50	GoN/DoED	GoN Project Bank/ License Cancelled Project	28°25'00"-28°27'07"N 84°24'00"-84°26'20"E	Low	*Not Considered*
55.	Chhilung Khola	8.00	GoN/DoED	GoN Project Bank/ License Cancelled Project	28°25'00"-28°27'30"N 87°50'30"-87°54'30"E	Low	*Not Considered*
56	Dudh Khola Dordi HEP	5.000	GoN/DoED	GoN Project Bank/ License Cancelled Project	28°22' 01"-28°23'05"N 84°36'00"-84°36'46"E Lamjung	Low	*Not Considered*
57.	Dudh Khola small HEP	5.00	GoN/DoED	GoN Project Bank/ License Cancelled Project	28°21'25"-28°22'22"N 84° 36'46"-84° 38'32"E	Low	*Not Considered*
58.	Kiche Khola	1.2	GoN/DoED	GoN Project Bank/ License Cancelled Project	28°18' 50"-28°19'34"N 84°18' 20"-84°20'11"E	Low	*Not Considered*
59.	Myardi Khola	30.00	GoN/DoED	GoN Project Bank/ License Cancelled Project	28°26' 34"-28°27'30"N 84°19' 36"-84°22'33"E	Low	*Not Considered*
60.	Rigdi Khola HEP	3.7	GoN/DoED	GoN Project Bank/ License Cancelled Project	27°48' 00"-27°48'55"N 84°30' 30"-84° 31'30"E (Chitwan)	Low	*Not Considered*
61.	Upper Nar HEP	31.77	GoN/DoED	GoN Project Bank/ License Cancelled Project	28°38'04"-28° 40'46"N 84°13'10"-84°15'00"E	Low	*Not Considered*

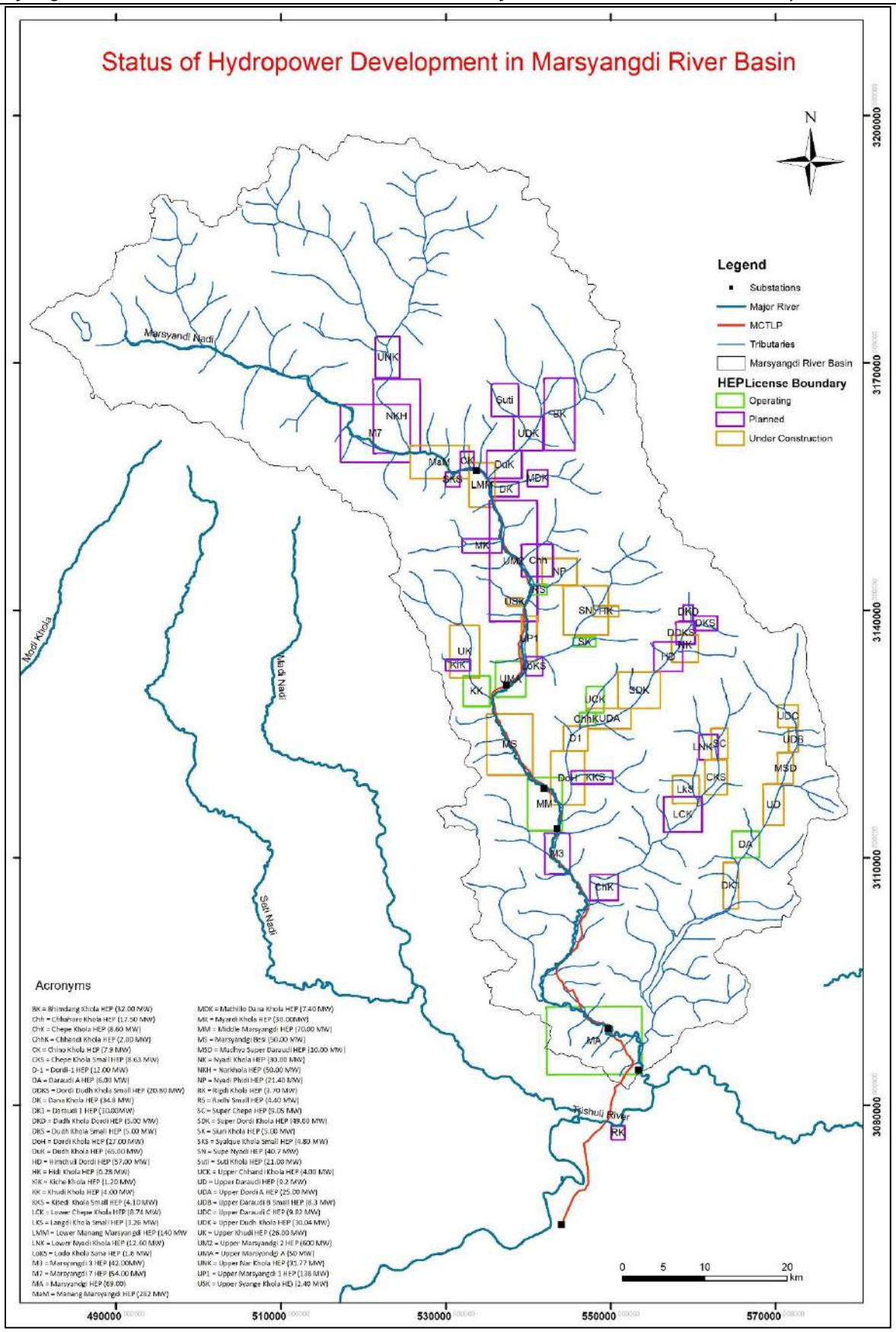

Figure 4-5: Status of Hydropower Development in Marsyangdi Basin

5 BASELINE ENVIRONMENTAL CONDITION OF VALUED ENVIRONMENTAL COMPONENT

5.1 Protected Areas and Ecologically Sensitive Areas

There are different ecologically sensitive areas and protected areas in and around the study area boundary. The upper section of the MCTLP passes through Annapurna Conservation Area (Figure 5-1), whereas the lower section lies in Barandabhar wildlife corridor (Figure 5-2).

5.1.1 Annapurna Conservation Area (ACA)

ACA covers an area of 7,629 km^2 and is home to over 100,000 residents of different cultural and linguistic groups. ACAP is rich in biodiversity and is characterized by 1,226 species of flowering plants, 105 mammals, 518 birds, 40 reptiles and 23 amphibians.

5.1.2 Chitwan Annapurna Landscape (CHAL)

The Chitwan-Annapurna Landscape (CHAL) was conceived in 1999 as a landscape to maintain north-south ecological connectivity. It covers the Gandaki River basin, which has one of the highest hydropower potentials and its rivers are critical corridors for conservation.

5.1.3 Terai Arc Landscape (TAL)

The Terai Arc Landscape (TAL) was conceived in 2004 to conserve the ecosystems of the Terai and Churia hills in order to ensure integrity of ecological, economic and socio-cultural systems and communities.

5.1.4 Barandabhar Corridor

The Barandabhar corridor connects Chitwan National Park (CNP) with the Mahabharat range to the north. The Corridor covers an area of 161 km^2 (DNPWC, 2014). It is an important biological corridor for the Gandaki river basin, connecting the Terai with higher altitude areas and could play a very important function in climate adaptation.

The existing East-West Road Highway and the East-West 132kV TL Project cut across the corridor, impacting the wildlife movement and habitat. A section of MCTLP is proposed within the Barandabhar Corridor.

5.2 Religious and Cultural Sites

5.2.1 Devghat Dham

Devghat Dham is the most sacred as well as religious place located at the tri-centre of Tanahun, Nawalparasi and Chitwan. It is home to various temples and caves dedicated to Hindu gods, goddesses, and saints including Goddess Sita's cave. This is the place where the great rivers Kaligandaki and Trishuli meet together. Kaligandaki river is one of the holy rivers in Nepal well known for its rare *Saligram Sheela*, which Hindu's religious place. The junction point of these great rivers is known as Devghat. This site is about 5km aerial distance from the Bharatpur Substation.

5.2.2 Other sites

Beshishahar Municipality itself is a historical place. Historical Lamjung Palace and Lamjung Kalika Temple, Purankot Palace are important from religious, historical as well as archeological point of view. Kaulepani Devi temple, Bahuni Padhero, Sukunde Cave are main historical and religious places. During field visit, it was observed that some small temples are found inside the settlements, some mosque and church were also observed in the project area. One religious place located within Dharapani substation will be affected.

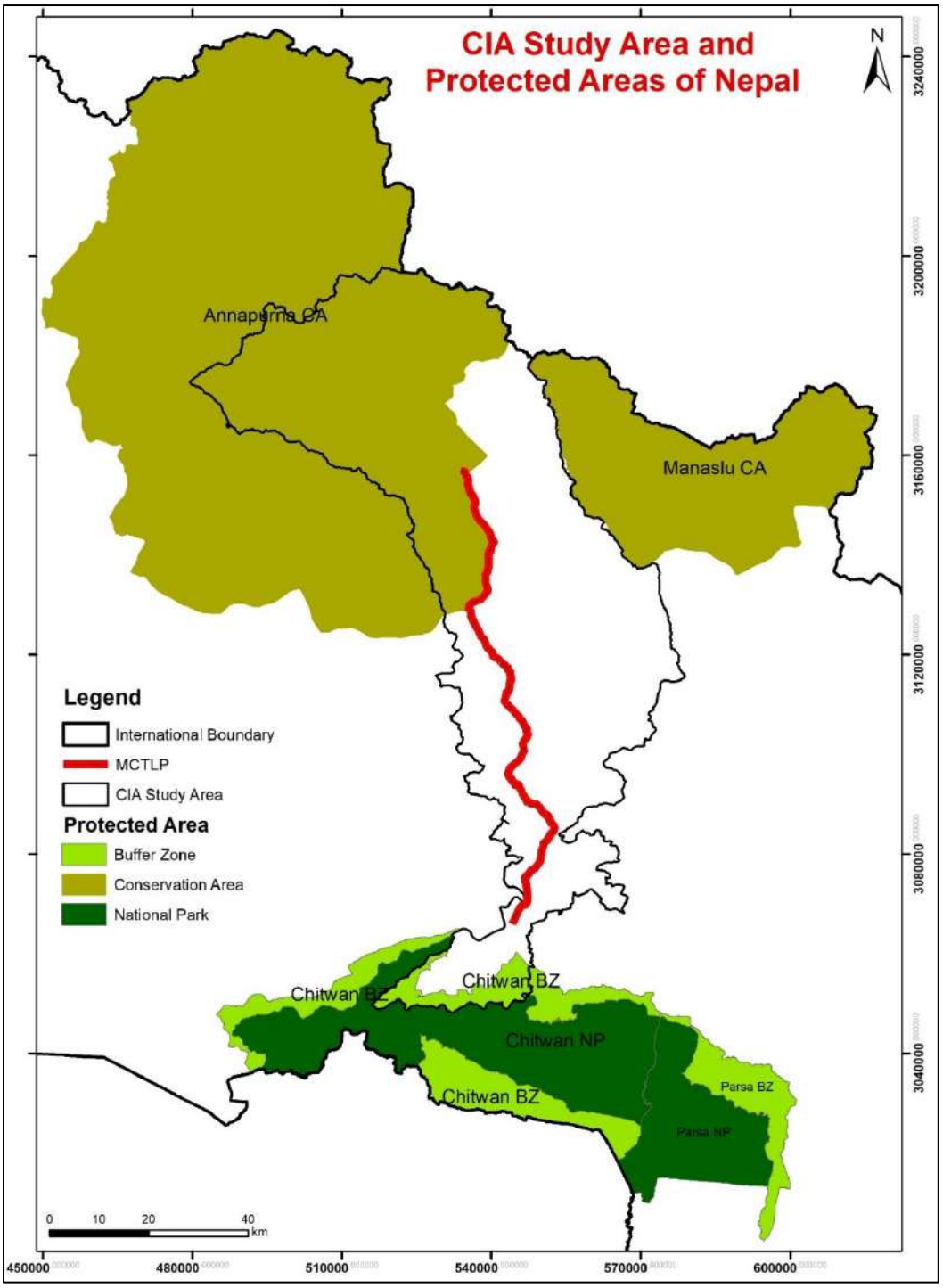

Figure 5-1: MCTLP CIA Study Area and Protected Areas

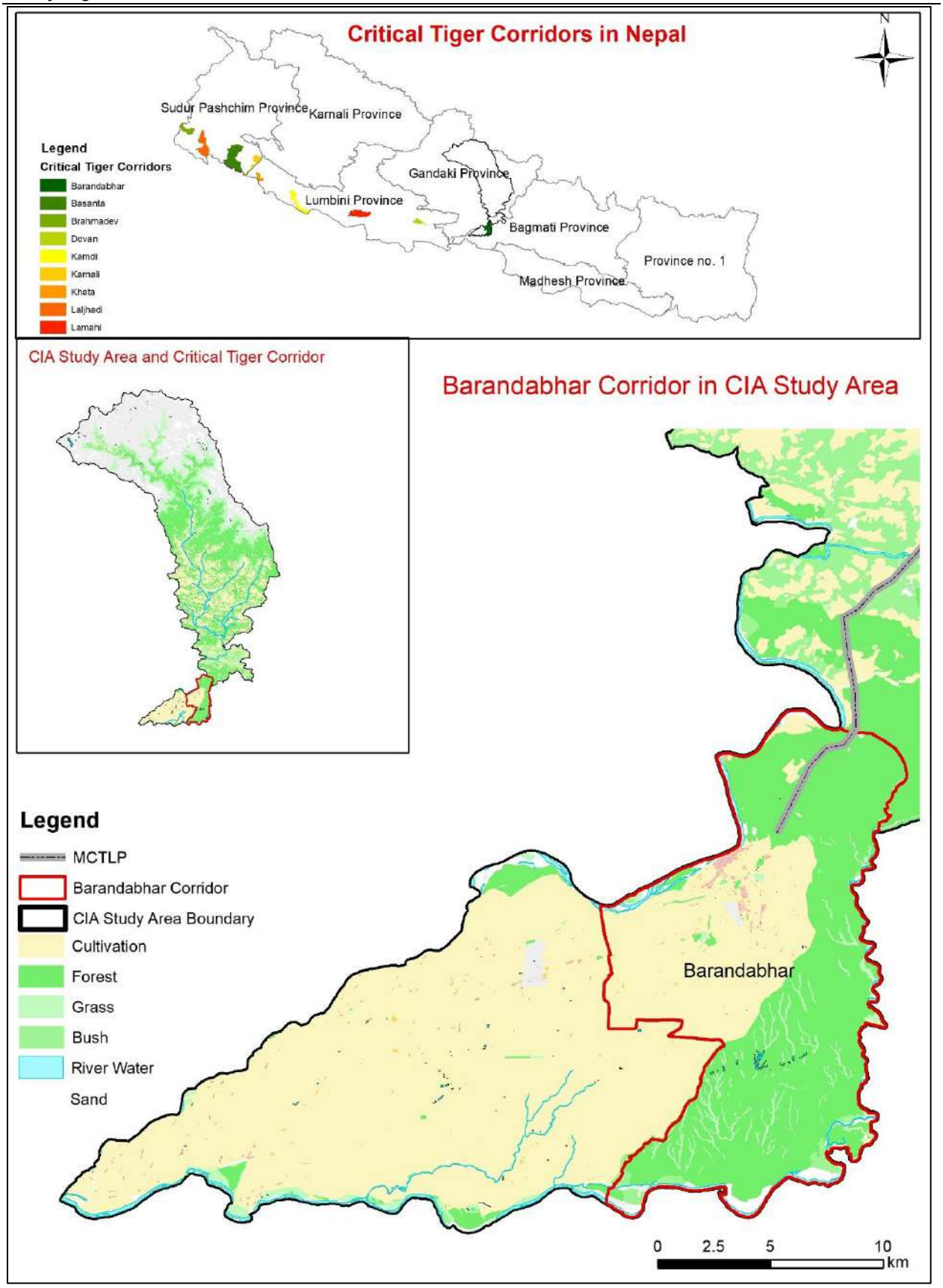

Figure 5-2: Barandabhar Corridor within CIA Study Area

6 CUMULATIVE IMPACTS

6.1 Stakeholders' Concerns and Grievances

Stakeholder consultation is one of the major components of assessing cumulative impacts. The concerns/suggestion of different stakeholder regarding multiple project development scenario within the study area are presented as follows;

Table 6-1: Issues/Suggestions of Communication Meetings with Stakeholders

SN	Date	Venue	Issues/Suggestions	Remarks
MANANG DISTRICT				
1.	2078/11/30	Manang, Nasong RM-4, Ghelanchowk	• The access road from Chame Headquarter to SS in Ghelanchowk should be technically and environmentally sustainable. • The risk and dangers associated with TL and SS should be safely managed. • Locals should be provided with skill-based training and should be prioritized for employment based on their capacity. • The conservation of aquatic, terrestrial living beings, religion, culture and environment would be easy and sustainable if high level, sustainable and intergraded master plan for road, HEPs, TL corridor is made and there is management for coordination between local, provincial and central agencies.	
2.	2078/12/01	Manang, Nashong RM-4, Oddar	• Development project which are proposed in and around Manang; road, transmission line, hydropower, agriculture should develop close coordination with local people. These projects should analysis to the technical and environmental prospective and need a master plan. Water animal, wild life and people residing the river bank, should not harm with construction related activities. • Project should give employment opportunity to the locals.	
LAMJUNG DISTRICT				
3.	2078/11/27	Sundarbazar Municipality-6, Municipality Office	• Interactions should be carried out with the local people of project affected area on time to time. • The risk zones due to project implementation should be demarcated and the safety issue should be in a more effective manner. • Continuity should be given to release water downstream of hydro-projects for maintaining aquatic ecosystems. • The royalty received by local levels is low in comparison to the impact received. Therefore, the royalty amount should be increased. • Sufficient coordination should be done while operating local projects and carrying out works related to hydropower development • The quality and reliability of electricity supply needs to be improved in Lamjung district	
4.	2078/11/27	Dordi Rural Municipality-4, Sera	• With the recommendation from the local levels, all the projects within those areas, should provide the total amount under the social responsibility and forest/ environment conservation programs at a time and it is necessary to carry out such activities under the monitoring/ supervision of local levels.	

SN	Date	Venue	Issues/Suggestions	Remarks
			• High voltage transmission line is required in the basin to evacuate the energy generated by government and private sectors. • The formulation and execution of plans for providing complete compensation or provision of 'share' to the hydropower and transmission line project affected families would help completing the under construction and proposed projects on time. • A joint master plan for all infrastructure projects should be developed. All the development activities, activities related to compensation and social/community responsibilities need to be done though 'one-door system' so as to avoid repetition/duplication. This will also help solve the issues related to social-cultural groups and forest/environment sector.	
5.	2078/11/28	Sundarbazar Municipality-7, Paudibazar	• Attention should be provided by the concerned bodies to maintain the transparency and uniformity in land acquisition. • Appropriate measures should be taken to manage Transmission lines and towers • Distribution line poles should be erected on appropriate depth and with the use of concrete. • Attention should be given to minimize the impact of EMF on animals • Prior information should be provided to affected pubic before the operation of dam/reservoir • Appropriate compensation should be provided to the local people affected by the construction of transmission line or other project • The determination of compensation rate for the land acquisition should be in line with the rate recommended by the local levels • Marsyangdi 3 HEP proposed near Paudi should not be constructed • Minimum no of towers and wires should be managed/ used while transmitting/distributing electricity • Electricity facility should be increased for residents of Lamjung districts • Siren system should be provided for residents of downstream of dam • The employees should not be engaged in discrimination while providing public service.	
6.	2078/11/28	Rainas Municipality-6, Dhamilikuwa	• There has been no equitable evaluation of property, the project need to coordinate with the locals • *'Lagat katta'* should be done for the land of RoW (separation of parcel of affected land) • Provision should be made to make the land of RoW bankable (to use such land as collateral for loan purpose). • Prior information is to be provided before the execution of the project. • Appropriate standards should be made for road construction. Compensation should be provided by road projects as well.	

SN	Date	Venue	Issues/Suggestions	Remarks
			• Reconstruction of the Mid-Hill Highway affected community/social structures should be done • Impacts can be minimized by issuing public share and sharing the project benefits with the local people • Compensatory plantation should be done in the nearby areas of the affected forests. • The public notice (including land acquisition and compensation notice) should be made available on time, before the deadlines	
7.	2078/11/28	Beshisahar Municipality-11, Ramchowk Besi	• High voltage transmission line is required to evacuate the energy from Marsyangdi Corridor and Dordi Corridor. The existing 11kV, 33kV, 132kV and under-construction 220kV transmission lines have fragmented the land, affected house and property and further created hindrances for commercial farming. • Due to the existing transmission lines, some electrical accidents have been encountered in project area. Therefore, there is a need of overall safety system of electrical systems along with the provision of insurance. • There is a need of compensation of the land under RoW of the transmission line. • It is required to make a master plan for all the hydro-projects (operating, under construction and planned) in the Dordi, Marsyangdi, Khudi and other rivers so as to supply required amount of water to aquatic life, irrigation, drinking water and for social and cultural sites downstream of dams/diversion structures. • It is highly recommended to formulate necessary legal regime (policy/act/regulation or guidelines) which will ensure the regular monitoring, examination, recommendation and execution for the quality assurance of projects. For this, one mechanism or executing body constituting of the representatives from the federal government, provincial government; local level and from affected area and project developer/proponent need to be established. Such body shall recruit the subject-expert as required for such regular monitoring.	
8.	2078/11/29	Rainas Municipality, Teenpiple	• With the development of road projects, agriculture land has been decreasing. It is necessary to manage the settlement areas. • Make public participation in the selection of development projects related to different sectors. • As the construction of road projects will affect the environment and biodiversity along with deforestation, tree planting will be done as per the need. • Conduct income generating programs to make the municipality financially capable • In order to facilitate the transmission line in this area and in case of any power outage, the Electricity Authority should be informed in advance.	

SN	Date	Venue	Issues/Suggestions	Remarks
9.	2078/11/29	Marsyangdi Rural Municipality Office, Bhulbhule	• Currently, private and government hydropower projects are constructing separate transmission lines, resulting in various conflicts in the project related to land acquisition, forest conservation, irrigation, aquatic conservation, drinking water, wildlife and birds, as well as lack of water for religious and social works. To solve this problem, it is necessary to construct a single high-capacity transmission line in a river corridor. • In EIA and IEE related to roads, hydropower and other infrastructure, it is necessary to set up a mechanism with representatives of local bodies and experts to spend the budget of CSR in the specified area and regularly monitor, inspect and recommend the project. • It is necessary to monitor and control at least 5 years after the completion of the project in order to manage the chemicals waste, scarp goods and other items released from the project in an environment friendly manner.	
10.	2078/11/29	Besisahar Municipality Office	• Currently, lack of high-capacity transmission lines to evacuate electricity from hydropower projects being constructed in the corridors of Marsangdi, Dordi, Khudi, Nyadi, etc.; a number of TL lines of capacity 33 KV, 132 KV, 220 KV and other of the same capacity have been studied. This causes problems in land acquisition, land and wildlife. In order to solve this problem, it is necessary to formulate a policy to compensate the land even under the wire, and only a single TL in a river corridor. • During the preliminary study of hydropower, roads, transmission lines, and other infrastructures, it seems necessary to formulate an action plan with the solution of possible problems through discussions between the local government, environmentalists and technicians. • Irrigation, drinking water, religious activities, aquaculture, livestock, plants and the environment have been affected due to the diversion of water by hydropower projects built near villages and agricultural areas. It is seen that other proposed projects should be constructed away from villages and settlements. • As the use of water by various projects has reduced the water available in the downstream areas and has affected aquaculture and employment, it seems necessary to increase the amount of water in the downstream area by constructing check dams. • In order to implement measures mentioned in EIA, SIA, CIA and IEE reports and solve the possible problems, it is necessary to establish a monitoring system at the local level with representatives of local bodies and experts.	
11.	2078/11/29	Marsyangdi RM-8, Battisemul	• Because of four TL within Marsyangdi RM (two TL are constructed and two are proposed) land will be fragmented. These TLs should be developed an integrated master plan.	

SN	Date	Venue	Issues/Suggestions	Remarks
			• Because of small and large scale HEPs, aquatic lives, traditional fishing, traditional agriculture farming should be in danger, they should be managed properly. • Development project should make guideline for every project during feasibility study of every development project should mention coordination with; local/central level government, technical exports, environmentalist and subject export.	
GORKHA DISTRICT				
12.	2078/11/28	Palungtar Municipality-7, Biruwatar	• Contribution/support to be made to the project affected wards for social/community works. • The coverage of public notice should be made wider and effective. • The integrated route of transmission line, rather than numerous individual lines, would be much better • Compensation rates should be made equal. *'Lagat katta'* should be done for the land of RoW during the time of compensation distribution • Community support programs should be implemented. • Water should be released downstream of dam as per national standards. • Straight lines should be designed to the extent possible. • Irregularities have been encountered in operation time of dam • Problems have been encountered while carrying out death rituals in river banks (mainly due to untimely release and closure of water from dam). • The existing distribution and transmission lines should be managed in line with the road alignment accordingly with the ongoing expansion of roads.	
13.	2078/11/30	Gorkha Municipality-14, Yangkot	• The 33kV transmission line from Gorkha to Arughat has been contracted and the connection of poles and wires has been obstructed by the locals, the locals have not been informed, the land has not been compensated and the local government has not been informed.	
14.	2078/12/02	Palungtar Municipality-4, Ward Office	• Development project should make guideline for every project during feasibility study of every development project should mention coordination with; local government, technical exports, environmentalist and subject export. • Compensation of RoW should provide properly because Palungtar have limited agriculture and residential land. • Community Support Program should be provided after consultation with project affected people.	

SN	Date	Venue	Issues/Suggestions	Remarks
TANAHUN DISTRICT				
15.	2078/11/29	Bhanu Municipality-9, Baishjanghar	• At least 60 percent of the value of the land should be provided for land under RoW. • Integrated transmission lines should be developed in spite of several lines. • Consideration of long term while developing plan for road construction. • To make the land affected by the TL project useable for banking purposes. • While conducting the project survey, it is necessary to go for implementation with wide public participation and suggestions. • Multipurpose utility should be considered while constructing hydropower. • Fish diversity and Simli have been destroyed by the power project on the Marsyangdi River.	
16.	2078/11/30	Aabukhaireni RM Office	• 18 km of Prithivi Highway, dam site of 69MW HEP, 7.5km tunnel and powerhouse are lies within the area of this RM. People of RM suffers from NEA's land acquisition policy because they take land of plane terrain. NEA takes RoW for transmission line project without consent of land owner. Expansion of several TL destroyed huge partial of forest it may be cause of climate change. In present NEA started construction of 220kV Marsyangdi Corridor TL which affects ward no 2, 3, 4 and 5. Project should construct with close coordination of locals/affected.	
17.	2078/11/30	Banu Municipality-1, Bhansar	• When evaluating the land under RoW, 50 percent of the valuation of the land of the tower should be given. • The concept of multi-circuit power should be applied to all TL projects. • Development plan should be made considering 50 years period. • While conducting survey, stakeholder consultation should be done. • Hydropower projects should be planned with multi-purpose concepts like drinking water, irrigation, agriculture and fisheries and other. • Customers who use more electricity should be given relief in electricity charges. • It is possible to raise investment from the locals while constructing hydropower rather than looking for outside investors.	
18.	2078/12/02	Aabukhaireni-2, Dhakaltar	• Proper compensation for RoW should be provided, resettlement and employment should be assured. • All project affected people should be informed about upcoming project from the initial phase. • There will be environmental damage by felling tree during construction of project.	
CHITWAN DISTRICT				
19.	2078/05/30	Bharatpur-2, Jaldevi CFUG	• In spite of taking CF land every time for every particular project, it will be better to take land in lease for at least for 50 years by making master plans.	

SN	Date	Venue	Issues/Suggestions	Remarks
			• It will be better to make (conservation) ponds for animals and cultivate herbs under the RoW of TL.	
20.	2078/06/02	Bharatpur, Kabilsa-29	• Compensation should be provided in time for house/cowsheds under the RoW of TL • Plantation should be done for lost/felled trees from CF and Leasehold Forest. • Rural electrification should be provided to Project Affected Kabilasi area. • Wooden electric poles need to be replaced with Concrete Poles.	
21.	2078/06/02	Bharatpur-1	• Project should move ahead in coordination with the affected (Satanchuli) CFUG.	
22.	2078/06/03	Bharatpur-29	• Government need to provide additional forest land as compensation because forest land will further decrease by construction project at forest land. • The project should arrange additional provisions for afforestation in the open space within the community forest.	
23.	2078/06/03	Bharatpur-1, Ramnagar	• MCTLP is expected to affect not only wildlife, birds, habitat, or grazing grounds, but also can contribute to global climate change. Therefore, adequate analysis of alternatives should be considered before executing such projects.	
24.	2078/12/01	Ichchhakamana RM-6, Jalbire	• Haphazardly developed TLs are will be a major cause of displacement of affected people. • Soil erosion occurs due to unmanaged road project. • Compensation will not provide for land take of road project. • Dust pollution occurs due to road project and farmers suffers when road side fodder is covered with dust and they can't feed their animals. • Local people always scared due to road side accident.	

6.2 Cumulative Impact Evaluation

The basis of evaluation of cumulative impacts of MCTLP with other development projects is presented in Table 6-2. These predicted impacts resulting from the interaction of MCTLP with the other projects in the study area are classified based on following category.

Category

A: The interaction between MCTLP and the project adds to the impact MCTLP has on the VECs and the resulting impact is significantly higher than the MCTLP Impact.

B: The interaction between MCTLP and the project adds to the impact MCTLP has on the VECs and the resulting impact is higher than the MCTLP Impact.

C: The interaction between MCTLP and the project doesn't add to the impact MCTLP has on the VECs and the resulting impact is same to the MCTLP Impact.

D: The project in Consideration doesn't interact with the MCTLP.

Table 6-2: Assessment of Cumulative Impacts

VECs/Indicator	33 kV TL	132 KV TL	220KV TL	400 KV TL	Operating Hydro	Under construction	Planned	Road
ACA	24.9km /14.84ha	0/0	27.034km /17.77ha (row=81.102 ha)	0	2 HEPs (54 MW)	5 HEPs	9 HEPs	45km upgrading
Terrestrial Habitat/ Landuse		Forest= 201.90 Grass = 3.93 Bush = 22.95 Barren = 8.37 Other = 23.43	Forest= 56.08 Grass = 6.69 Bush = 16.82 Barren = 44.31 Other = 21.311	Forest= 0 Grass = 0.38 Bush= 64.96 Barren = 3.16 Other = 0.35	Forest= 71.85 ha Grass = 2.25 ha Barren = 15.86 ha Other = 19.855 ha			328.5 km
Avia-Fauna	142 species of birds including four species of nationally threatened (Egyptian Vulture, Red-headed vulture, Greater Spotted Eagle and Steppe Eagle) were recorded in the MCTLP corridor. There are 21 species of raptors and 16 species of birds of wetland (Field Study, 2021). Although, no any migratory route has been identified in the study area, river and gorge may be the route of birds' migration. Most section of existing transmission lines including MCTLP lines aligned along the Marsyangdi River and crosses the river many times. Available figure shows that, there is 295.19km of existing high tension transmission line in the area and 267.255km of transmission line is at different stages of development.							
	Length = 97.78km	Length = 293.52km	Length = 131.73km	Length = 39.39km				
Wildlife	**<u>Fragmentation of Habitat</u>** Fragmentation of forest resulting fragmentation of wildlife habitat is a major issue of transmission line project. Each project clears its RoW forest depending on its voltage capacity. 33kV project clears 6m of RoW, 132kV project clears 18m of RoW, 220kV project clears 30m of RoW and 400kV project clear 46m of RoW. Any single project may have fragmented any forest through which its line passes. The issue of habitat fragmentation will be more when two or more transmission lines runs parallel in the forest area. In the CIA study area, **Pokhara-Damauli-Bharatpur 132kV** and **Lower Marsyangdi-Bharatpur 132kV** are adjacent to each other in the Barandabhar forest area of Chitwan District. The existing fragmented forest corridor is about 30m in the area. In the same Barandabhar forest **MCTLP** and **Upper Seti-Bharatpur 220kV** line is aligned adjacent to the previous lines. The up-gradation of the Narayanghat-Mugling highway also has also wider the road width in that corridor. So, the fragmented corridor in the Barandabhar forest area will be more widen and the cumulative impact of fragmentation will be high. In most of the section, 220kV lines under construction are aligned parallel to the existing 132kV transmission lines and 33kV lines. So, the impact of the forest/habitat fragmentation will be high in that section. Fragmentation of the forest and decrease in forest area limits the wildlife in the narrow habitat space. This results in the increasing incidence of the human wildlife conflict.							

<table>
<tr><td>Protected flora and Fauna</td><td colspan="7">Field data shows four species of globally threatened birds (Neophron percnopterus, Sarcogyps calvus, Clanga clanga and Aquilia nipalensis) are recorded in the MCTLP corridor. In addition, there are six species of threatened bird species found in the Barandabhar area (Leptoptilos javanicus, Haliaeetus leucoryphus, Gyps bengalensis, Gyps tenuirostris, Aquila hastata, Aquila clanga) (http://datazone.birdlife.org).
As per the approved EA reports, Panthera tigris, Manis pentadactyla and Ailurus fulgens are the nationally protected species found in the area.
As more developmental projects are constructed, their impact on the forest area will increase accordingly. This results in further fragmentation of forest area and reduces the available wildlife habitat patches decreases. Species with their narrow habitat niche are more impacted.</td></tr>
<tr><td rowspan="3">Livelihood</td><td colspan="7">Livelihood of the residents of the project area depends on the employment opportunity available in the area, production of the area and availability of cultivable land. Development project like hydro-project and road, have also bought various opportunities to the local people. But there will not be much direct benefit from the transmission line project to the local people.
In the transmission line project, the project will acquire land for tower foundation and substation only. Land within the RoW is restricted for certain use. Cultivation within the RoW is permissible. So, the permanently acquired land is very low compared to the total impacted land in transmission line project.
In hydro and other developmental project, project impacted land is huge. These projects acquire land permanently.
The MCTLP will impact on 161.96ha of private cultivated land including RoW. With construction of all TL projects, the total impacted private cultivated land will be 397.69ha. There will be 106.956ha of private cultivated land acquisition for the hydro and the road projects in the study area. In total, 504.787ha of private cultivated land will be impacted in the MCTLP corridor.</td></tr>
<tr><td>33 kV TL</td><td>132 KV TL</td><td>220KV TL</td><td>400 KV TL</td><td></td><td>Hydro Power Project</td><td>Road</td></tr>
<tr><td></td><td>260.139ha.</td><td>98.30ha.</td><td>39.39ha.</td><td></td><td>76.736ha.</td><td>30.22ha</td></tr>
<tr><td>Religious and Cultural Sites</td><td colspan="7">There are some important religious and cultural sites in the periphery of the project area including Devghat Dham. However, no significant cumulative impact is expected from the development of various projects in the area.</td></tr>
</table>

6.3 Development Scenarios and Cumulative Impacts

The Cumulative impacts are assessed for different development scenarios (Figure 6-1). The justification for evaluation of cumulative impacts of MCTLP with different categories of projects as presented from Table 6-3 to Table 6-5 is presented in Table 6-6.

There already exists impacts due to existing or operating projects in the study area. Some of these impacts are of cumulative in nature. Therefore, Scenario-1 deals with the cumulative impacts of MCTLP on existing development projects. Table 6-3 depicts the predicted cumulative impacts of scenario-1.

Table 6-3: Cumulative Impacts of MCTLP and Existing Projects (Scenario-1)

VECs/Indicator	33kV TL	132kV TL	Hydropower	Road	Cumulative Impact
ACA	B	D	B	B	B
Terrestrial Habitat/ Landuse	B	A	B	B	A
Avi-fauna	B	A	C	D	A
Wildlife	B	A	B	C	A
Protected Flora Fauna	B	A	C	C	A
Livelihood	C	B	B	B	B

Note: There is no any existing 200kV and 400kV TL in the Study Area

Scenario-2 deals with the cumulative impacts of MCTLP on the existing as well as under construction projects within the study area. Table 6-4 depicts the predicted cumulative impacts of Scenario-2.

Table 6-4: Cumulative Impacts of MCTLP, existing project and project under construction (Scenario 2)

VECs/Indicator	33kV TL	132kV TL	220kV TL	Hydropower	Road	Cumulative Impacts
ACA	B	D	D	A	B	A
Terrestrial Habitat/ Landuse	B	A	B	A	B	A
Avi-fauna	B	A	B	C	D	A
Wildlife	B	A	B	A	B	A
Protected Flora Fauna	B	A	A	A	C	A
Livelihood	C	A	B	A	B	A

Note: There is no any existing and under construction 400 kV TL

Similarly, Scenario-3 deals with the cumulative impacts of MCTLP on the existing, under construction and planned projects (if all constructed) within the study area. Table 6-5 depicts the predicted cumulative impacts of Scenario-3.

Table 6-5: Cumulative Impacts of MCTLP, existing projects, under constructing project and Planned Project (Scenario 3)

VECs/Indicator	33kV TL	132kV TL	220kV TL	400kV TL	Hydropower	Road	Cumulative Impact
ACA	B	D	D	D	A	B	A
Terrestrial Habitat/ Landuse	B	A	A	B	A	B	A
Avi-fauna	B	A	B	B	C	D	A
Wildlife	B	B	A	B	A	B	A
Protected Flora Fauna	B	A	A	B	A	C	A
Livelihood	C	A	B	A	A	B	A

Table 6-6: Justification of Impact Categorization

VECs/Indicator	Transmission Line	Hydropower	Road
ACA	B – land requirement (RoW) is less than MCTLP D - No such TL project in ACA	A - More land required than MCTLP B- Two operating projects, less impact	B - Besisahar-Chame road Upgrading, has some impact but less than MCTLP
Terrestrial Habitat/Landuse	A - More land required than MCTLP B – land requirement (RoW) is less than MCTLP	A - More Land required than MCTLP B - Has some impacts	B - Besisahar-Chame road Upgrading, land requirement less than MCTLP
Avia-fauna	More line length more chances of bird collision and electrocution A - Length of line is more than the MCTLP B - length of line is less than the MCTLP	C - No any additional impacts on birds that MCTLP has (electrocution, collusion)	D - No interaction of roads and MCTLP to impact birds
Wildlife	More forest land required, more impact is anticipated on wildlife A - Length of TL is more than MCTLP. So predicted more forest fragmentation and tree felling B - Length of line is less than MCTLP. So, less forest fragmentation and tree felling	More forest land required, more impact is anticipated on wildlife A – More forest land required than MCTLP B – Less Forest land required MCTLP	More forest land required, more impact is anticipated on wildlife B - Impact on forest area is less than the MCTLP C - No any impact on forest is anticipated from the existing road
Protected Flora Fauna	A - a) Line passing through Barandabhar forest area b) Length of line is more than the MCTLP line, so impact on protected birds is anticipated more. B- Impact of 33kV TL on birds (mainly due to collision) is anticipated less than the MCTLP impact. However, the anticipated impacts on birds due to electrocution are higher in lower voltage transmission and distribution lines.	A - Impacts of under constructing and planned hydropower is anticipated more than the MCTLP impact on protected species. C - No any impacts of existing hydropower are anticipated on the protected species.	C - No any impact is anticipated on the protected flora fauna.
Livelihood	A - More private land required, more impact on public B - Less private land required, less impact on public C - No need to acquire private land	A - More private land required, more impact on public, no any direct benefit to public B - Less private land required, less impact on public	B - Less private land required, less impact on public, direct benefit to public

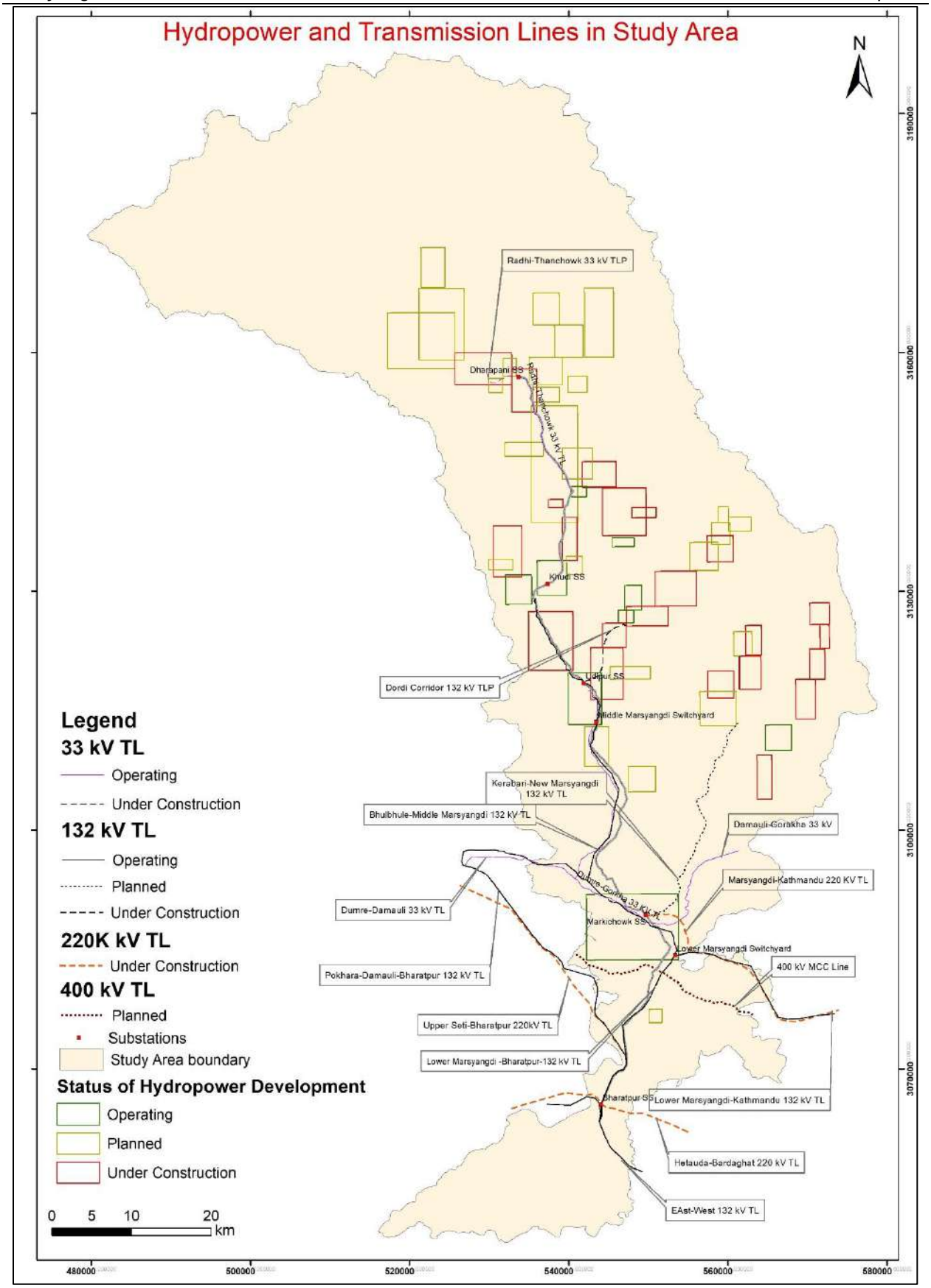

Figure 6-1: Status of Hydropower and TL Development in CIA Study Area

7 CUMULATIVE IMPACT MANAGEMENT FRAMEWORK

7.1 Mitigation Measures

This section recommends the mitigation measures at the project and management strategies for the government authorities to mitigate cumulative impacts due to transmission line and other developmental projects in the study area. The mitigation measures at the project levels are taken from the project level EIA/IEE reports. Past project level experiences, stakeholder concerns and filed information are considered to recommend cumulative impacts management strategies for government authorities.

Table 7-1: Mitigation Measures Proposed at Project Level

Identified VECs	Transmission Line Developers	Hydropower Developers	Road Developers	Cumulative impact management Strategies
Annapurna Conservation Area	• Avoidance of forest area as far as possible • Compensatory plantation • Biodiversity Management Plan	• Avoidance of forest area as far as possible • Compensatory plantation • Biodiversity Management Plan	• Avoidance of forest area as far as possible • Compensatory plantation • Biodiversity Management Plan	• Coordinate between TL developers to avoid parallel line construction in same corridor. In such area, multi-circuit towers should be constructed. • A financial management framework that generates and provide fund for environmental management of Developmental projects. • A monitoring and evaluation framework that ensures the effective management of environmental impacts at the project level • Develop a planning tool to restrict the use of fertile cultivated land for project development
Terrestrial Habitat/ Landuse	• Compensation of private land • Replacement of forest area	• Compensation of private land • Replacement of forest area	• Compensation of private land • Replacement of forest area	
Avi-Fauna	• Use color balls in TL in river crossing and wetlands			
Wildlife	• Control of hunting and poaching	• Control of hunting and poaching	• Control of hunting and poaching	
Protected flora and fauna	• Aware construction workers	• Aware construction workers	• Aware construction workers	
Livelihood	• NEA will take into account the potential vulnerability status of those project affected households by multiple lines and review better outcomes for those project-affected people when it is raised to them through a grievance or other intervention in order to be addressed. This will be recorded under a specific category of grievance and will be individually assessed on a case-by-case basis. • Compensation of private land and structures • CSP and Livelihood Restoration Program	• Compensation of private land and structures • CSP and Livelihood Restoration Program	• Compensation of private land and structures • CSP and Livelihood Restoration Program	

The table above presents mitigation measures that are more or less similar to those recommended by individual environment assessment report of individual projects. However, one important element discussed above is the requirement of coordination among and between different stakeholders.

Further, the CIA team has proposed some mitigation measures which are beyond those identified in the EIA reports of individual projects. This recommendation of mitigation measures is based on the stakeholder consultation and field study by the CIA team. These measures are presented in the following table.

Table 7-2: Mitigation Measures proposed beyond Project Level

SN	Issues /Concern	Mitigation Measures	Remarks
Transmission Lines			
1.	In Barandabar area (critical habitat), there are multiple projects. Two parallel double circuit 220kV transmission lines (including MCTLP) are in the process of construction.	Construct a single but multi-circuit tower system so as to include both double circuit 220kV lines through a single RoW. This will reduce the required forest area for TL construction.	MCTLP has initiated this measure, and a multi-circuit tower system is to be constructed including 220kV MCTLP and 220kV Upper Seti (Damauli)-Bharatpur 220kV TL in the Barandabhar area
2.	In areas (including Barandabhar), there exists two or more parallel but single circuit high voltage transmission lines. Each of these operating 132kV TLs have their separate RoW in the forest area.	• These single circuit lines can be merged and constructed into a double circuit tower system to minimize the impact of corridor. • For Barandabhar area, so as to mitigate the cumulative impacts due to existing and upcoming TLs of different capacity, an integrated/ common underground TL system can help mitigate the impacts to a large extent.	• This is to be done with the expiry of the useful life of these single circuit operating lines (beyond the scope of MCTLP). • The construction of underground system of high voltage transmission lines in the Barandabhar area requires strong coordination between different projects and requires national level commitments and is beyond the scope of MCTLP.
3.	Addition of new transmission lines due to overloading of existing transmission lines	• In certain instances, changing of the existing conductor with new and efficient conductor types can help increase the power evacuation without addition of new transmission lines (Retrofitting). • Formulation and execution of transmission line master plans based on future energy scenario.	• This measures can postpone the impacts for the future by postponing the need of new transmission lines. • Transmission line master plan is prepared. However, taking the ownership and serious execution of the master plan (including licensing of TLs according to master plan) is not being practiced.
4.	Delay in construction of the MCTLP has resulted in or compelled the private hydropower developers to develop or extend their power evacuating transmission lines beyond	Early or timely completion of the MCTLP will help minimize need of additional TL or their extension beyond MCTLP substations.	• This is mainly observed in the upper section (Khudi to Udipur section).For instance, the early execution of MCTLP would have avoided the construction of 132kV single circuit line of 50MW Upper Marsyangdi A

SN	Issues /Concern	Mitigation Measures	Remarks
	the nearest MCTLP substation. This has helped increase cumulative impacts and public grievances.		HEP (Bhulbhule-Middle Marsyangdi 132kV TL) or the extension of double circuit 132kV TL of 30MW Nyadi HEP. • EIB, MCTLP and NEA should put this project on fast track and assure the timely completion so as to minimize the further addition cumulative impacts.
Hydropower			
5.	Cascades of hydropower have resulted changes in hydrology, microclimate and impacted the aquatic biodiversity including fish	• River basin planning (based on IWRM principles) and licensing of hydro-projects accordingly. Not merely on 'first come first service' basis. • Zonation of ecologically sensitive rivers or section of rivers • Priority setting for water use; priority to be given for multipurpose projects.	• Planning and executing of a storage type project in the upper catchment of Marsyangdi river can address the cumulative impacts of cascades of hydropower projects to a large extent. Operating of such storage project will help control floods in Marsyangdi River and provide water downstream for different sectors in dry season. It will also supply much needed water for existing downstream RoR and PRoR type hydropower in dry season to generate additional energy in dry season without constructing new hydro-projects.
6.	Non-compliance of riparian release from dam or diversion structures	• Ensure strong monitoring mechanisms.	

7.2 Monitoring

Environmental monitoring of CIA mitigations will be carried out for all the projects in the study area in a regular or intermittent schedule. Monitoring team will ensure the implementation of mitigation measures of the respective EA report first. In general, observation, inspection, review of official records, interview, counting and/or measurements will be used for monitoring. The team also monitor the parallel line construction and forest fragmentation cases, bird collision and electrocution cases, wildlife electro-caution cases and social issues raised by stakeholders. Government institutions and local level representatives will also involve in the monitoring.

7.3 Institutional Arrangements

Department of Electricity Development (DoED) is one of the major government institutions to regulate the hydropower and transmission line development in Nepal. DoED issues survey license and construction license to hydropower and transmission line developers. So, the Ministry of Energy, Water Resources and Irrigation (MoEWRI) along with its line agencies and departments, could constitute an Energy Advisory Forum (EAF) for proper planning, and environmental and social aspect management of energy project and other developmental projects in Marsyangdi basin/study area with key stakeholders.

Government Stakeholders for the energy-projects and the road projects are as follows:

- Nepal Electricity Authority (NEA)
- Ministry of Forest and Environment (MoFE)
- Ministry of Energy Water Resources and Irrigation (MoEWRI)
- Ministry of Physical Infrastructure and Transport (MoPIT)
- Water and Energy Commission Secretariat (WECS)
- Energy Regulatory Commission (ERC)
- Department of Electricity Development (DoED)
- Department of National Park and Wildlife Conservation (DNPWC)
- Department of Roads (DoR)
- Annapurna Conservation Area Project (ACAP)
- Chitwan National Park (CNP)
- Representatives of Provincial Government
- District Coordination Committee (DCC)-Manang, Lamjung, Gorkha, Tanahu and Chitwan
- Local Level (RM/Municipality/Metropolitan city)

Other Institutions

- National Trust for Nature Conservation (NTNC)
- Investment Board Nepal (IBN)
- Hydropower Developers (IPPs)

A proposed Institutional Arrangement for Energy Advisory Forum for Marsyangdi Corridor is presented below.

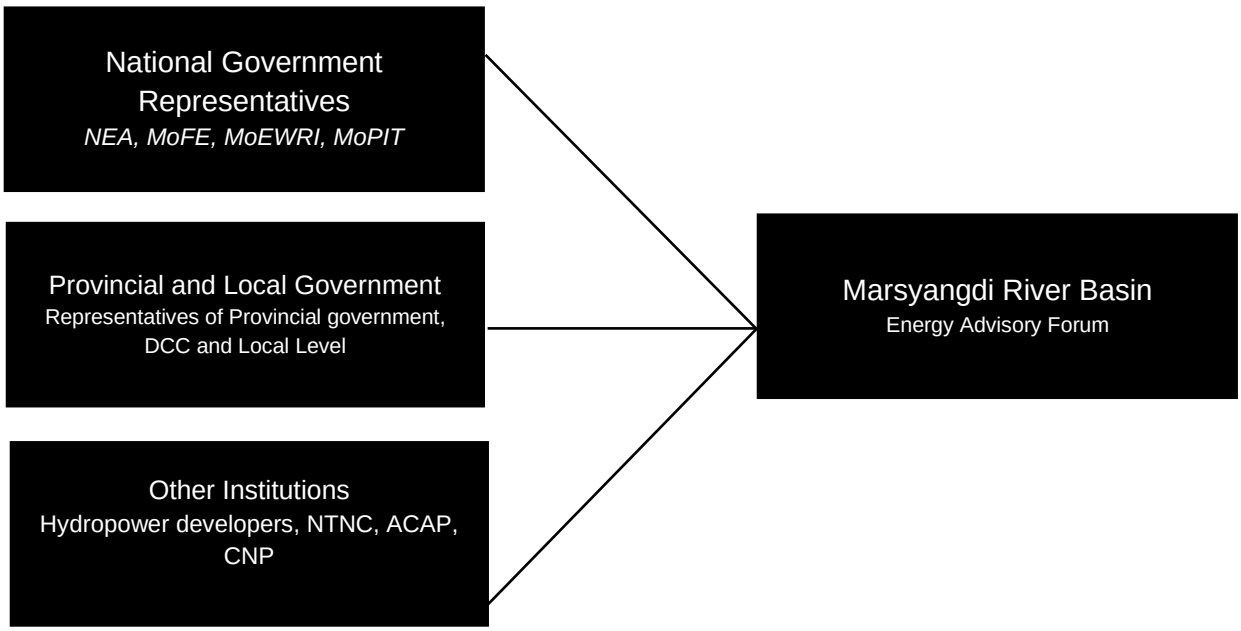

Figure 7-1: Proposed Institutional Arrangement for Energy Advisory Forum

8 CONCLUSION AND RECOMMENDATIONS

In addition to the existing large infrastructures within the Marsyangdi Basin and downstream, several new projects, including MCTLP, are being developed or planned. Such new project includes, high voltage transmission lines, hydropower projects, highway, road expansion projects, and others. These infrastructure development projects, including MCTLP, will transverse through the protected areas, conservation landscapes and wildlife habitats. Further these projects will displace people, acquired private/cultivated land and affect livelihoods.

For linear projects such as transmission lines, including MCTLP, attempts should be made to avoid important/biodiversity sensitive areas and this is to be done as early as with the project inception and design. Where avoiding the protected areas is not possible, the project designs needs to minimize the impacts and accommodate the conservation objectives. The following mitigation measures are proposed by the CIA. These are categorized into short term, medium term and long term depending upon the time to be taken for their execution.

Immediate/Short term:

- Early or timely completion of the MCTLP will help minimize need of additional TL or their extension beyond MCTLP substations.
- Construction of a multi-circuit tower system including 220kV MCTLP and 220kV Upper Seti (Damauli)-Bharatpur 220kV TL in the Barandabhar area. This will reduce the impact of cumulative forest/habitat loss due to TL construction.
- NEA will take into account the potential vulnerability status of those project affected households by multiple lines and review better outcomes for those project-affected people when it is raised to them through a grievance or other intervention in order to be addressed. This will be recorded under a specific category of grievance and will be individually assessed on a case-by-case basis.

Medium term:

- Changing of the existing conductor with new and efficient conductor types can help increase the power evacuation without addition of new transmission lines (Retrofitting). This can postpone the immediate need of new transmission lines.
- Single circuit lines can be merged and constructed into a double circuit tower system to minimize the impact of corridor in critical habitat areas like Barandabhar. However, this is to be done with the expiry of the useful life of these single circuit operating lines.
- NEA will have to agree to take into account potential vulnerability status of those affected by multiple lines at the planning stage in future projects for other projects and in particular to the study area. This will be done through a geographic information systems (GIS) approach correlating land plots with previous transmission lines.

Long Term:

- The construction of underground system of high voltage transmission lines in the Barandabhar area requires strong coordination between different projects and requires national level commitments and is beyond the scope of MCTLP.
- Formulation and execution of transmission line master plans based on future energy scenario.
- Planning and executing a storage type project in the upper catchment of Marsyangdi River is recommended as a long term mitigation measures to address cumulative impacts of cascades of hydropower projects. Operating of such storage project will help control floods

in Marsyangdi River and provide water downstream for different sectors in the dry season. It will also supply much needed water for existing downstream RoR and PRoR type hydropower to generate additional energy in dry season without constructing new hydro-projects.

Further the following recommendations are made by this CIA;

- Under-construction and future planned infrastructure development need to be eco-friendly as well as climate resilient. The integration of conservation friendly infrastructure will help increase the sustainability of development infrastructures.
- The existing infrastructure need to be retro-fitted accordingly so as to minimize the overall cumulative impacts in the region (Even though the retrofitting solutions are more difficult for the already constructed projects).
- Though Government of Nepal has mandated the project level environmental assessments (BES, IEE/EIA) and to some extent has acknowledged the Strategic Environmental Assessment (SEA) through the legal regimes, the Cumulative impact assessment (CIA) has yet to be recognized by the national legislations.

REFERENCES/BIBLIOGRAPHY

DNPWC, 2014. *Status of Tigers and Prey in Nepal*, Department of National Parks and Wildlife Conservation, Government of Nepal, Kathmandu.

IFC, 2014. *Cumulative Impact Assessment and Management: Guidance for the Private Sector in Emerging Markets- Good Practice Handbook*. International Finance Cooperation.

MoFSC, 2015. *Strategy and Action Plan 2016-2025, Chitwan-Annapurna Landscape, Nepal.* Ministry of Forests and Soil Conservation, Government of Nepal, Kathmandu.

MoFSC, 2015. *Strategy and Action Plan 2015-2025, Terai Arc Landscape, Nepal.* Ministry of Forests and Soil Conservation, Government of Nepal, Kathmandu.

RPGCL, 2018. *Transmission System Development Plan of Nepal*, Rastriya Prasaran Grid Company Limited, Kathmandu.

EIA/Supplementary EIA document:

- Marsyangdi Corridor (Manang-Udipur) 220kV TLP
- Electricity Transmission Project (Lapsiphedi-Ratmate-New Hetauda, Ratmate-New Damauli-New Butwal-Nepal India Border 400kV TL and 44kV Substations)
- 132kV TL Project of Nyadi HEP
- Upgrading of Narayanghat-Mugling Road Project
- Upgrading of Kathmandu (Nagdhunga)-Naubise-Mugling Road and Bridges
- Upper Marsyangdi 2 HEP (327MW)
- Tallo Manang Marsyangdi HEP (139.2MW)
- Dudh Khola HEP (65MW)
- Chino Khola HEP (7.9MW)
- Himchuli-Dordi HEP (57MW)
- Super Dordi Kha HEP (54MW)
- Nyadi HEP (30MW)

IEE document:

- Marsyangdi Corridor (Udipur-New Bharatpur) 220kV TLP
- Dordi Corridor 132kV TLP
- Bhulbhule-Middle Marsyangdi 132kV TLP
- Marsyangdi-Kathmandu 220kV TLP
- Dumre-Damauli 132kV TLP
- Upper Seti (Damauli)-Bharatpur 220kV TLP
- Kerabari-New Marsyangdi (Daraudi Corridor) 132kV TLP

APPENDIX

APPENDIX A: CONSENT LETTER FROM DNPWC/ACAP

NATIONAL TRUST FOR NATURE CONSERVATION
ANNAPURNA CONSERVATION AREA PROJECT

Headquarters, Pokhara

Headquarters, Pokhara

Date: 2078-09-05

Ref: 249 /078/079

ने.वि.प्रा.	
दर्ता नं:	९२४
मिति:	२०७८।०९।०६

Nepal Electricity Authority
Environmental and Social Studies Department
Lazimpat, Kathmandu

Re: Permission to conduct research in Annapurna Conservation Area

We received your request letter regarding permission to conduct research on **"Biodiversity Impact Assessment of Marsyangdi Corridor (Manang-Udipur and Udipur-New Bharatpur) 220KV Transmission Line Project"**. You have been given permission to carry out your field research in Annapurna Conservation Area (ACA) with the following terms and conditions.

1. The research must be for Biodiversity Impact Assessment and Cumulative Impact Assessment of Marsyangdi Corridor with the aim of making contribution in conservation and development of conservation area.
2. This permission will be **valid up to 2080 Mangshir 8** (November 24, 2023).
3. You have to follow the ACAP Minimum Impact Code and the Conservation Area Management Regulation 2053.
4. You have to follow the terms and conditions mentioned in the research permit provided by Department of National Park and wildlife Conservation.
5. You are **not allowed to collect any sample** from the ACA.
6. You will have access to the NTNC-ACAP Resource Library in Pokhara.
7. Upon the completion of the research, **you must submit a hard copy and digital copy of your report with all the real captured footages of Camera trapping** to the NTNC-ACAP Headquarters, Pokhara.
8. You have to **coordinate with ACAP Unit Conservation Office Manang and Bhujung** while performing your field research work in ACA.
9. You and your research **team have to strictly follow all rules, guidelines and social norms to keep in safety from COVID-19 while doing your fields work.**
10. Any dispute arose during the execution periods will be solved by mutual understanding.
11. Any unsolved disputes will be handled as per the existing law of Nepal government.

Thank you and wish you all the best.

Raj Kumar Gurung
Project Chief

नेपाल विद्युत प्राधिकरण वातावरण तथा सामाजिक अध्ययन विभाग खरिपाटी, भक्तपुर	
श्री वातावरण अध्ययन महाशाखा श्री सामाजिक अध्ययन महाशाखा श्री अनुगमन महाशाखा	श्री प्रशासन शाखा श्री लेखा शाखा श्री वि.ए.
१. आ.का. गर्ने २. पेश गर्ने ३. परिलक्ष गर्ने ४. छलफल गर्ने ५. राय दिने ६. फाइल गर्ने	मिति: २०७८।९।१६

CC:
NTNC-ACAP Unit Conservation Office, Manang / Bhujung

Central Office : P.O. Box 3712
Khumaltar, Lalitpur, Nepal
Tel. No. : 00977-1-5526571, 5526573
Fax : 00977-1-5526570
Website: www.ntnc.org.np

Headquarters : P.O. Box 183
Pokhara, Kaski, Nepal
Tel. No. : 00977-61-431102, 430802, 432288
Fax No. : 00977-61-431203
E-mail : info@acap.org.np

नेपाल सरकार
वन तथा वातावरण मन्त्रालय
राष्ट्रिय निकुञ्ज तथा वन्यजन्तु संरक्षण विभाग
(..... शाखा)
फोन नं. : ४२२०८५०
: ४२२०९१२
: ४२२७९२६
फ्याक्स नं. : ४२२७६७५
पो.ब. नं. - ८६०
बबरमहल, काठमाडौं
Email : info@dnpwc.gov.np
http//:www.dnpwc.gov.np

पत्र संख्या : - ९९९
चलानी नं. : - ६६३

मितिः २०७८/०८/२३

विषय : अध्ययन अनुसन्धान अनुमति सम्बन्धमा ।

श्री अन्नपूर्ण संरक्षण क्षेत्र आयोजना कार्यालय, हरियोखर्क, पोखरा ।

प्रस्तुत विषयमा विद्युत प्राधिकरणद्वारा निर्माणाधीन मर्स्याङ्गदी कोरीडोर २२० के.भी प्रसारण लाईन आयोजनाको सम्भाव्यता अध्ययन तथा वातावरण प्रभाव मूल्याङ्कन (EIA) प्रतिवेदन स्वीकृत भएको र सो प्रसारण लाईनको केही खण्ड तहाँ संरक्षण क्षेत्र भित्र पर्ने भएको हुँदा जैविक विविधता सम्बन्धमा दातृ निकाय (European Investment Bank) को निर्देशन तथा शर्त बमोजिम जैविक विविधता प्रभाव मुल्याङ्कन (BIA) र समस्टिगत प्रभाव मुल्याङ्कन अध्ययन (CIA) गर्ने प्रयोगजनार्थ camera trapping, transect walk, vantage point survey, quadrat sampling, स्थानीयसँग छलफल लगायतका विधिहरु प्रयोग गरी अध्ययन अनुसन्धानका लागि अनुमित माग भई आएकोले तपसिलमा उल्लेखित शर्तहरुको परिधि भित्र रही मिति २०७८/०८/२३ देखि २०८०/०८/०८ सम्मको लागि अध्ययन अनुसन्धान अनुमति प्रदान गर्ने मिति २०७८/०८/२१ मा विभागीय निर्णय भएको व्यहोरा निर्णयानुसार अनुरोध छ ।

शर्तहरु :

१) अनुसन्धानकर्ताले राष्ट्रिय निकुञ्ज तथा वन्यजन्तु संरक्षण ऐन, २०२९, अन्तर्गतका नियमावलीहरु तथा CIA र BIA आकर्षित हुने अन्य प्रचलित ऐन नियमको पूर्ण रुपमा पालना गर्नु पर्नेछ ।
२) अनुसन्धानको स्थलगत कार्य सुरु गर्नु अघि अनुसन्धानको विधि, समय, तालिका, अनुसन्धानमा संलग्न हुने विज्ञको नामावली सहितको विस्तृत प्रस्ताव विभाग तथा सम्बन्धित संरक्षित क्षेत्र कार्यालयमा समेत पेश गर्नु पर्नेछ ।
३) अध्ययन अनुसन्धान गर्दा सम्बन्धित संरक्षित क्षेत्र कार्यालयसंग समन्वय गरी कार्यालय ले तोकेको कर्मचारीको रोहबरमा गर्नु पर्नेछ । अध्ययन कार्यदलमा विभागको अधिकृत प्रतिनिधिको समेत सहभागीता हुनु पर्नेछ
४) अनुसन्धानकर्ताले अनुसन्धान समाप्त भएपछि एक प्रति कागजी प्रतिवेदन र एक प्रति इलेक्ट्रोनिक प्रतिवेदन यस विभाग र सम्बन्धित संरक्षित क्षेत्र कार्यालयमा बुझाउनु पर्नेछ ।
५) कुनै पनि नमुना संकलन गर्न पाइने छैन ।
६) तोकिएका शर्तहरुको पालना नगरेमा विभागले कुनै पनि समयमा अनुमतिपत्र रद्द गर्न सक्नेछ ।

अशिम थापा
सहायक इकोलोजिष्ट

बोधार्थ :

श्री नेपाल विद्युत प्राधिकरण, ईन्जिनियरिङ्ग सेवा निर्देशनालय वातावरण तथा सामाजिक अध्ययन विभाग, लाजिम्पाट, काठमाण्डौ : सम्बन्धित कार्यालयसँग समन्वय गरी उल्लेखित शर्तहरु अनुसार अध्ययन अनुसन्धान गर्ने व्यवस्थाको लागि अनुरोध ।

फोन नं.:- ४२२०८५०
४२२०९१२
४२२७९२६
फ्याक्स नं.:- ४२२७६७५

नेपाल सरकार

वन तथा वातावरण मन्त्रालय

राष्ट्रिय निकुञ्ज तथा वन्यजन्तु संरक्षण विभाग

बबरमहल, काठमाण्डौं
व्यवस्थापन शाखा

पो.ब.नं. -८६०
Email: info@dnpwc.gov.np
http//:www.dnpwc.gov.np

पत्र संख्या :- २०७८/०७९ व्य.प्र.

चलानी नं. :- १३६५

मितिः २०७८।११।२५

विषयः CIA/BIA अध्ययनको लागि खटाइएको सम्बन्धमा

नेवि.प्रा.
दर्ता नं: १४०५
मिति: ०८८/११/२४

संरक्षण अधिकृत,
श्री लोकेन्द्र अधिकारी
अन्नपूर्ण संरक्षण क्षेत्र सम्पर्क कार्यालय, हरियोखर्क, पोखरा।

प्रस्तुत विषयमा नेपाल विद्युत प्राधिकरण, इन्जिनियरिङ सेवा निर्देशनालय, वातावरण तथा सामाजिक अध्ययन विभागको च.नं.१०२१ मिति २०७८/११/२० को पत्रानुसार मर्स्याङ्दी कोरिडोर २२० के.भि. प्रसारण लाइन आयोजनाको अन्नपूर्ण संरक्षण क्षेत्र पर्ने खण्डमा जैविक विविधता प्रभाव मूल्यांकन(Biodiversity Impact Assessment) तथा समष्टिगत प्रभाव मूल्यांकन (Cumulative Impact Assessment) अध्ययन गर्दा राष्ट्रिय निकुन्ज तथा वन्यजन्तु संरक्षण विभागको अधिकृत प्रतिनिधि अध्ययन दलमा खटाईदिन अनुरोध भई आएकोले तपाईलाई यस विभागको प्रतिनिधिको रुपमा अध्ययन कार्यमा सहभागी हुन २०७८/११/२६ बाट लागू हुने गरी खटाइएको व्यहोरा अनुरोध छ।

अशोक भण्डारी
व्यवस्थापन अधिकृत

बोधार्थः
श्री नेपाल विद्युत प्राधिकरण, इन्जिनियरिङ सेवा निर्देशनालय, वातावरण तथा सामाजिक अध्ययन विभाग, लाजिम्पाट, काठमाडौं: तँहाको च.नं.१०२१ मिति २०७८/११/२० को पत्रको सम्वन्धमा तथा अध्ययन कार्यमा संलग्न कर्मचारीको दैनिक भ्रमण भत्ता उपलब्ध गराउने व्यवस्था हुन ।

नेपाल विद्युत प्राधिकरण
वातावरण तथा सामाजिक अध्यन विभाग
धरिपाटी, भक्तपुर

श्री वातावरण अध्ययन महाशाखा श्री सामाजिक अध्ययन महाशाखा श्री अनुगमन महाशाखा	श्री प्रशासन शाखा श्री लेखा शाखा श्री वि.ए.
१. जा.ना. गर्ने २. [illegible] ३. [illegible] ४. छलफल गर्ने ५. [illegible] ६. [illegible]	सहि: मिति:

APPENDIX B: MINUTE OF STAKEHOLDER CONSULTATION/MEETING

नेपाल विद्युत प्राधिकरण

वातावरण तथा सामाजिक अध्ययन विभाग

लाजिम्पाट, काठमाडौं

मर्स्याङ्गदी कोरिडोर २२० के.भी. प्रशारण लाइन आयोजनाको

समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment) को लागि तगार गरिएको प्रश्नावली, २०७८

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधीन यस मर्स्याङ्गदी कोरिडोर २२० के.भी. प्रशारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संचालनमा रहेका, निर्माण हुँदै गरेका तथा प्रस्तावित आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण अन्तर्गतको वातावरण तथा सामाजिक अध्ययन विभागले गरिरहेको छ । यसै सन्दर्भमा, निम्नानुसारको प्रश्नावलीमा आयोजना प्रभावित क्षेत्रका स्थानीय, वन उपभोक्ता समुह तथा जानकारहरुसंग निम्न मिति, समय र स्थानमा छलफल गरी त्यस क्षेत्रको जैविक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा जानकारीहरु तथा रायसुझाव संकलन गरिएको छ ।

स्थान: जिल्ला : चितवन गाउँपालिका/नगरपालिका : भरतपुर वडा नं. / ठाउँ :.....

मिति: २०७८/०५/३० समय:.....

क्र.सं.	विवरण दिनेको नाम	स्थायी ठेगाना	सामुदायिक वन/संस्था	पद/पेशा	सम्पर्क न.	हस्ताक्षर
१.	[illegible]	भरतपुर	[illegible]	[illegible]	[illegible]	
२.	कमल बहादुर जि.सी.	"	"	कार्यालय सचिव	९८४२१२८४९	
३.	राम कुमार लामा	"	"	अ.स.	९८१११८६१३८	
४.						
५.						
६.						
७.						
८.						
९.						
१०.						

समष्टिगत प्रभाव मूल्याङ्कन टोलीका सदस्यहरु

क्र.सं.	विवरण लिनेको नाम थर	ठेगाना	पद/पेशा	सम्पर्क न.	हस्ताक्षर
१.	बिनोद प्याकुरेल	ने.वि.प्रा. वातावरण विभाग	वातावरणविद्	९८४१२४०८६४	
२.	अच्युत घिमिरे	ने.वि.प्रा. वातावरण विभाग		९८४१६६४४१९	
३.	प्रकाश ओझेल	ने.वि.प्रा. वातावरण विभाग	सहायक प्रबन्धक	९८४४२६३३३३	

रायसुझाव: पटक-पटक प्रशारण लाइनको लागी वन क्षेत्र हिड्न गन्दा कम्तीमा ४० वर्षको योजना बनाएर एउटै प्रशारण लाइन बनाईदा उपयुक्त हुने।

- प्रशारण लाइन मुनी बस्नेजनतुलाई पानीको पोखरी, जडीबुटीहरु लगाईदा उपयुक्त हुने।

नेपाल विद्युत प्राधिकरण

वातावरण तथा सामाजिक अध्ययन विभाग

लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधिन **मर्स्याङ्गदी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना** र यस आयोजना प्रभावित क्षेत्रमा संञ्चालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय बासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला : चितवन नगरपालिका/गाउँपालिका: भरतपुर वडा नं. २३

मिति : २०७८।०६।०२ ठाउँ : कविलास

उपस्थिती

क.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	काजीमान गुरुङ	अध्यक्ष/वन	भरतपुर-२३ कविलास	९८४६०४९३०८	काजीमान
२	मनबहादुर गुरुङ	सचिव/घोल सुधार	,,	९८६९३९०६०२	[signature]
३	अवधत सापकोटा	स्थानीय	,,	९८[illegible]२०६८२	अवधत
४	निकास गुरुङ	स्थानीय	,,	९८४४६६९२०८	[signature]
५	शोभा सापकोटा	स्थानीय	,,		[signature]
६	प्रकाश गौडेल	नोकरी	ने.वि.प्रा.	९८५११४६३३३	प्रकाश
७	शैलजा ढकाल	नोकरी	ने.वि.प्रा.	९८४१६८८४०५	[signature]
८	विनोद ब्याकुरेल	,,	ने.वि.प्रा.	९८५१२४०८६२	[signature]
९	अच्युत [illegible]	,,	,,	९८४१३६३३४१	[signature]
१०					

रायसुझाव

१) आयोजनाको तारमुनी परेका घर/गोठ तथा जग्गा जमीनको समयमै उचित मुआब्जा दिनुपर्ने।

२) सामुदायिक र कबुलियती वनबाट कटिने रुखविरुवा कटान भएबापत क्षतिपूर्ति गर्नुपर्ने।

३) आयोजना प्रभावित सबै कविलास क्षेत्रमा भरपर्दो ग्रामीण विद्युतीकरण गर्ने।

४) आफ्नो जग्गामा रहेका काठका पोल प्रतिस्थापन गरी थप विद्युत [illegible] गर्ने।

काजीमान [signature]

नेपाल विद्युत प्राधिकरण

वातावरण तथा सामाजिक अध्ययन विभाग

लाजिम्पाट, काठमाडौं

मर्स्याङ्दी कोरिडोर २२० के.भी. प्रशारण लाइन आयोजनाको

समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment) को लागि तयार गरिएको प्रश्नावली, २०७८

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधीन यस मर्स्याङ्दी कोरिडोर २२० के.भी. प्रशारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संचालनमा रहेका, निर्माण हुँदै गरेका तथा प्रस्तावित आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण अन्तर्गतको वातावरण तथा सामाजिक अध्ययन विभागले गरिरहेको छ । यसै सन्दर्भमा, निम्नानुसारको प्रश्नावलीमा आयोजना प्रभावित क्षेत्रका स्थानीय, वन उपभोक्ता समुह तथा जानकारहरुसंग निम्न मिति, समय र स्थानमा छलफल गरी त्यस क्षेत्रको जैविक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको वारेमा जानकारीहरु तथा रायसुझाव संकलन गरिएको छ ।

स्थान: जिल्ला :........................ गाउँपालिका/नगरपालिका : भटरे(वडा नं. / ठाउँ : ९

मिति: २०७८/०६/०२ समय:........................

क्र.सं.	विवरण दिनेको नाम	स्थायी ठेगाना	सामुदायिक वन/संस्था	पद/पेशा	सम्पर्क न.	हस्ताक्षर
१.	लोक ब गुरुङ	रामनगर -९	सतनचुली सा.व.	अध्यक्ष	९८६५२५६३२५	[signature]
२.	तिलक पुजा	छिमुरा -१		"	९८१११९८५२८	[signature]
३.	तारा देवकोटा	छिमुरा -१		"	९८४५२८४५६४	[signature]
४.	आमा पुजा	रामनगर -९		"	९८४५११८६८१	[signature]
५.						
६.						
७.						
८.						
९.						
१०.						

समष्टिगत प्रभाव मूल्याङ्कन टोलीका सदस्यहरु

क्र.सं.	विवरण लिनेको नाम थर	ठेगाना	पद/पेशा	सम्पर्क न.	हस्ताक्षर
१.	विनोद ब्याकुरेल	ने.वि.प्रा. वातावरण विभाग	वातावरणविद्	९८५१२४०८६२	[signature]
२.		ने.वि.प्रा. वातावरण विभाग			
३.		ने.वि.प्रा. वातावरण विभाग			

रायसुझाव: आयोजनाले सतनचुली सा व उ समितिसँग समन्वय गरेर आयोजनाको काम अगाडि बढाउनुपर्दछ ।

[signatures]

नेपाल विद्युत प्राधिकरण

वातावरण तथा सामाजिक अध्ययन विभाग

लाजिम्पाट, काठमाडौं

मर्स्याङ्गदी कोरिडोर २२० के.भी. प्रशारण लाइन आयोजनाको

<u>समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment) को लागि तयार गरिएको प्रश्नावली, २०७८</u>

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधीन यस मर्स्याङ्गदी कोरिडोर २२० के.भी. प्रशारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संचालनमा रहेका, निर्माण हुँदै गरेका तथा प्रस्तावित आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण अन्तर्गतको वातावरण तथा सामाजिक अध्ययन विभागले गरिरहेको छ । यसै सन्दर्भमा, निम्नानुसारको प्रश्नावलीमा आयोजना प्रभावित क्षेत्रका स्थानीय, वन उपभोक्ता समुह तथा जानकारहरुसंग निम्न मिति, समय र स्थानमा छलफल गरी त्यस क्षेत्रको जैविक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा जानकारीहरु तथा रायसुझाव संकलन गरिएको छ ।

स्थान: जिल्ला : चितवन गाउँपालिका/नगरपालिका : भरतपुर वडा नं. / ठाउँ : २९

मिति: २०७८/०६/०२ समय: ....

क.सं.	विवरण दिनेको नाम	स्थायी ठेगाना	सामुदायिक वन/संस्था	पद/पेशा	सम्पर्क न.	हस्ताक्षर
१.	क्याप्टेन सूर्य ब गुरुङ	भतेरी	इन्द्रेणी सा व	अध्यक्ष	९८६२२४६६६०	[signature]
२.	केशव थापा	भतेरी	इन्द्रेणी सा व	कोषाध्यक्ष	९८४४०४०४९२	[signature]
३.	आशबहादुर गुरुङ	देवीटार	इन्द्रेणी सा व	सदस्य	९८४४०४४०१४	[signature]
४.	मन प्रसाद गुरुङ	भतेरी	,,	वनरक्षक		[signature]
५.	जय लाल श्रेष्ठ	भालाङ,	इन्द्रेणी सा.व	वनरक्षक	९८४५६६६२८	[signature]
६.	राम बहादुर मगर	जुगेडी	,,	वनरक्षक	९८११९३६२४९	[signature]
७.	साम ब. गुरुङ	भतेरी		उपभोक्ता	—	[signature]
८.	मनिका गुरुङ	भतेरी	,,	उपभोक्ता	—	[signature]
९.	अन्जन थापा	भतेरी		उपभोक्ता	—	ANJU
१०.						

समष्टिगत प्रभाव मूल्याङ्कन टोलीका सदस्यहरु

क.सं.	विवरण लिनेको नाम थर	ठेगाना	पद/पेशा	सम्पर्क न.	हस्ताक्षर
१.	विनोद भाकुरेल	ने.वि.प्रा. वातावरण विभाग	वातावरणविद्	९८५१२४०८६८	[signature]
२.	प्रकाश गौडेल	ने.वि.प्रा. वातावरण विभाग	सहायक प्रबन्धक	९८५११५६३३६	[signature]
३.	अच्युत राई	ने.वि.प्रा. वातावरण विभाग	सह निर्देशक	९८४१३६३३१९	[signature]

रायसुझाव: १) आयोजनाले वन क्षेत्रमा निर्माण कार्य गर्दा सामुदायिक वनको वन क्षेत्र घट्ने भएकाले सो को सोधभर्ना स्वरुप सरकारले सामुदायिक वनलाई थप वनक्षेत्र हस्तान्तरण गर्नु पर्ने देखिन्छ ।

२) आयोजनाले सामुदायिक वन क्षेत्र सिसिका रुख काटेको ठाउँमा वृक्षारोपण गर्नुपर्ने

[signature] [signature]

[signature]

नेपाल विद्युत प्राधिकरण

वातावरण तथा सामाजिक अध्ययन विभाग

लाजिम्पाट, काठमाडौं

मर्स्याङ्गदी कोरिडोर २२० के.भी. प्रशारण लाइन आयोजनाको

समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment) को लागि तयार गरिएको प्रश्नावली, २०७८

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधीन यस मर्स्याङ्गदी कोरिडोर २२० के.भी. प्रशारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संचालनमा रहेका, निर्माण हुँदै गरेका तथा प्रस्तावित आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण अन्तर्गतको वातावरण तथा सामाजिक अध्ययन विभागले गरिरहेको छ । यसै सन्दर्भमा, निम्नानुसारको प्रश्नावलीमा आयोजना प्रभावित क्षेत्रका स्थानीय, वन उपभोक्ता समुह तथा जानकारहरुसंग निम्न मिति, समय र स्थानमा छलफल गरी त्यस क्षेत्रको जैविक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा जानकारीहरु तथा रायसुझाव संकलन गरिएको छ ।

स्थान: जिल्ला चितवन गाउँपालिका/नगरपालिका : भरतपुर वडा नं. / ठाउँ : रामनगर-१

मिति: २०७८/०६/०३ समय:

क.सं.	विवरण दिनेको नाम	स्थायी ठेगाना	सामुदायिक वन/संस्था	पद/पेशा	सम्पर्क न.	हस्ताक्षर
१.	सोमराज आचार्य	भ.म.न.पा.-१ रामनगर	सतनचुली	उपाध्यक्ष	९८४०५१५७१३	[signature]
२.	शर्मिला गौतम	,,	,,	सचिव	९८४५०-२३४२५	[signature]
३.	चूडामणि गुरुङ	,,	,,	कोषाध्यक्ष	९८५५०-२२३३३	[signature]
४.	बिनोद भुजेल	,,	,,	का. सदस्य	९८६३०-६४२६८	[signature]
५.	राधा न्यौपाने	,,	,,	का. सचिव	९८४५५१८८०१	[signature]
६.	अमर पन्त	,,	,,	बन रक्षक	९८४५१४३८१	[signature]
७.	लोक ब. गुरुङ			,,	९८६५२५८३३५	लोक ब.
८.	तारा प्र. देवकोटा			,,	९८४५२-०५६८४	[signature]
९.						
१०.						

समष्टिगत प्रभाव मूल्याङ्कन टोलीका सदस्यहरु

क.सं.	विवरण लिनेको नाम थर	ठेगाना	पद/पेशा	सम्पर्क न.	हस्ताक्षर
१.	प्रकाश गौडेल	ने.वि.प्रा. वातावरण विभाग	सहायक प्रबन्धक	९८५११२६३३३	[signature]
२.	विनोद ज्याक्रुरेल	ने.वि.प्रा. वातावरण विभाग	वातावरणविद्	९८५१२४०८६२	[signature]
३.	सैलजा ज्ञवाली	ने.वि.प्रा. वातावरण विभाग	सहायक निर्देशक	९८४१६८८४०२	[signature]

रायसुझाव: नेपाल विद्युत प्राधिकरण द्वारा निर्माण हुन गईरहेको २२० के.भी मर्स्याङ्दी बाट हाम्रो जनतामा प्रत्यक्ष रुपमा यहाँका वन्यजन्तु वासस्थान चराचुरुङ्गीको वासस्थान चरिचरण क्षेत्र लगायत विश्व जल वायु परिवर्तनमा समेत असर पर्ने भएको हुँदा उक्त विकास परियोजना आउदा विकासका नाउमा हामीले संरक्षण र सम्बर्दन गरेर बसेका वन जंगल विनाश भई जनतामा अनेकन असर पर्ने भएको हुँदा उक्त विकास भन्दा अघि वैकल्पीक व्यवस्थापनका कार्यहरुलाई पनि महत्व नजर गरी विकासका कार्यहरु अगाडी बढाउन उचित हुन्छ भन्ने अनुरोध गर्दछौं ।

[signatures]

नेपाल विद्युत प्राधिकरण

वातावरण तथा सामाजिक अध्ययन विभाग

लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधिन मर्स्याङ्गदी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संञ्चालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय बासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला : लमजुङ नगरपालिका/गाउँपालिका: सुन्दरबजार वडा नं: ६

मिति : २०७८।११।२६ ठाउँ : सुन्दरबजार न.पा. ; कार्यालय

उपस्थिती

क.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	जनकराज मिश्र	प्रमुख	सुन्दरबजार न.पा.-१	९८४६०८६६३१	[signature]
२	फिरोज सिद्दीकी	Prog. Specialist	VSO Nepal	९८५८०२२६६२	[signature]
३	विश्वनाथ घिमिरे	Exe. Director	RCDC, Nepal	९८५६०१५१६१	[signature]
४	ईश्वर खापकोटा	आसमान नेपाल	ललितपुर	९८४११५४०२८	[signature]
५	ठाकुर प्र. तिवारी	उप-प्रमुख	सुन्दरबजार, (न.पा.	९८४६०३५४८१	[signature]
६	ध्रुव कुँवर	अध्यक्ष, मोति	"	९८४६३०८४५३	[signature]
७	भिम गुरुङ	आर्टिकल्चर उद्यम ...	(एमडी) सु.न.पा.-६		[signature]
८	राजु के.सी.	शिक्षक	सु.न.पा. ६	९८४६०४४५७५	[signature]
९	होम बहादुर कार्की	"	- ८	९८४६६१०४३२	[signature]
१०	होरक खातकोटा				[signature]

११) अ. कृष्ण जोशी. १२ अच्युत द्वाडी. ध. नि. १३) [illegible] १४- सीता खावल्ली ध. - निर्देशक १५ गंगालाल वि. क.

रायसुझाव

१. आयोजना प्रभावित क्षेत्रका बासिन्दाहरुसँग समय समयमा अन्तरक्रिया गरी गुनासो सुनुवाई व्यवस्थापन गर्नुपर्ने।

२. आयोजनाका कारण अधिग्रहण क्षेत्रहरुको सीमांकन र सुरक्षा व्यवस्था अझ बढी प्रभावकारी बनाउनुपर्ने।

३. जैविक पारिस्थितिक प्रणाली सुचारु हुने गरी जलप्रवाहलाई निरन्तरता (दिनुपर्ने)

४. प्रभावको तुलनामा रोयल्टी न्यून भएकाले बढोत्तरी गर्नुपर्ने।

५. स्थानिय आयोजना संचालन तथा जल विद्युत सम्बन्धी आयोजनाको काम गर्दा पर्याप्त समन्वय गर्नुपर्ने।

६. लमजुङ जिल्ला विद्युत उपभोक्ता समितिबाट विद्युत प्रसारणको कामहरु गुणस्तरहीन भएकाले quality energy वितरणका लागि आवश्यक व्यवस्था मिलाउने।

नेपाल विद्युत प्राधिकरण

वातावरण तथा सामाजिक अध्ययन विभाग

लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधिन मर्स्याङ्दी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संचालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय बासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा सौँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला : लमजुङ नगरपालिका/गाउँपालिका: दोर्दी गा.पा. वडा नं. ४

मिति : २०६८/११/२६ ठाउँ : श्रीरा

उपस्थिती

क.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	ओम बहादुर गुरुङ	अध्यक्ष	दोर्दी गा.पा.	[illegible]	
२	शमशेर गुरुङ	प्रमुख कार्यकारी अधिकृत	दोर्दी गा.पा.	[illegible]	
३	भिम रुपलाल लामिछाने	शिक्षा अधिकृत	मार्सी - ३२ फ्दिन	९८४६१३००४८	[illegible]
४	गजेन्द्र खापकोटा	नी.प्र.पे.प्रा.	दोर्दी गा.पा.	९८४६०४६०४३	[illegible]
५	रुद्र कुमार गुरुङ	प्रा.जि.सा. प्रमुख	दोर्दी - ८ बेसार	९८४५०६८२६५	[illegible]
६	लोक नारायण ढकाल	योजना अधिकृत	अधि आधि बोना-इछाकमना	९८४६९३४४९४	[illegible]
७	विनोद प्रसाद काफ्ले	ना.प्र.ले.पा.	दोर्दी गा.पा.	९८४६०४४३९८	[illegible]
८	प्रविण रेग्मी	ना.प्र.स.पा.	दोर्दी गा.पा.	९८४६३३८७५७	[illegible]
९	मान ब. गुरुङ	प्रशासन शाखा	" "	९८४८०३८३६२	[illegible]
१०	मनबहादुर गुरुङ	SSO	ESMU-Khudi	९८४८४५४४८७	[illegible]
११.	अर्जुन त्रिवेदी	ESO	ESMU-Khudi		[illegible]
१२.	जोगेन्द्र कुमार उप्रेती	ESSD NEA	KTM	9841254376	[illegible]

रायसुझाव

① स्थानीय सरकारसँग सिफारिस लिई उक्त क्षेत्रका बन्ने सम्पूर्ण आयोजनाहरुले सामाजिक उत्तरदायित्व अन्तर्गत र वन तथा वातावरण सम्बन्धी क्षतिपूर्ति रकम एकमुष्ट रकम उपलब्ध गराई स्थानिय सरकारको सुपरिवेक्षणमा काम गर्न आवश्यक रहेको।

② सरकारी तथा नीजि क्षेत्रबाट उत्पादन भएका विद्युत प्रसारण गर्न उक्त भोल्टेजको कोरिडोर को लागिसम्म प्रसारण लाइन बनाउन आवश्यक रहेको।

③ प्रसारण लाइन तथा हाइड्रो पावर प्रभावित परिवारहरुलाई उनीहरुको माग बमोजिमको पूर्ण मुआब्जा दिई योजना बनाएर मात्र निर्माणाधिन तथा प्रस्तावित आयोजनाहरु निर्माण (सम्पन्न) सम्पन्न गर्न सकिने

④ सम्पूर्ण पूर्वाधार सम्बन्धी संयुक्त गुरुयोजना बनाई एकद्वार प्रणालीबाट विकासका कार्य, मुआब्जा कार्य र सामाजिक उत्तरदायित्वका कार्य गरेमा दोहोरोपन नआउने र सामाजिक सांस्कृतिक समूह, वन, वातावरण क्षेत्रका समस्या समाधान गर्न सकिने

नेपाल विद्युत प्राधिकरण
वातावरण तथा सामाजिक अध्ययन विभाग
लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधिन मर्स्याङ्दी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संञ्चालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय बासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला : लमजुङ
नगरपालिका/गाउँपालिका: सुन्दरबजार वडा नं. 6
मिति : २०७७।११।२८
ठाउँ : पाँउदी बजार

उपस्थिती

क.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	श्री जयराम रेग्मी	वार्ड अध्यक्ष	सुन्दरबजार 6.	९८४२०४४२९६	[signature]
२	श्री चन्द्र प्र. पोखरेल	समाज सेवी	,,		
३	कमल नारायण मिश्र	स्थानिय व्यपारी	,,	9814147576	[signature]
४	सरोज मिश्र	,, व्यपारी	,,	९८५६१३०६६८	[signature]
५	सुदिप कान्त अधिकारी	,, ,,	,,	९८४६५००९४८	[signature]
६	रविन्द्र थापा	समाज सेवी	,,	९८४८०३६२८३	[signature]
७	अमृत कु मिश्र	स्थानिय व्यपारी	,,	९८४६०४४८२०	[signature]
८	डिल्ली भक्त मिश्र	शिक्षक	,,	९८४३६३८९६४	[signature]
९	विष्णु प्र पौडेल	पूर्व शिक्षक	,,	9866087311	[signature]
१०	खुसीराम मिश्र	समाजसेवी	,,		[signature]

रायसुझाव

(१) जग्गा अधिग्रहण गर्दा पारदर्शिता एवं सरलता हुन संबन्धित निकायले ध्यान जान पर्ने (२) टावर र तारमा उचित व्यवस्थापन हुन पर्ने (३) विद्युत पोल गाड्दा उचित तवरले गहिराई एवं सिमेन्ट प्रयोग गरी काम गर्नु पर्ने (४) विद्युत प्रवाह हुने विधिकरणमा [illegible] प्रभावित [illegible] गर्नु पर्ने (५) स्थानिय सञ्चालन गर्ने प्रभावित समुदायलाई [illegible] दिनु पर्ने (६) विद्युत प्रसारण एवं अन्य आयोजना [illegible] स्थानिय बासिन्दालाई [illegible] उचित क्षतिपूर्ति दिनु पर्ने (७) अधिग्रहण गरिएको जग्गाको क्षतिपूर्ति एक मुष्ठ गर्दा स्थानिय सरकारको सिफारिस अनुसार दिनु पर्ने (८) पाउदी [illegible] र प्रस्तावित मर्स्याङ्दी ६ बजार तहुँ (९) विद्युत प्रवाह गर्दा सकेसम्म कम तार र टावरको व्यवस्थापन गर्ने (१०) लमजुङ बासीलाई विद्युत सेवामा वृद्धि गर्नु पर्ने (११)

नेपाल विद्युत प्राधिकरण
वातावरण तथा सामाजिक अध्ययन विभाग
लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्धारा निर्माणाधिन मर्स्याङ्गदी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संञ्चालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय बासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला : लमजुङ नगरपालिका/गाउँपालिका: सुन्दरबजार वडा नं. 6

मिति : २०७८/११/२८ ठाउँ : पाउँदी बजार

उपस्थिती

क्र.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	देवका थापा		सु.न.पा.-6	9841897339	[signature]
२	भुपबहादुर अधिकारी		,,	9749834627	[signature]
३	प्रेम ब. डुम्राकोटी		,,	9818113401	[signature]
४	श्याम लाल श्रेष्ठ		,,		
५	हरि कुमार श्रेष्ठ		,,	9803079125	[signature]
६	साकिला श्रेष्ठ			9861242222	[signature]
७	[illegible] श्रेष्ठ		,,	9816632005	[signature]
८	[illegible] हरी गोली		,,	9846292017	[signature]
९	[illegible] पौड्याल		,,	[illegible]	
१०	कृष्ण ज्ञवाली	उप. निर्देशक	काठमाण्डौ		

११) अच्युत [illegible] बे. निर्देशक काठमाडौं [signature]

रायसुझाव

१२) [illegible] ज्ञवाली – वे. निर्देशक – [signature] १३ राजीव [illegible]

(१४) [illegible] पानी [illegible] व्यवस्थापन गर्नु पर्ने

(१५) [illegible] सबै [illegible] जतन [illegible]

२५[illegible]

[signatures]

नेपाल विद्युत प्राधिकरण
वातावरण तथा सामाजिक अध्ययन विभाग
लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधिन मर्स्याङ्दी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संञ्चालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय बासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला : लमजुङ   नगरपालिका/गाउँपालिका: राइनास   वडा नं. ६

मिति : २०७८/११/२८   ठाउँ : धामिलिकुवा

उपस्थिती

क्र.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	भवनिधि पाण्डे	किसान	राइनास-६	९८४६१२१८४२	
२	नन्दलाल श्रेष्ठ	"	"	९८४६५५६५३०	
३	मोहन शर्मा चितवाल	"	"	९८४६३३५५४४	
४	कृष्ण राम ढकवाल	"	"	९८४६५४६६६१३	
५	विवेक चपलियार	"	"	९८४६१९१६६९	
६	टेक बहादुर ढकवाल	"	"	९८४६६२१६०२	
७	सुकुमारी चपलिया	"	"		
८	उद्धव राज चितवाल	"	"		
९	गुणनिधि चितवाल	"	"	९८४६५६०००१	
१०	[illegible]कुमार श्रेष्ठ	"	"	९८४६४३६४६८	
११.	भोजकुमारी सेलाई	[illegible]	[illegible]	९८४६०८८६०१	

१२) कृष्ण प्र. जोशी   १३) अमृत दवाडी   १४. कमला खवाली

रायसुझाव

१. समानुपातिक मुल्याङ्कन गरेर/आयोजनाले स्थानियसँग समन्वय गर्नुपर्ने
२. तारमुनिको जग्गा [illegible] हुनुपर्ने
३. तारमुनिको जग्गा [illegible] हुनुपर्ने
४. आयोजना बन्न अगाडि पूर्व सूचना दिनुपर्ने
५. बाटोमा उचित मापदण्ड बनाउनुपर्ने / क्षतिपूर्ति पनि दिनुपर्ने
६. क्षति भएका सामाजिक संरचना (मध्यपहाडी लोकमार्ग) पुनःनिर्माण गर्नुपर्ने
७. सार्वजनिक सूचना समयमै प्रवाह हुनुपर्ने (म्याद नकटी)
८. सेयर बिक्री/आव्हान गरेर प्रभाव कम गराई स्थानिय लाई लगानीमा सहभागि गराउनुपर्ने
९. कटान गरिएका रुखहरु बापत आयोजनाले जग्गा किनेर सम्बन्धित क्षेत्रमै वृक्षारोपण गर्नुपर्ने
१०. मुआब्जा सम्बन्धी सूचना म्याद जारी गर्दा स्थानिय बासीले बुझ्ने गरि [illegible] नेपाली भाषामा जानकारी हुने व्यवस्था हुनुपर्ने।

नेपाल विद्युत प्राधिकरण
वातावरण तथा सामाजिक अध्ययन विभाग
लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधिन मर्स्याङ्गदी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संञ्चालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय बासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला : लमजुङ नगरपालिका/गाउँपालिका: बेसीशहर न.पा. वडा नं. ११

मिति : २०६८/११/२८ ठाउँ : रामचोक बेशी (समाजसेवा युवा क्लब भवन)

उपस्थिती

क.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	प्रकाश बाबु सेढाई	व्यापार	बे.न.पा.-११ रामचोक	९८४६६६४४५६	[signature]
२	अर्जुन राज सेढाई	शिक्षक	,,	९८४१०९८८६८	[signature]
३	महा प्रसाद सेढाई	व्यापार	बे.न.पा. ११	९८४१५५२२०८	[signature]
४	ईश्वर कुमार श्रेष्ठ	कृषि	,,	9846372032	[signature]
५	राजन सेढाई	बैंकर	बे.न.पा. ११	९८५६०४६५०२	[signature]
६	टिका कुमारी सेढाई	कृषि	,,		[signature]
७	होमनाथ ढोलिया	,,	,,	९८४६११२१६६	[signature]
८	निर्मला सेढाई	शिक्षक	,,	९८६६०२०१०९	निर्मला
९	सर्मिला सेढाई	कृषि	,,	9846759957	[signature]
१०	सरिता सेढाई	,,	,,	9846251318	सरिता
११	गणेश कुमार श्रेष्ठ	समाजसेवी	आबुखैरेनी	९८४१-४१६८६९	[signature]

रायसुझाव

१. मर्स्याङ्दी कोरीडोर र दोर्दी कोरिडोर बाट उत्पादन हुने सम्पूर्ण विद्युतलाई उक्त सबस्टेशनको प्रसारण लाइन बनाउन आव श्यक [illegible] ३३ के.भी. १३२ के.भी. ११ के.भी. र [illegible] २२० के.भी. प्रसारण लाइन [illegible] [illegible] कृषि कार्यमा बाधा पुऱ्याएको छ।

२. प्रभावित क्षेत्रमा बनेका प्रसारण लाइन बाट [illegible] विद्युत [illegible] सुरक्षा प्रणाली र [illegible] व्यवस्था हुनु आवश्यक [illegible] को व्यवस्था हुन आवश्यक छ।

[signatures]

नेपाल विद्युत प्राधिकरण
वातावरण तथा सामाजिक अध्ययन विभाग
लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधिन मर्स्याङ्दी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संञ्चालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय वासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला : लमजुङ नगरपालिका/गाउँपालिका: बेसीशहर न.पा. वडा नं. ११
मिति : २०७८/११/२८ ठाउँ : रानीचौकबेसी (समाजसेवा युवा क्लब भवन)

उपस्थिती

क.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	शोभा सेढाई	कृषि	बे.न.पा.-११ रानीचौक		शोभा
२	टिकमान सेढाई	,,	,,		टिकामान
३	मुरारी सेढाई	,,	,,		मु
४	राधिका सेढाई	,,	,,	९८४१८४२४६६	राधिका
५	भगवति डाँलिया	,,	,,	९८४६३११८	भगवती
६	विजय राज सेढाई	,,	,,	9846180482	[illegible]
७	डम्बरध्वज सेढाई	,,	,,	९८४५४१६३४८	[illegible]
८	दशराम मिजार	,,	,,		दशराम
९	बुद्ध राज सेढाई	,,	,,	९८६६०४२६७६	[illegible]
१०	सन्जय सेढाई	,,	,,	9817155960	[illegible]
११	गणेश कुमार उप्रेती	समाजशास्त्री	काठमाण्डौ	९८४१४७६८९१	गणेश उप्रेती

रायसुझाव

१. दोर्दि र मर्स्याङ्दी (५६) मार्स्याङ्दी कोरिडोरका खोलाबाट बनि सकेका, निर्माण हुँदै, प्रस्तावित जलविद्युत आयोजनाहरुको [illegible] [illegible] गर्दा जग्गा [illegible] आवश्यक मात्रा, सिंचाइ, खानेपानी सामाजिक तथा साँस्कृतिक क्षेत्रमा आवश्यक हुनुपर्ने मात्राको व्यवस्था सुनिश्चित गरेर आयोजनाको [illegible] हुन। स्थानीय [illegible] [illegible] केन्द्र सरकार, प्रदेश, स्थानीय, प्रभावित क्षेत्र र आयोजनाको [illegible] संयोजनमा बनाई विषय विज्ञ व्यक्ति गरि निरन्तर अनुगमन, निरिक्षण, सिफारिस र कार्यान्वयन समेत गर्न सक्ने निति सहित नियमावलि निर्देशिका/व्यवस्था हुनुपर्नो।

नेपाल विद्युत प्राधिकरण
वातावरण तथा सामाजिक अध्ययन विभाग
लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधिन मर्स्याङ्गदी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संञ्चालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय बासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला : लमजुङ्ग..... नगरपालिका/गाउँपालिका : मर्स्याङ्दी गा.पा. वडा नं. ८.....

मिति : २०८८/११/२८..... ठाउँ : तिरापाचर.....

उपस्थिती

क्र.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	विनेश गुरुङ्ग	विद्यार्थी	मर्स्याङ्दी-८	९८४६६०२६६	
२	ईमान गिरुङ्ग तमाङ	कृषि	मर्स्याङ्दी-८	९८४८४[illegible]	
३	बिर बहादुर बस्याल	कृषि	" "		
४	मेघ ब. गुरुङ्ग	गृहणी	" " "	९८४६०८०८२९	
५	कुमारी बस्याल	" "	" " "		
६	मोहन विष्ट	कृषी/कामदार	" " "		
७	गोविन्द राज सिंह	क्षेत्री	के.नि.पा-११	९८४३९८६०४८	
८	प्रत्युष गुरुङ्ग	SSO	ESMU. Khudi		
९	[illegible]	वातावरण अनुगमन	" " "	९८४२५४३७९६	
१०	[illegible]	समाज सेवी	काठमाडौं	—	

रायसुझाव

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नेपाल विद्युत प्राधिकरण

वातावरण तथा सामाजिक अध्ययन विभाग

लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधिन मर्स्याङ्दी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संचालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय बासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला : गोरखा नगरपालिका/गाउँपालिका: पालुङटार वडा नं. ६ सात

मिति : २०७८/११/२८ ठाउँ : [illegible]

उपस्थिती

क.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	बसन्त कुमार श्रेष्ठ	वडा अध्यक्ष	पा.न.पा.-६	९८४६०६०३६६	[signature]
२	हित बहादुर थापा	अध्यक्ष	[illegible]	९८४६४५०८३४४	[signature]
३	भिमसेन पाठक	[illegible]	गो.न.पा	९८४६०३००३४	[signature]
४	[illegible]	स्थानीय	पा.न.पा.-६	९८४६०३०४६९	[signature]
५	[illegible]	[illegible]	पा.न.पा. [illegible]	९८४६०४०४८०	[signature]
६	किम बहादुर कुमाल	स्थानीय	पा.न.पा-६	९८४१३३६८०४	[signature]
७	मनोज कुमार श्रेष्ठ	″	″		[signature]
८	ओमिला सुनार	″	″		[signature]
९	कृष्ण पि. चौधरी	उप. निर्देशक		[illegible]	[signature]
१०	अच्युत [illegible]	[illegible]	[illegible]	[illegible]	[signature]

रायसुझाव

- [illegible] प्रभावित वडामा [illegible] कामका [illegible] गरिदिनु पर्ने।
- सुचनाको प्रभावमा न्यून रहेको।
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- पानीको [illegible] रहेको।
- नदी [illegible] समस्या आएको।
- विगतमा रहेको वितरण प्रणाली लाइनहरु सडक विस्तारपछि [illegible] अनुकुल हुने गरी परिवर्तन गरिनुपर्ने। [signature]

नेपाल विद्युत प्राधिकरण

वातावरण तथा सामाजिक अध्ययन विभाग

लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्धारा निर्माणाधिन मर्स्याङ्गदी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संञ्चालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय बासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला : तनहुँ..... नगरपालिका/गाउँपालिका आँबुखैरेनी वडा नं.....

मिति : २०७८।१।१५ ठाउँ : गाउँ कार्यपालिकाको कार्यालय आँबुखैरेनी

उपस्थिती

	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	गिर बहादुर थापा	अध्यक्ष	आँबुखैरेनी गा.पा.	९८४६३२२४७	
२					
३					
४					

आँबुखैरेनी गाउँपालिका गाउँ कार्यपालिकाको कार्यालय आँबुखैरेनी, तनहुँ, गण्डकी प्रदेश, नेपाल २०७३

गिर बहादुर थापा
अध्यक्ष

मिति : २०७८-११-३०

श्री नेपाल विधुत प्राधिकरण,
वातावरण तथा सामाजिक अध्ययन विभाग,
काठमाण्डौ ।

विषय : राय शुझाव सम्बन्धमा ।

प्रस्तुत विषयमा आँबुखैरेनी गाउँपालिका गण्डकी प्रदेशको प्रवेशद्वारमा रहेको स्थानीय तह हो । यस गाउँपालिका भित्रवाट १८ कि.मि. को पृथ्वी राजमार्ग गएको छ भने नेपाल विधुत प्राधिकरणको ६९ मेगावाटको ड्याम साईड, ७.५ कि.मि. को टनेल र उत्पादन गृह पनि यसै गाउँपालिका भित्र पर्दछ । नेपाल विधुत प्राधिकरण मस्याङ्दी महाशाखाले आफ्नो आयोजना सुरुवात २०४३ फाल्गुन देखि सम्पन्न मिति २०४६ माघ सम्म यहाँको जनतालाई धेरै पिडा भएको अवस्था रहयो । गाउँपालिका अन्तर्गत पर्ने राम्रा समथर भुमि जति प्राधिकरणको अधिकरणमा पर्यो । विधुत प्राधिकरणले मुआव्जा वेगर जनताको खेत वारीको बिचवाट आफ्नो नियम अनुसार आफुखुसी विधुत लाईनहरु विस्तार गर्यो । उक्त लाईन विस्तारको क्रममा वन जंगलको समेत ठुलो क्षती भएकाले जलवायुमा असर पनि परेको होला । हाल नेपाल विधुत प्राधिकरण फेरी २२० के.भी. प्रसारण लाईन निर्माणको क्रममा आँबुखैरेनी गाउँपालिका वडा नं. २, ३, ४ र ५ नं. वडा भएर सो लाईन विस्तार हुदैछ तर प्रभावित व्यक्तिहरुले उचित मुआव्जा पाएको अवस्था छैन । गुनासा, असहमतिहरु धेरै आएका छन् त्यसलाई प्राधिकरणले यथाशिघ्र सम्बोधन गर्नु पर्ने हुन्छ । Row भित्रको जग्गाको मुआव्जा निर्धारण भएको छैन वन क्षेत्र पनि यस आयोजना भित्र पर्छ यसको मुआव्जाको केही निर्णय भएको देखिदैन । राष्ट्रिय आयोजनाहरुलाई गाउँपालिकाले अवरोध नगरेता पनी स्थानीय तह, प्रभावित क्षेत्रका नागरिकको सहमतिमा अगाडी वढ्न सकेमा आयोजना समयमा सम्पन्न हुनेछ ।

आँबुखैरेनी गाउँपालिका गाउँ कार्यपालिकाको कार्यालय आँबुखैरेनी, तनहुँ, गण्डकी प्रदेश, नेपाल २०७३

गिर बहादुर थापा
अध्यक्ष

गिर बहादुर थापा
अध्यक्ष

नेपाल विद्युत प्राधिकरण

वातावरण तथा सामाजिक अध्ययन विभाग

लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधिन मर्स्याङ्दी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संचालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय बासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला : तनहुँ........ नगरपालिका/गाउँपालिका: भा.न. .... वडा नं: ....९.....

मिति : २०७८।११।२८ ठाउँ : ब्याइंसे डाँडा

उपस्थिती

क.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	तिलक संजिव शिवाकोटी	वडा अध्यक्ष	भा.न. - ९	9856860229	[illegible]
२	मित्र बहादुर गुरुङ	वडा अध्यक्ष नं.९ ...	भानु - ३	9813589648	[illegible]
३	चोम नारायण श्रेष्ठ	[illegible]	भानु - ९	९८५६०६०६६५	[illegible]
४	कृष्णराज धमाला	समाज सेवी	भानु - ९	९८५६०५०३८१	[illegible]
५	[illegible]		,, ,,	9846498317	[illegible]
६	[illegible]	[illegible]	,, ,,	9843246122	[illegible]
७	राम बहादुर पाण्डे	भानु स्थानीय	,, ,,	9846163821	[illegible]
८	[illegible] श्रेष्ठ	[illegible]	भानु ९	9866000025	[illegible]
९	हरिकृष्ण श्रेष्ठ	समाज सेवी	भानु - ९	९८४६०५०९१०	[illegible]
१०	गणेश [illegible] श्रेष्ठ	[illegible] भानु - ३	[illegible]	९८५६००००८३	[illegible]
११	नर [illegible]	[illegible]	भा.न. - ३		[illegible]

रायसुझाव

१) Row मा परेका जग्गा धनीका लागी कम्तिमा ६० प्रतिशत अधिकरणको रुपमा जग्गा धनीलाई उपलब्ध गराउनु पर्ने ।

२) विद्युतिय लाइन एकिकृत गरी एउटै पोल मार्फत लैजानु पर्ने

३) उद्योग, बाटो निर्माण मा भविष्यको लागी दिर्घकालिन सोचबनाई योजना कार्यन्वयन हुनु पर्ने ।

४) विद्युतिय प्रभावित जग्गालाई बाँडिड योजना मा आफ्न सम्झे बनाउनु पर्ने

५) योजना सञ्चालन मा व्यापक जन सहभागीता गराई सुझाव लिई कार्यन्वयनमा जानु पर्ने । -

९२

नेपाल विद्युत प्राधिकरण
वातावरण तथा सामाजिक अध्ययन विभाग
लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्धारा निर्माणाधिन मर्स्याङ्गदी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संञ्चालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय बासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला : ..... नगरपालिका/गाउँपालिका : ..... वडा नं. ..

मिति : ..... ठाउँ : .....

उपस्थिती

क्र.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
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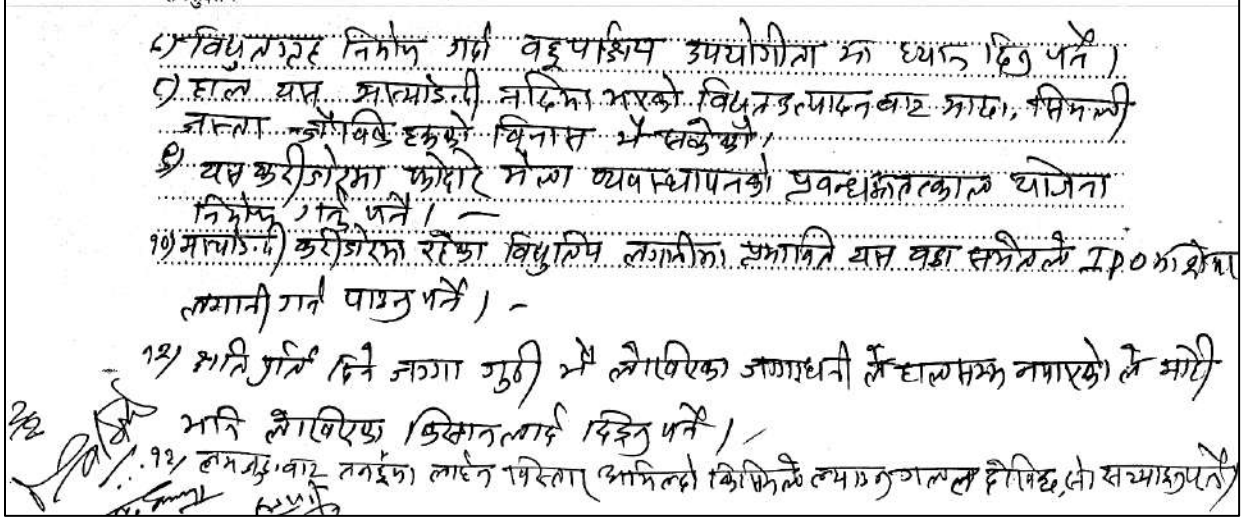
रायसुझाव



नेपाल विद्युत प्राधिकरण

वातावरण तथा सामाजिक अध्ययन विभाग

लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधिन मर्स्याङ्दी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संचालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय वासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला : लमजुङ   नगरपालिका/गाउँपालिका : राइनास   वडा नं. : 5

मिति : 2078/11/29   ठाउँ : तीरपिपल

उपस्थिती

क्र.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	धनकुमारी गुरुङ	नगर-उपप्रमुख	राइनास-5 [illegible]	9846167106	[signature]
२	[illegible] अधिकारी	प्रशासन अधिकृत	कुश्मा-5 पर्वत	9857641050	[signature]
३	महेश थापा	सब-इन्जिनियर	राइनास-5 [illegible]	9843041032	[signature]
४	रामकृष्ण पौडेल	समाजसेवी	राइनास-[illegible]	9856045602	[signature]
५	[illegible] देवकोटा	सूचना प्रविधि [illegible]	[illegible]	9840012464	[signature]
६	[illegible]		राइनास-[illegible]	9846560117	[signature]
७	नवीन कुमार थापा	लेखा अधिकृत		98467[illegible]9557	[signature]
८	अच्युत दवाडी	सह-निर्देशक	काठमाडौं	9841369911	[signature]
९	शैलजा [illegible]	प्र. निर्देशक	काठमाडौं	9841688405	[signature]
१०	सञ्जीव श्रेष्ठ	ESO, मर्स्याङ्दी कोरिडोर	काठमाडौं	9841588568	[signature]
११.	गंगालाल वि.क.	SSO	काठमाडौं	9841173852	[signature]

रायसुझाव

(१) सडक आयोजनाहरुको विकाससँगै तत्कालिन जोखिम न्यूनीकरण [illegible] वन [illegible] बढ्दै गएको छ भएकाले वृक्षारोपण [illegible] बनाउनुपर्ने ।

(२) विभिन्न [illegible] सँग सम्बन्धी आयोजना हस्तान्तरण [illegible] अनुसन्धान [illegible] गर्ने

(३) सडक आयोजना निर्माण गर्दा वनजङ्गलसँगै वातावरणीय तथा जैविक विविधतामा प्रभाव पर्ने भएकाले आवश्यकता अनुसार वृक्षारोपण गर्ने

(४) नागरिकहरूलाई आर्थिक रुपमा सबल र सक्षम बनाउन आयमूलक कार्यक्रम सञ्चालन गर्ने ।

(५) यस क्षेत्रको विद्युतीय लाइन प्रसारणमा सहजता ल्याउन तथा ग्रामीण क्षेत्रका [illegible] कुनै पनि कार्य गर्दा विद्युत बन्द गर्नुपर्ने अवस्था आएमा विद्युत प्राधिकरण लाई पूर्व जानकारी गराई गर्ने ।

(६) ROW (Right of way) मा पर्ने जग्गाको प्राधिकरणले नै जग्गाधनी लाई मुआब्जा उपलब्ध गराउने ।

(७) Project छिटो सञ्चालन हुने सीपमूलक तालिम आयोजना बाट प्रभावित परिवारलाई उपलब्ध गराउने ।

(८) आयोजना प्रभावित क्षेत्रमा Bio-engineering को अवधारणा प्रयोग लाई प्रोत्साहन गर्ने

(९) प्रसारण लाइनमा रहेको जग्गामा वैकल्पिक खेती विस्तार गर्ने (अम्रिसो, बेसार आदि)

नेपाल विद्युत प्राधिकरण
वातावरण तथा सामाजिक अध्ययन विभाग
लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधिन मर्स्याङ्दी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संचालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय बासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला : लमजुङ नगरपालिका/गाउँपालिका: मर्स्याङ्दी वडा नं. ८
मिति : २०७८।११।२९ ठाउँ: बाँतिसेपुल

उपस्थिती

क्र.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	बुध राज गुरुङ	किसान कृषि	मर्स्याङ्दी-८ बाँतिसेपुल	९८४६४३८७४३६	[signature]
२	कमल तामाङ	कृषि	"	९	
३	पदम बहादुर गुरुङ	कृषि	"	९८४६५८०४३१	[signature]
४	दिल बहादुर तामाङ	कृषि	"	९८४६१८६३४१	
५	पकुली तामाङ	कृषि	"	/	पकुली
६	सन्तमाया गुरुङ	कृषि	"	९८६१४०६११६	सन्तमाया
७	देवि तामाङ	कृषि	"	/	दे.बि.ता.
८	प्रेम जङ्ग गुरुङ	SSO	ESMU - Khudi	/	[signature]
९	अर्जुन सुवेदी	ESO	" "	9845543796	[signature]
१०	गणेश कुमार उप्रेती	Sociologist	KTM	9841417891	[signature]

रायसुझाव

① हाल मर्स्याङ्दी गा.पा.-८ बाँतिसेपुल क्षेत्रको ४०० मी. भित्र ४ वटा प्रसारण लाइन निर्माण भई सकेको र अन्य ४ वटा प्रस्तावित प्रसारण निर्माण हुँदा गाउँ बस्ती र जग्गा छाडेर खाली भई समस्या आएकोले सम्पूर्ण मर्स्याङ्दी, दोर्दी, डाँडी, [illegible] आयोजना बाट उत्पादन हुने विद्युत प्रसारण उच्च क्षमताको प्रसारण लाइन बनाउन आवश्यक देखिन्छ। ② [illegible] जलविद्युत आयोजना बनाउँदा [illegible] निर्माण [illegible] गर्दा [illegible] तथा [illegible] माछा तथा अन्य जलचरलाई [illegible] आवश्यक पानीको व्यवस्था गर्दा [illegible] गर्न आवश्यक देखिन्छ।
③ गाउँ बस्तीमा सडक निर्माण गर्दा वातावरण अनुकूल [illegible] स्थानीय [illegible], [illegible] लगानी गर्दा पहिरोको [illegible] हुँदा र मुख्य [illegible] कृषि क्षेत्रमा प्रभाव पर्ने हुँदा [illegible] बनाई सहकार्यमा [illegible] निर्माण गर्न आवश्यक देखिन्छ।

[signature]

नेपाल विद्युत प्राधिकरण

वातावरण तथा सामाजिक अध्ययन विभाग

लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधिन मर्स्याङ्गदी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संञ्चालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय वासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला : तनहुँ नगरपालिका/गाउँपालिका : म्या.गा. वडा नं. : १

मिति : २०७८/११/३० ठाउँ : भनस्याङ

<u>उपस्थिती</u>

क.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	उदय राना मगर	प्रमुख	म्याग्दे गा.पा.	9856013909	
२	आशा थापा	उप-प्रमुख	9856033560	9856603355	
३	ध्रुव पौडेल	उप-सचिव	''	9855052421	
४	सनिल पाण्डे	वरिष्ठ अधिकृत	''	9856026588	
५	रघु रेग्मी	स.इ.	''	9856027717	
६	अच्युत ढकाल	वि. विशेषज्ञ	वा. व्यवस्थापन	9841369911	
७	शैलजा ज्ञवाली	सहायक निर्देशक	ने.वि.प्रा.		
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रायसुझाव
RoW को मुल्यांकन गर्दा

१. टावरका जग्गाको मुल्यांकन मौकाको ५०% को दरले दिनुपर्छ।

२. सबै ठाउँको मल्टिसर्किट टावरको अवधारणा लागु गर्नु पर्छ।

३. ५० वर्ष सम्मको समयलाई मध्यनजर गर्दै विकास अवधारणा/योजना बनाउनु पर्छ।

४. सबै पालिका (प्रभावित समेत) छलफल गरि आयोजनाको सर्वे गर्नु पर्छ।

५. ज.वि. आयोजनाले खानेपानी, सिंचाई, कृषि, मत्स्यपालन जस्ता बहुउद्देश्यिक अवधारणा लिएर आयोजनाको योजना बनाउनु पर्छ।

६. विद्युत खपत बढि हुने ग्राहकलाई विद्युत शुल्कमा सहुलियत दिनु पर्छ।

७. बाहिरका लगानिकर्ता खोज्नु भन्दा HEP निर्माण गर्दा स्थानीय क्षेत्रका बासिन्दाबाट नै लगानि उठाउन सकिन्छ।

नेपाल विद्युत प्राधिकरण

वातावरण तथा सामाजिक अध्ययन विभाग

लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधिन मर्स्याङ्दी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संञ्चालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय बासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला : गोरखा

नगरपालिका/गाउँपालिका: गोरखा वडा नं. १४

मिति : २०७८।११।३०

ठाउँ : [illegible]

उपस्थिती

क.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	इन्द्र ब. कार्की	शिक्षक	गोरखा न.पा.-१४	९८४६२१६१३७	[signature]
२	बाबु कार्की	स्थानिय समाजसेवी	गोरखा न.पा.-१४	९८२६१९१०८०	[signature]
३	रुद्र बहादुर अधिकारी	स्थानिय समाजसेवी	गोरखा न.पा.-१४	९८०६६८२१२३	[signature]
४	डिल बहादुर वि.क.	स्थानिय	गोरखा न.पा.-१४		[signature]
५	कृष्ण बहादुर नेपाली	स्थानिय	गोरखा न.पा.-१४		[signature]
६	दिपा कुँवर	जनप्रतिनिधि	गोरखा न.पा.-१४	९८४४९४११९१	[signature]
७	मधु माया श्रेष्ठ	स्थानिय	गोरखा न.पा.-१४	९८०४८४०८८२	[signature]
८	दुर्गा अधिकारी	स्थानिय महिला	गोरखा न.पा.-१४		[signature]
९	राम ब. टण्डन	वडा अध्यक्ष	गोरखा न.पा.-१४	[signature]	
१०	मिलन बराल	ESO	ESMU-Aabu	9842083498 / 9850401055	[signature]
११	नारायण पौड्याल	SSO	ESMU-Aabu	9849226092	Narayan

रायसुझाव

* वन फडानीबाट वन उजाड, पैरो आउने सम्भावना, तापक्रम वृद्धि, पानीको मुहान सुक्ने [illegible]
* Row को दायाँ बायाँ पनि जग्गाको हाल प्रतिको रकम कम भएको। [illegible]
* कृषी कार्यमा पानीको अभावले असर परेको [illegible]
* [illegible]
* [illegible]
* नदी किनारमा रहेका ढुंगा, गिटी बालुवा उत्खनन गर्न बाढी पहिरोको जोखिम बढेको।
* विद्युत प्रभाव नाङ्गा तार जालोले गर्दा बढ्ने [illegible] आतंक [illegible]

[signatures]

नेपाल विद्युत प्राधिकरण
वातावरण तथा सामाजिक अध्ययन विभाग
लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधिन मर्स्याङ्दी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संचालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय बासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला गोरखा

मिति : २०७८।११।३०

नगरपालिका/गाउँपालिका गोरखा वडा नं. ४, २, १

ठाउँ : फिनाम ताप्ले

उपस्थिती

क.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	स्नोप के अधिकारी	राजनीतिज्ञ	गोरखा न.पा. ४	९८४३०४०३८४	[signature]
२	विना कुमारी क्षेत्री	..	गो.न.पा. ६	९८४६०६४०५६	[signature]
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रायसुझाव

गोरखा वितरण केन्द्र बाट ३३ के.भी. ए लाईन आरुघाट तर्फ
लान लेखा के ध्यकेको र पोल तार समेत जडान गर्दा स्थानीयले
पोल गाडन अवरुद्ध गरेको, स्थानीय ले जानकारी हामीले
जानकारी पाएनौं, हाम्रो घर नजिक लाईन जानलागेको, जग्गा को
मुआब्जा नदिएको, स्थानीय सरकार लाई जानकारी नगराएको
कारन अवरुद्ध भएको छ। राष्ट्रिय प्रसारण लाईन को काम हुन
आवश्यक छ।

दिनेश राज पन्त, प्र.प्र. अधिकृत

→ गौ.न.पा. वडा नं 14 मा ८ जना व्यक्तिहरूको 220 KV प्रसारणलाइन जग्गा अधिग्रहण मा परेकोमा घर्ले माग (जग्गाको मुआब्जा निर्धारण भएकोले खासै विवाद देखिदैन ।

→ मर्स्याङ्दी कोरिडोर तर्फ लमजुङका ठेकेदारले सरकारी जग्गा छुट हुदै सर्वेक्षणको क्रममा व्यक्तिको निजी जग्गामा विद्युत पोलको सर्वेक्षण गरेकोले समस्या सिर्जना गरिदिएको छ।

→ गौ.न.पा.-14 मा कोहि व्यक्तिको घरमाथि विद्युत तार परेको छ।

→ विद्युत आयोजनाले Water Dam Side बाट ~~प्रवाह~~ 10% न्यूनतम छोड्नु पर्ने पानी नछोडेकोले ~~गर्दा~~ गर्दा तलका चपक्युक्त, जङ्गलहरुले पानी नपाएर विचलित भएको छ। साथै दुई जिल्लाको सिमानामा बग्ने ~~नदिको~~ नदिमा पानी नहुदा सिमाना छुट्याउन नसकि नदीजन्य पदार्थको चोरी बढेको छ र चोरी निकासी रोक्न सकिएको छैन।

[signature]
२०७५/११/२०

नेपाल विद्युत प्राधिकरण
वातावरण तथा सामाजिक अध्ययन विभाग
लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधिन मर्स्याङ्दी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संञ्चालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय बासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला : लमजुङ नगरपालिका/गाउँपालिका: मर्स्याङ्दी वडा नं: ४

मिति : २०७८/१२/०१ ठाउँ : धारापानी

उपस्थिती

क्र.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	देवी जङ्ग गुरुङ	होटल व्यवसाय	मगाउँ-४ मर्स्याङ्दी	9849336588	[signature]
२	हरी जङ्ग गुरुङ	कृषि	"		[signature]
३	आश बहादुर सिंह	स्कूल, कृषि	"		[signature]
४	देउ बहादुर तामाङ	किसान	"		देउ बहादुर
५	नन्द ब. गुरुङ	समाज सेवा	"	9846352999	[signature]
६	अजमसिंह गुरुङ	समाजसेवी	मेलछाम (मनाङ) अध्यक्ष		[signature]
७	नन्दा गुरुङ	होटल व्यवसाय	"		नन्द गुरुङ
८	जीवन गुरुङ	युवा	"		[signature]
९	राम तामाङ	युवा	"		[signature]
१०	मन प्रसाद गुरुङ	वातावरणविद्	ESMU-Khudi	9841515978	[signature]
११	मजुन सुबेदी	वातावरणविद्	ESMU-Khudi	9842543796	[signature]
१२	जगत कुमार श्रेष्ठ	समाजशास्त्री	KTM	9841419801	[signature]

रायसुझाव

(१) भाविष्य, वातावरणीय सामाजिक समस्याहरू बीच सन्तुलन गर्दै गुरुयोजना बनाई एकद्वार नीतिबाट विकास गर्नु पर्ने। कारण खोला, पोखरी, पहाड, पशुपन्छी सामाजिक, भौतिक, सांस्कृतिक संरचनाहरूमा समस्या आएको देखिन्छ।

(२) साना साना खोलाहरू र जलविद्युत आयोजना, प्रसारण लाइन बनाउनु भन्दा ठूलो कोरीडोरबाट सबै विद्युत जाने सक्ने प्रसारण लाइन बनाउने नीति आवश्यक छ। जलविद्युत, सडक, अन्य खोलाहरू, गाउँबस्ती, खेतीयोग्य जमिन भन्दा टाढा बाताबरण मिलाएर गर्दा बढ्नु पर्ने देखिन्छ।

नेपाल विद्युत प्राधिकरण
वातावरण तथा सामाजिक अध्ययन विभाग
लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधिन मर्स्याङ्गदी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संञ्चालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय बासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला : चितवन

मिति : २०७८।१२।०१ नगरपालिका/गाउँपालिका: इच्छाकामना वडा नं. ६

ठाउँ : अलबिर

उपस्थिती

क.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	सुरेन्द्र प्रजा	वडा अध्यक्ष	इच्छाकामना-६	9844294908	[signature]
२	सन्त बहादुर गुरुङ	व्यवसायी	इच्छाकामना-६	9848828382	[signature]
३	डिल बहादुर प्रजा	व्यवसायी	इच्छाकामना-६	9848686356	[signature]
४	चन्द्रकला गुरुङ	स्थानीय बासी	इच्छाकामना-६	9848656638	[signature]
५	चन्द्र कुमारी न्यौपाने	वडा सचिव	इच्छाकामना ६	9848026986	[signature]
६	नारायण पोख्रेल	SSO	ESMU	9848223092	[signature]
७	मिलन बराल	ESO	ESMU	9842083498	Nargis
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रायसुझाव

१- प्रस्तावित लाइन आयोजनाको कारण विस्थापित हुने समस्या भयो, जग्गा क्षति भएकाहरुले उचित मुआब्जा पाउन समस्या छ।

२- सडक निर्माणको कारण स्थानीय क्षेत्रमा मुख्य तथा सहायक समस्या भयो। बायो इन्जिनियरिङ गरी जमिनलाई सुरक्षित गर्न, बाटोमा पानी निकास तथा बाटो छेउ [illegible]

३- सडकको कारण धुलो धुवाँले रुख बिरुवामा असर परेको छ। घाँस, खेती गर्न समस्या छ।

४- दैनिक सडक दुर्घटना भैरहने कारण स्थानीय बासिन्दा चिन्तित हुनुपर्छ, कति अपाङ्ग र ज्यान गुमाउनु परेको छ।

५-

नेपाल विद्युत प्राधिकरण
वातावरण तथा सामाजिक अध्ययन विभाग
लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्धारा निर्माणाधिन मर्स्याङ्गदी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संचालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय बासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला : तनहुँ नगरपालिका/गाउँपालिका: पालुङटार वडा नं. ४

मिति : २०७८/१२/०२ ठाउँ : वडा कार्यालय भवन

उपस्थिती

क.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	दिलेन्द्र ढेवकोटा	वडा अध्यक्ष	पालुङटार-४		
२	अविनाश ढेवकोटा	समाजसेवी	,, ४		
३	तेजु गिरि	समाजसेवी	,, ४		
४	राम बहादुर रानामगर	प्रभावितस्थानिय	,, ४		
५	किशोर ढेवकोटा	,, ,,	,, ४		
६	[illegible] शाह	स्थानिय	,, ४		
७	तिर्थ राज ढेवकोटा	प्रभावित स्थानिय	,, ४		
८	सञ्जीव श्रेष्ठ	ESO, Marsyangdi Corridor	Kathmandu	9841588568	
९	मनजङ गुरुङ	SSO, ESMU	Lamjung	9846075978	
१०	गणेश कुमार श्रेष्ठ	उप. निर्देशक, ESSD	Kathmandu	9841-417831	
११	अर्जुन घिमिरे	ESO ESMU	Lamjung	9842508796	
१२	इश्वरी प्रसाद [illegible]	SSO ESMU	Phedrumna	9851145223	

रायसुझाव

(१) स्थानिय तह, प्राविधिक, वातावरणविद् र विषय विज्ञ सहित आयोजनाको समष्टिगत अध्ययन गर्नुपर्ने बेलाबेलामा समन्वय, छलफल गरी आयोजनाको विस्तृत योजना बनाउने नीति आवश्यक देखिन्छ।

(२) आयोजना प्रभावित क्षेत्रमा गर्नुपर्ने सामाजिक उत्तरदायित्व कार्यक्रम स्थानियसंग छलफल गरी स्थानिय तहमा प्रभावित, सामुदायिक वन, आयोजनाको प्रतिनिधि रहनेगरी गुनासो व्यवस्थापन र कार्यान्वयन समिति बनाउने नीति, कार्ययोजना आवश्यक देखिन्छ।

(३) पालुङटार क्षेत्रमा जग्गा सिमित भएको हुँदा तारमुनीको जग्गाको उचित क्षतिपूर्ति दिने नीति आवश्यक देखिन्छ।

नेपाल विद्युत प्राधिकरण
वातावरण तथा सामाजिक अध्ययन विभाग
लाजिम्पाट, काठमाडौं, नेपाल

नेपाल विद्युत प्राधिकरणद्वारा निर्माणाधिन मर्स्याङ्दी कोरीडोर २२० के.भी. प्रसारण लाइन आयोजना र यस आयोजना प्रभावित क्षेत्रमा संचालनमा रहेका, निर्माण हुँदै गरेका र प्रस्तावित अन्य विकास आयोजनाहरुको समष्टिगत प्रभाव मूल्याङ्कन (Cumulative Impact Assessment-CIA) नेपाल विद्युत प्राधिकरण, वातावरण तथा सामाजिक अध्ययन विभागबाट भइरहेको छ। यसै सिलसिलामा प्रभावित वडा/नगरपालिका/गाउँपालिका तथा स्थानीय बासिन्दासँग त्यस क्षेत्रको भौतिक, जैविक, सामाजिक तथा साँस्कृतिक वातावरणमा पर्न सक्ने समष्टिगत प्रभावहरुको बारेमा विभागबाट खटीई आएका वातावरणीय अध्ययन टोली तथा स्थानीयवासी, सरोकारवाला बिच निम्न मिति, समय र स्थानमा छलफल गरी निम्न रायसुझाव सँकलन गरियो।

स्थान : जिल्ला ...तनहुँ.......... नगरपालिका/गाउँपालिका: आँबुखैरेनी ...... वडा नं. २......

मिति : २०७८।१२।०२..... ठाउँ : छकालटार......

उपस्थिती

क.सं.	नाम थर	पद/पेशा	ठेगाना	फोन नम्बर	हस्ताक्षर
१	अर्जुन बगाले	स्थानिय प्रभावित	आँबुखैरेनी -२	९८६६०४४५०८	[illegible]
२	रजनी घुमान	स्थानिय समाजसेवी	आँबुखैरेनी -२	९८४६२१८२३१	[illegible]
३	एक बहादुर गुरुङ	स्थानिय प्रभावित	आँबुखैरेनी -२	९८६६६५६७००३	[illegible]
४	एक बहादुर बगाले	स्थानिय प्रभावित	आँबुखैरेनी -२		[illegible]
५	नारायण पौड्याल	SSO	ESMU आँबुखैरेनी		
६	निमन बराल	ESO	ESMU आँबुखैरेनी	9849226092	Naryan
७	शैलजा ज्ञवाली	ने.वि.प्रा.	काठमाडौं	9842083498	[illegible]
८	अच्युत ढकाल	सह निर्देशक	काठमाडौं		[illegible]
९				९८४१३६३३११	[illegible]
१०					

रायसुझाव

१- सर्वेमा सबैलाई जानकारी गराई सर्वे गर्नुपर्ने, सबै प्रभावितलाई जानकारी नहुँदा आयोजनाको बारेमा अनभिज्ञता रहेको।

२- जग्गाको उचित मुआब्जा निर्धारण हुनुपर्ने र पुनर्स्थापना वा रोजगारी सुनिश्चित हुनुपर्ने।

३- रुखहरुको कटान हुने हुँदा वातावरणीय क्षति हुने

४-

Pictures of Consultation Meetings

Ghalan Chowk, MANANG

Nasong RM Office, MANANG

Nasong RM-4, Odar, MANANG

Besisahar-11, Ramchowk Besi, LAMJUNG

Besisahar Municipality Office, LAMJUNG

Dordi RM Office, LAMJUNG

Consultation at Jagat, LAMJUNG

	
Marsyangdi RM-8, Battiise Mul, Simalchaur, LAMJUNG	Rainas Municipality Office, Tinpiple, LAMJUNG
	
Rainas -6, Dhamilikuwa, LAMJUNG	Sundarbazar Municipality Office, LAMJUNG
	
Sundarbazar -7 Ward Office, LAMJUNG	Sundarbazar-7, Paudi, LAMJUNG
	
Palungtar-4, GORKHA	Palungtar Municipality Office, GORKHA

Palungtar Municipality-7, Biruwatar, GORKHA

Bhanu Municipality-9 Ward Office, TAHANU

APPENDIX C: RELEVANT DATA

Table: Land Requirement for CIA Prioritized Transmission Line Projects

S. N.	Name of Transmission Line Project	Length of TL (km)		Impacted Area (ha)	Landuse/Landcover (ha)						
		Total	within study area		Cultivation	Vegetation			Barren	River/ Water body	Other
						Forest	Grass	Bush			
A. Project in Operation											
1	Bhulbhule-Middle Marsyangdi 132kV TL	19.79	19.79	35.605	20.033	1.448	0	0	1.555	10.637	1.932
2	East-West 132kV TL		11.738	21.13	10.48	9.30	0.89	0	0.11	0.35	
3	Middle Marsyangdi-Lower Marsyangdi 132kV TL	38.38	38.38	69.1	44.13	17.78	0.16	1.4	0	5.63	
4	Pokhara-Damauli-Bharatpur 132kV TL		17.58	31.66	9.99	17.56	0	3.48	0.1	0.53	
5	Lower Marsyangdi-Kathmandu 132kV TL		10.845	19.52	8.96	1.97	0	8.13	0	0.46	
6	Lower Marsyangdi-Bharatpur 132kV TL	25.564	25.564	44.19	17.5	17.24	0	9.13	0	0.32	0.03
7	Dumre-Damauli 132kV TL	18.00	7.75	10.99	7.681	2.289	0	0.813	0	0.183	
Sub-total A			**131.647**	**232.195**	**118.744**	**67.587**	**1.05**	**22.953**	**1.765**	**18.11**	**1.962**
B. Project Under Construction											
8	Marsyangdi Corridor (Manang-Udipur) 220kV TL	45.25	45.25	147.912	59.3825	27.0385	0	0	44.31	17.181	
9	Marsyangdi Corridor (Udipur-New Bharatpur) 132kV TL	64.45	64.45	199.441	102.585	91.42	0	0	2.786	2.65	
10	Dordi Corridor 132kV TL	10.167	10.167	20.7603	14.78	2.1472	2.8837	0	0.8697	0.0797	
11	Upper Seti Bharatpur 220kV TL	38.42	6.927	20.81	7.01	6.4	6.69	0	0	0.71	
12	Marsyangdi-Kathmandu 220kV TL	85.00	18.589	55.80	28.32	8.88	0	16.82	0	1.71	0.07
13	Hetauda Bardaghat 220kV TL	143.33	6.33	19.00	3.59	13.77	0	0	0	1.64	
Sub-Total B		**386.617**	**151.713**	**463.7233**	**215.6675**	**149.6557**	**9.5737**	**16.82**	**47.9657**	**23.9707**	**0.07**
C. Planned Project											
14	Kerabari-New Marsyangdi (Daraudi Corridor) 132kV TLP	32.00	32.00	68.33	24	40.75	0		2.95	0.63	
15	Electricity Transmission Project 400kV TLP (MCC)	313.90	23.628	108.24	39.39		0.38	64.96	3.16	0.35	
Sub-Total C		**345.90**	**55.628**	**176.57**	**63.39**	**40.75**	**0.38**	**64.96**	**6.11**	**0.98**	
Total (A+B+C)			**338.988**	**872.4883**	**397.8315**	**257.9927**	**11.0037**	**104.733**	**55.8407**	**43.0607**	**2.032**

S. N.	Name of Hydroelectric Project	Capacity (MW)	Location	River	Impact Area (ha)	Landuse/ Landcover (ha)							tree loss (no)
						Cultivation	Forest	Grass	Barren	River/ Water body	Other	Total	
1	Nyadi Phidi HEP	21.4	Marsyangdi RM	Nyadi and Phidi River	4.93		4.03		0.52	0.38		4.93	876
2	Nyadi HEP	30.0	then Bahundada and Bulbule VDC	Nyadi River	29.2	19.32	0.2		2.51	7.17		29.2	28
3	Super Dordi Kha HEP	54.0	Dordi RM	Dordi River	17.96	7.35	2.42		7.53	0.66		17.96	285
4	Himchuli Dordi HEP	57.0	Dordi RM	Dordi River	16.19		15.03			1.16		16.19	971
5	Tallo Manang Marsyangdi HEP	140.00	Nashong RM, Manang	Marsyangdi River	35.87	23.16	12.71					35.87	1762
6	Dudh Khola HEP	65.0	Nashong RM, Manang	Dudh Khola	16.9	4.55	0.2	2.25	5.3	1.4	3.2	16.9	419
7	Upper Marsyangdi-2 HEP	327.0	Nashong, Manang, Marsyangdi RM	Marsyangdi River	65.5	22.356	37.26			5.885		65.497	5722
				Total	**186.55**	**76.736**	**71.85**	**2.25**	**15.86**	**16.655**	**3.2**	**186.547**	**10063**

Loss of Forest

SN	Name of Project	Loss of Forest area (ha)			Loss in project area of MCTLP	Cumulative Loss (ha)	Remarks
		Total area	District wise	FMS wise			
1	Marsyangdi Corridor (Manang-Udipur)220kV TLP	27.0385	Manang=3.2425 Lamjung=23.796	GMF : 0.4135 ACA : 17.277 CF : 6.672 LF : 2.676	27.0385	27.0385	Approved EIA
2	Marsyangdi Corridor (Udipur-Markichowk-Bharatpur) 220kV TLP	90.66	Lamjung: Gorkha: Tanahu: Chitwan:	GMF : 43.51 CF : 43.84 LF : 3.31	90.66	117.6985	Approved IEE (2017) of MCTLP
3	Bhulbhule-Middle Marsyangdi 132kV TLP	1.44	Lamjung:1.44	CF: 1.44	1.44	119.1385	Approved IEE, 2015
4	Middle Marsyangdi- Lower Marsyangdi 132kV TLP						
5	Lower Masyangdi- Suichatar Kathmandu 132kV TLP						
6	Lower Masyangdi- Bharatpur 132kV TLP						
7	Dumre-Damauli 132kV TLP	12.24	Gorkha : Tanahu :	CF : 9.36 LF : 2.88			Approved IEE, 2010
8	Marsyangdi-Kathmandu 220kV TLP	110.57	Gorkha : 26.39 Chitwan :13.84 Dhading :69.13 Kathmandu : 1.21	CF : 105.35 LF : 5.22			Approved IEE, 2014
9	Dordi Corridor 132kV TLP						
10	Upper Seti (Damauli)-Bharatpur 220kV TLP	26.79	Tanahu : 4.06 Chitwan : 22.73	CF : 54.82 LF : 1.44			Approved IEE, 2010
11	Hetauda-Bharatpur-Bardghat 220kV TLP	281.19	Makwanpur : 77.88 Chitwan : 39.57 Nawalparasi : 163.74	GMF: 137.09 CF: 143.20 Private F: 0.90			Approved IEE, 2007
12	Kerabari-New Marsyangdi (Daraudi Corridor) 132kV TLP	41.78		GMF : 27.78 CF : 18.00			
13	400kV MCC TL (New Damauli-Ratmate section)						
14	Marsyangdi Besi HEP (50MW)						
15	Manang Marsyangdi HEP (135MW)						
16	Dumre-Besisahar Road – Upgrading project (42.408km)						

Loss of Trees

SN	Name of Project	Tree Loss (no.)			Loss in the project area of MCTLP	Cumulative loss (no.)	Remarks
		Total tree loss	District wise	FMS wise			
1	Marsyangdi Corridor (Manang-Udipur) 220kV TL Project	12,602	Manang: Lamjung:	GMF : 194 ACA : 8,051 CF : 3,110 LF : 1,247	12,602	12,602	
2	Marsyangdi Corridor (Udipur-Markichowk-Bharatpur) 220kV TL Project	5,522	Lamjung:	GMF : 2,495 CF : 2985 LF : 42	5,522	18,124	
3	Bhulbhule-Middle Marsyangdi 132kV TL Project	970	Lamjung:970	CF : 970	970	19,094	
4	Middle Marsyangdi- Lower Marsyangdi 132kV TLP						
5	Lower Masyangdi-Suichatar Kathmandu 132kV TLP						
6	Lower Masyangdi-Bharatpur 132kV TL Project						
7	Dumre-Damauli 132kV TL Project	3,374					
8	Marsyangdi-Kathmandu 220kV TL Project	24,702	Gorkha: Chitwan: Dhading: Kathmandu:	CF: 23,529 LF: 1,173			
9	Dordi Corridor 132kV TL Project						
10	Upper Seti (Damauli)-Bharatpur 220kV TL Project	8,948	Tanahu: Chitwan:	CF: 8,467 LF: 481			
11	Hetauda-Bharatpur-Bardghat 220kV TL Project	31,639	Makwanpur: 7,870 Chitwan: 3,499 Nawalparasi: 20,270	GMF : 16,457 CF : 15,047 Pvt. F :135			
12	Kerabari-New Marsyangdi (Daraudi Corridor) 132kV TLP	9,975		GMF: 2,610 CF: 7,365			
13	400kV MCC TL (New Damauli-Ratmate section) Project						
14	Marsyangdi Besi HEP (50MW)						
15	Manang Marsyangdi HEP (135MW)						
16	Dumre-Besisahar Road – Upgrading project (42.408km)	4,660					